

GOOD OLD BOAT

The sailing magazine for the rest of us!



MAY/JUNE 2007
ISSUE 54
www.goodoldboat.com



\$7⁰⁰ (Canada \$9⁰⁰CDN)



7 25274 97035 3

On newsstand until June 30



20



13



29



51



About the cover...

Bill Tabb and Vanessa Watson were pleased when the BoatPix.com helicopter flew by and caught them sailing *Impulsive*, their Pearson 36-2, on North Carolina's Pamlico Sound. More on the Pearson 36, the predecessor to the 36-2, on Page 4.

GOOD OLD BOAT



4

For the love of sailboats

4 **Pearson 36**

This 1970s family cruiser offers a fair turn of speed

BY ED LAWRENCE

29 **Vespera floats again**

A revived cutter teaches her owners and aspiring cruisers a few lessons

BY KAREN LARSON

46 **Yamaha 25**

A fine racer/cruiser for a small family

BY DURKEE RICHARDS

51 **Seeking the perfect dinghy**

Here's one that comes pretty close to ideal

BY BILL KINNEY

Speaking seriously

13 **The schooner rig**

It's versatile, efficient, and above all, handsome

BY TED BREWER

17 **Replacing a bow trim casting**

Ingenuity and a warm oven solve the problem

BY JOHN BROOKE

20 **Respecting the furler**

Advice for avoiding problems with your roller headsail

BY JERRY POWLAS

25 **Flexible grating**

This grating bends to the contour of any floor

BY JIM SHROEGER

33 **Exhaust ingenuity**

Custom waterlift muffler calls for creative approach

BY PAUL RING

42 **Anchor Sentinels 101**

Adding staying power to your ground tackle

BY DON LAUNER

58 **Are brokers necessary?**

Yes, says this seasoned seller, sometimes they are

BY KEN TEXTOR



44



55

Just for fun

7 The Solitude of the Open Sea

A singlehander achieves communion with himself

BY GREGORY NEWELL SMITH



More online . . . Maps of Gregory Newell Smith's voyage are available online at <http://www.goodoldboat.com/Solitude_maps.html>.

18 Remembering Sparrow

An old affair of the heart still haunts this sailor

BY BOB WALKENSHAW

27 Night sail

An anxious sailor learns to listen to others

BY VERN HOBBS

44 Looking for sea life

BY ELSIE HULSIZER

55 Still sailing after all these years

RC model Lasers are more than toy boats

BY LIONEL TAYLOR

What's more

3 The view from here

They can't MAKE you safe -

BY JERRY POWLAS

62 Good old classifieds

71 Simple solutions

Rudder stops - BY WALT HODGE

The jug sling or hackamore -

BY GEOFFREY TOYE

74 Quick and easy

All-purpose portable domelight -

BY PHILLIP REID

Cockpit piloting - BY RICHARD SMITH

Plastic brightwork - BY GREGG NESTOR

79 Product launchings

81 Mail buoy

87 Last tack

The perils of over-choice - BY KAREN LARSON

88 Reflections

The soul of sailing - BY MATTHEW GOLDMAN



76



72

GOOD OLD BOAT

FOUNDER/EDITOR Karen Larson
karen@goodoldboat.com

FOUNDER/TECHNICAL EDITOR Jerry Powlas
jerry@goodoldboat.com

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

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
Bill Sandifer

COPY EDITOR John Vigor
CREATIVE DIRECTOR Mary Endres
AD PRODUCTION Audrey Mikkelsen

PRODUCTION EDITOR Pat Morris
DIRECTOR OF
CIRCULATION/RETAIL Mark Busta
763-420-8923 mark@goodoldboat.com

CLASSIFIED ADS AND
FINANCIAL MANAGER Karla Sandness
763-420-8923 karla@goodoldboat.com

EDITORIAL ASSISTANT Theresa Meis
WEBMASTER Jerry Stearns
www.goodoldboat.com

54 - VOLUME 10, NUMBER 3

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

PUBLISHED BIMONTHLY BY: Partnership for
Excellence, Inc.

EDITORIAL OFFICE: 7340 Niagara Ln. N.
Maple Grove, MN
55311-2655
Phone: 763-420-8923
Fax: 701-952-9434

BUSINESS OFFICE: 1501 8th Ave. N.W.
Jamestown, ND 58401
Phone: 763-420-8923
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



www.goodoldboat.com

Our contributors



Ed Lawrence (*Pearson 36*, Page 4) writes about boats and off-beat subjects for several national magazines from his home base in Montana. He and his wife, Judy, sail a San Juan 23 when they get a chance to get out on the water.



After returning to Seattle from his around-the-world travels, **Gregory Newell Smith** (*The Solitude of the Open Sea*, Page 7) met the woman of his dreams and is now happily married. He lives with his wife in the mountains of Northern Idaho, lake sailing, writing a new book, and planning new adventures. He can be contacted at gregsmith@hotmail.com.

Ted Brewer (*The schooner rig*, Page 13) is a contributing editor with *Good Old Boat* and one of North America's best-known yacht designers. He also is the man who designed scores of good old boats ... the ones still sailing after all these years.



John Brooke (*Replacing a bow trim casting*, Page 17) resides on Cape Cod and has owned boats since he was 10. He has made several trips down the Intracoastal Waterway,

and has sailed from Bermuda, throughout the Bahamas, St. Vincent, Grenadines, and Trinidad. His interests tend toward things mechanical and philosophical. Now in early retirement, he owns two boats and devotes his time to all things nautical.

After selling *Sparrow*, **Bob Walkinshaw** (*Remembering Sparrow*, Page 18) and his wife, Nellie, moved ashore to Blue Rocks, Nova Scotia, where Bob is restoring a Triton and working part time at the Fisherman's Museum Boat Shop.



Jim Shroeger (*Flexible grating*, Page 25) is a retired school teacher (special education and administration). He owned and ran a residential construction business simultaneously with the school career. His special love is wood-working, which came in handy during *Serendipity's* restoration. He and his wife, Barb, are sailing *Serendipity* in the North Channel to revisit anchorages they enjoyed in the 1980s in their Cal 28.



Vern Hobbs (*Night sail*, Page 27) and his wife, Sally, sail a 1974 35-foot Bristol cutter along Florida's Atlantic coast and the Intracoastal Waterway. Their day jobs pay the rent, but Vern's work as a local artist specializing in maritime subjects finances boat projects.

Paul Ring (*Exhaust ingenuity*, Page 33) is a retired marine who has sailed, repaired, modified, restored, and built boats for the past 42 years. *Magnolia*, his restored Cheoy Lee Offshore 27, graced the cover of Don Casey's book, *This Old Boat*. Paul currently sails his Nonsuch 260 with first mate Barbara Brown on Mobile Bay. He has written many how-to articles for sailing publications.



Don Launer (*Anchor Sentinels 101*, Page 42), a *Good Old Boat* contributing editor, has held a USCG captain's license for more than 20 years. He built his two-masted schooner, *Delphinus*, from a bare hull and sails her on Barnegat Bay in New Jersey.

Elsie Hulsizer (*Looking for sea life*, Page 44) is an environmental professional with a degree in oceanography and a certificate in fine arts photography. She is the author of the book *Voyages to Windward: Sailing Adventures on Vancouver Island's West Coast*.



Durkee Richards (*Yamaha 25*, Page 46) learned to sail in the Sea Scouts on the Columbia River. His first date with Mary, his sail-mate, was on a 15-foot 6-inch Snipe. They spent nearly 40 years in the Midwest where they cruised Lake Superior on chartered boats until they bought their J/32 in 1999. After Durkee retired, they moved to the Olympic Peninsula and are now exploring the waters of Puget Sound and British Columbia.



Bill and Lisa Kinney (*Seeking the perfect dinghy*, Page 51) and their Portuguese water dog, Jibe, live on and sail a 1976 Northstar 40 ketch on the waters of San Francisco Bay. To fill the cruising kitty, the two-footed crewmembers work in the pharmaceutical industry. They plan to take an extended cruise in the near future.



When **Lionel Taylor** (*Still sailing after all these years*, Page 55) was seven years of age, his father introduced him to sailing with a sailing canoe. Excluding service on an aircraft carrier in WW II, he has been skippering good old boats — sailing dinghies to 36-footers — for 70 years. He is now downsizing to a 10-foot Sprite and a 42-inch radio-controlled Laser.

Ken Textor (*Are brokers necessary?* Page 58) has been living and working on elderly boats since 1977 and writing about his adventures for national sailing magazines almost as long. His newest project is rehabilitating a 1979 Cape Dory 27. The boat has received new LP gas, plumbing, and anchoring systems and a paint and varnish renewal.



Walt Hodge (*Simple solutions: Rudder stops*, Page 71) began his long association with boats at the age of 10, paddling an apple crate across the Ohio River. He and companion, Janet Perkins, restored and sail a 1977 Ranger 28, *Gilded Lily*, and a 1979 Compac 16, *Short Sheets*.



Geoffrey Toye (*Simple solutions: The jug sling or hackamore*, Page 72) lives in a beach house near Cardigan on the west coast of Wales. He's been involved with small craft for more than 40 years. A writer and journalist, he has published several books.



Phillip Reid (*Quick and easy: All-purpose portable domelight*, Page 74), his wife, Andie, and certain other miscreants sail their 1977 Pearson 28, *Mis Bohicket*, out of Wilmington, North Carolina. They finished a five-year refit in the fall of 2005. When not sailing, writing, or boat-grubbing, Phillip teaches a college history course.



Richard Smith (*Quick and easy: Cockpit piloting*, Page 76) has owned and built several boats, sailing them in the Irish Sea and Puget Sound. These include an Atkin Red Onion sloop, a 30-foot Alan Page steel cutter outfitted from a bare hull, an Atalanta 26, five dinghies, and an Ericson Cruising 31.



Gregg Nestor (*Quick and easy: Plastic brightwork*, Page 77), a contributing editor with *Good Old Boat*, has had a lifelong interest in all things aquatic. He has just completed his second book: *Twenty Affordable Sailboats to Take You Anywhere*.



Matthew Goldman (*Reflections: The soul of sailing*, Page 88) became addicted to boating early. He has owned an assortment of small boats ("It followed me home. Can I keep it?"). His 26-foot sloop, *MoonWind*, is a 1970 Chris-Craft Pawnee, designed by Sparkman & Stephens.

They can't MAKE you safe

Compulsory testing and licensing send the wrong message

by Jerry Powlas

THE COAST GUARD AND THE COAST GUARD AUXILIARY HAVE recently thrown their weight behind the idea of mandatory testing and licensing for the operators of boats. This is not a new topic for me; I just have more to say.

- **Big Brother** can't make you safe when you are sailing. In fact, Big Brother won't even come close. The people in the marine industry are screaming already. They want to see greater numbers of consumers buying and using boats and boating facilities. They don't want to see a licensing barrier that would reduce the number of people who would consider taking up boating. The net effect of this would be to devise Pabulum-grade "Who is buried in

“Recreational sailing is a voluntary activity. It is also not inherently safe and cannot be made to be so.”

Grant's Tomb?" type tests that require almost no training knowledge or experience to pass. This would embolden the novice. Having gained the license, he would think he surely knows what he is doing.

- **You** can't make yourself safe when sailing either. You can make yourself safer, but not completely safe. Make no mistake: I am in favor of trying to be safer. Some of our readers have noticed that in almost all of the above-deck pictures of your editors, Karen and I are wearing life jackets. You might think we rush to put on a life jacket whenever we have a photo opportunity, but that's not the case. We are not trying to promote your safety; we are trying to promote ours. We simply wear a life jacket whenever we are above deck and the boat is moving. That is our rule. We don't say it should be yours.


I do suggest that the captain and crew of any sailboat will be happier, more comfortable, and safer if they study and practice to refine their individual and team skills. This effort is, in fact, so rewarding that most sailors will embrace it without being bullied into doing so.

- Recreational sailing is a voluntary activity. It is also not inherently safe and cannot be made to be so. In my opinion, very few recreational activities are inherently safe. If you want to be a lot safer than you are when you are

sailing, sell your boat and go home and lock the door and suck your thumb. Please sterilize your thumb first; there are bound to be germs.

The Coast Guard would almost certainly enforce any licensing scheme, so it seems odd to me that they are supporting this initiative. I would guess that the Coast Guard already has more missions than resources and does not need another job. I'm certain they are very busy; they never return my phone calls. We need to support our Coast Guard. We don't need to give them more work.

Those readers who have a bit of sailing experience will know that no matter how good they are as sailors, conditions and circumstances will occasionally conspire to put a vessel and her crew at risk. They will also know that, in those moments, good preparation, training, and seamanship will tell and in almost all of such situations the vessel and crew will return to harbor little the worse for wear and with another sea story to tell.

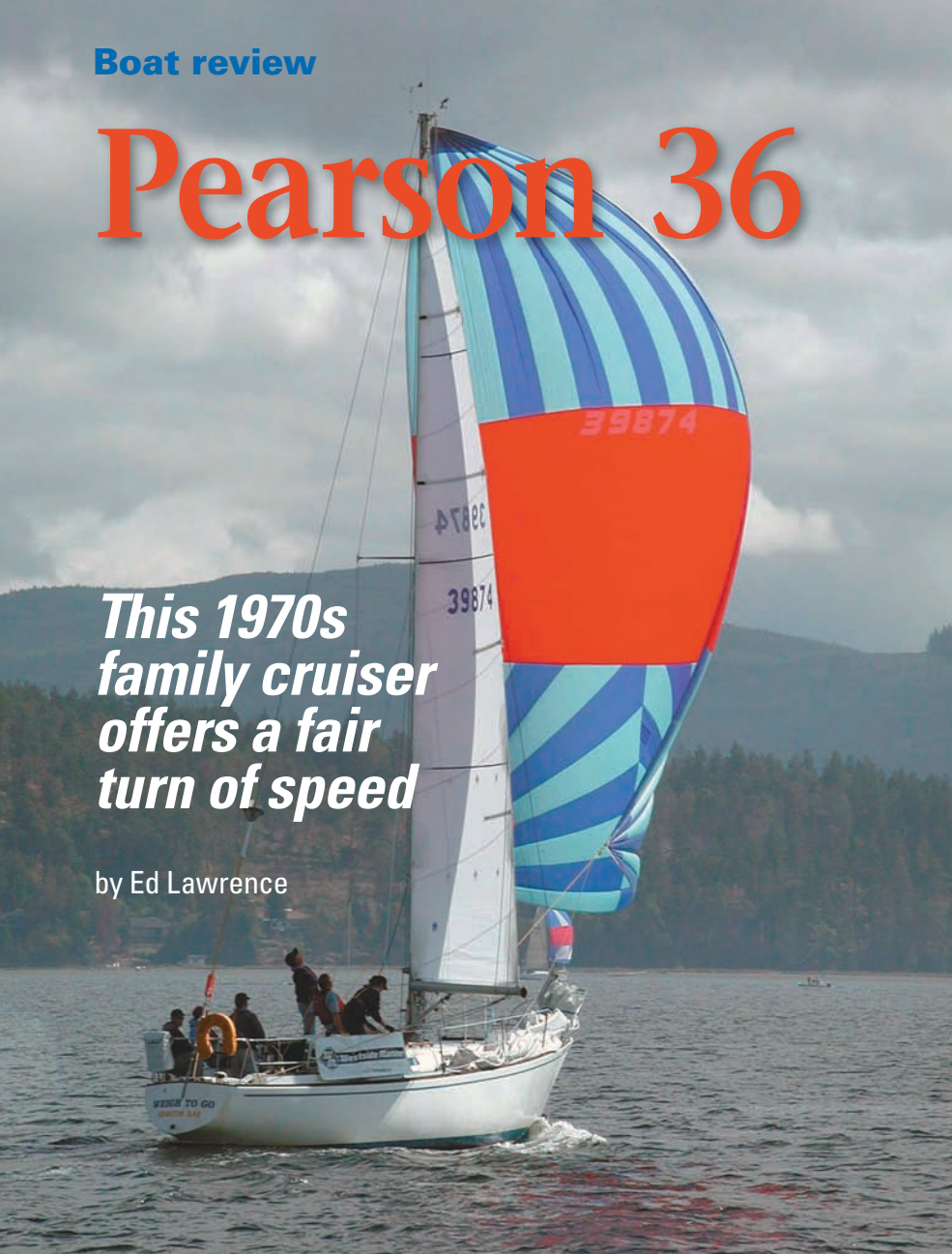
Sadly, now and then we lose one. It is rare, but occasionally conditions and circumstances will test a vessel and her crew, and they will not pass. In these situations, I don't think it will help to know who is buried in Grant's Tomb. 



Pearson 36

This 1970s family cruiser offers a fair turn of speed

by Ed Lawrence



PEARSON YACHTS WAS ONE OF THE most respected builders during its long run from 1956 to 1988 or thereabouts (under ownership by an investment firm, the end was protracted and sloppy). Founded in 1956 by cousins Clint and Everett Pearson, the company's early auxiliary sailboats were designed by a who's who of naval architects: Phil Rhodes, John Alden, Bill Tripp, and Carl Alberg. But it was Bill Shaw, who came aboard in 1964, who designed most of the models for the company. Grumman Aircraft Engineering Corp. bought the company in 1960, and the decision was later made to bring design in-house.

Bill Shaw was a graduate of the U.S. Maritime Academy at King's Point and a student at the Westlawn School of Yacht Design. Afterward, he worked 11 years for the prestigious firm of Spark-

man & Stephens, where chief designer Al Mason gave him a key role in the development of the Nevins 40 (1954) and the Tartan 27 (1960). His move to Pearson Yachts in 1964 was the beginning of a long relationship.

Bill thrived in Grumman's corporate environment, becoming both general manager and chief designer. His first boats were the Coaster and Wanderer (1966) and the Renegade (1967), the first Pearson with the rudder detached from the keel. Our review boat, the Pearson 36, came along five years later. It was in production from 1972 to 1976, numbering 103 units. The base price in 1975 was \$29,500.

In Bill's words, "The boat was designed as a performance-oriented cruiser also designed for the race-course" in what he described (in those days) as "a world of beamy cruisers

and pipe-berth 'tonners' " that left buyers with the choice of going slow comfortably or less slow uncomfortably.

Comfortable cockpit

The result is a fast 36-footer that provides crew with comfortable accommodations in the cockpit and down below. The design features a high-aspect-ratio masthead rig that represents the shift from the CCA rule to the IOR era. A tall-rig version was available.

The overhangs are moderate, with a raked stem and fairly broad (by IOR standards) counter transom. Also typical of the IOR are narrow ends. The resulting lack of deck space at the bow is an inconvenience for those using these boats as cruisers.

The hull is nicely proportioned with an overall length of 36 feet 6¾ inches

“So, while Bill Shaw paid his respects to the IOR, the 36 was more of a dual-purpose family boat.”

and a waterline length of 29 feet 2 inches. Sail area is 601 square feet, with only 260 square feet in the mainsail, meaning that large headsails will require some effort if they are to be trimmed tight in a stiff breeze. The sail-area-to-displacement ratio of 17 and the displacement-to-waterline-length ratio of 243 are about right for a cruiser with better-than-average performance. *(Note: These numbers may have varied a bit over time, of course, but those were the original specifications. —Eds.)*

So, while Bill Shaw paid his respects to the IOR, the 36 was more of a dual-purpose family boat. That was, in fact, the overall design philosophy of Pearson Yachts throughout its history.

The hull is solid fiberglass with integrally bonded bulkheads and the deck is cored with end-grain balsa. Water tanks are made of fiberglass, the fuel tank is fashioned from Monel. The external ballast is lead, and the rudder is hung on a skeg.

Wheel location

I'd been aboard for at least 11 seconds when I noticed that the wheel is located far forward in the cockpit, a big difference from most boats. It was a welcome sight.

Most wheels are located well aft to enhance crew comfort (such as protection under the dodger), allowing the crew to work winches forward in the cockpit, and relegating the helmsman to a seat at the stern. On many boats, the mainsheet traveler is mounted on the bridge deck, so it is more or less out of the way as well. But this ar-

rangement results in mid-boom sheeting which requires a heavier boom.

On the Pearson 36, the boom is only 12 feet 10 inches, so the mainsheet is attached to the end of the boom. The result: a mainsheet and traveler that can be managed from the helm position. It's great for singlehanded. And whenever there is crew, the jib and spinnaker trimmers are aft, out of the helmsman's way, an important consideration when changing course or jibing a spinnaker. A minor downside is that the mainsheet, when on centerline, interferes with companionway access.

While under way during our test sail, the cockpit proved to be large enough for six adults and a child. One can relax against the high-sided coamings and stretch out comfortably. Our review boat has old-fashioned cockpit lockers in which loads of sails and gear can be stowed. In the original manufacturer's configuration, however, the quarter berth housing took up a lot of the starboard locker.

Accommodations

The 36's interior is well-organized and nicely appointed. Heading below is as simple as stepping onto the top companionway step, which measures

20 by 18 inches. That dimension is noteworthy because it provides a convenient perch on which

the night watch can scan the horizon without getting too wet or cold. What's more, this step can be raised to gain access to the top of the engine.

The 11-foot 1-inch beam produces a wealth of space belowdecks coupled with the 6-foot 4-inch headroom. The saloon measures 9 feet on centerline, allowing two people to stand shoulder-to-shoulder without feeling as if they're packed in on a crowded subway ride. The galley and a settee are to starboard; to port is a nav station and second settee.

On our review boat, the table folds out of the way on the bulkhead, freeing space and allowing the settees to slide out and convert to berths. Both berths are more than 6 feet long. A pilot berth to starboard will be popular on a long passage, since sleeping amidships is like being on the pivot point of a teeter-totter. On this boat, its opposite space to port is occupied by a bookshelf and two cabinets. Some Pearson 36s have an additional pilot berth to port.

The large area devoted to the saloon unfortunately subtracts space from the forward cabin. The V-berth is long enough and wide enough for a couple, but with the door closed there's precious little room for dressing.

Weigh To Go, Bob McClinton's 1975 Pearson 36, spreads her spinnaker during a race in Sequim Bay, Washington, far left on facing page. Not a racer, Fantasy is Pamela Heath's 1973 model Pearson 36. She is used as a vessel for daysail charters in St. Thomas, U.S. Virgin Islands, top right on facing page. The Schoder family sails Secret, bottom right on facing page, on Lake Champlain. Another shot of Secret this page. Note the unusual location of the wheel forward in the cockpit.





On our review boat, behind the port settee backrest, at left, are cubbies with valuable stowage space. The 11-foot beam makes for a spacious saloon, at right, with pull-out settee/berths, a large table, and pilot berth to starboard up and out of the way and centrally located for sleeping when the boat is under way. The settee berths are more than 6 feet long. The table folds up against the main bulkhead. The galley is aft in the starboard quarter. The top companionway step makes a good seat for keeping watch on a cold night.

The navigation station sports a 25-by 30-inch chart table, just right for folded NOAA charts.

The L-shaped galley in our review boat is fitted with an Adler-Barbour 12-volt ColdMachine refrigerator and two-burner Optimus stove/oven. However, Bill Shaw sneakily threw a curve ball when he placed a cupboard door under the sink, giving the impression of accessible storage space there. In fact, the door provides access to the fuel and water filters on the starboard side of the engine, though only a gnome will be comfortable working on that side of the engine.

Also of note is the wet locker to port of the companionway. Although small, it is vented to the engine compartment so wet things will dry.

The head is a small compartment crammed with a toilet, a vanity with a small sink, and a shower.

Performance

The first thing I noticed during a test sail on Puget Sound was that the Pearson 36 motors at 7 knots with the diesel turning at 1,800 rpm — pretty snappy performance. Theoretical hull speed is 7.29 knots. The original engine was a 30-hp gasoline Atomic 4.

With a full-battened mainsail and an aging genoa, our test boat sailed to weather in 9 to 11 knots of breeze making 6.5 to 7.6 knots, impressive performance for a cruising sailboat. She covered the bottom at about the same speed when we eased sheets and sailed on a broad reach. She's a tad on the tender side, but once heeled to 20



Pearson 36


Designer: William Shaw
LOA: 36 feet 6¾ inches
DWL: 29 feet 2 inches
Beam: 11 feet 1 inch
Draft: 6 feet 0 inches
Displacement: 13,500 pounds
Ballast: 6,100 pounds
Sail area: 601 square feet
Displ./LWL ratio: 243
SA/Displ. ratio: 17
Mast height above waterline: 50 feet 5 inches
PHRF rating: 135-158

degrees she buried her shoulder and forged ahead.

Replacing the three-bladed prop with a folding prop should add at least half a knot.

The Pearson 36 carries a PHRF rating of between 135 and 158, depending on the fleet. Rating for the largest fleet, on Narragansett Bay, is 141. For comparison, a Ranger One Ton and an Irwin Competition 37 of the same year rate 120 and 123 respectively.

When shopping for a Pearson 36, be advised that Pearson built a number of 36-foot sailboats before it disappeared from the scene. The first of the 36s is very different from those that followed. The original 36s were built between 1972 and 1976. The next boat, the Pearson 36-2, was in production from 1985 to 1990. (This one is shown on the cover.) Other variants, all designed by Bill Shaw over the years, are the popular Pearson 365 (a ketch), the Pearson 367 (a cutter), and the Pearson 36 Pilot House. All of these 36-footers are well-loved and actively sought-after sailboats.

What I can say for certain is that the Pearson 36 is a well-built, moderate interpretation of the IOR that still looks good and sails well today. 

Resources

Pearson websites

<<http://www.pearsoncurrent.com>>
 <<http://www.pearsoninfo.net>>
pearson@list.sailnet.net

The Solitude of the Open Sea

A singlehander achieves communion with himself

by Gregory Newell Smith

Note: This chapter is excerpted from Gregory Newell Smith's popular book, The Solitude of the Open Sea. In this chapter, he reaches the end of his circumnavigation after a 5,000-mile crossing: Panama Canal to Hilo, Hawaii. Your Good Old Boat editors were so taken with this book that we selected it as one of the first audiobooks produced for sailors who enjoy listening to well-told nautical stories. The audiobook is beautifully narrated by the author. We hope you'll enjoy this sample. —Eds.

WHAT'S THE LONGEST YOU'VE EVER BEEN ALONE? I'M A sailor, at home in the practical world of physical forces of wind, weather, and waves, so I'm not talking in existential terms — alone within the shell of the body, or locked in the prison of the mind. Rather, I'm referring to the conventional notion of aloneness — by oneself, cut off from human contact, completely isolated from the sight or sound of another person.

Whenever I ask this question, the initial answer is generally, "I've spent a lot of time alone." But after thinking it over, few people can come up with even a 24-hour stretch during which they saw no one, talked with no one, when the phone didn't ring, and when there was no email, television, or radio. Before I embarked on this life of ocean sailing, I could recall only a single incident when I'd had a day all to myself — a solo backpacking trip in the North Cascades, 26 hours between the Tuesday morning I left the trailhead and the next afternoon when a ranger wandered through my camp.

My longest encounter with extended solitude begins on a sultry morning in mid-May, when I set out from the Pacific side of the Panama Canal to cross more than 5,000 miles of ocean to Hilo, Hawaii. Already behind me are more than three years and 37,000 miles aboard this 39-foot sailboat, *Atlantean*, during which I've explored iceberg-choked bays in Alaska, basked in Mexican sunshine, island-hopped the South Pacific, sojourned among kiwis in New Zealand and koalas in Australia, transited the Indian Ocean, rounded



***Atlantean* on a brisk broad reach inside Australia's Great Barrier Reef.**

the Cape of Good Hope, and cruised the Caribbean coast of South America. Family and friends have joined me for parts of the trip, and pick-up crews have helped out on the long ocean passages. Singlehanded a few short hops has taught me the tricks of getting the sails up and down by myself, but no matter where I've dropped my anchor, I've always been part of the cruising community, an armada of several hundred sailboats all heading in roughly the same direction, like a moveable small town where everybody recognizes most everybody else.

Clipper-ship route

The Hilo passage will be different. I'll be alone for 40 days if *Atlantean* maintains her daily passage average of 125 miles per day. The old clipper-ship route I plan to follow adds nearly 1,000 miles to the straight-line journey. Hurricane season is already under way, and I know of no other boats headed to Hawaii with whom I might maintain single-side-band radio contact. Prevailing contrary winds and currents make the alternative of sailing up the coast of Central America impractical.

I'm ready to test myself. An extended solo passage represents the last great challenge on a trip that is rapidly drawing to a close. My health is good, *Atlantean* is as sound as a boat can be after sailing 80 percent of the way around the planet, and I'm anxious to get home to Seattle. And although having another body on board would be a convenience in sharing watch duty and dealing with emergencies, being alone obviates the human conflicts that invariably arise from sharing close quarters — a bit of wisdom practiced by that most solitary of sailors, Joshua Slocum, who wrote of his own voyages aboard *Spray*, "There was no dissension amongst the crew." Now the only company I have to complain about is my own.

Sleep is a serious issue for the solo sailor, primarily because of the risk of a collision at sea. The common wisdom is that it takes 20 minutes for a commercial vessel to appear from over the horizon and run you down, so most singlehandlers sleep in the cockpit in brief snatches, alternated with sweeps of the horizon to determine all is well. By midnight of my first day, I'm 70 miles out of Balboa and traffic has dwindled. I can keep my eyes open no longer, so I set my wristwatch alarm for 20 minutes and curl up on the cockpit cushions. Each time I wake up, there is a ship in sight, but never on a threatening course.



No more ships

But the human body can adapt to almost anything. Within a week there are no more ships in sight, and I've developed routines to occupy myself during the 10 or 12 hours per day when I'm not working on sleep. I practice my flute, recite my French lessons, and read the mystery novels I've picked up in book swaps. The highlight of each evening is marking my progress on the Eastern Pacific chart (a thumbprint's width if the wind has been good, a little finger's if it hasn't), though the tiny cluster of Hawaiian islands nestled along the chart's left margin often looks impossibly distant. Another ritual is listening to the high-seas weather broadcasts out of Honolulu. I always breathe a sigh of relief when the computer-generated voice addresses my little piece of the Pacific and says, "Warnings: None." The broadcasts come every six hours and are my only regular link with the civilized world.

Conditions vary from almost no wind to rainless 25-knot squalls that last an hour or two before dying away to nothing. I keep busy figuring out new sail sets and ways to minimize the slatting and crashing when there isn't enough wind to fill the canvas, which is most of the time. When all is well, I feel wonderful, in love with *Atlantean* and the sailing life.

From the log

May 20, day eight: Yesterday has to go down as one of my best sailing days ever. Everything worked right — good course, comfortable seas, good progress, good weather. Just before sunset I got a little worried when the wind eased. Then it came right back.

As a bonus, dolphins visited me. I saw one leap completely out of the water in a 180-degree flip. "Good trick," I called out. "Do that again." Within minutes a dozen of his buddies were leaping and splashing all around the boat, small ones of a species I don't think I've seen before. After dark another group turned up, larger ones that swam in the bow wave, leaving stardust wakes of bioluminescence as bright as I've ever seen.

May 23, day eleven: After a restless night, a wind shift to the west, and two hours of motoring (surely the last my dwindling supply of fuel can afford), I finally gave up. All the sails are down except the staysail, sheeted in tight to cut down on the rocking. The autopilot, set for west-southwest, has the boat pointed roughly south. Rocking, rocking, rocking, southeast swell mixed with southwest chop, made worse by what





On his outbound voyage, Greg anchored at Fatu Hiva in the Marquesas Islands, above. *Altantean* sailing downwind under the poled-out genoa, at left.

little west-northwest wind puffs through. Everything in the boat slides its maximum allowable distance, generating the maximum possible noise, then slides back to where it started, generating the maximum possible annoyance.

Complete merger

On day seventeen I have to climb the mast to replace a hal-yard that chafed through from all the slatting. It's 56 feet to the masthead, and I climb on stirrup steps I installed before leaving Seattle. Although the mast swings like a pendulum with any passing wave, the seas are relatively calm and the winds light. I focus my attention on careful hand and foot placement and make it up without undue difficulty. With two feet planted firmly in the steps and one hand holding tight, I double-wrap my safety harness tether around the hollow aluminum spar and clip the carabiner to a sturdy padeye. It's time for a look around.

It's surprising how vast the ocean appears from on high, where there's far more than the customary deck-level 4 miles to the horizon. Looking down on the water rather than across it makes the Pacific a deeper and more vivid shade of blue — Indigo? Sapphire? Azure? Or is this what they call cerulean blue? I choose cerulean, an appropriately noble name for the unbroken expanse of ocean that spreads before me like a magnificent carpet, richly textured by the rippling of long, lazy swells stretching forever in all directions, until the weave merges into the powdery hues of the sky. There is nothing as far as the eye can see but ocean,

and sky, and cottony puffs of cloud with their little blobs of shadow trailing beneath them like faithful dogs.

Biblical verse comes to mind: "And the Spirit of God moved upon the face of the waters." I am alone, totally and assuredly alone, but alone in the midst of such an unbounded beauty that it would have made the poet Rilke weep for joy. There is no feeling of despair or loneliness, only the thrilling freedom that comes from unity with one's surroundings, communion, a liberation so overwhelming it approaches rapture.

I am completely unconstrained ... as if I could unhook myself and soar like a bird in a complete merger of body, spirit, and the world around me. Is this how sailors on the old sailing ships felt when they watched from the crow's nest or tended the sails on the upper spars? Could this splendid blend of solitude and union be part of the siren song that has always drawn humans to the sea?

My aerial reverie doesn't last long. The wristwatch alarm beeps, signaling the next Coast Guard weather broadcast, which, of course, I'll have to miss. It raises a chuckle. Where else on a 39-foot sailboat could I be 60 feet away from the radio? But it also reminds me there's work to be done. After an hour and two more trips up the mast, *Atlantean* is again sailing under a full suit of sails.

Time for change

Each time a little breeze picks up, I let it push me to the northwest, back across the Equator and closer to Hawaii. When it dies, I drift to the south, vowing that I'll keep heading that way until the southeast trades return. How far south could I sail? My chart says I'm closer to the Marquesas Islands than Hawaii. Why not go back there to rest and refuel before resuming my journey? For that matter, why not sail around the world again? Bernard Moitessier did it, only a few thousand miles away from an easy victory in the 1968 Golden Globe Race for the first solo non-stop circumnavigation. He abruptly changed course and spent another three months sailing to Tahiti. Like me, Moitessier may have thought, "The sailing life is the life I know, and what awaits me back home?"

But returning to the South Seas isn't an option I seriously consider. Sailing has had a lot to teach me about the world and about myself, and now it's time for a change. The problem with staying out here, with never coming home, is that it's a dropout lifestyle, a way to run away from the world rather than embracing it. A round-eye with a sailboat and a modest bank account can always find some little island to waste away his days, and maintaining boat and body will provide enough challenges to satisfy the human need for productive work. But in the end, those people are lost souls, adrift, belonging to no one and to no place.

For me, life on land isn't all bad. There's much I miss: music, art, literature, the lively exchange of ideas among inquiring minds. Relationships that matter, family and friends, and a special person with whom to share my life, a partner for future quests. And not least by far, I miss a sense of place, the feeling of home. I've visited dozens of different countries, but nowhere has resonated so deeply within

me as does my beloved Pacific Northwest; not New Zealand, not South Africa, not even southeast Alaska, though they are all beautiful in their own ways and have much to offer. I'll leave those places to their own natives, to those people who, as Terry Tempest Williams writes, naturally comprehend their landscapes and hold them as sanctuary inside their unguarded hearts.

No, I'm not headed for the Marquesas. Been there, done that, as the saying goes. For now I'll keep my sights set on Hawaii and, afterward, Seattle.

West of Seattle

June 13th, a day of light but steady winds, marks an entire month at sea. Dolphins and pilot whales show up just before dark. The dolphins come to play and the whales keep their distance.

During the night I hear the pilot whales' squeaks sounding through the hull, and the next morning they're swimming with the boat. It's a good omen. The winds build to a steady 15 knots, and that day *Atlantean* covers 138 miles, including 124 miles of westing. I'm almost to 125° west longitude, well west of Seattle, and past the point I've arbitrarily designated as halfway to Hilo. Hopefully, the second half won't take as long.

I let the wind push me northward, and by June 16th I've reached 5° north latitude. That night Polaris glimmers briefly through the haze, low on the horizon. The distance to Hilo is down to 2,000 miles and I'm only 12 miles from crossing my outbound track — the course I followed from Mexico to the South Seas more than two years ago — and the official completion of my circumnavigation. Unfortunately the wind goes back to zero and I drift eastward, caught in the Equatorial Counter-current.

The culprit is the intertropical convergence zone (ITCZ), the Pacific equivalent of the doldrums, a band of dead air, and thunderstorms north of the Equator. When the good winds started a few days before, the mechanical radio voice reported the zone had slid up to 9° north. Now it's back down to 4°, and I'm in the middle of it. To make matters more interesting, the radio also reports that the season's first official hurricane, Adolphus, has formed off the coast of Mexico, with sustained winds of 120 knots. I'm glad it's 2,000 miles away.

The sails stay limp all night and the morning fix reveals I've drifted to the northeast. My outbound track is now farther away than it was 12 hours before and the course line on my Pacific Ocean chart takes a discouraging kink to the right. It's time to start burning my precious fuel.



Powering north

After what I used escaping from Panama, plus intermittent battery charging, I calculate there are 45 hours of low-rpm motoring left in the tank, 40 of which I'm willing to commit to crossing the ITCZ. I start the engine, and the iron genny pushes *Atlantean* due north, with the electric autopilot doing the steering. I continue through the day and night across the placid, windless seas until the course lines on my plotting sheet finally come together. At approximately 0800 on June 18th, I cross my outbound track in latitude 7° 28' north, longitude 125° 04' west, thereby completing the circumnavigation.

Next to the thrill of arriving in Cape Town at dawn, it's the most satisfying accomplishment of my trip.

I've done it. Sailed around the world. Sailed west and come back to a place I've been to before.

“I’ve done it. Sailed around the world. Sailed west and come back to a place I’ve been before.”

So much has happened during the three-plus years since I left Seattle, so many trials and tribulations, so many people and places trailing in my wake. But I haven't really done it alone. *Atlantean* has been with me every inch of the way, has made it all possible. Perhaps I really do love her best. “I couldn't have done it without you, old girl.” She remains silent, as always, though over the years I've enjoyed more than enough *Atlantean* luck to prove she really cares about me.

The big island of Hawaii has two mountains in excess of 13,000 feet, which I should be able to spot from quite a distance. On July 3rd, however, clouds stack up to the west and a few sprinkles fall, the first rain I've had since the Gulf of Panama, and not enough to clear the sheen of salt off the

deck. I gaze through the binoculars as the sun sets — I'm still 100 miles out — but there's no sight of the mountains.

Land ho!

The next morning I'm down to 70 miles, and by 1310, 28 miles east of Cape Kumukahi, I spot it, an unmistakable solid curve rising above a break in the clouds. "Land Ho!" I shout to nobody, before the clouds regather and the mountain disappears.

At 2100 it's full dark and I'm practically drifting 20 miles from Hilo. While

I'm peering into the night, a series of brightly colored flashes appears, low on the horizon. I climb the mast to the spreaders and for the next 20 minutes

watch the distant sparkle and glitter of the Hilo Harbor Fourth of July fireworks display. A burst of patriotic pride and nostalgia for the land of my birth wells in my chest.

Dawn finds me 5 miles from the entrance to the harbor in a light drizzle under a totally overcast sky. This is Hilo after all, on the wet, windward side of the island, where the tradewind clouds stack up on the mountains' flanks and plenty of rain falls. The ceiling is nevertheless high enough that I'm dazzled by the sight of so much green. After weeks of nothing but blue, it's as if I've awakened to a vibrant world of intense and vivid color, even in the gray light of dawn.

I putter through the entrance to Radio Bay Harbor, waving happily at the few fishing boats heading out. They must think I'm crazy, sailing so early in the morning. I raise the harbormaster on the VHF, and he directs me to the inner yacht basin. By the time I arrive, most people aboard the half-dozen sailboats lying at anchor are up and about. A couple of them climb into a dinghy and help me stern-tie to the quay. "Where are you coming from?" they shout.

"Panama!" I call back, pleased to see the surprise on their faces.

My longest passage is complete. After factoring in the six time zones I crossed, I've been at sea 53 days, 7 hours, and 37 minutes.

Most common questions

When I tell people about my Hilo passage, their most common questions are, "Weren't you lonely?" and "Didn't you get bored?" My answers are an unqualified "No," to both. Our culture is highly suspicious of solitude, to the extent that many people cannot comprehend how

Children welcome Greg to the island of Kandavu, in Fiji, at right. *Atlantean* in profile, on opposite page.

“I’m dazzled by the sight of so much green. After weeks of nothing but blue, it’s as if I’ve awakened to a vibrant world.”

being alone on a small sailboat could be anything but the equivalent of a jail sentence.

Modern society affords few opportunities for people to be truly and peacefully alone. Faced with life's daunting complexities and the nearly constant onslaught of useless information, we cope by "turning down the volume," erecting a protective filter between our brains and an otherwise overwhelming quantity of sensory data. We retreat inside our heads and only come out when our defense mechanisms tell us it's safe. The more carefully we guard ourselves, however,

the more superficial our interactions with the outside world will be. To satisfy the universal hunger for meaning, many people try to fill the void not by increasing their awareness

and searching out meaningful connections, but rather by grasping for ready amusements and constant companionship.

I can think of no more immediate experience than sailing by oneself (the word immediate is from the Latin, "without mediation or an intervening agent"). Alone on the sea, every moment occupied my attention. There was always a sail to trim, a line to check, a squeak to investigate, the course and wind to monitor, equipment to maintain and repair, or simply the waves and clouds to watch. I might say there was no time to be bored, but there was more to it than that. Boredom and loneliness are really two sides of the same coin: we feel bored or lonely when we are no longer living in the present moment.

Acceptance is key

A sailboat forces one to work with the natural environment instead of against it. Ocean sailors may challenge temporary obstacles with judicious use of a diesel engine, but for the most part we rely on whatever winds and currents





Greg returned from his voyage to do something more difficult than sailing around the world: writing a book about it. He's shown here in Glacier Bay, Alaska, on his shakedown cruise.

Nature provides. The key is acceptance. Eventually the sea will get you to admit that one of the few things you can change in life is your attitude. A successful ocean passage is, therefore, nothing short of the union of the boat and its crew with the natural environment, and exemplifies the difference between reacting and responding. When we react to the outside world, we objectify it; the world becomes something we wish to tame and subjugate to our own purposes, whether it's a poorly designed turning block, a clumsy crewman, or wind that won't blow the way we want.

On the other hand, when we realize we are intimately connected with our surroundings, we work with them rather than against them, responding in ways that are cooperative, not combative, finding solutions that don't force the elements into behaving other than they would naturally. Reacting, we try to shape our environment. Responding, our environment shapes us.

And therein lies the answer to avoiding both boredom and loneliness. Turning our attention away from ourselves and the alternate reality we uselessly wish for and toward the actual reality in which we live our lives, we enter into what I call communion, the immersion of ourselves in an intimate and profound interchange with the world around us. Loneliness is nothing more than the universal craving for communion, which many believe can only be found in the company of others. Yet we are never so alone, never so excluded from the connection we desire, than when we're surrounded by the nameless, faceless mob of modern humanity.

Achieved communion


It took the sea's total freedom and the solitude I found there to finally achieve the communion I'd sought for so many years. When I found that communion, it was not with another soul, as I had so long dreamed it must be. Instead, it was a communion with Nature, with the universe beheld each day, with the wind, the waves, the sky, and the creatures of the sea, and with dear *Atlantean*, that fragile product of

human craftsmanship and ingenuity that kept me alive to enjoy it all. And perhaps most importantly, I achieved communion with myself. For a brief time I was at peace. There was nothing I truly desired, no other person I needed to make me feel whole. My world was complete.


Sailing a boat across a wide expanse of ocean, or even all the way around the world, is no great accomplishment, not in the grand scheme of things. One lesson the sea has taught me is the relative insignificance of human accomplishment. At any moment, Nature could have squashed me like a bug. A chance slip on deck might have spelled disaster. But I believe in Edward Abbey's maxim that though Nature may be indifferent to our love, she is never unfaithful. We humans are a part of Nature, and her faithfulness

means that she treats us with the same care and respect she affords to all. Nature provides the stage on which we play out life's brief flicker and allows us to accomplish what we might. She promises only to be fair, no matter that it might result in our ultimate failure ... because

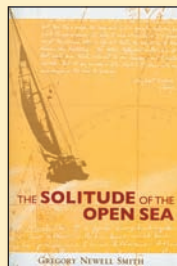
even failure would be another of life's great experiences, proof of the miracle of our existence.

There is much I still hope to accomplish in my lifetime, many more tests that I will find for myself, and countless undreamt dreams waiting to be followed. Yet I can think of nothing I would trade for those 53 days, alone, at sea. 

“The most common questions are, ‘Weren’t you lonely?’ and ‘Didn’t you get bored?’ ...an unqualified ‘No’ to both.”

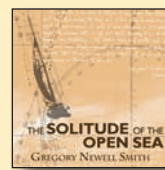
 More online ... Enjoy the circumnavigation with Gregory Newell Smith. To help you follow along as you read the book or listen to Greg's unabridged narration of the book, maps of his voyage are available online at http://www.goodoldboat.com/Solitude_maps.html.

For further reading ...



Read Gregory Smith's book, *Solitude of the Open Sea*, or let him read it to you. *Good Old Boat* has produced this book in unabridged audio format, narrated by the author. It can be downloaded as an MP3 file or ordered on CD in two formats: MP3 or audio CD. Go to <http://www.goodoldboat.com/audio.html> or call 763-420-8923. The book itself is available from the

Good Old Bookshelf <http://www.goodoldboat.com/bookshelf.html> or by calling 763-420-8923.



The schooner rig

**It's versatile,
efficient,
and above all,
handsome**

by Ted Brewer



Tree of Life carrying both her fisherman staysail and main topsail.

and larger knockabout schooners were built in the early 1900s for fishing off the Grand Banks, but the type never caught on.

The more normal schooner is fitted with a bowsprit and carries one or two headsails, a foresail on the foremast, and a mainsail on the mainmast. The foresail is usually gaff-rigged, while the mainsail may be gaff or Bermudan. If gaff-rigged, the vessel is known as a bald-headed schooner if she does not carry a main topsail, a triangular fore-and-aft sail set above a gaff mainsail for added area in light-to-moderate breezes. Some schooners, such as the famous Nova Scotian *Bluenose* and other large fishing schooners,

THE SCHOONER RIG IS CONSIDERED TO be distinctively North American. There is even a stale old story of how the name came to be. According to legend, when the first ship of this type was launched and sailing in America in 1713, one onlooker cried out, "See how she scoons!" Apparently soon is either an old Scots word or an old New England word, depending on which "authority" you read, and means to skim over the water. However, this smacks too much of an old wives' tale to me.

The "sch" spelling of the word is said to be of Dutch or German origin and, since the Dutch originated the schooner rig back in the 1500s or early 1600s, more than 100 years before 1713, I have to believe that the Dutch originated the name as well. So much for legend.

In any case, the schooner is a fore-and-aft rig with, usually, two masts — a foremast and a mainmast — although schooners have been built with three, four, and more masts. A number of six-masted cargo schooners were launched in the early 1900s. The biggest schooner of all was the ill-fated, seven-masted *Thomas W. Lawson*, built in 1902. (Note: The T.W. Lawson: The Fate of the World's Only Seven-Masted Schooner, by Thomas Hall, is

available from Amazon.com. —Eds.)

Her masts were named fore, main, mizzen, number 4, number 5, number 6, and spanker, according to her first master. I can hear it now: "It's coming on to blow, me hearties, so tuck a reef in the fore, four, and six!"

The more typical two-masted schooner is of greater interest to yachtsmen, and the boats come in a variety of styles. The cat schooner, as the name implies, has the foremast set well forward and does not fly any headsails. The Block Island cowhorn is a handsome example of the type; plans for such a boat are shown in Howard I. Chapelle's *American Small Sailing Craft*. The schooner foresail is usually set on a boom, but the cowhorn foresail was boomless and overlapped the mainsail. Chapelle recommended the boomless, overlapping foresail for any small schooner seeking improved performance, but it does mean another sheet to tend.

Extended bow

The knockabout schooner sets one or more headsails but has an extended bow instead of a bowsprit, or widow maker, as many fishermen called that protuberance. A number of 100-foot

set topsails above both main and foresail, but the majority of schooner yachts only set a main topsail.

These boats are often, mistakenly, called topsail schooners, but that term should be reserved for those schooners that set a square topsail from a yard on the foremast and, occasionally, a topgallant or raffee (a triangular sail set from the masthead to the yard) above that. These are true topsail schooners and the *Californian*, a 1984 replica of a 19th century U.S. Revenue Service vessel, is a fine example of this rig. Visit the Maritime Museum of San Diego online to see a grand photo and details of this lovely vessel: <<http://www.sdmaritime.com/>>.

The staysail schooner is a different rig altogether and does not set a foresail. Instead, a stay runs from the mainmast to the foremast above the deck and a triangular staysail is set on that. It may have individual sheets but usually is set up with a boom to be self-tending for convenience in beating to windward and sail handling in general. The Cherubini 48 is a truly beautiful example of a modern staysail schooner and, noted for its very high quality, is one of the very few schooners ever put into production in fiberglass.



A huge fisherman was carried on the 33-foot *Ingenue* when racing, at left, helping L. A. "Pokey" Wheeler, win more than his share of prizes. Pokey is credited with the creation of the Bermudan schooner rig. The tern schooner *Millenium Falcon*, at right.

Pinky schooner

The only other two production schooners of which I'm aware are a handsome 26-foot pinky schooner weekend-er that, if my memory serves me, was built in Maine in the late 1960s. My own Lazyjack 32 design is the other. The little pinky may have been designed by Murray Peterson, a man who created many beautiful small schoo-

ners. I'd be interested to know more about the little 26 if any reader owns one and can tell me about it. I designed the Lazyjack 32 based on ideas by the late Dick Ketcham. The boats were built by Ted Hermann on Long Island in the 1970s. Neither of these small schooners is in production now. That is rather sad. I believe the schooner rig has much to offer the cruising yachts-

man and family in handiness as well as being the prettiest rig of all.

The schooner is definitely not a racing rig under the present rating rules, but schooners were a serious threat in long-distance ocean racing before World War II. John Alden's big schooner-rigged Malabars were always strong contenders in the Bermuda Races of the late 1920s and early '30s and won their share. *Nina*, a beautiful 59-foot staysail schooner designed by Starling Burgess and built in 1928, won the Bermuda Race in 1928 and again 40 years later, in 1968, much to the delight of many of us old-timers. I have seen *Nina* racing under full sail, and I can assure readers that it is a sight never to be forgotten.

The fisherman staysail is a large triangular sail set between the masts in light-to-moderate winds. The head of the sail is hoisted to the top of the mainmast, the forward corner to the foremast, the clew is sheeted well aft, and a downhaul from the forward lower corner of the sail keeps the luff reasonably taut. The fisherman staysail must be lowered and reset when the vessel tacks, so it is not a convenient sail in close waters, but it definitely pays its way on longer passages.

Huge fisherman staysail

The photo of *Tree of Life* (Page 13) shows a more or less normal fisherman and that of *Ingenue* (above left) shows the Bermudan schooner rig dreamed up by L. A. "Pokey" Wheeler for racing under the CCA rule in the early 1960s. The yacht was rated with only a small Bermudan foresail, rarely flown, but that huge fisherman staysail

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

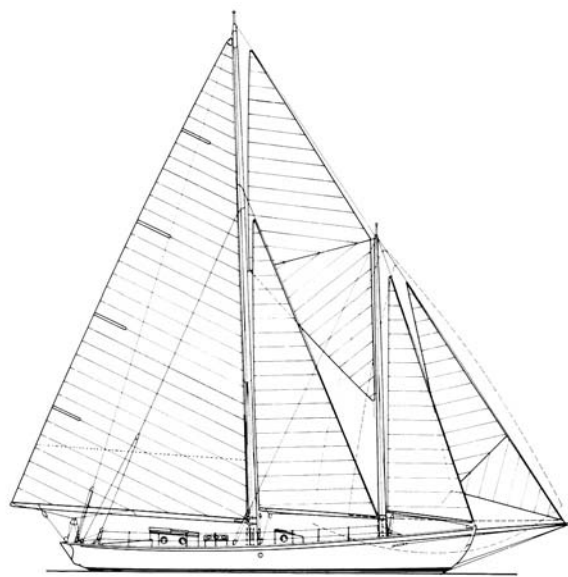
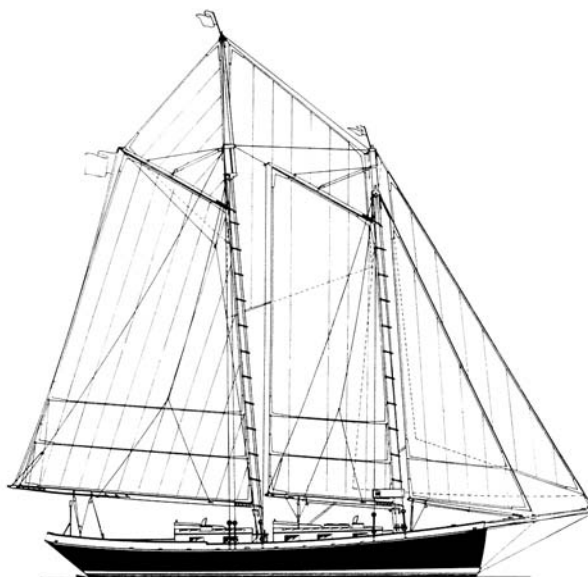
"We switched to Electro Systems and eliminated complaints about false alarms"

Richard Edmundson, OEM

EMA
CONSUMER
ELECTRONICS
AWARD OF
EXCELLENCE

ELECTRO SYSTEMS

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



The *Sophia Christina*, at left, is a typical gaff schooner and was styled after the old Boston pilot schooner, *Lillie Nina*, at right, a 1928 staysail schooner, won the Bermuda Race in 1928 and again 40 years later in 1968.

was hoisted on the foremast sail track and acted as an overlapping foresail. It made *Ingenue* a serious contender off the wind and won Pokey more than his share of silver.

However, racing aside, the cruising sailor might give the schooner some serious consideration for more reasons than one. The first reason is general performance. One of the more popular cruising rigs today is the ketch but, for handicapping purposes, the schooner was rated as a more efficient rig by the Royal Ocean Racing Club. A Bermudan schooner was rated at 92 percent of a Bermudan sloop, 4 percent more efficient than a Bermudan ketch or gaff yawl. Similarly, a gaff-rigged schooner was rated at 85 percent, only 3 percent lower than the Bermudan ketch and 4 percent better than a gaff ketch.

More important is how the schooner can perform on long ocean passages. Last autumn I had an email message from the owners of a 40-foot steel schooner, now in New Zealand. Gary and Jessie Balding were new to schooners, but they were not newcomers to cruising, as they had been sailing for 15 years and made a nine-year circumnavigation aboard their previous yacht. Still, they were delighted with the performance of their husky schooner. In fact, it was their message that prompted me to write about the virtues of the rig, which, like Rodney Dangerfield, never gets any respect.

Homemade squaresail

The couple, with their 11-year-old daughter, Sara, first sailed *Southpaw*, their gaff-rigged schooner, from Oregon to Zihuatenejo, Mexico. On

the passage from Mexico to Fanning Island, 2,600 miles in light air, they set a homemade squaresail and raffle to make the passage in 29 days, averaging more than 5 knots. They also had the satisfaction of beating — by 12 days — a 56-foot ketch that left at the same time. Later, on the passage from Fanning to Apia, in the Samoas, they made harbor a day-and-a-half ahead of

three modern cruising yachts, one of them a 42-foot fiberglass cruiser/racer.

As for handling storms, the worst *Southpaw* encountered was a 45-knot gale. They had a storm trysail aboard. I had asked them to try it on both masts during the voyage to see which worked better. However, Jessie advised me that they did not feel the need for the staysail in that gale and

Mobile

Marine Electrical Services, Inc.

Custom Marine Electrical
and Instrument Panels



visit us on-line at:
www.wewireboats.com

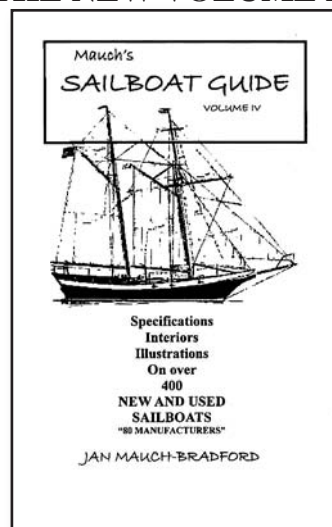
5-7 Perry Way, Unit 11
Newburyport, MA 01950

978-462-0470 Ph.

978-462-2852 Fax

e-mail us at:
yachtwire1@aol.com

THE NEW VOLUME IV



IS HERE!

A set of 4 Volumes with over 1500 boats with up to date Specs, line drawings, interior layouts, underwater profiles and a concise review of current and out of production sailboats from 20' to 100'.

To order:

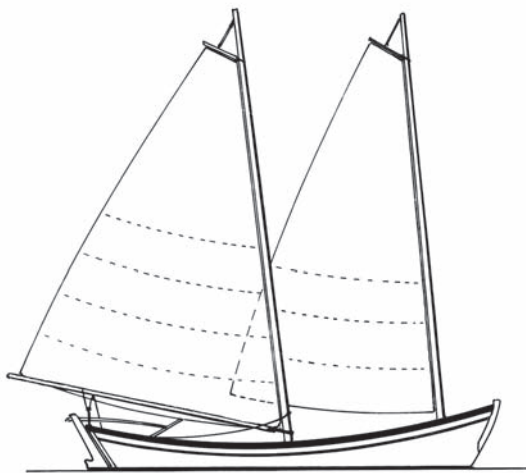
www.mauchs.com

904-821-1280

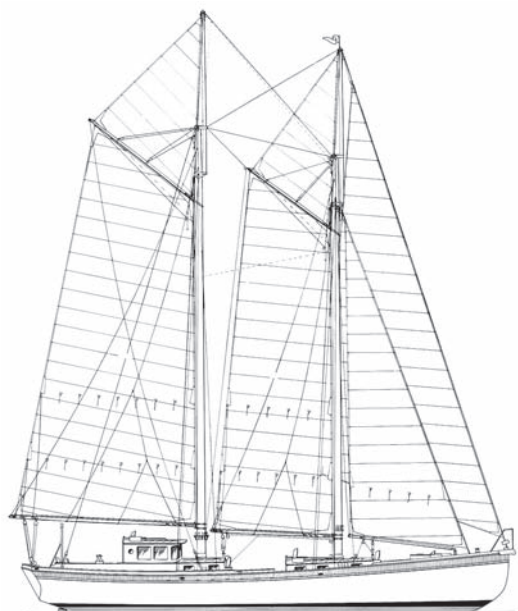
\$35.94 Each (Includes S&H)
\$132.75 Set of 4 Vols. (Includes S&H)



The Cherubini 48, a lovely staysail schooner, and the only schooner now in fiberglass production.



A Block Island cowhorn, rigged as a cat schooner. Note the very deep reefs.



Albatross, a knockabout schooner, shows the tall spars necessary to spread adequate sail area on the rig.

had no problems weathering the storm with reefed working sails.

Pokey Wheeler once wrote me that he and his wife had encountered a full gale in the Gulf Stream aboard the 33-foot *Ingenue*, while en route from Florida to New York. Pokey took down the main as the wind piped up and continued on with the jib and the Bermudan foresail. When the wind strengthened to gale force, he took the jib in, and *Ingenue* sailed on under the small 100-square-foot foresail alone, still making a few knots of headway to windward and handling the seas and the gale quite easily, according to Pokey.

My own experience tends to bear this out. I recall being at the wheel of a 45-foot gaff-rigged schooner under just foresail and staysail in a stiff blow when the few sloops and cutters we saw were under double-reefed main and small jib or motoring with all sails furled. The heavy schooner handled the weather beautifully; I was greatly enjoying the sail and the hot, rum-laced coffee coming up from the galley until we almost T-boned a very large whale. That made for some quick maneuvering. I'm sure the huge creature had never studied the rules of the road, and I was not about to argue that, being under sail, we had the right of way.

Three-masted schooner

In a larger size, I had always admired L. Francis Herreshoff's design of the *Marco Polo*, a 55-foot tern (three-masted) schooner. Herreshoff had convincing reasons for the tern schooner rig on a yacht of this size, stating that it was a rig that could be handled by one man on watch. He pointed out that it is easy to make great shifts in the center of effort (CE) of the sails, keeping the CE well forward to prevent broaching when broad reaching or running in heavy weather, or setting a reefed sail or storm sail on the mizzen mast to move the center well aft if laying-to in extreme conditions.

When a client came to me in the 1980s requesting a 60-footer that could be easily handled by a couple, I recalled the *Marco Polo* and thought about the old master's reasons for using the rig. It made good sense to me and, eventually, to my


client, so I started on the design of the 60-foot *Arden*. She was to be built in cored fiberglass but, unfortunately, ill health stopped work on the boat when the hull was partially completed.

I put the project aside as one more broken dream, but a few years later another client asked me to convert the design to steel. This required new, slightly beamier hull lines with heavier displacement, along with a revised sail plan of larger area. The result was *Han Solo*, later renamed *Millineum Falcon*, which proved to be very successful. She was beautifully built by her owner and performed surprisingly well in a few coastal distance races. Now an aluminum sister has been built using the same hull lines but with added ballast, and she is likewise proving the worth of the tern schooner rig for short-handed cruising, both coastal and bluewater.

Versatile rigs

The tern schooner can be Bermudan or gaff rigged, as preferred, and either is a versatile rig capable of flying a wide variety of reduced sail combinations to suit any weather. She can set quite an assortment of light-air sails between the masts — such as fishermen and mizzen staysails — for added performance when reaching and running. In any case, the rig allows for smaller and lighter sails than on a two-masted schooner of equal size, thus easing the work for a small crew.

All in all, the schooner rig deserves serious consideration by cruising sailors and designers. Perhaps we would see more schooners dotting our waters if the rig had received even a small part of the attention that has been given to improving the sloop.

Still, although the schooner is not the fastest rig, it has one undeniable merit. As Jessie Baldwin wrote to me, "*Southpaw* was, without exception, the prettiest yacht in any anchorage we visited." That alone may be all the reason anyone needs to own a schooner. 

Resources

There's some fascinating reading on this subject in Howard I. Chapelle's books *Yacht Designing and Planning*; *American Small Sailing Craft*; and *The American Fishing Schooners, 1825-1935*.

The finished trim piece looks good on the bow of John's boat.



Replacing a bow trim casting

Ingenuity and a warm oven solve the problem by John Brooke

REPLACING A SMASHED ALUMINUM stem casting had us facing the prospect of having to have one custom-machined from scratch at considerable expense. Instead, we decided to make it ourselves. We wound up with a perfect-looking result.

As we considered our broken casting, PVC electrical conduit came to mind because it resembles aluminum, is available in several diameters, and is less brittle than plumbing PVC pipe (or cast aluminum for that matter.) A quick trip to the local electrical supply turned up the proper size conduit and, to our surprise, they also stocked 2-foot long 90-degree sweep sections in each size. They were so inexpensive we got two, planning to practice bending on the first one. A trip to the plumbing supply revealed that standard PVC pipe caps fit the size we had selected for our replacement piece.

First we capped one end and secured the cap with a sheet metal screw instead of PVC cement. Next we filled the pipe with sand and packed it down with a mallet. (*Note: use sand that has been carefully dried in an oven. Wet or damp sand may cause an explosion when the moisture turns to steam. —Eds.*) Finally the second cap, with some sand in it, was installed and hammered down to insure very tight packing of the sand. It was also secured to the pipe with a sheet metal screw. (*Note: do not seal the pipe tightly. Leave an opening for expanding and contracting air to enter and leave. —Eds.*)

The bend in the sweep was already 90 degrees, so we had to continue bending until we had the desired bend, which was almost a U-turn due to the fineness of the bow on this boat.

We made a cardboard template of the shape of the bow, refined to be an exact fit, and a male pattern of that template, also from cardboard.

We placed the plugged, sand-filled conduit in a household oven at 200° F for half an hour to preheat the sand. When it was removed, it seemed as rigid as when it had been cold. We increased the temperature to 235° F for another half-hour.


Suddenly flexible

To our surprise, when we checked the piece at 235° F, it was not only flexible but the original bend/sweep was half-gone. Undaunted, we removed it from the oven (wearing leather gloves) and were able to bend it so the male pattern could lie right on the centerline of the conduit. The sand not only kept it from kinking during this extreme bend but also held the heat so our working time was extended. While holding the bend we needed, we ran some cold water over the piece to set the bend.

After removing the screws, caps, and sand, we traced the pattern on the piece and cut the line with a bandsaw. A jigsaw or even a coping saw could be used instead of a bandsaw.

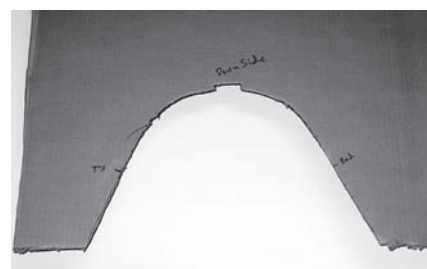
A little scribing, trimming, and rounding gave a perfect fit, top and bottom. Instead of drilling and through-bolting in three places (as was designed for the installation of the original aluminum), we decided to bond it in place. This would prevent a crack from starting at a bolt hole as had been the case with the original casting. The bonding material would fill the space behind the casting, cushioning any impacts. In addition, no screwheads would be showing.

Tracing around the new piece on the

hull gave us a line to which to run 2-inch masking tape. We also completely masked the outside of the fitting. A third of a cartridge of Life Seal was dispensed into the fitting and we pushed it in place and held it overnight with a strip of duct tape. The next day, after the excess caulk and masking was cut away, we had a very solid finished product. This is a good application for Life Seal as it is as resilient as silicone but with far better adhesion. 



The elbow before bending.



The cardboard template used to make the correct curvature.



The piece after sawing it in half.



Remembering

An old affair of the heart still

ANOR'EASTER IS BATTERING THE coast of Nova Scotia, causing this old house to shudder. The sump pump valiantly struggles to rid the basement of water. I am hunkered down, warm, dry, and safe in the knowledge that a basement is not a bilge and, no matter how strong the winds blow, my cozy and commodious cabin is most unlikely to drag off onto the rocks.

My mind wanders back to other storms in other places. In those times, life was more about stimulation than security and what security there was had a lot to do with the design and seaworthiness of *Sparrow*, our Rhodes-designed Bounty II.

They say all boats are compromises, in that no design offers it all. That may be so, but if ever there was a boat that came close, it was our *Sparrow*. She was fast, beautiful, strong, and seakindly. She made very little leeway. At anchor in a blow she was ever the lady, in that she faced into the wind like a little bird perched on a wire.

Sparrow began her life as a kit boat, one of two purchased by John Blunt of Sarnia, Ontario, in 1959. The kit was manufactured by the Coleman Boat and Plastics Company of Sausalito, California, and the design was based on Phillip Rhodes' 1955 wooden yawl, *Altair*.

The Bounty II was the first large fiberglass boat ever built and Coleman hired designer Bill Garden to engineer the scantlings. Since fiberglass was a new and untried material for boatbuilding, no chances were taken, and the Bounty II was stalwart to say the least.

John Blunt took his two kits home to Sarnia where he finished them up, outfitted them both as charter boats, and sent them off to Grenada. One of them he named *Affair de Coeur*.

Reported missing

Rumor has it that one of *Affair's* customers failed to return her to the charter company and she was reported missing. The Coast Guard spotted her at anchor somewhere in Florida

and went out to search her for drugs. As they approached, the "charter guest" was seen by onlookers heading to shore in an inflatable.

No drugs were found, so the Coast Guard left. Shortly thereafter, the vessel sank. Apparently they had interrupted the fugitive in the middle of a water-pump repair.

This turn of events aroused even more suspicion and the Coast Guard revisited the boat, raised her to the surface, searched her again, and then let her sink to the bottom once more. The story I was told was that the "gentleman" whose hasty retreat went unnoticed by the Coast Guard was in the precious stones business and was not a drug smuggler. (Many years later, while in the midst of extensive renovations, I always nurtured a hope that I might come across a nice diamond or ruby but, alas, it was not to be.)

But back to our story. John Blunt received a phone call from a friend who had recognized *Affair*. John went to Florida, had the boat raised, hauled, and shipped home to Canada where he had her steamed cleaned and then sold her.

Over the next few years she passed through the hands of several owners and I can only surmise about their dreams for her. Was she too much for their pocketbooks? Did her needs exceed their abilities for boat repairs? Did they just buy her to flip and make a quick buck?

Low windage, long overhangs

What I do know is that one spring day, sometime back in the mid-1980s, I first saw her hauled out in Port Credit, Ontario. She was beautiful... everything a boat ought to be: a full keel, low windage, long overhangs, a fine entry, modest in beam, and the product of a long evolutionary process that was all about being seaworthy and fast.

I must confess to having had an inordinate amount of interest in the "fair sex" as a young man. This, I am told, is due to an excess of hormonal activity that occurs around the time

of puberty. What, I am wondering, is *this* then? Could there be some sort of sailboat hormone that prepossesses some men to become stricken at the very sight of a sailboat? All I know about this medical revelation is that the very sight of that beautiful turn of her bilge made my old heart go pit-tery-pat. She was indeed an *Affair de Coeur* and I had to know all about her.

The young man who was sanding her bottom in preparation for the antifouling worked in Toronto and lived far enough west of the city that commuting to work was expensive and time-consuming. During the work-week he lived on *Affair* and could take a bus to work. On weekends he went home to his family. It was from him that I learned she was a Bounty.

I had just returned from two years spent living aboard an Alberg 30, during which time I had crossed over to Spain and Portugal and returned to North America, resolved to work five more years, buy a bigger boat, and move aboard for good.

Over the next few months I found myself drawn to Port Credit. When I wasn't actually there, I was researching Phil Rhodes and the Bounty II.

Five-year refit

It wasn't too long before my Alberg was sold and *Affair de Coeur* was propped up in the backyard undergoing what would become a five-year refit.

I love working on boats, even more so when they are in the water, but moving big boats from here to there, monthly yard bills, and Travelift costs make it much more cost-efficient to keep your boat at home until it is ready.

A heavy canvas tarp and a little cube heater made it possible to keep working inside all winter long. When summer came, the tarp came off, and it was time to work on the decks. The windlass was rebuilt, a dodger added, bow rollers, heavier ground tackle, new sails, the bottom got four coats of coal tar epoxy, the decks and topsides were painted and the interior was redone.

After five years and the investment

Sparrow

by Bob Walkenshaw

haunts this sailor

of mucho money, she was ready to go around the world. On August 31, 1989, I registered her as *Sparrow*, the third vessel to be registered at the Port of Collingwood, Ontario, that year. We were given a little blue book containing a single page of the most official-looking paper attesting to the fact we owned 64 shares of this vessel of 10.44 Register Tons and signed by Mrs. McEachim, the registrar of shipping.

It was 1992 before the great escape actually began. *Sparrow* left Collingwood on August 8 and made her way through the Great Lakes past Sarnia, Windsor, off down Lake Erie through the Welland Canal, and then entered the Erie Bridge Canal, where the mast was lowered.

Seized engine

At Tonawanda, New York, the old Perkins 4-107 lost oil pressure and, having no alarm, the engine just seized up with 1,465 engine hours of service to its credit. Adrift and at right angles to the canal, we had the honor of being rescued by the first private yacht from the Soviet Union ever to visit the USA. They secured us alongside and towed us to an old wharf beneath a bridge, where we tied up directly beneath the downpipe that drained rainwater off the bridge above.

In retrospect, the good life was

starting to pale a little. That was a rainy summer, so with each deluge a fresh offering of cigarette butts, muddy water, and soggy trash fell from above onto our beautiful decks. *Sparrow* shared her new digs with an old wino who liked to sing himself to sleep and whose habit was to retire in the not-so-early hours of the morning.

A replacement engine had to be found, the old engine removed, new cabinetry below had to be butchered, and to be completely honest, a nice time was not had by all.

When the main course involves quitting your job, selling your home, and saying goodbye to friends and family, there is a certain amount of stress. When for dessert you find yourself living under a bridge with a wino who sings very poorly, all the while being showered with cigarette butts and other soggy stuff of indeterminate origin, the stress level might be exacerbated.

Brand-new engine

Three weeks later, *Sparrow* was off and running once again with a brand-new Perkins 4-108 and a captain who was a bit anal about oil-change intervals.

September 16 saw us at Castleton on the Hudson, the last day I banged my head on the mast while coming up the companionway since it was there that she became a sailboat once more.

There was a hurricane at Cape May and the transmission had to be rebuilt at Annapolis. Were it not for bad luck, or so it seemed, I might not have had any luck at all. Upon reaching Beaufort, North Carolina, my wife left. Since then, I've met many a fellow with similar stories to tell. In retrospect, the worse things get on the outside, the more we tend to focus on the immediate problems, blindsiding ourselves to the whole picture. I believe they call it tunnel vision.

In any event, *Sparrow* and I spent the winter in Beaufort, North Carolina, and over the course of the next few years I made several trips to the Bahamas. I met a new woman, a good thing; the Canadian dollar kept falling, a bad thing. We made a lot of new friends, visited lots of new places, and




had many new adventures.

As the dollar fell, our cost of living crept upward and, for this and other reasons, it was time to move ashore. We decided to list *Sparrow* with a broker. As I expected, the first potential buyer found the boat on his computer. I also expected my heart would break when I signed her over, but I really liked the young man who purchased her. He was me 20 years earlier: a romantic with a faraway look in his eyes and a dream of sailing around the world. He didn't know much about boats but he knew navigation and earned his living as a commercial pilot.

Unnecessary renovations

He brought a friend with him, one of those experts who knows everything about anything. I hoped *Sparrow's* new owner wasn't gullible or considering any shared financial arrangement with this friend. Most of all, I hoped that this time *Sparrow* would get to sail around the world.

Sadly, this was not to be. *Sparrow* was to spend the next few years undergoing unnecessary renovations in a yard somewhere in Georgia. Tragically, her new captain would die in a plane crash a few weeks prior to his intended shakedown cruise.

She is out there somewhere. Is she just a home for a liveaboard, a weekend party boat, a young family's coastal cruiser? I don't know, but my wish for her is to cross many oceans and possibly even to circumnavigate the globe. May her masthead make little circles under the starry firmament and may her logbooks be chock full of the lats and lons of faraway places. May she be all she was meant to be. 



Respecting the furler

Advice for avoiding problems with your roller headsail

by Jerry Powlas

Six furlers (four are shown here) unfurled in Sewell's Marina when a big storm struck the coast of British Columbia recently.

PHOTO COURTESY OF PACIFIC YACHTING MAGAZINE

IT WAS 3 A.M. THE WIND HAD REACHED the forecasted gale force, and somewhere in the marina I could hear the sound of a jib dying. I knew the sound before I saw the sail. I'd heard it before. A roller furler had unfurled. Fortunately, the boat was pointed right into the wind so the really bad things had not started happening yet. I grumbled, dressed, got a flashlight and a winch handle, and walked through wind and spray to the far pier where the jib was snapping like the flags on a used-car lot.

There was no saving the sail. Parts of it had already gone off downwind, and the remaining part had split from roach to luff about 7 feet above the deck. I expected that. I had come over to refurl the sail before it snagged in the rigging. If it caught the rigging, or if the sheets were still attached and the wind shifted as forecast, the boat would heel in her slip and probably tangle her mast with the boat next to her. As it turned out, the sheets were attached to the part of the sail that was hopelessly tangled around the stay and furler. There would be no refurling this one before daylight unless the wind went down first. I dropped the sail in

several parts and tied them to the bow pulpit with the halyard. The tatters of cloth would never be a sail again.

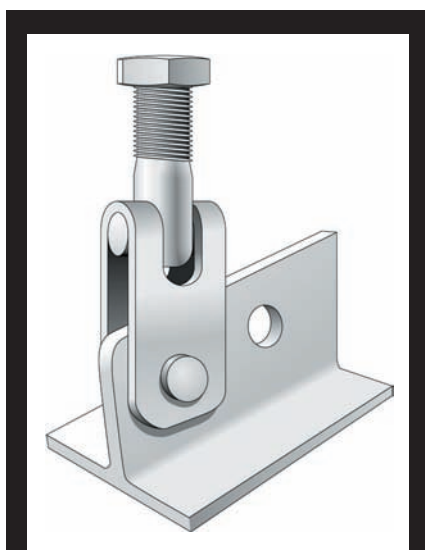
Despite the high cost, roller furling is one of the most popular rigging upgrades. The arguments for it are

compelling. You need have only one sail, and it will be easier to handle and much faster to furl. In addition, roller furling is typically promoted as roller reefing, meaning that one simply rolls in the sail to the size needed for the wind conditions. Treating this complex system as if it were that simple, however, would be a mistake. There are some subtle, but very important, things you should know and practice in order to make roller furling work really well on your boat.

Installation and maintenance

Start by comparing the installation of your furler with the manufacturer's instructions for installing it. Make certain that the instructions were followed and that any previous owners have not degraded the installation. It is critical that the connections at the ends of the furler, masthead, and stemplate be toggled so the furler can move in all directions without damaging end fittings. It is common to see furlers that can move fore and aft or side to side, but not both ways. If they cannot move in both directions, they risk the loss of the mast.

Some furlers attach the drum to



Double toggle the furler top and bottom so it is capable of fore-and-aft as well as side-to-side movement.

“The worst problem you can have with a furler is halyard wrap ... a partially furled sail that will not budge.”

the lower turnbuckle instead of the stem-head. These designs need a specially designed turnbuckle

with a beefed-up lower stud to take the added side loading. Attaching the furler drum to the lower turnbuckle opens the design up to two additional failure modes. If the bearings become stiff from corrosion or if the furler is rotated under heavy loads, high torsion stresses are directed to the turnbuckle. This can cause the lower stud to unscrew. These stresses can also unlay the headstay. Either of these failures can lead to the loss of the mast. Keep the bearing system running free.

While you have the manufacturer's literature out, read the section on owners' maintenance. In many cases there will be some washing and rinsing to do to keep the bearings clean and free. You may be asked to ease the halyard a little when rolling the sail in or out and when the sail is not in use. This keeps the bearings from being distorted or the races from being dented. There may be some parts that wear and need to be replaced on occasion. The plastic slides in the halyard swivel can wear enough for the swivel to cock and bind. You may even want keep some of these parts in stock aboard so you won't be caught short just before a cruise or, worse, during one.

Halyard wrap

The worst problem you can have with a furler is halyard wrap. You will be confronted with a partially furled

sail that will not budge. It will not furl, and it will not unfurl. Nor can you lower the sail with the halyard. Sorting it out may require a trip up the mast, which may or may not be possible. Sailors have been known to ride out a thunderstorm or even a gale with a full genoa because they had no other choice.

Properly set up, halyards don't wrap. What is critical is that, with the sail fully hoisted, the halyard must not run parallel to the forestay. It must lead away from the stay at the top by an angle of 5 to 10 degrees (see illustration on Page 22). This is often accomplished by attaching a fairlead to the mast below the mast sheave. Ideally, the upper swivel is as far up the foil as possible but stopped just short of coming off the foil at the top. This can be accomplished by adding a pendant to either the head or tack of the sail. Walk around a marina sometime and look at all the furlers with long halyards running parallel to the forestay. These are likely to be a disappointment in just the conditions when their crews need them to work flawlessly.

So what do you do if you are on a boat that has halyard wrap? If it happens in benign conditions, you may be able to unwrap the jib from deck level or you may have to go aloft. Once the jib has been unwrapped, you can disconnect the tack of the sail at the furler and hoist the sail up as high as

it will go. Then use a short piece of line to make up the difference at that end and re-connect the tack

to the furler. Control the luff tension with this line so the sail sets properly. Test for proper furling. This fix has worked for me a couple of times when I was on a boat that had a bad case of halyard wrap. The trick is that when the halyard is jammed up tight at the masthead, there is no halyard available to wrap. Don't think of this as a permanent fix. Do it right, making up the difference with a stout piece of cable when you get back to port.

If you find yourself in enough of a blow that the sail cannot be rolled, furled, or struck, and you need to reduce sail area, it is possible to force the sail to furl by powering through a dizzying series of 360-degree turns until it is rolled up on the stay. This may seem hokey, but it can be very appealing if the thing is stuck and you absolutely must get it furled.

A hanked-on sail sort of guy, I learned the hard way on a friend's boat that there must always be some tension on the halyard whenever the furler rotates. If the halyard is free (not cleated) it will wrap for sure.

Burying the furling line

Most furling units have a kinship with casting reels. A fairly small line is rolled up on a fairly large spool. Just as on casting reels, things can go wrong with this simple process. You want the line to roll evenly and tightly onto the spool. Keep a little tension on



Cutaway views of the typical roller furling unit: drum, at left, and upper swivel, at right.

ILLUSTRATIONS BY TED TOLLEFSON

the furling line as you unfurl the sail and a little tension on the jib sheets as you furl it. Inspect the furling line on the spool and refine your technique so you get the line to lay evenly and tightly as the sail rolls out. The location of the furling line fairlead block

should be such that the line leads into the drum at 90 degrees to the stay (see illustration on Page 23). This will prevent backlashes and burying the line into itself as the upper coils crush into the lower coils. It is good to have this block as far aft as possible

to minimize how far from perpendicular to the headstay the line is when it is rolling onto one end of the drum or the other. Although you will see sailors put the furling line on a winch, many furler manufacturers recommend against this practice.

Figure 1

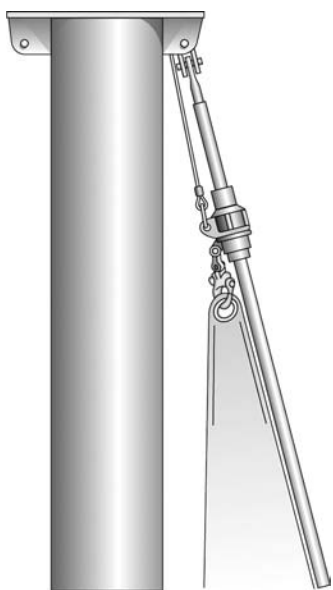


Figure 2

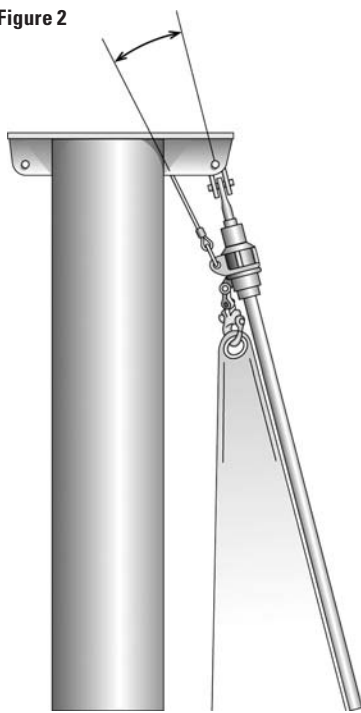


Figure 3

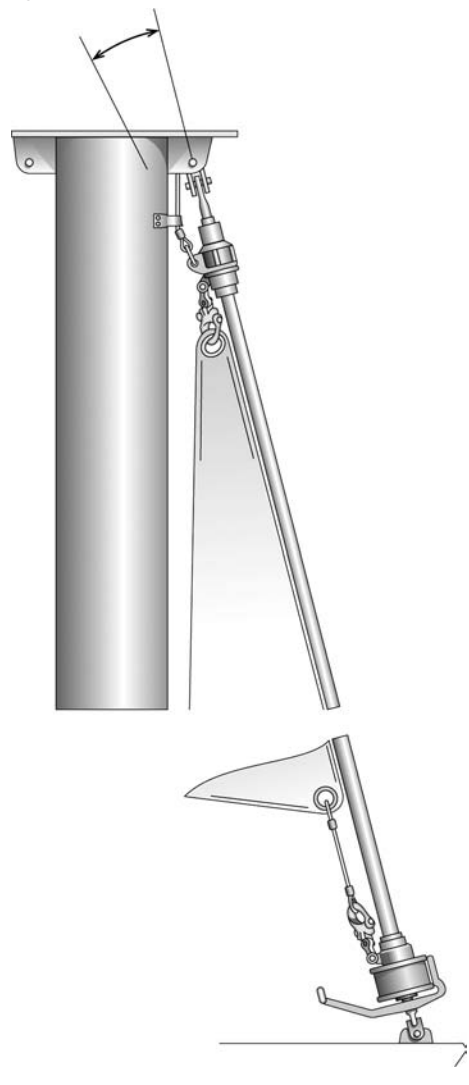


Figure 4

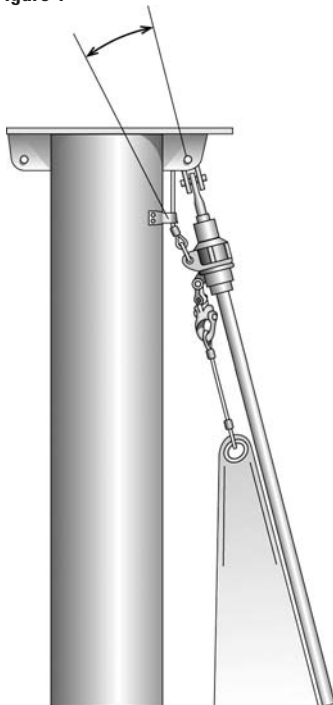
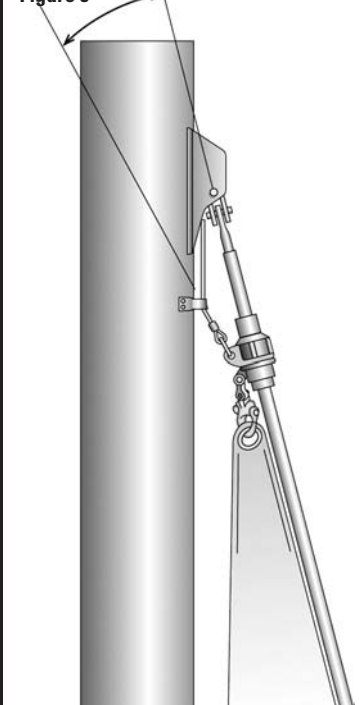


Figure 5



Prevent halyard wrap by making sure that the halyard does not run parallel to the forestay, (Figure 1). The halyard must lead away from the stay at the top by an angle of 5 to 10 degrees. Notice the angles in the remaining illustrations: a masthead rig with a long crane (Figure 2), a masthead rig with fairlead and pendant at the foot of the sail (Figure 3), a masthead rig with the fairlead and pendant at the head of the sail (Figure 4), a fractional rig with a fairlead (Figure 5).

Sail trim

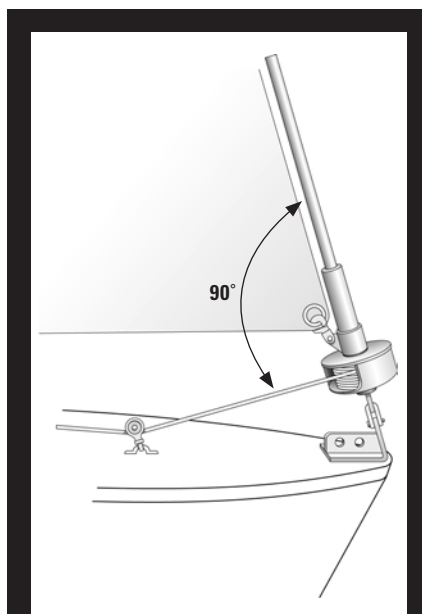
When the boat is close-hauled and the jib is roller reefed, the jib's sheet-lead angle may need to be changed. I'm told on good authority that this may not always be the case, but I have never been on a boat with roller furling where the sheet block did not need to be moved as the sail was reefed. If you simply roll in more and more sail as the wind speed picks up, you will notice that you can't point very high and, in extreme cases, the leech of the sail will flap about three-quarters of the way up. After a while, the sun cover may even separate from the sail in this area because of the flapping.

As the sail is reefed, the jib sheet-lead angle must be changed. Usually the fairlead block must be moved forward as the sail is rolled in, and backward as the sail is rolled out. If you do this properly, the jib will point much higher and pull much harder. Sailors with hanked-on jibs or with luff groove foils will set their jib lead blocks by watching a series of telltales along the luff of the sail. They head up and watch to see which telltales lift first. Ideally, they should all lift together. If the top telltales lift first, the jib has too much twist in the top part and the jib block needs to be moved forward. If the opposite happens, there is not enough twist so the block should be moved aft. Moving the jib lead forward as the boat turns further off the wind will also help keep the sail properly trimmed.

Roller-furling jibs are often made today with markers in several places along the foot. These are stopping points for reefing, which the sailor can use to match with jib lead block positions determined beforehand by the use of telltales.

What if you find yourself on a boat where nothing has

been marked or predetermined? A few general rules will get you close. First, it is never right to have the leech flapping. Moving the block forward will correct that. When a sail looks right,



The furling line should enter the furling drum at a 90-degree angle to the foil.

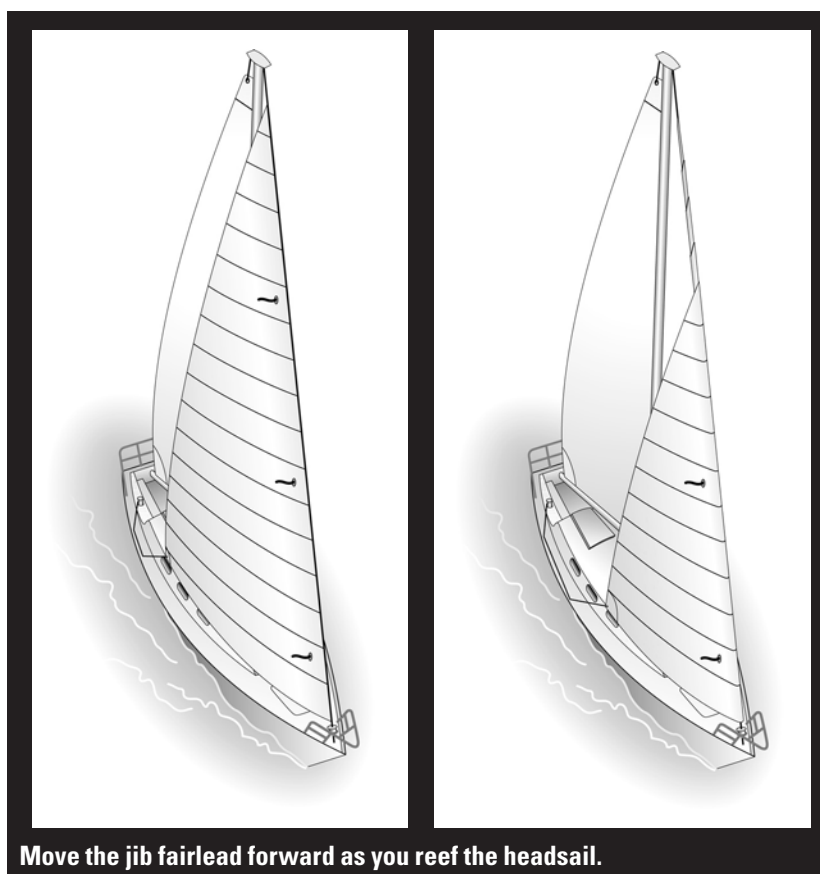
it is probably close. Second, study the sail when it is full and match that look when it is reefed. Maintain about the same amount of twist. If you have the jib lead block too far forward, it won't hurt the sail. Instead, you will lose some power and the boat won't point as well. Nor will it hurt the sail if you have the block a bit too far aft, so long as the leech does not flap. You will have a bit too much twist and the boat will be somewhat depowered, which is actually a trick that racers use in certain circumstances.

Securing for a blow

Every time you leave your boat you should secure for a blow unless you have absolute faith that you know what weather will come to her before you return. In the case of the roller furler, it is absolutely essential that the sail cannot — under any circumstances — unfurl.

When the sail is completely furled, have enough line left on the drum so you can wrap the jib sheets around the sail several more turns. These final turns — plus whatever else you can do to make sure that the furling line is

securely cleated and the sail cannot unfurl by accident — are critical measures to take in storm conditions and whenever you leave the boat unattended. You may be able to mechanically lock the drum with a carabiner or drill it for a locking pin. As mentioned already, high winds can and do unfurl headsails aboard unattended boats. Nothing good happens after that. One furler design, Reef Rite, <<http://www.anzam.com>>, has a locking pawl and release wire. This allows a more positive locking of the drum when not in use and also takes the load off of the reefing line when the sail is partially rolled into a reef.



Move the jib fairlead forward as you reef the headsail.

World's largest celestial navigation catalog...FREE!

ASTRA III PROFESSIONAL

\$795

Aluminum frame for light weight.
Bronze arc for accuracy.



TELLTALE COMPASS

Overhead mounting for your bunk. Gives peace of mind and situational awareness to the skipper.

\$360



HONEYWELL WIRELESS WEATHER STATION

24-hour barometric display

\$79



SUUNTO X9i – World's Smallest GPS WATCH



Has weather graph, accepts Marine Navigation Software and more!

\$499

AQUAGLIDE

Sail, windsurf, kayak --

all for **\$399**

58 lbs. in carrying case.
Fits in trunk of car or
checks as airline luggage.



Your single source for:

- marine sextants
- aircraft sextants
- astro compasses
- chronometers
- celestial computers
- astronomy
- world band radio
- electronic charting
- wind meters
- star finders
- plotting tools
- computer programs
- books/videos
- weather stations
- GPS receivers
- star charts
- nautical almanacs
- sight reduction tables



560 S. Oliver, Wichita, Kansas, USA 67218

1-800-727-9785

Int'l +1-316-686-9785

Fax +1-316-686-8926

www.celestaire.com

View the complete catalog on-line!

email: info@celestaire.com



If you don't have a drum which can be mechanically locked like Reef Rite's drum with its locking pin, at left, you may be able to drill yours so that it can be locked. Reef Rite's lever and cable, at right, control the drum lock.


Changing sails for conditions

A lot of experienced sailors who enjoy the convenience of roller furling own several headsails. Some will mount a smaller jib in spring and fall when the winds are stronger. Some will actually carry several jibs on a cruise and change them much as a sailor without roller furling would, except not as often. There is much to be said for this. A purpose-built roller-furling jib is different from a sail designed for a luff foil or hanks. Among other things, it will have a flatter cut. No matter what the differences are, any roller furling sail will be at its absolute best when it is not furled at all, and its performance will deteriorate as it is furled. To put it another way, a purpose-built furling 110 will outperform a furling 150 rolled up to the size of a 110. By changing to the sail that will not need to be furled as often or as much, these sailors enjoy better boat performance.

If several jibs are carried, the skipper will need to plan the sail changes with a little more care. Changing up — from smaller to larger — is not a problem, but changing down takes some anticipation since removing any sail without hanks in a blow is more difficult. The sail will, at some point, be held only at the tack, head, and clew and can be hard to control in a blow. Using several

crew for the change is very helpful as is ducking into shelter for the change. The Reef Rite furler departs from standard design practice by having larger grooves and "Kiwi slides," which are essentially slugs sewn to the luff at the spacing of hanks. This design allows the changing of jibs to be as simple as it is for sails with hanks.

In very high winds, a separate, dedicated storm jib is a very desirable sail. It will perform much better than the small triangle of a large jib almost fully furled. A very small jib can be carried on a separate stay if the boat has one, or a Gale Sail by ATN, <<http://www.atninc.com>>, can be mounted right around the furled genoa. This looks like a good solution since the sail can have good shape and can fair the luff on both tacks.

The modern roller furler is a sophisticated device that has evolved over the years. Properly installed and used, it can be very reliable and give acceptable performance. Roller furlers are seen on long-distance singlehanded racing boats and bluewater cruisers. Indeed, roller furlers are the rig of choice today for everything but racing. If you have a furler or intend to install one, you will get better and safer service from it if you take the time to understand and maintain it and use it as it was intended. 



ATN's Gale Sail is a storm jib attached to a sleeve, which is secured over the furled jib.

MARINE GRATINGS HAVE ONE THING in common: they are rigid and fit only in perfectly flat areas. A curve in the sole means getting out the wood rasp and fairing. Without a doubt, getting that thing to fit is going to be a big job.

In the process of installing a new cabin sole in our Watkins 27, I found myself with a bit of spare time while I was waiting for the weather to get around to being spring. "What else needs doing?" said I, as I looked around *Sundew's* interior. The first thing I noted was the cruddy snap-together rubber tiles in the head. They are cheap, uncomfortable to stand on, and look about as nautical as a clearance sale at Wal-Mart. "There's room for improvement here," I thought, "but how to put a grating in a space that has a concave floor?" Enter the flexible grating.

If you think about it, a grating that can form itself to a floor space that is not flat has oodles of possibilities. Other than the floors in most heads, there is the space between V-berths, the bottoms of storage lockers, and spaces under dinettes to name a few possibilities. But how does one go about creating a flexible grating?

You'll need some basic woodworking machines: a table saw, drill press, chop saw, thickness planer (nice but not absolutely required), belt sander and/or an orbital sander. Next, select the type of material you want to use for your project. Teak, mahogany, and oak are the most common options, but you can use just about any material that toots your whistle.

Individual slats

Once you have decided which material to use, you will have to create the individual slats that make up the grating. The grating I made covered a little over 2 square feet and required 90 slats to complete, so figure about 45 to 50 slats per square foot of grating. Each slat measures 4 inches long, $\frac{3}{4}$ inch wide, and $\frac{3}{8}$ inch thick.

The first step is to mill this material to the desired thickness. A thickness planer is the proper tool to complete this task. If you don't have a planer, a local woodworking shop should be able to do the job at a reasonable cost. Once the material is planed to its proper thickness ($\frac{3}{8}$ inch), set up your table saw to cut the material into $\frac{3}{4}$ -inch-wide strips. At this point it would

be a good idea to set up a cutting jig to make all cuts exactly the same. Finger boards are a great way to keep the stock in a consistent position while it is going through the saw. You can make your own out of any clear hardwood that is at least $\frac{3}{4}$ inch thick, or they are available at your local Home Depot for about \$7.

When you have enough strips cut (4 inches times the number needed equals the total length of the $\frac{3}{8}$ -inch strips required), set up your chop saw to cut the strips to length. A simple stop clamped to the saw will eliminate the need to measure each slat before cutting. Just set the stop, shove the strip up to the stop, and cut. Repeating this approximately 100 times will give you the number of slats you will need to construct your grating. Make more if your grating is larger than 2 square feet or fewer if it will be smaller.

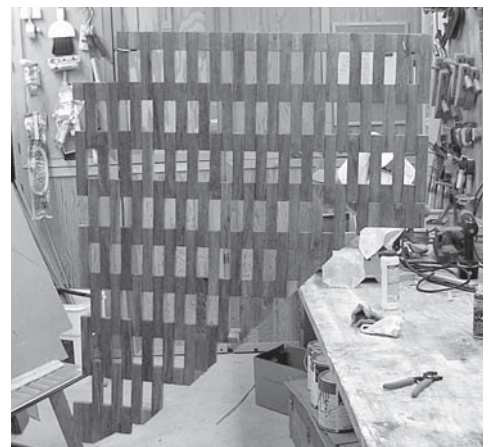
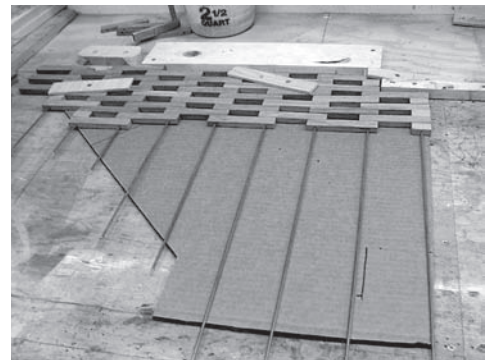
Set up a jig

The next step will be to drill $\frac{1}{4}$ -inch holes, one in each end of all your slats. It is most expedient to set up a drilling jig to ensure accuracy and precision. The holes are drilled $\frac{1}{2}$ inch in from each end and exactly in the

Flexible grating

This grating bends to the contour of any floor

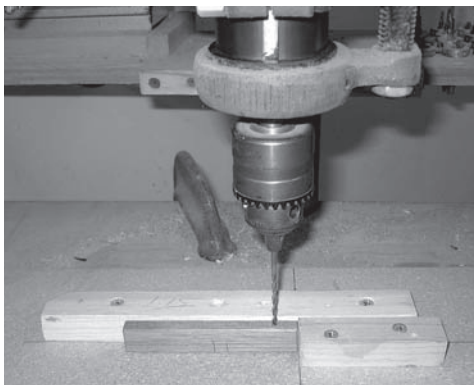
by Jim Shroeger



Jim made finger boards, above left, to keep the planed material in position while cutting the $\frac{3}{4}$ -inch strips, and a template of the shape of the sole in the head, above right. By hanging the finished piece, he was able to spray both sides at once with polyurethane.

middle of the side of each slat. The jig, when properly set up, will ensure that each hole is precisely where it should be. Take sufficient time to set up your jig correctly or each hole may be precisely where it should *not* be.

Using the jig, drill holes in the sides of each slat. Continue this until you



Curved sole? Not a problem. Jim's flexible grating is shown installed in the head, at top. He used a drilling jig to help him drill holes ½ inch in from both ends of each slat.

have gone completely crazy or the job is done. If crazy comes before you're completely done, finish the job tomorrow.

Next, you'll have to spend a little time sanding all the slats. The sanding operation will consist of smoothing each surface, slightly rounding each edge and end corner so the finished slat is smooth and uniform.

You will now need to create an exact pattern of the space you wish to cover with your new grate. A piece of light-

weight cardboard is best for this job. To get an exact fit, start with a piece that is approximately 85 percent of the floor space and then — using smaller pieces and masking tape — form the pattern to the exact shape required.

Now you have the pattern, a huge stack of slats, and — I hope — some good vibes about getting this whole thing together. The secret of the “flexible” in this grating is the fact that the slats are fastened together by passing a ⅛-inch brass rod through the holes that you so carefully drilled.

Brazing rod

Your local welding shop is an economical source for ⅛-inch brass rod. They stock brass brazing rod that's exactly what is needed for this project.

I like to think of this operation as knitting with wood. To begin, place the pattern on a suitable flat work-space. Align several brass rods so that slats are arranged in alternate positions with a space between each slat. If you study the photos on Page 25, you will recognize the alternate slat placement used in the grating.

Continue “knitting” the slat placement until your floor pattern is covered by interconnected slats. Finishing may involve one of several operations, depending on the final shape of your grating. The one I created was basically a triangle with an identity problem (it was not sure if it wanted to be a triangle, as it had too many sides).

In any case, finishing a flexible grating will require cementing the perimeter slats to the brass rod. I injected polyurethane glue into the holes in the slats and reinserted them on the brass rods. It's critical that you

secure the grating in position during this operation. This is done by using ¼-inch plywood pieces of 2 inches by 5 inches and screwing them through the open spaces in the grating to the work surface.

If your grating shape is irregular like mine, you will have to work your way around the entire perimeter, gluing slats in small sections until the entire grating is completely fastened to the ends of the brass rods that connect the slats. It may also be necessary to glue adjacent slats together to help form a continuous perimeter that will ensure that the grating will maintain the desired shape.


Ready to finish

Once you have completed the grating and the shape matches the pattern, you are ready to finish the piece. To do this, place the grating on a flat work surface and, using an orbital sander, smooth the top surface until all slats are smooth and uniform.

Next, I selected spray polyurethane semi-gloss varnish. The spray makes the finishing much easier than trying to brush on finish, and the polyurethane allows for several fast recoats, so the finishing process goes rather quickly. (This is a welcome change from the repetitive nature of the project.) I sprayed six coats of finish on both sides, and the result was very pleasing. The finishing job goes more quickly if you can hang the grating and spray both sides at once.

If your pattern was exact and if you were diligent in replicating the desired shape, you're ready to install your handwork. The brass wire connectors will allow the grating to assume a concave shape that will snugly fit in almost any configuration your boat's sole may have. In order to hold the concave

shape, it will be necessary to fasten the center of the grating to the cabin sole with just one #6 x ¾-inch stainless-steel screw. You can determine the exact screw location by pressing the grating into position with your hand and testing several locations until the best fastening spot is determined.

Now that the job is done, you can step back and admire your craftsmanship. It looks great. Don't throw away any of the instructions and jigs that you used. Your marina mates will want you to make one for them too. 

Bristol Channel Cutter
LOA: 37'9" LOD: 28'1" Disp: 14,000#
Design: Lyle C. Hess
Hull/Deck lay-up: Sam L. Morse
This boat will be completed in our shop during 2007





920-685-6624
2353 Elo Rd.
Pickett, Wisconsin 54964

Custom Boatbuilding and Restoration
Power and Sail
Wood and Fiberglass

Current Projects
Boatbuilding:
Camden Knockabout
Bremer 25 Sailboat
Bristol Channel Cutter

Restoration:
1966 Alberg 35

WWW.AMESPOINTBOATWORKS.COM

Night sail

WHEN FIRST CONCEIVED, the notion of an overnight sail seemed exciting. Sally and I had been coastal cruising for years, but we always planned our inlet-to-inlet passages between sunrise and sunset. We had spent many nights aboard but always on the hook or moored in a marina. All were great memories. Still, the longer I pondered the idea of standing watches in the red glow of the binnacle, the more obsessed I became.

"Even coastal cruisers should be competent night sailors," I began my pitch to Sally. We were planning to repeat a cruise made the year before. For three lovely days we had sailed down the Intracoastal Waterway, motoring when we had to and anchoring each evening before sunset. On Day Four, we ran the Fort Pierce Inlet at dawn and sailed the 60 miles back to Port Canaveral, offshore.

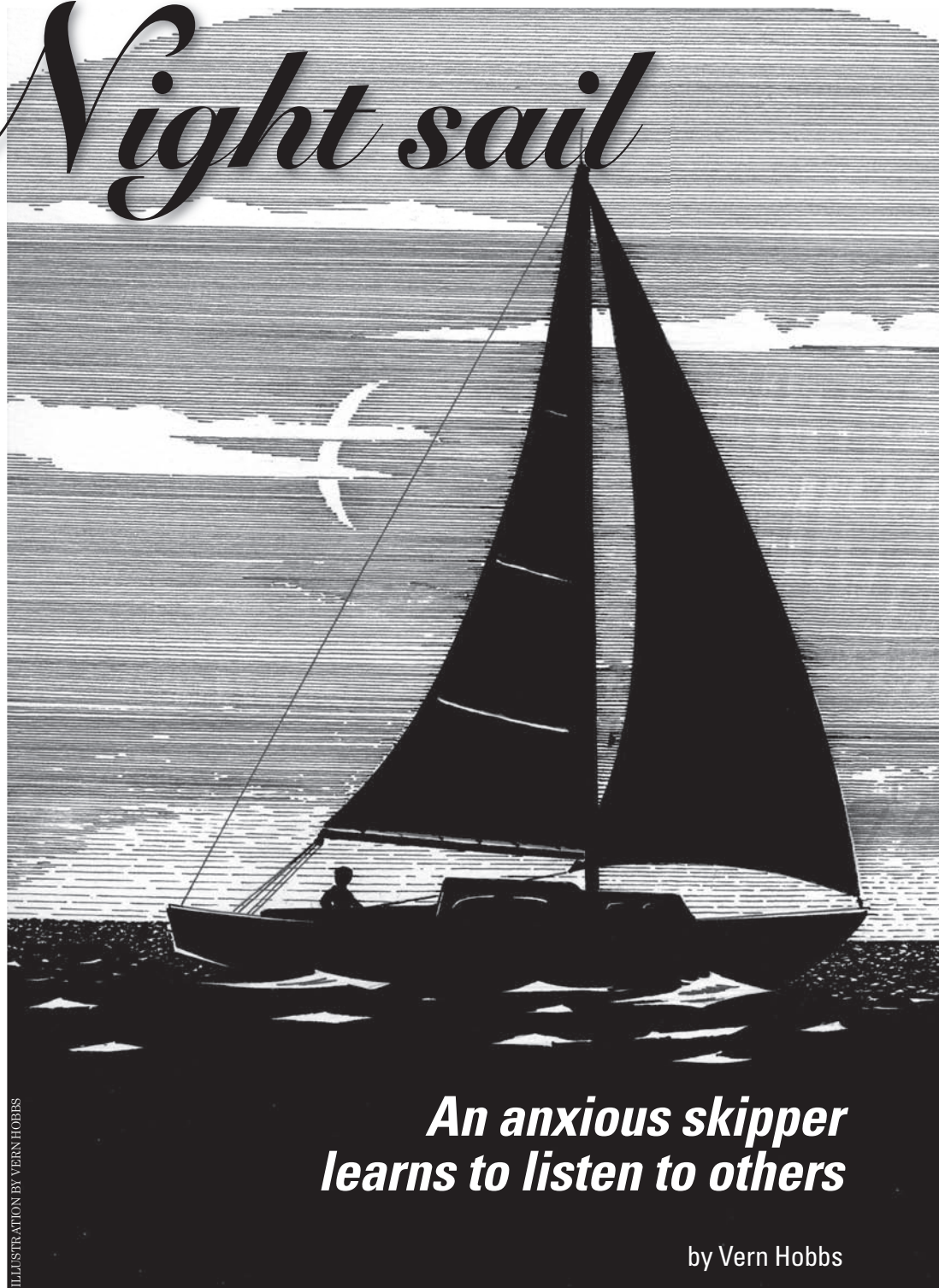
According to my revised plan, this year we would run the inlet in the afternoon and make our passage to our homeport overnight, gaining valuable experience and having a grand adventure to boot.

"I don't know," protested Sally. "Let's just do it like last year — we had such a good time."

"Wait," I added, "Simon is going with us this year." John Simon, my dear friend and mentor in all things nautical, had, after much persuasion, agreed to join us. He's a delivery skipper who has sailed the world over, and he was the missing piece of my plan. With a seasoned mariner aboard to teach us the nuances of night sailing and navigation, how could anyone say no?

Pleaded for days

"No," said Sally, "You and Simon go by yourselves. It's going to be a 'guy-trip.'" My pleading went on for days. Anxious to share this new experience, I sincerely wanted to include her. At last my efforts paid off, and Sally reluctantly signed on.



***An anxious skipper
learns to listen to others***

by Vern Hobbs

Our cruise began perfectly with a stiff east wind and clear skies. Day Two was equally satisfying, ending with us moored at the Vero Beach Municipal Marina. The next day or, more importantly, the next night, the real adventure would begin.

I awakened early, eager to get under way. For Sally, certain she had been shanghaied into some "boys' night out," the morning was passing all too quickly. She disappeared while Simon and I made final preparations. I found her beneath a banyan tree, reading a paperback novel. When asked if she was excited about our "passage," she wondered aloud about renting a car and driving home.

“I had sailed beyond sight of land before, but in broad daylight. Why was darkness making it all so different, so foreboding, and so intimidating?”

Departure time finally came. We reached the inlet early and discovered the outgoing tide was still an hour away. Sally suggested anchoring until slack tide, but driven more by “the plan” than sensible thought, I pushed on at an agonizingly slow pace.

Eventually we reached the sea buoy, hoisted the main, set the jib, silenced the diesel, and took up a broad reach on our course of 345 degrees. Perfect.

Afternoon passed quickly into twilight. It was time to switch on the running lights and set the watch. Sally had excused herself from any watch schedule. Simon and I had cooked up this little all-nighter, so we could steer the boat ourselves. She enjoyed the sunset, bid us good night, and retired to the V-berth with her novel.

Nobody sleepy

The first watch was Simon's. I would sleep two hours, then switch. But neither of us was sleepy. So we set aside the ritual and vowed that when one felt tired, he would confess and go below for a nap.

The wind strengthened with nightfall, delivering 6 knots. A check of the GPS confirmed we were off Sebastian Inlet, a full two hours ahead of schedule. Encouraged by our early progress, Simon and I began discussing the possibility of reaching Port Canaveral before sunrise. I was calculating a revised time estimate when I noticed a buoy depicted on the chart near our position. Surely on this dark night we would see its red light flashing every four seconds. I returned topside with binoculars and began scanning the horizon. Nothing.

“We’ve had two hurricanes this past year,” Simon interjected, detecting my concern. “Yeah,” I said, “That buoy’s probably long gone.”

Our conversation turned to other topics, only to be interrupted by a Coast Guard radio broadcast warning that the lighted buoy at Bethel Shoal was extinguished. Bethel Shoal! Extinguished? That’s the buoy I was looking for. Should we slow down? Should we heave-to until dawn? Simon gave me the helm and went below. Squinting through his bifocals, he surveyed the chart, then the GPS. “We’ll hear it, Skipper, it’s a whistle buoy,” he said calmly. “Besides, we’re past it.”

The adrenaline ebbed, leaving me suddenly tired. “I’m

gonna take that nap,” I said. “I’ll wake you in two hours,” replied Simon. I clipped off my harness, went below, and stretched out, realizing I had never tried to slumber while under way. Before I

finished the thought I was sound asleep.

Wind went slack

“You’re really sawing some timber there, Skipper,” said Simon, prodding me awake. He told me the wind had slackened and clocked to the south, explaining that he had altered course to north-northeast, intending to turn back toward the coast later. I took it all in, still half asleep. Simon went below and was snoring in minutes.

A thin crescent moon had risen. Our speed was down to 4 knots, and Simon’s new course was carrying us well offshore. There was a chill in the air and, although my two companions were only a shout away, I felt very much alone.

I held Simon’s course, understanding his plan, but realizing he felt none of my present anxiety about being this far offshore. The lights of the coast were disappearing in the deeper swells. “We’re no more than 5 or 6 miles off,” I told myself. Still, the dwindling lights dredged up misgivings and doubts. I had sailed beyond sight of land before, but in broad daylight. Why was darkness making it all so different, so foreboding, and so intimidating?


I deferred my anxiety. I would hold Simon’s course until the lights fell totally out of sight, then come about and steer toward the coast. The lights were gone a few minutes past three. Bringing the boat about, I felt my fear displaced with rising exhilaration. Perhaps it was the knowledge that I was turning toward land, or maybe it was simply the act of performing a task, rather than passively riding on the black ocean. Whatever the reason, I was relaxed now and even coveted my time alone in the cockpit. I selfishly decided to extend my watch until dawn.

Still a way to go

A thin strand of lights crept back over the horizon within an hour. Our speed fell to three knots. I wondered how far north we were, but reasoned that since I could not see the launch towers at Cape Canaveral there was no chance we had passed our destination.

Dawn found us ghosting along still 10 miles south of Port Canaveral. The rising sun washed over us, vanquishing the chill and awakening my crewmates. Soon the teapot was whistling in the galley and, as our tiny ship came to life, I realized the moment was precisely as I had imagined it would be.

The wind died completely with the morning sun. I cranked the diesel and began steering toward the launch towers now prominent on the horizon. Struggling against fatigue, I began to mentally catalog the lessons of the night.

The boat had sailed as stiffly and reliably in darkness as she ever had by day. No surprise. The true discoveries were more personal. First, in spite of the fact that we experienced no trouble, listening to your crewmate and, more importantly, your lifemate, is best put ahead of blind ambition. Second, that living the better part of five decades doesn’t mean I’m too old to be a little afraid of the dark. 

MOISTURE METERS

for Fiberglass and Wood


SOVEREIGN
 DUAL MARINE


TRAMEX
 SKIPPER PLUS

Electrophysics
 GRP-33

to the trade prices from \$310.00

Non-destructive hand-held meters for assessing moisture levels in fiberglass and wood. Simple to use, understand and evaluate. Sold worldwide to surveyors, repair yards, brokers, yacht designers, architects, insurance adjusters, U.S. Navy and Coast Guard. 9-V batteries furnished. Limited warranties up to 2 years.



GRP-33
 Includes instrument case & calibration block \$310.00



J.R. Overseas Co.
 6527 Marina Drive/P.O. Box 1228
 Prospect, KY 40059 U.S.A.
 502-228-8732 / sales@jroverseas.com
www.JROverseas.com

Vespera floats again

A revived cutter teaches her owners and aspiring cruisers a few lessons

by Karen Larson



VESPERA IS NOT YOUR TYPICAL GOOD old boat. But then, sailors Stan and Kathy Sroga aren't your typical good old boaters. *Vespera* is 51 feet overall, including her bowsprit and swim platform, and is sometimes referred to by this length. However, her deck is 46 feet and she has a waterline of 41 feet. No matter how you measure her, this is a cutter outside of the range of boats normally covered by *Good Old Boat*. Her better-known sister, *Crédit Agricole*, won the first BOC Challenge race in 1982, captained by Philippe Jeantot. (*Crédit Agricole* is the name of the French firm that sponsored Jeantot.) *Vespera*, unlike *Crédit Agricole*, is a centerboard model.

We all know how large any boat looks when it's out of the water. A 51-footer is a formidable sight to behold, particularly if it is a prominent feature next to a small home along the highway in the middle of rural Minnesota. Yet this is exactly where *Vespera* spent the past five years of her life. During this time, Stan Sroga's project boat became a local landmark.

Once you're on the outside looking up at any boat, you know how endless

the bottom-painting job seems and how huge the topsides buffing project becomes. Now consider how these jobs and all the others become proportionately larger with additional boat length. A 51-footer is a lot of boat to maintain if it's in good condition. If it's not in great shape, it becomes a major project.

A major project is indeed what Stan took on back in 2001. You read about his star-cracked gelcoat in our January 2007 issue. That was the most problematic of the projects he took on. But there were others, such as a leaky teak deck and a waterlogged bilge. It was Stan's innovative solutions to these problems that led us to expand our definition of a good old boat to include *Vespera*. More about these innovations will follow. But first a bit about the evolution of a sailor who thinks outside the box.

Began with Hobie Cats

Stan discovered sailing on a vacation in Nassau. These days he is surprised that the folks there would rent a Hobie Cat to a non-sailor. No training was offered in that easy-going vacation-land, so it is an understatement to

say that Stan learned a lot that day. The most memorable of the lessons learned in Nassau was that he had to have a Hobie of his own. "I bought one as soon as I got home," he says.

"We'd tent camp on that Hobie Cat on Lake Pepin [a wide spot in the Mississippi River, south of Minneapolis, Minnesota]," Stan says. And looking back, he adds, "That was one of the neatest times of our lives."

Kathy laughs, "He'd look at his watch to see if he had time enough to capsize it. He liked to hear me scream. When I stopped screaming, he sold the boat."

The scream-factor may have been part of the reason for selling the boat. But with three children, they needed something with a bit more room: a little cuddy cabin, a head of some sort, and more... every sailor knows how one thing leads to another. The next boat was a King's Cruiser, a wooden, slightly larger, cousin of the Folkboat.

Stan jokes about his level of seamanship in the early days, saying he didn't realize that sailboats swung from anchors at night. He thought they were to be pulled up on shore. After



all, that had worked for the Hobie. “I dragged it up on shore along with all the powerboats,” he says.

He wound up getting advice on this fine point of sailing from a more experienced sailor. “He was really polite,” Stan recalls. “He told me, ‘Umm, most sailboats, well, they don’t pull ’em up on shore. They anchor ’em.’” And with that revelation, Stan, the cruiser, was born.

Needed much work

Stan, the project boat fixer, had already been born. That first King’s Cruiser may have been affordable, but it needed a lot of work. While sweating over that one, he saw another that was stored in a warehouse and offered for sale cheap. “I had worked and worked and worked on mine. This boat was beautiful. I realized I could have worked until eternity and never would get my project boat to that point,” Stan says. “The owner was selling it for the price of what he’d just paid for a new set of sails.”

There was a reason for the low sale price. “Every rib had snapped,” Stan says. “But I knew how to fix that. I had just done that with the first King’s Cruiser.” So Stan practically gave the first one away and took on the second King’s Cruiser.

They say necessity is the mother of invention. A little previously acquired knowledge about the maintenance required by wooden boats caused the birth of Stan, the innovator. “I could have made a wooden boat out of it,” Stan says. But I used Allan Vaitses’ theory and built a fiberglass hull over it.”

Kathy notes that all three kids

could fit in the V-berth at that time. The head was under a cushion in the V-berth. It was cramped in some ways, but it was just right in more ways. Over the years, looking back at all the boats they’ve owned, Stan still says without reservation, “That was my favorite boat. I loved that boat.”

The family sailed on that King’s Cruiser for two years and might still be sailing it on Lake Pepin if it weren’t for a separate theme that was playing simultaneously in Stan and Kathy’s lives. They had started a software company that had grown to the point that it was demanding too much of their time. There were no vacations. Stan was always on call, with a pager going off a dozen times a day. So they sold the business and went sailing.

They bought a 32-foot Columbia. Stan spent two years fixing it up, and then they went on what they call a sailing sabbatical for a year-and-a-half, exploring the western Great Lakes and traveling down the Tennessee-Tombigbee Waterway as the northern summer season drew to a close. The children were small yet: 6, 4, and 2. They returned home via the same river system in the spring.

A dream is born

A Hunter 34 and charter vacations on other boats followed. And there was another software business for Stan, while Kathy went on to a position in research administration with an area university. The kids became teenagers and didn’t want to go sailing anymore. Somewhere in the daily hubbub of grocery stores, mowing the lawn, and rou-

tine family events, a dream coalesced for Stan and Kathy. They wanted to go cruising once more. But they wanted to be more engaged than they had been as cruisers the first time. Cruising for the sake of cruising would not be enough to keep them interested.

“We learned while cruising that we needed to have a purpose. We wanted to be meeting interesting people and have something to do, but not 365 days a year. We need time off also,” Stan says. They agreed to start a sailing school that would operate half time during the winter months. During the summer they would take their boat north to the Great Lakes via the Intracoastal Waterway or the Mississippi and Tennessee river system. Because they’d have a sailing business, some of the boat-related expenses could be absorbed, and they’d be having fun at the same time.

So Stan earned his captain’s license and was certified as an American Sailing Association (ASA) instructor. He’d been training people to use his software for years. He felt confident with his training skills. Now they needed the boat. They traveled to Fort Lauderdale, Chicago, Miami, Milwaukee, and Detroit — some more than once — in search of their dream boat, which would become the base for their new business, Sail Training, Inc.

“The mission was to find a boat that could go through waves. It had to sail well. It had to sleep six to eight people,” Stan says. “I figured out that I couldn’t find a *new* boat that sailed well that I could afford. It would have to be a fixer-upper.”

They learned about the Jeanneau Trinidad from a passionate owner who said it would self-steer in 35 knots of wind. So they spent three weeks sailing with that man, all in relatively calm conditions. "But finally we got the conditions he had described," Stan gloats. "And the boat was stable. The waves vaporized. In those conditions I would have needed a football helmet with a teethguard in my Columbia." They bought *Vespera*, a somewhat newer Trinidad model, in the Chesapeake, sailed her there for three weeks, and then trucked her home to the outskirts of Minneapolis, where she spent the next five years as a landmark.

Boatless in Minneapolis

But she wasn't idle during those five years. Stan was working half-time at his software business and half-time on the boat. The Hunter had been sold. He was boatless by one way of measuring, but by any other measurement system he had a boatload of projects. "We were boatless," Stan agrees, "But that wasn't a negative for

me. I loved working on the boat. I'm healthier than ever. Nothing is square on a boat. You're working in corners lifting things in awkward positions. It's a very healthy lifestyle." He says he feels younger than he did when he started. There's no denying it: at 60, Stan looks fit and trim and healthy.

During this time, his mind was active also. Stan has devised some very intriguing cures for some rather vexing problems. He was confronted with five major projects, along with many smaller projects on *Vespera*. The teak deck leaked at the fasteners and around the deck fittings, and the balsa core under the deck was wet. The engine beds and hull stringers had plywood cores that were wet and some had rotted to mush. Bulkheads were wet and, in some cases, rotten where they joined the hull in the bilge, and the gelcoat on the outside of the hull was cracked with wet laminate under those cracks (described in the January 2007 issue). Because of the sheer size of this boat and the scope of the work needed, Stan felt obliged

to think outside the box.

He removed all 2,000 screws from the teak deck and from below in the cabin and drilled holes in the cabin overhead to dry the core. He did this wherever his moisture meter showed that it was wet. When it was dry once again, he resealed the holes with urethane sealant driven in under pressure with a grease gun. Above decks, he resealed all 2,000 screw holes with urethane sealant and replaced the narrow teak hold-down strips between the wider teak planks with wide beads



Stan and Kathy Sroga, on facing page, prepared *Vespera*, following her launch, the culmination of a grueling five-year refit. Stan used some non-traditional tricks to save time on this massive refit project. He salvaged the good portions of rotted bulkheads by cutting off the wet bottoms and setting them in ferroconcrete footings. He was just as creative with the teak deck repair and star-cracks on the topsides. *Vespera* required very little work to her interior, however. Her large U-shaped saloon is inviting as visitors step down the companionway. The navigation station is to starboard, nestled between a starboard-side galley and one of two aft cabins. One of these cabins is shown in the center photo at bottom. The largest cabin, shown at bottom right, is in the bow.





of caulk. Where the core had gotten wet under deck fittings, he gouged out the wet material and filled the space with urethane sealant. The teak planks were glued in place during the original construction. There were no holes in the planks, and they were left in place.

Added skidplate

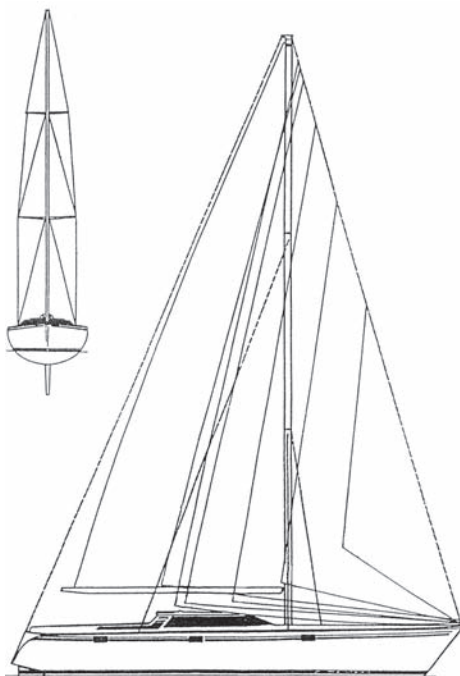
He dried the hollow-core rudder and injected urethane sealant into the void and then added an aluminum skidplate to the bottom of the rudder. Notice that, in the case of the wet deck and leaking rudder, he retained the original shapes and much of the original structure. This saved him a lot of time.

Rather than replace the engine beds and hull stringers with plywood-cored glass, as the boat had been originally built, Stan elected to use a modified version of ferroconcrete boat construction. He cut the tops off the beds and stringers and gouged out the wet and, in some cases, rotten plywood, leaving behind the heavy glass-laminate outer skins. He lined the cavities with urethane sealant and filled them with reinforced concrete. As in the case of the deck, by leaving the laminate in place and replacing the cores with concrete, he saved a lot of time.

Rather than tear out all the bulkheads and replace them, Stan cut the wet and rotted bottoms off and set them in ferroconcrete footings. The hull in this area was coated with urethane sealant, as were the bottoms of the wooden bulkheads. Thus Stan avoided the problems of bonding concrete to glass laminate and wood. He also avoided having to remake the bulkheads.

On the outside of the hull below the waterline, Stan ground off the star-cracked gelcoat to expose the underlying wet laminate. He air-dried the

laminate and re-faired it before he epoxied glass cloth over it. He stretched the cloth over the hull with wooden battens and bungee cords so it would conform to the curvature of the hull. In this way he avoided a massive re-fairing as the last step of the repair. He finished the job with a moisture barrier. In all these repairs, Stan performed a satisfactory, but minimally invasive repair, which allowed major elements to stay in place. The use of



Jeanneau Trinidad

LOD: 45 feet 11 inches

LWL: 41 feet 4 inches

Beam: 15 feet 1 inch

Draft (CB down/up): 8 feet 8½ inches/
4 feet 7 inches

Displacement: 27,558 pounds

Ballast: 11,023 pounds

a very thin urethane sealant and ferroconcrete allowed him to work fairly quickly and still make sound repairs.

The story that Stan and Kathy got when buying *Vespera* was that a fellow traded her for a new boat. "But," Stan says, "there were problems [that no one mentioned]. This boat was designed to have a bone-dry bilge. It is supposed to be 98 percent dry. The builder ran wiring through the bilge. Even the mast had a separate keel sump. But it wasn't dry, and there must have been too many problems [for the previous owner]. By the time I came along, they had cut the price almost in half." After a moment's consideration, he adds, "And I still paid too much."

He continues: "Before I bought the boat they let me remove the headliner and most of the floorboards. I knew what I was buying. I'd done enough with our previous boats to think I got it all. The biggest surprise was the hull. That was a miserable job," Stan recalls.

"Working on the teak deck wasn't so bad. I was covered from head to foot with a snowmobile suit," Stan says. "I had to remove 2,000 teeny retainer screws. About 10 percent of these were leaking. 'The headliner looks like a map for a lake bottom.'"

Test-bed for training/repairs

All in all, *Vespera* is a traditional boat with non-traditional repairs. In some ways, she's a test-bed. How well each new idea will turn out remains to be seen, but the odds of success are good. Even the sail training that Stan and Kathy started earlier this year is a bit non-traditional. They know that students can't absorb everything in a week when it's presented in a new environment and jam-packed with facts that must be understood and

Continued on Page 80



Exhaust ingenuity

Custom waterlift muffler calls for creative approach

by Paul Ring

The finished waterlift muffler Paul designed and built to fit in the space available behind the engine is very creative. Note the valley, which allows the propeller shaft to pass through, and the short pipe, which bridges the valley in order to integrate the interior volume. The inlet is on the front; the outlet is on the top.

MY FRIEND, KEN SIMMONS, AND I ran into a common problem when we replaced the aging Atomic 4 in his 1968 Pearson Vanguard with a shiny Yanmar 3GM30F diesel: the exhaust system wouldn't fit. There was no room to position the waterlift muffler the prescribed distance below the exhaust-mixing elbow.

It wasn't feasible on Ken's boat to install a high-rise exhaust elbow:

it would have had to protrude up through the cabinetry that enclosed the engine. This was not acceptable. After a long and frustrating discussion of the problem, I finally told Ken that we'd have to attach the waterlift to the outside of the hull, and that his new, more powerful engine would more than make up for the drag. He didn't think that was very funny. Then I suggested that if we did away with

A word of caution

by Jerry Powlas

The muffler described in this article was made of ordinary epoxy composite, and will burn if you put a match to it. Ordinary polyester composite would also burn. There are additives for these composites that will make them more-or-less fire retardant, but we found that they are not easily obtained and not available in practical quantities. We also learned that if you have an older boat there is a good chance that you have other exhaust system components that will burn if you put a match to them. If your boat is brand-new it is unclear what you will have in this regard.

We chose to print this article because the innovative muffler design solves a problem many older sailboats have, one for which we have seen no better alternative solution. If my boat had this problem, I would use this muffler to solve it, even though it is made of ordinary epoxy. Why? It is a matter of managing risks. Sailing cannot be made risk-

free. Bureaucrats and policy wonks will try occasionally, but I am happy to report that even they can't do it.

We have, in the years we have been sailing, replaced the exhaust system on our boat twice, once when our raw-water pump failed and once when we were hit by lightning. In both cases there was thermal damage to the non-metal parts, and in the case of the raw-water-pump failure there was smoke but no flame. I knew that the vast majority of the materials in the system would burn, but there did not seem to be much tendency in these kinds of failures for them to do that. Our author checked with a marine insurance company and got a similar characterization.

There are luminaries in the sailing business who don't even think you need an engine. I think for the vast majority of our readers their engines should be considered one of their safety systems. I put myself in that group. So here is where the

risk management comes in. Given that I think many, if not most, exhaust systems on existing boats have components that will burn if you put a match to them, would I add one more component of such character if it would protect the engine from being flooded with sea water in a severe following sea? Yes, I would accept that risk. I know of many engines that have been damaged and made unserviceable from this cause, and I know of no boats that have caught fire from flammable exhaust components.

This is a tough call. If you accept every risk that comes your way, I'd bet you have not seen your 20th birthday, and I'd advise you not to buy green bananas. If you will accept no risks that come your way, proceed to the nearest port and get off the water. In between these extremes you accept some risks and pass on others. In that spirit, we offer you information about this very interesting muffler.



A view of the new engine beds and propeller shaft. The deep, narrow V-shape of the hull in the engine location is what created this exhausting problem.

the propeller shaft, there might be room for one of the narrower Vetus waterlifts. He thought that was even less funny. But this strained humor had planted a seed in my brain.

That night, during that time before sleep comes, I thought, "Why *not* put the waterlift where the prop shaft is? We can run the prop shaft *through* the waterlift."

The next morning, when I presented this idea, Ken remarked glumly that my humor had reached a new low. But then as we measured the space, figured, and scratched our heads, the idea began to take a realistic form. The space available was odd-shaped (see photo above). No stock waterlift would fit in it, plus there was that problem of running the prop shaft through it. Finally, I suggested that I build a custom-made waterlift. The exhaust gases and cooling water didn't care about the *shape* of the thing — just as long as the *capacity* was sufficient and the inlet and outlet fittings were in the right places.

Flat-bottomed

I made some sketches. The waterlift would have to be flat-sided, in a V-shape with a flat bottom, and also be tapered from front to back in order to make best use of the space available behind the engine. I thought about running a tube through it for the prop shaft, but that would have made it difficult to service the stuffing box. In the end, we decided on a U-shaped valley in the top for the passage of the prop shaft. Both sides of this valley would be joined at the top by a tube to

integrate all of the interior volume.

Fiberglass was the natural choice for the building material. I had no welding equipment for fabricating stainless steel, and plastic was impossible. I needed sheet fiberglass from which to make the basic box, fiberglass tubing for the inlet and outlet, and a molded shape for the prop-shaft valley.

On a waxed plate-glass mirror, I laid up fiberglass cloth with epoxy resin to a thickness of approximately $\frac{3}{16}$ inch to make the fiberglass sheet I needed. Intuitive engineering suggested this was more than strong enough and would be stiff enough to prevent drumming induced by pulsations from the exhaust. I shaped the individual parts using my band saw, table saw, and hole saw.

The fiberglass tubing was made using a piece of 1-inch Schedule 40 PVC pipe — which has an outside diameter of about $1\frac{1}{4}$ inches — as a mold. I used paste floor wax as a release agent on the PVC pipe. Then I wrapped three layers of fiberglass cloth around it, applying epoxy resin with a disposable brush as I wrapped. When the epoxy had cured overnight, I slit the fiberglass tube lengthwise, popped

the slit open a bit, and slid the tube off the PVC pipe. Next, I carefully applied a bit of epoxy resin all along the slit to close it, restoring the basic shape and strength to the tube.

Snug fit

After wet-sanding the exterior of the tube, to make it smooth and to remove the amine blush left by the cured epoxy, and after letting it dry, I again wrapped the tube with fiberglass cloth and epoxy resin until I reached a diameter that would fit snugly inside the exhaust hose. When it had cured, I again wet-sanded it until the exterior of the tube was smooth. To do this, I found that using wet-or-dry sandpaper (as one would use a shoe-shine rag on the toe of a pair of wingtips) worked well and maintained the roundness of the tube.

The valley for the prop shaft was the last part to be fabricated. To make a male mold for this, I glued up a sandwich $2\frac{1}{4}$ inches thick, which I felt would give the prop shaft plenty of clearance as well as some dimensional tolerance in the installation. Then I hand-planed the top of the mold until it was half-round. This time I used

Continued on Page 36



On Paul's workbench are the three components from which the waterlift muffler was built: on top of a waxed plate-glass mirror, he laid up a sheet of fiberglass for the sides, top, bottom, and ends. The fiberglass tube, made by winding epoxy-saturated fiberglass cloth around a PVC pipe, became the inlet, outlet, and crossover tubes. He also laid up — over a wooden male mold — the valley to allow the propeller shaft to pass through the waterlift. That assembly is to the right.

How a waterlock works

The job of the waterlift (waterlock) is to direct exhaust gases and cooling water from the engine to the outside of the boat, and to muffle the noise of the engine exhaust. It's a pretty simple thing; nothing more than a container made from fiberglass, stainless steel, or plastic. The shapes are various. Round and pot-like seems to be most common, but some are rectangular. Those made by the Vetus company are very unusual-looking, but they all function the same way.

There is an inlet fitting on the waterlift to which the hose from the engine's exhaust-manifold mixing elbow is connected. At the mixing elbow, the exhaust gases are cooled by the injection of the raw water from the engine's cooling system. As the engine runs, exhaust gases and water collect in the waterlift until sufficient pressure builds up to blow the gases and water out the discharge port, through the exhaust hose, thence out of the boat. This pause of the gases in the waterlift causes much of the engine exhaust noise to be absorbed. This is the muffler function.

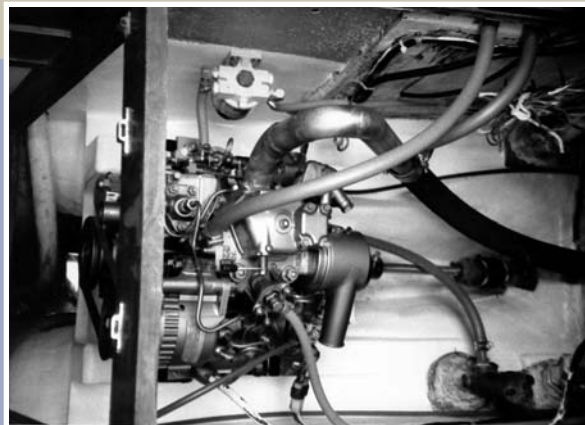
When the engine is shut down the water that was on its way from the waterlift to the outside of the boat drains back from the high point in the exhaust hose to the waterlift, which

now functions as a waterlock, preventing the water from draining back into the engine through the exhaust valves, where it would, more than likely, cause the engine to break. For the waterlock to function, three things are necessary.

Recommended capacity

First, the waterlift muffler must be of sufficient size. The book, *Desirable and Undesirable Characteristics of Offshore Yachts*, by the Technical Committee of the Cruising Club of America, recommends a capacity of 2 liters for every 10 horsepower, plus 1 extra liter. For the 3GM30F Yanmar, this would work out to approximately 7 liters.

The next requirement relates to the position of the waterlift relative to the engine or, more specifically, the exhaust-manifold mixing elbow. Yanmar engine installation instructions specify a drop of not less than 250 mm (9⁷/₈ inches) from the lowest point on the mixing elbow to the inlet on the waterlift. Other experts recommend a drop of 12 inches. This, along with sufficient capacity in the waterlift, assures that water cannot return to the engine — that is, unless the boat does a 360. If the configuration of the hull and the installed position

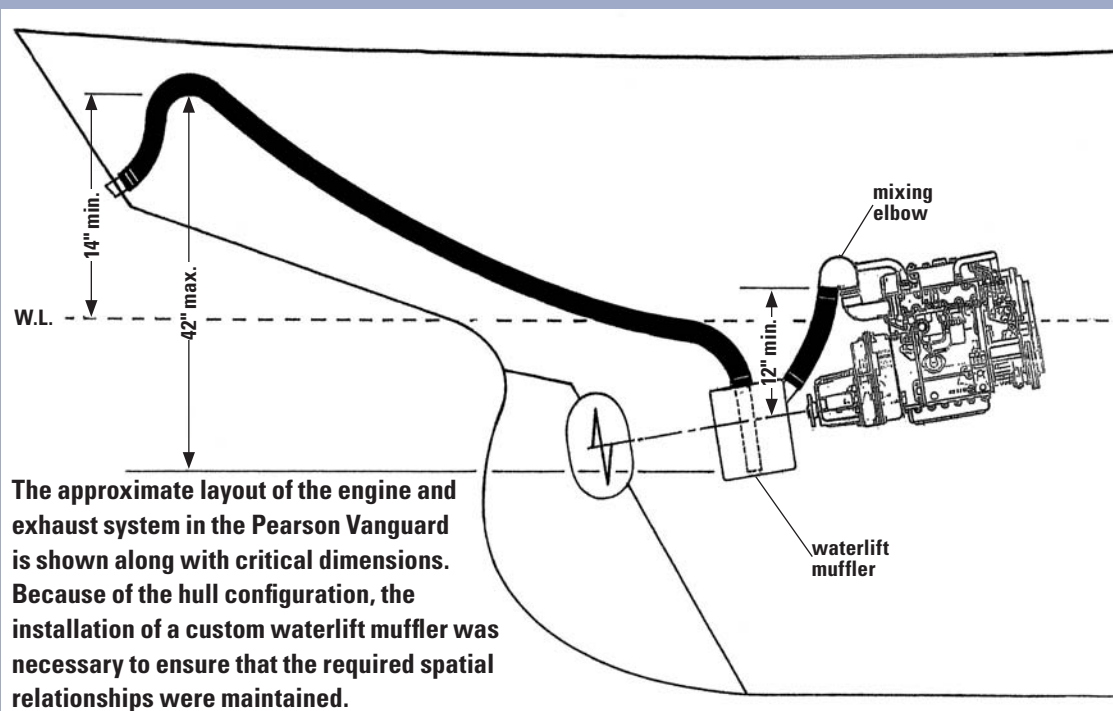


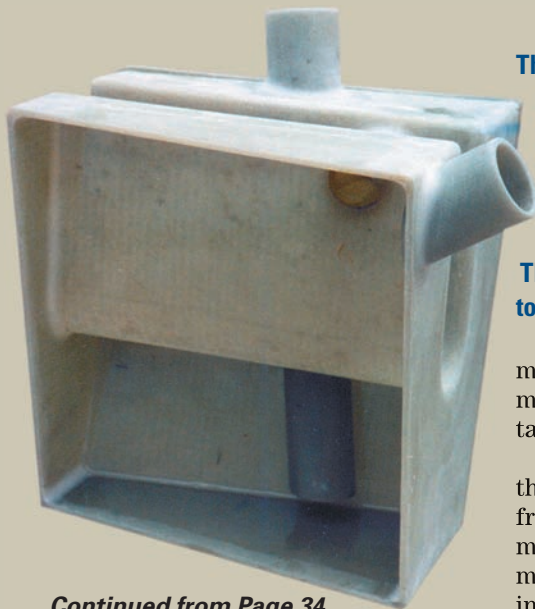
One solution to the problem of not being able to locate the waterlift muffler low enough is to use a high-rise exhaust elbow such as the one shown here, which Paul had fabricated and installed on the new engine in his boat. Such a solution was not feasible on Ken's Pearson Vanguard.

of the engine preclude installing the waterlift in a low enough position, then a high-rise exhaust elbow must be installed to ensure a sufficient drop. I was able to install just such an exhaust elbow on the engine in my boat (see photo above).

The last requirement is that the exhaust hose leading from the waterlift outlet to the transom must loop upward at least 14 inches above the waterline, but not more than 42 inches above the bottom of the waterlift. This loop is to prevent following seas from entering the exhaust hose, filling the waterlift and then find-

ing their way into the engine. The figure at left depicts these critical spatial relationships between the engine's exhaust manifold, the waterlift muffler, and the loop in the exhaust hose on its way to the transom. A more thorough discussion of waterlift exhaust systems can be found in the September 1998 issue of *Good Old Boat*, "Cool and Quiet and Trouble-Free" (Note: available only on a back issue CD. —Eds.)





Continued from Page 34

waxed paper to prevent the epoxy-saturated fiberglass from gluing itself to the mold. As with the fiberglass sheet, I laid up the fiberglass and epoxy over the mold until it was about $\frac{3}{16}$ inch thick. When it had cured, I popped the valley off the mold and wet-sanded both sides until smooth.

Before cutting out parts, I verified that my plan would provide the required seven liters of interior volume. The ends would be square and parallel, but the sides were to be tapered from top to bottom and from front to back. I therefore determined the interior width of this odd-shaped box at the mid-point, top to bottom and front to back. With that “width dimension,” I did the standard volume calculation for a rectangular box ($L \times W \times H = \text{Volume}$) and subtracted the calculated volume of the trench. It was oversized less than enough to bother with. It was time to begin fabrication.

Thickened epoxy

I used ordinary butt joints. I joined the two end pieces to the bottom by applying thickened epoxy to the inside of the joints and then propping them in position on my workbench. I applied a fillet of epoxy putty to the inside corners for added strength. Next, the piece of tubing joining the two sides of the valley at the top was installed in the valley, which was then dropped into the cutouts for it in the two ends. This was followed by the two top pieces. This made it possible to add epoxy putty fillets to the inside of these joints before the sides were added. The inlet and outlet tubes were installed next and finally the two sides. Of course, it was impossible to add an epoxy fillet to the inside of

The waterlift muffler is complete, at left, except for adding the last side. The epoxy fillets used to strengthen the joints can be seen. Note that the outlet goes down almost to the bottom of the waterlift. Temporary plywood brackets were used to hang the waterlift in place, below, from the propeller shaft while epoxying the support stringers to the hull sides. Waxed paper was placed between the mounting brackets and the stringers to avoid gluing the waterlift to the hull.

The fiberglass tape Paul used to strengthen the joints between the sides, top, bottom, and ends is easy to see also.

most of the side joints, but this was made up for by applying fiberglass tape to the outside of these joints.


Installation came next. We hung the waterlift in place temporarily from the prop shaft. This allowed me to determine the location for the mounting brackets. After the mounting brackets were attached, they were screwed to hardwood stringers that were subsequently epoxied to the inside of the hull. To do this, the attached stringers were planed to a bevel that matched the slope of the hull. They were detached from the brackets on the waterlift, then re-attached with overlapping waxed paper between them and the brackets.

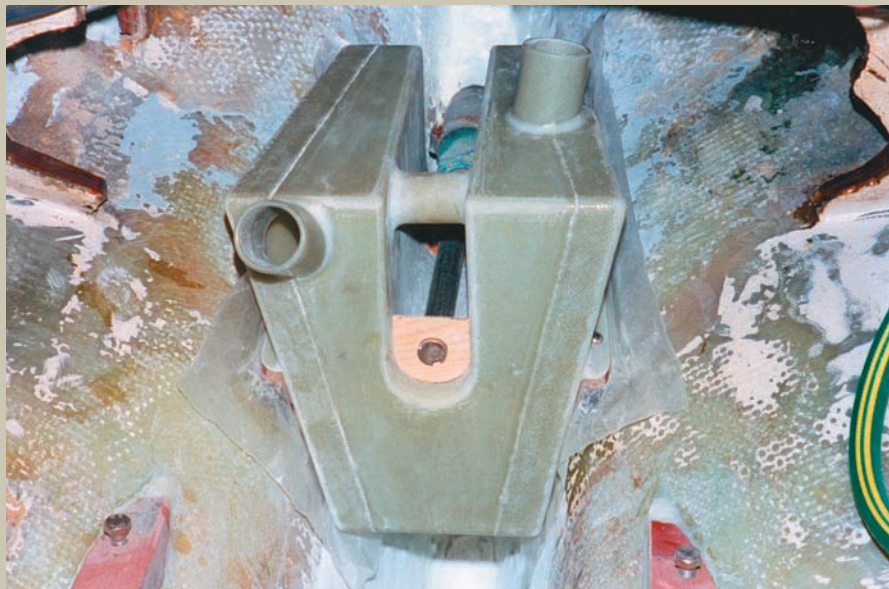
This made it possible to apply an epoxy mush to the hardwood pieces but not to the waterlift, so that when the waterlift was again slid in place over the prop shaft, only the hardwood shelf pieces would be glued to the hull. I went to the trouble of making the waterlift removable. In case this grand design of mine proved faulty, the waterlift could at least be removed without dynamite. After sanding the exterior smooth, I gave the waterlift a finished appearance by applying a couple of coats of gray primer.

Didn't explode

The rest of the engine installation was completed without a hitch. When the engine was started up, the waterlift didn't explode. Instead, together with the attached exhaust hoses, it competently carried exhaust gases and cooling water to the outside of the boat, all the while muffling the exhaust noises to a level comparable to commercially available waterlift mufflers.

Ken may have the most expensive waterlift muffler in the harbor — or maybe in the free world — but at least it's not attached to the outside of the boat bottom.

Those readers contemplating an engine replacement should take the design of their exhaust system as a most serious matter. It might appear that it is simply a matter of plumbing the parts together, but that approach could lead to disastrous consequences for an expensive new engine. Read the *Good Old Boat* article (September 1998) by Jerry Powlas and Dave Gerr along with the engine manufacturer's installation instructions. Should a properly designed system seem impossible to install because of hull configuration, a custom-built waterlift muffler might be the solution to your exhausting problem. 



U.S. Coast Guard checklist

Each time you go on a boat trip:

- Make sure you know where carbon monoxide (CO) exhaust outlets are located on your vessel.
- Educate all passengers about the symptoms of poisoning and where CO may accumulate.
- When docked or rafted with another boat, be aware of exhaust emissions from the other boat.
- Confirm that water flows from the exhaust outlet when engines and generator are started.
- Listen for any change in exhaust sound, which could indicate an exhaust component failure.
- Test the operation of each CO alarm by pressing the test button.

Once a month:

- Make sure all exhaust clamps are in place and secure.
- Look for exhaust leaking from exhaust-system components. Signs include rust and/or black streaking, water leaks, or corroded or cracked fittings.
- Inspect rubber exhaust hoses for burned, cracked, or deteriorated sections. All rubber hoses should be pliable and free of kinks.

Once a year:

Have a qualified marine technician:

- Replace exhaust hoses if cracking, charring, or deterioration is found.
- Ensure that your engines and generators are properly tuned and well maintained.
- Inspect each water-pump impeller and the water-pump housing. Replace if worn.
- Make sure cooling systems are in working condition.
- Inspect all metallic exhaust components for cracking, rusting, leaking, or loosening. Make sure to check the cylinder head, exhaust manifold, water-injection elbow, and the threaded adapter nipple between the manifold and the elbow.
- Clean, inspect, and confirm proper operation of the generator cooling-water anti-siphon valve (if equipped).



The case for epoxy

Examining the typical wet-exhaust system

by Paul Ring

AFTER BUILDING A CUSTOM WATER-lift muffler with epoxy and fiberglass, one question remained: how does it compare with the commercial ones made of polyester/vinylester resin composites or molded plastic?

For almost all applications, epoxy resin is superior to polyester and vinylester resins. It makes a stronger fiberglass laminate, its secondary bonding strength is far superior, and it is much more resistant to osmotic water migration. Indeed, it has been the industry standard for repairing and coating blister-damaged hulls constructed of polyester/fiberglass laminates. It has, however, two drawbacks: high cost and flammability.

A typical supplier lists 5 gallons of polyester resin with hardener for \$119.95 and the same amount of epoxy with hardener for \$257.80. This price ratio helps one understand the popularity of polyester resins with most boatbuilders, although a few top-end builders have recently switched to epoxy. Why then wouldn't epoxy also be superior for building waterlift mufflers? Indeed, when I spoke with David Parks, of Marine Muffler Corporation, a major manufacturer of fiberglass components for marine wet-exhaust systems, he cited cost as the problem with epoxy but didn't see much wrong with my epoxy-muffler concept.

The problem with epoxy is that there is insufficient demand for it to

be formulated with higher heat resistance and flame retardancy when cheaper polyester resins will suffice for most of the industrial applications for which fire retardancy is required. And, therefore, a waterlift muffler constructed from epoxy laminates would not meet the American Boat and Yacht Council (ABYC) standard requiring that such fiber-reinforced plastics "shall meet test criteria 94V-0 when tested in accordance with UL (Underwriters Laboratories) 94, Test for Flammability of Plastic Materials for Parts in Devices and Appliances."

Test criteria

Briefly, this test uses a ½-inch by ½-inch by 5-inch specimen that is held in a clamping device at one end in the vertical position. A burner flame is applied to the free end of the specimen

Ignited by a charcoal grill lighter, this epoxy/fiberglass laminate burns with a yellow, sooty flame and does not self-extinguish. It would not meet the test criteria 94V-0 when tested in accordance with UL 94, Test for Flammability of Plastic Materials for Parts in Devices and Appliances. A wet-exhaust system component made from the same material would, therefore, not meet ABYC standards.



A heat gun on the 1,100° F setting charred this epoxy/fiberglass laminate, but was incapable of causing flames or glowing embers.

for two 10-second intervals separated by the time it takes for flaming combustion to cease after the first application. Two sets of five specimens are tested. For each specimen, total flaming combustion must be

less than 10 seconds duration. For all five specimens in any set, total flaming combustion must be of less than 50 seconds' duration. Flaming and glowing combustion for each specimen after the second burner flame application must be less than 30 seconds' duration. Flaming drips from any specimen must not ignite cotton placed 12 inches below the specimen and, finally, no specimen may burn up to the clamp holding it in position above the burner.

The sample of epoxy laminate that I have ignited with a charcoal grill lighter would not pass this test (see photo on Page 37). Instead, it burns quite nicely with a yellow, sooty flame that does not self-extinguish. The flammability of epoxy, therefore, seems to condemn it for use in building a waterlift muffler. Or, could it be that the ABYC standard is too stringent? To judge this, I decided to take a look at what goes on in the typical wet-exhaust system.

Take a minute to review the diagram on Page 35. Follow the exhaust hose 12 inches up from the waterlift muffler to the mixing elbow. This is where the hot exhaust gases and the engine cooling water come together, or are mixed.

Heat-resistant problems

Why not build a one-off custom waterlift muffler from the same stuff the big boys use and not worry about it? Primarily because it is difficult to get that stuff. An extensive Internet search turned up several manufacturers and suppliers of heat-resistant and flame-retardant polyester and vinylester resins. But, with one exception, the smallest standard packaging was a 55-gallon drum, and orders of fewer than 10 drums were considered a nuisance. One source (the only one I could find), LBI, Inc. 973 North Road, Groton, CT 06340 <<http://www.legnosboat.com/lbiproducts/resins.html>>, offers 1-gallon packages of Hetron 197P, a product of Ashland Chemical Company. This polyester resin offers "heat resistance — gases and vapors to 350° F and good flame-retardancy — ASTM

E-84 Class II rating with additional 5 percent antimony trioxide." Without getting into the technical details, the ASTM E-84 Class II rating compares favorably to ABYC Standards, but it's not quite the same thing and therefore not approved by the ABYC. It only earns the ASTM rating if you have a bit of antimony trioxide on the workshop shelf. If you don't, there may be a problem. That's sold mostly by the gondola carload or by the shipload from China. Therefore, for all practical purposes, the typical good old boater is left with a choice from among conventional epoxy, polyester, or vinylester resins for a home-workshop-built waterlift muffler. My choice would be epoxy because of its superior qualities, discussed above. The cost differential isn't very important in a project of this size.

Uncooled exhaust

I asked Mark Coulson, the staff engineer at Marine Exhaust Systems of Alabama, Inc., "What is the temperature of diesel exhaust at the mixing elbow, if not cooled by water?"

He responded, "The temperature varies and depends on the engine. Generally anywhere between 700° F to 1,100° F. For reference, the wet system would be under 200° F."

This is supported by Chris Cerullo of Laborde Products, a Yanmar engine dealer, who says, "According to Yanmar test parameters, if we were measuring the exhaust temperature just prior to the mixing elbow, the maximum allowable temperature is 1,130° F. This temperature is going to vary somewhat according to propeller load and ambient temperatures. In the case of an overloaded engine, it may be higher also."

Having already learned that an epoxy-based laminate would burn when an open flame is applied to it, I now sought to learn what would happen when it is exposed to uncooled, non-flaming exhaust gases. After a period of contemplation, I decided against asking Ken Simmons to let me run his Yanmar dry to do a real-world test of my waterlift muffler. Instead, more prudently, I conducted a couple of simulations.

In one test I applied heat to an epoxy-based laminate from a distance of approximately ½ inch with a heat gun rated for 1,100° F. The laminate charred but did not burst into flame, even after prolonged application of heat. In the second test, I put another epoxy laminate sample in the oven of our kitchen stove and set it for 200° F. Then I increased the temperature in a series of 25-degree increments.

Layers separated

At each increment, I examined the laminate and tried to bend it using cooking tongs. By the time it reached 400° F, the laminate had browned to the color of "just-right biscuits." When I tried to bend it, it buckled at several points where the fiberglass cloth layers separated. However, once cooled, the sample returned to near-original strength.

It is, therefore, reasonable to conclude that a waterlift muffler made from epoxy-based composites

“Having learned that an epoxy-based laminate would burn, I now sought to learn what would happen when it is exposed to uncooled, non-flaming exhaust gases.”

would become unserviceable after being subjected to uncooled exhaust gases for more than a few minutes, but it would not ignite, so long as one kept one's charcoal grill lighter away from it. Therefore, the ABYC requirement that such a muffler meet UL Standards for “flammability of plastic materials for parts in devices and appliances,” may be a bit of overkill and, as we shall see, is contradictory. Because ABYC standards are voluntary, one may interject one's own conclusions, bearing in mind, however, that, as stated by Matt Murphy, the editor of *WoodenBoat* magazine (issue #135), “these standards [ABYC standards in general] are the product of some of the best minds in the industry and years of experience.”

However, in issue #134 of *WoodenBoat* magazine, an article, entitled “Marinizing a Subaru Engine for Marine Use,” describes, as part of the marinization process, a clever design for building, from an epoxy/fiberglass laminate, a custom waterlift muffler, which would accept exhaust from the dual-exhaust manifolds of the Subaru engine.

Expert opinions

I asked BOAT/U.S. for any data they might have relating to boat damage or losses resulting from exhaust-system meltdowns or fires caused by the loss of cooling water. Chuck Fort, their technical services associate editor with *Seaworthy* and *Exchange* magazines, offered the following:

“Exhaust component meltdown is common on overheated engines, especially V-8 gas engines. Usually, the driver doesn't notice the gauge or can't hear the alarm.

“Most of our claims are for gas powerboats; typically the rubber hose that connects the manifold to the exhaust system melts. This often causes a lot of smoke which, in turn, makes people think the boat is on fire. Sometimes the hoses do catch fire and have caused boats to burn, but it's not common. On some boats, breaching the cooling system causes water to enter through the exhaust system and, occasionally, boats sink.

“The reason for the overheating is

Continued on Page 41

Comparing mufflers



Jerry Powlas offered me the waterlift muffler he had just removed from his project boat. He thought I might like to subject it to the “charcoal grill lighter test,” just to see how it compared to my epoxy-composite muffler.

A couple of days later, when I opened the FedEx box, I found a nice plastic waterlock. For a hoarder of boat parts, it was difficult to apply flame to this perfectly useable muffler. However, expecting it to meet ABYC fire-retardancy standards, I didn't anticipate any real damage, perhaps a little melting around the edge of the inlet hose fitting. Was I in for a surprise! Within seconds of applying the flame, the

muffler ignited and continued to burn until I blew it out.

Now that the muffler was already pretty much ruined, I decided to experiment further: I took it outside and set it on a cement block and re-ignited it. The flames quickly spread and soon melted blobs of burning plastic were dripping to the ground. Within a few minutes, the fire reduced the muffler to nothing but a puddle of melted, burning plastic).

I was surprised that this muffler (I have one in my boat) burned so readily, actually more readily than the epoxy composite. It was about

26 years old, so perhaps something has changed since then.

The descriptions of similar waterlocks offered for sale in the current West Marine catalog make no mention of fire-retardancy. However, elsewhere on the same page, descriptions of the Vernalift mufflers, made by Centak Industries, include a claim for fire-retardancy, leading one to infer that this is meant to be a desirable quality — a selling point. Is this further evidence (besides the flammability of black rubber exhaust hoses) that the ABYC standard for fire-retardancy is at least inconsistent?





Hoses: the weak link?

This sample of black rubber exhaust hose burned with enthusiasm when ignited by a charcoal grill lighter and would not self-extinguish. It nevertheless carries the SAE J2006 certification and therefore meets the ABYC standard for approval as a wet-exhaust system component.

The other parts of the wet exhaust system, from the mixing elbow to the transom, are the hoses and, if needed, elbows and bellows. The hose connected to the mixing elbow is in the front line, in the event cooling water is lost, and therefore subjected to the highest temperatures. To learn more about hoses, I turned to the Trident Marine Systems website and found a column entitled "Ask Bill" <<http://www.tridentmarine.com/stage/askbill.htm>>. Bill is Bill Shields, the president of Trident Marine and a recognized expert on marine hose and boating safety.

In his column, Bill emphasizes the importance of a properly designed, installed, and maintained wet-exhaust system and the importance of using high-quality, certified exhaust hose and flexible connectors like bellows and elbows. By certified, he is talking about SAE J2006 Marine Exhaust Hose Standard, which has been adopted by both the ABYC and National Marine Manufacturers Association (NMMA). This standard requires hose, bellows, and elbows to "pass a number of performance tests, including an aggressive high-heat test (1,100° F for 2 minutes at 4,900 cubic feet/minute air flow). That simulates running the engine at full power for 2 minutes with no cooling water." There is no mention of a flame test similar to the UL test for plastics flammability.

There are essentially three grades of certified wet exhaust hoses. The first, made from 100 percent EDPM high-temperature hard black rubber, is the least expensive and will withstand continuous heat up to 250° F. The second two are

made from two different grades of silicone. One will withstand 350° F continuous and is colored blue. The other is colored red and will withstand 500° F continuous. Bill Shields strongly recom-

mends one of the silicone formulations because of the higher temperature ratings and also because they will last up to six times longer than black rubber and will therefore be more cost-effective in the long run.

Hoses will burn

I was unable to find specific information regarding the flammability of exhaust hose. However, a couple of my inquiries brought responses suggesting that they will burn. When I asked Mark Coulsen, of Marine Exhaust Systems of Alabama, Inc., what the failure of these components consists of — meltdown or distortion, noxious gases, fire — he told me that "hoses will melt, crack, or become so brittle that abrupt failure is possible at a later date ... Running dry or nearly dry can result in fire, flooding, carbon monoxide poisoning/asphyxiation . . ."

Dave Parks, of Marine Muffler Corporation, told me that (in the event of cooling-water loss) the hose goes first and is not fire retardant. He also recommends silicon hose, because of its higher temperature rating.

Having found nothing really definitive about the fire-retardancy of exhaust hose, and because the SAE J2006 Marine Exhaust Hose Standard (adopted by ABYC) measures heat resistance but not fire-retardancy, I reopened my

workshop laboratory. What I found was an inconsistency in ABYC standards for two different non-metallic components of the exhaust system. I applied my charcoal lighter flame to a new piece of SAE J2006-rated wet-exhaust-system black rubber hose. It ignited as quickly as, and burned just a little better than, did the epoxy laminate I tested previously (see photo above). I then gave it the same heat-gun test as I had given the epoxy laminate. The heat gun produced glowing embers where applied to the hose, while the epoxy laminate only charred (see photo below). While these home-workshop tests were primitive, I found that the unapproved epoxy laminate was less flammable than the ABYC-approved exhaust hose; at least it didn't burn with as much enthusiasm. I suspect that the only reason that a waterlift muffler made from an epoxy/fiberglass laminate would ignite was because flames from a burning ABYC-approved exhaust hose reached it.

The 1,100° F setting on the heat gun chars this black rubber exhaust hose sample, just as it did to the epoxy/fiberglass laminate. However, in this case, it also produced glowing embers but did not flame. This hose carries the SAE J2006 certification and meets ABYC standards, while the slightly less flammable epoxy/fiberglass laminate does not.



“Either both the epoxy composite and black rubber hose are unsuited for wet-exhaust system applications or both are suitable.”

Continued from Page 39

usually that the seawater impeller has failed or, less commonly, an obstruction in the system...”

He goes on to say, “...there is one standard that many people are not aware of: (ABYC Standard) P1.7.1.4. An indicator shall be provided at all helm positions to indicate loss of exhaust system cooling water supply.”

Buying time

Chuck Fort continues, “Cheap hoses melt quickly... The better the hose, the more time it will buy you if your engine overheats.”

Mark Coulsen, of Marine Exhaust Systems of Alabama, echoes Chuck's concerns for exhaust-system safety: “This is an important subject that too many boaters take for granted. The whole system should be inspected hand-over-hand routinely... all the way from the initial water intake to the exhaust outlet. Any defects should be further inspected/corrected as soon as possible. The Coast Guard's website has a good checklist that I copied and put on our website” (see Page 37).

In view of this information, I consider a properly built, one-off waterlift muffler constructed of an epoxy/fiberglass laminate to be a fully serviceable component of a marine wet-exhaust system.

My workshop tests demonstrated that an epoxy composite could not pass the UL test for flame-retardancy. It nevertheless performs better than SAE J2006-certified black rubber exhaust hose when subjected to heat and flame. The standards adopted by ABYC for these two components therefore appear to be inconsistent, all the more so considering that the more poorly performing exhaust hose is closer to the heat.


Logically, two conclusions are possible: either both the epoxy composite and black rubber hose are unsuited for wet-exhaust system applications or both are suitable. Based upon my investigations, I consider both the epoxy waterlift muffler and black rubber exhaust hose to be

satisfactory components of a well-designed, properly installed, regularly inspected, wet-exhaust system.

Unlikely to ignite

Even in the event of a loss of cooling water, neither component would be exposed to open flame and would be unlikely to ignite. However, Bill Shields' advice that silicon hose is preferable should be considered, especially for that hose section between the exhaust elbow and the waterlift muffler.

While the ABYC requirements are apparently contradictory in this instance, ABYC Standard P-1 Installation of Exhaust Systems for Propulsion and Auxiliary Engines (downloadable for \$40 at <<http://www.abycinc.org/standards>>) is nevertheless an excellent guide and should be carefully read by anyone undertaking an exhaust-system installation. The advice provided by paragraph P1.7.1.4: “An indicator shall be provided at all helm positions to indicate loss of exhaust system cooling water supply” should be taken to heart by everyone operating a vessel with a wet-exhaust system.

Twice I have experienced water-pump impeller failures. Neither boat was equipped with an exhaust-overheating alarm. Great good luck allowed me to notice the change in exhaust sound and discover the problem before damage was done. If not discovered in time, an exhaust-system meltdown can be very expensive and possibly dangerous. I've ordered my alarm. I recommend you do so also. It could be the best \$70 to \$80 spent on your boat. 

Wet exhaust alarms

Borel Manufacturing, Inc.

<http://www.borelmg.com/products_alarm.htm>; \$79

Aqualarm

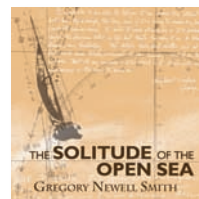
<http://www.aqualarm.net/store/comersus_listCategories.asp>; \$69

Sail to work today!

JUST RELEASED:

The Solitude of the Open Sea, by Gregory Newell Smith

Greg Smith reflects on adventures and discoveries during his world circumnavigation. Ideal for anyone seeking insight into the unexpected joys, bureaucratic hassles, beauty, and loneliness of global cruising. Rich port cities to small third-world coastal villages, and into the far reaches of your own mind, Greg takes you to the most unexpected places. Unabridged. 10.6 hours. Narrated by the author.



\$25/MP3 download
\$29⁹⁵/MP3 CD

\$40/Set of audio CDs



Into the Light, by Dave and Jaja Martin

When Dave and Jaja Martin and their three young children

abandoned the conventional lifestyle and headed off to pursue their dreams, little did they realize the discoveries and dangers that lay in wait. This story chronicles their epic adventure into the arctic as well as their growth as a family and the development of a powerful philosophy of life. Unabridged. 14.2 hours. Narrated by Jaja Martin.

\$25/MP3 download
\$29⁹⁵/MP3 CD

\$40/Set of audio CDs

What else is in the works?

We're finishing up *Voyage Toward Vengeance*, Jule Miller's sailing adventure thriller, a chilling novel that will keep you awake at night, and *Trekka Round the World*, John Guzzwell's wonderful classic of his circumnavigation in the 20-foot boat he built himself.

Also in the store

We have a series of three children's tales by John Vigor and Joshua Slocum's classic, *Sailing Alone Around the World*.

Visit our online audio store to order and for free audio samples of these books

www.goodoldboat.com/audio.html

Adding staying power to your ground tackle

by Don Launer

THE ANCHOR SENTINEL HAS BEEN USED BY MARINERS FOR thousands of years. It is known by many other names throughout the world: the kellet, sentinel, chum, Sent Angel, Rode Rider, Anchor Buddy, and anchor weight. Anchor weight is probably the most descriptive term, since this object is a weight that is hung from the center, or slightly beyond the center, of the anchor rode to increase an anchor's holding power. Nevertheless, sentinel and kellet are the two most commonly used names.

Two thousand years ago those master sailors, the Phoenicians, used this method to hold their primitive anchors more securely, and the same system is still being used today by knowledgeable sailors. The Phoenicians' *catenary stone* was the genesis of today's modern sentinel. Although nothing can correct for improper anchoring technique, the sentinel's advantages are complementary, resulting in greater holding power and decreased arc of swing once the anchor has been properly set.

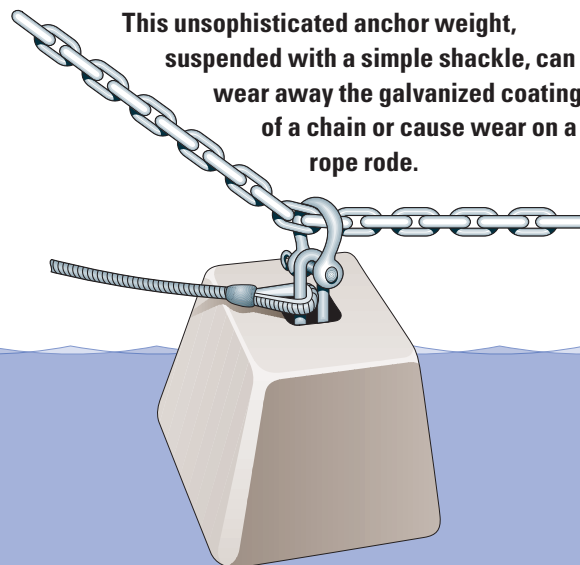
How it works

An anchor's holding power is greatest when the pull on the rode is horizontal. As this angle is increased from the horizontal, the holding power of the anchor is reduced by a surprising and alarming percentage. Royal navy tests in Britain showed that when the anchor rode is only at the small angle of 10 degrees, the anchor's holding power is already down to about 60 percent, compared with a horizontal pull. At an angle of only 15 degrees, the holding power is down to 40 percent, as is described in the *Admiralty Manual of Seamanship*.

The sentinel increases the catenary (the curve) of the anchor rode and keeps the angle of pull on the anchor lower. In many cases it can nearly double the anchor's holding power. This weight also decreases the hunting action of a boat at anchor as well as acting as a shock-absorber during sudden gusts or wave action. In these cases the weight is lifted while continuing to maintain a fairly constant pull on the anchor as well as on the boat's cleat.

In his book, *The Annapolis Book of Seamanship*, John Rousmaniere recommends the sentinel be in the 20- to 50-pound range. The recommended weight depends on boat size and windage as well as the ability of the sailor

This unsophisticated anchor weight, suspended with a simple shackle, can wear away the galvanized coating of a chain or cause wear on a rope rode.

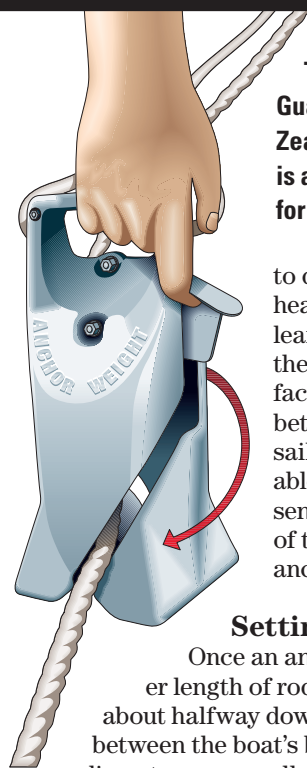


check-line to adjust position of sentinel (kellet)

anchor sentinel (kellet)

lower angle of pull on anchor





The Kiwi Anchor Rider, by Guardian Marine of New Zealand, twists onto the rode and is available in three weight sizes for either rope or chain rode.

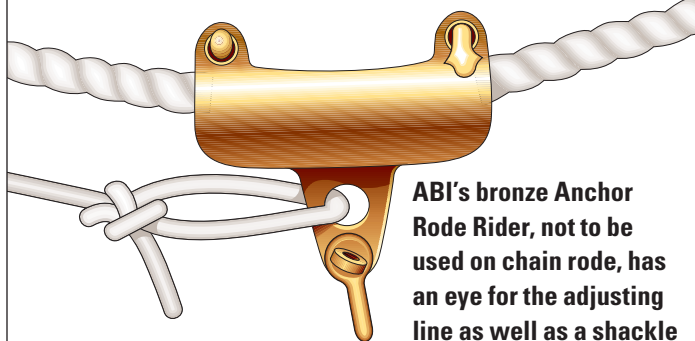
to deploy it easily. Although a very heavy weight would be the ideal, leaning over the bow to attach it to the anchor line presents a limiting factor and becomes a compromise between a heavy weight and the sailor's ability. A sailor should be able to set and retrieve an anchor sentinel easily, since time is often of the essence when weighing anchor.

Setting and retrieving

Once an anchor has been set and the proper length of rode deployed, the sentinel is sent about halfway down or a bit more, as measured between the boat's bow and the anchor. A small-diameter warp, called a check-line or buddy-rope, usually a 1/4-inch line, is attached to the sentinel to control this distance. When leaving an anchorage, the sentinel is brought back on board again using this warp, before the anchor is weighed.

Sentinels can be used on anchor rode that are all-chain, rode that use a short length of chain at the anchor end, or rode with a rope-to-chain splice. However, it's difficult, or sometimes impossible, to use a sentinel where (partway down the anchor rode) there is a line-to-chain connection, if this connection includes a shackle.

The sentinel itself can take many forms. Some weights are hung from a Rode Rider (usually bronze) that rides down the anchor rode. The Anchor Rode Rider from ABI

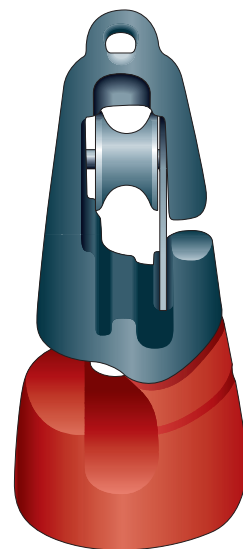


ABI's bronze Anchor Rode Rider, not to be used on chain rode, has an eye for the adjusting line as well as a shackle for attaching the weight.

Marine opens in half for easy attachment. It has no internal rollers, relying on the sentinel's weight to let it slide down the rope anchor rode. It is not suitable for a chain rode. Other sentinels, such as Guardian Marine's Kiwi Anchor Rider, have corkscrew slots molded into them, enabling them to be twisted on or off the rode. A handle on the top facilitates deployment and retrieval. The Kiwi Anchor Rider is manufactured for either a rope rode or chain rode and has internal nylon rollers to reduce friction.

A sentinel can be a complicated patented design or simply a shackle with a weight attached (the weight I use is a cast-iron theater scenery weight coated with epoxy). Whichever type of weight is used, it must ride on the anchor rode without abrading the nylon or rubbing the galvanizing off the chain. Some commercial models have nylon rollers to eliminate chafe and make deployment and retrieving easier.

Even if you don't use such a device every time you anchor, it is a good idea to have an anchor sentinel in your sailor's bag of tricks. ⚓



The Rode Rider sentinel by Ada Leisure Products has a hook at the bottom to allow for temporary storage on the pulpit while an anchor is being set or hauled.

Resources

Anchor Rode Rider

ABI Marine
<<http://www.ABImarine.com>>
800-422-1301

Kiwi Anchor Rider by Guardian Marine in New Zealand

available in the U.S. from
AB-Marine Inc.
<<http://www.ab-marine.com>>
401-847-7960

Rode Rider

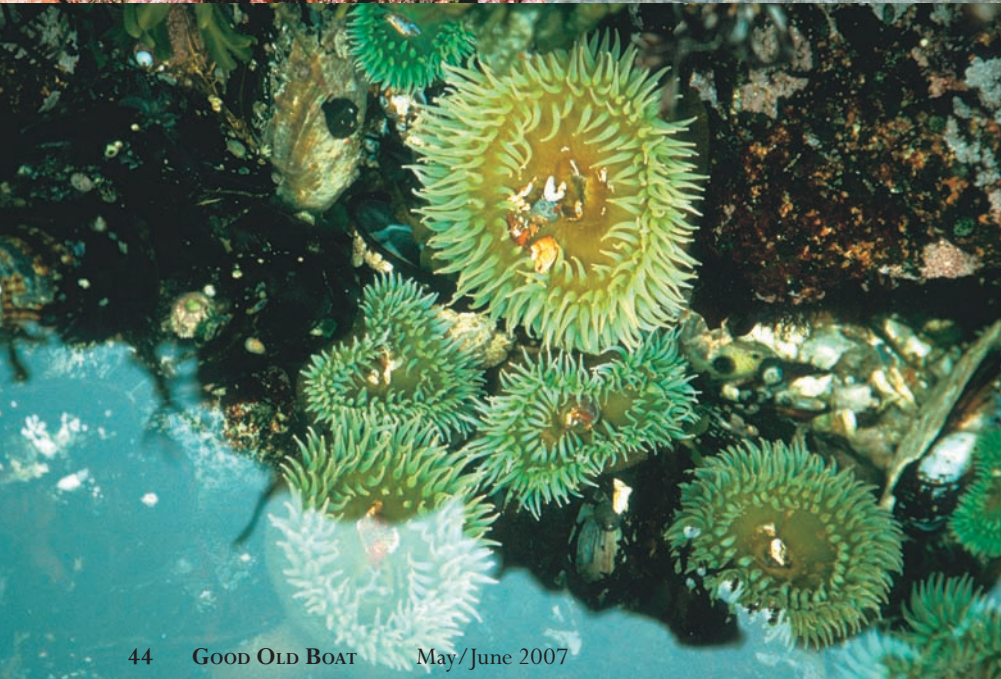
Ada Leisure Products
<<http://www.roderider.com>>
800-688-3217

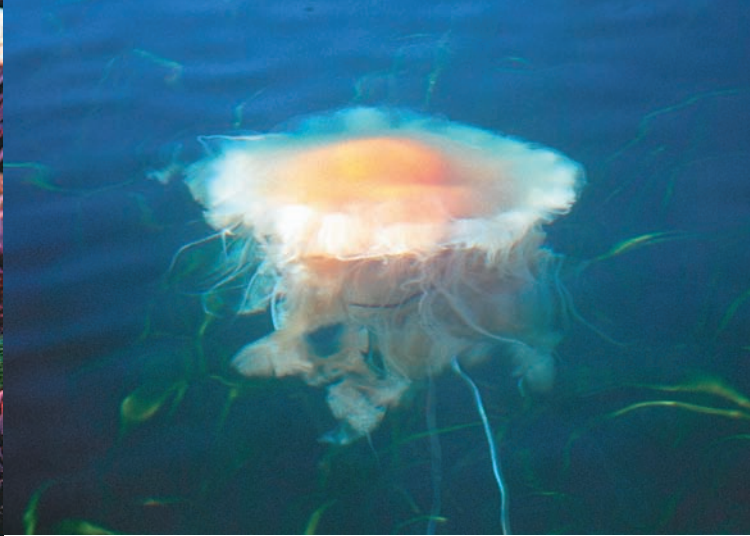


LOOKING



BY ELSIE
HULSIZER





SEA LIFE



FOR



Yamaha 25



*A fine racer/cruiser
for a small family*

by Durkee Richards

ED LAWRENCE

YAMAHA IS A WELL-KNOWN NAME IN musical instruments and motorcycles. But sailboats? Perhaps one in a hundred sailors knows that during the late 1970s and '80s Yamaha built a fine line of sailboats, with distribution throughout North America and Europe. They ranged in length from 21 to 37 feet. Most were cruiser/racer designs. One of the smaller models, the Yamaha 25, was available in two versions: a standard rig and the Mark II with a taller mast, more sail area, and spinnaker gear (spinnaker halyard and a turning block for the foreguy on the foredeck).

Yamaha developed an in-house engineering and design team to support its sailboat business. Product literature describes how the design process for the hull moved from preliminary lines drawings to tank testing using the company's own test facility. At the same time, other members of the design team made mockups of the cockpit, deck, and interior to assure good ergonomics. Prototypes were built and tested and then refined be-

fore moving into production.

Yamaha product literature from the 1970s touts its success on the race-course. *Magician V*, a modified production 24-footer, won the 1978 Quarter-Ton World Championship. Earlier, Yamaha Motors had followed a similar strategy with motorcycles: gain visibility with success in competition and then follow up with a full product line for a broader consumer market.

Specialty Yachts in Vancouver, British Columbia, was the primary dealer for Yamaha yachts in the Pacific Northwest. I spoke with a member of their staff, Lawrence Fronczek, who recalled the Yamaha yachts with obvious fondness. He had sailed extensively on models from 25 feet (the smallest his dealership imported) to 36 feet. He characterized them as "extremely robust and well built" with "well-thought-out interior layouts." Specialty Yachts had very few warranty problems to deal with. He could recall no incidence of osmotic blistering or delamination, even on older boats that came in for routine maintenance.

First impression

When you approach a Yamaha 25, the first impression will be of a lithe and lively vessel that was designed to sail well. The influence of the International Offshore Rule (IOR) is evident, as this model was designed to compete in the Quarter-Ton class. Whether you see her from bow or stern, you'll notice the trademark tumblehome. Because beam increases wetted surface area, and therefore friction that slows a boat, the IOR gave credit to beamy designs, but designers attempted to thwart the intent by adding beam only above the waterline.

Maximum beam in the IOR designs is not carried well aft as is currently in fashion. Rather, the hull typically tapers to a rather slender transom with pinched ends. The moderate bow and stern overhangs result in a fairly short waterline by today's standards. However, the buttock lines at the stern flow smoothly upward so that the effective waterline lengthens quickly as the vessel heels.

As with any rating rule, designers

exploited whatever part of the IOR they could to gain even a small advantage on the racecourse. Sometimes this resulted in peculiar bumps on the hulls. Sometimes a portion of the ballast ended up in the bilge rather than in the keel where one would normally expect it. When that was the case, the boats were prone to “death rolling” when pushed hard downwind. Fortunately, the Yamaha 25 seems free from these excesses. The hull has a smooth, fair shape, and all the ballast is in the deep cast-iron keel.

Straight sheer

The sheer is nearly straight, and the coachroof is smoothly contoured with tapered portlights port and starboard. The masthead sloop rig is conservative. The mast is deck-stepped with single spreaders, cap shrouds, and fore-and-aft lowers. The backstay is split and incorporates a block-and-tackle tension adjuster. The mast is stepped relatively far aft, so the jib and genoa are important in generating power. On larger boats, this design choice can lead to genoas that require a strong crew to sheet home. On a 25-foot boat, however, this should not be a concern. All halyards are run internally with nicely detailed sheaves where the lines exit the mast. The rudder is hung on a skeg, which gives added protection against the drift logs too often encountered in the Pacific Northwest.

The cockpit provides sufficient working space for a race crew, yet the boat should be easy to singlehand. The halyards are led aft to coachroof-mounted winches and linestoppers. The mainsheet traveler is close at hand, and the mainsail is sheeted to the boom end, which helps keep sheeting forces low. The engine controls also are close at hand on the starboard side of the cockpit. These controls are a clue to an unusual feature in a 25-foot sailboat: an inboard diesel engine.

On deck there are stoutly built and well-mounted stainless-steel bow and stern pulpits. A single vinyl-coated stainless-steel lifeline runs along each sidedeck. The stanchions feel quite secure. The foredeck is solid underfoot with a nice camber. A small anchor locker is molded into the starboard side of the foredeck and drains overboard. A translucent hatch pro-

vides ventilation for the V-berth and could be used for hoisting or dousing a spinnaker.

Easy access

The sidedecks provide easy access fore and aft, with the chainplates set inboard. An unusual feature is a molded gutter just inside the aluminum toerail. Just aft of the shrouds, the sidedeck has a molded-in ridge to deflect water away from the cockpit. Farther aft, the sidedecks feature a concave profile, which makes for comfortable seating when sailing to weather.

When stepping into the cockpit, you'll notice the bridge deck and locker below the companionway. The Yamaha 25 brochure suggests this would be a good place to store a life raft. Clearly, the design team intended these boats to be used for more than daysailing. There is another, larger locker running athwartships at the stern.

At the end of the cabin bulkhead, port and starboard, are clever recesses

adjacent to each of the winches on the coachroof for storing coiled-up halyards. A seahood provides protection for the companionway hatch and extends outboard far enough to enclose the lines running aft from the mast. Two Dorade vents are mounted near the forward end of the seahood.

Going below, you'll find a surprisingly spacious interior with several clever touches. The V-berth is large, in part because the mast is stepped well aft and thus the main bulkhead is well aft too. The cabin also seems roomy because there is no compression post to impede movement. This is a plus.

A potential negative is that a strong deck support of some kind is required to carry the mast compression loads. In the case of the Yamaha 25, the

The Yamaha 25, facing page, was designed during the heyday of the IOR, a rating rule that treated beam favorably because it tends to add wetted surface area. George Zimmerman and family sail *Escape*. George maintains the Yamahasailboats.org website. This closeup of the bow, above right, shows the recess or channel that runs the perimeter of the hull-to-deck joint, which is through-bolted forward, and fastened with Monel rivets everywhere else. An adhesive adds strength as well as making the joint watertight. Boats designed to the IOR, at right, have small mainsails and large foretriangles, resulting in big genoas that provide much of the driving power. On larger boats, they can be hard to sheet home on a windy day.



DURKEE RICHARDS



ED LAWRENCE



Lifting the center panel of the V-berth, at left, provides excellent access to the single-cylinder Yanmar diesel engine. During the late 1970s, Yanmar manufactured three models of small, horizontal diesels. When restored to its full size, the V-berth, at right, is very spacious. A portable toilet is located underneath the seat cushion to starboard.

molded fiberglass arch looks positively massive and effectively carries rigging stresses to each side of the hull. This arch is integrated into the main bulkhead, which also supports the chainplates for the cap shrouds. The overall engineering of this system leaves a very favorable impression.

Privacy curtain

A standard marine head is hidden away behind panels at the aft end of the V-berth on the starboard side. The

privacy curtain that closes off the V-berth also shields the head when in use. A holding tank for the head was not standard equipment. Most owners in the United States have opted to install flexible holding tanks in the bow.

No coachroof liner is used in the V-berth area. Instead, one can see the nicely finished underside of the deck. The contours of the deck help provide stiffness, and molded-in stringers provide more stiffness where needed. Additional reinforcement is visible

around the hatch.

The main cabin features a compact galley to port. Lifting a panel reveals a gimballed single-burner alcohol stove and a stainless-steel sink. A foot pump provides water to the sink from the 9½-gallon tank. Dish storage is built into the locker behind the sink and stove. Below the dish locker and behind the stove and sink there is a modest icebox. Standing headroom is available only for those shorter than 5 feet 7 inches.

Creating Kando together

by George Zimmerman

In Japan in 1887, Torakusu Yamaha built a reed organ and, based upon its success, began taking orders for more. Starting its life as a music company, Yamaha has grown and diversified into an international conglomerate with 84 consolidated subsidiaries, annual revenues of \$4.5 billion, and more than 24,000 employees worldwide. Today, Yamaha is a leader in many industries: musical instruments, audio-visual and information technology products, home furnishings, motorized vehicles, specialty metals, music education, and resort facilities.

Yamaha's corporate mission and goals translate into products that are high in quality, technologically sophisticated, and consumer-oriented. Their

corporate slogan is "Creating Kando Together." *Kando* is a Japanese word that signifies an inspired state of mind.

Yamaha Motors, the company division manufacturing sailboats, was founded in 1955. Starting with motorcycles, it has grown into a worldwide company that develops and sells products for business and leisure pursuits on land, in the sky, and at sea.

Racing heritage

In 1960, Yamaha Motors introduced its first fiberglass boats and outboard motors. Yamaha Motors entered the sailboat production business in 1965. Its first model was a rowboat rigged with a sail. A year later Yamaha developed and began production of a

14-foot catamaran. By 1970 the company had three sailboats in production: the Yamaha-15DX, Yamaha-21DX, and Yamaha 36. They spanned the spectrum of sailboats, from sailing dinghy/daysailer to a large ocean-going sailboat. This variety still is true of the company's range of models today.

As a result of a sophisticated design and testing process, Yamaha's early designs won races. In 1975, *Wing of Yamaha* won the Trans-Pacific single-handed yacht race held between Hawaii and Okinawa, and in 1978 *Magician V* won the Quarter-Ton World Championship. In 1983 *Supervitch* won the Pan Am Cup yacht race in its class. The company's first entry into the Whitbread round-the-globe

race, with a yacht called *Yamaha*, won overall in the W60 class. Yamaha also built the Japanese challenge boats for the America's Cup races held in 1992 and 1995. Using the experience gained from its racing sailboats, the company designed an extensive line of dinghies, racer/cruisers, and cruisers, manufacturing them in large numbers (at least in sailboat terms) for the Japanese and other Asian markets. During the 1970s and '80s they also exported select sailboat models to the U.S. and Canadian markets, primarily on the West Coast.

Models exported

In its racer/cruiser line of sailboats, Yamaha exported the 21, 25, 26, 30, 33, 36, and 37 models. These racer/cruisers have a dis-



ED LAWRENCE



DURKEE RICHARDS

A convertible dinette to port sleeps one person, at left. The woodwork and other finishing details are generally well done. On a small boat, where there isn't enough beam for an off-center cabin layout, there is no bulkhead or compression post to transfer the rigging loads to the hull and keel. On the Yamaha 25, a massive fiberglass arch, at right, integrated with the main bulkhead, does the job.

There is seating for two on either side of an adjustable table on the starboard side across from the galley. The aft seat is actually part of the starboard quarter berth. The table also serves as the chart table. When folded out athwartships, the table aligns with the cover panel over the galley and can provide dining space for four. Again, the aft seat on the port side is part of the quarter berth on that side.

The table serves one more func-

tion. When folded up, it can be lowered and covered with a cushion. It then aligns with the quarter berth and forward seat to provide more seating space. Or it could provide sleeping space for a fifth crewmember — preferably the shortest one. The quarter berths are surprisingly spacious and make good sea berths.

Lockers behind the seats to port and starboard provide storage for small items. More storage is located

underneath the quarter berths and between them. Fixed portlights to port and starboard provide for ample natural lighting. Strategically located incandescent lights provide nighttime lighting.

Construction details

The hull is built of solid fiberglass. A molded “grid-and-box” structure is incorporated below the sole to provide additional strength. The deck also is

tinctive appearance that can almost be described as jet-like. All were heavily influenced by the IOR rating rules of the time. Once you became acquainted with their sloped coachroofs, tumblehome hulls, triangular portlights, graceful bow entries, and reverse transoms, it is easy to distinguish Yamaha sailboats.

Yamaha also exported the Yamaha 24 motorsailer that was designed to be easily sailed with wheel steering and self-tacking jib. A shoal keel opened up shallow waters and allowed for trailering. Also produced was the Yamaha 35 CS, a distinctive-looking pure cruising sloop. In the mid-1980s the company broke from its distinctive jet-like styling and exported a more conventional-looking 28-foot cruising sloop to the United States and Canada.

The design process

Initially more than two dozen people were involved in the design of a Yamaha sailboat: yacht designers, engineers, model makers, computer technicians, production planners, and test sailors. The company hired non-sailing engineers and taught them to sail, possibly accounting for the innovations seen on Yamahas.

The process began with design goals developed for each model. Drawing preliminary lines was the next step. Yamaha was one of the early users of computers to aid in the design process and for basic analysis and study. From the preliminary lines drawings and the computer models and analysis, small models of the hull were made. The hull shape then was tested in a tank, followed by further

analysis. Use of a computer and a test tank enabled the design team to experiment early in the design process with different solutions to a problem.

While the hull shape testing was underway, life-size mockups of the deck, cockpit, and interior were constructed. Test sailors used these mockups to identify problems and then develop practical, real-world solutions. Scale models of the interior and exterior were also built.

These three-dimensional models gave the design team an opportunity to review lines drawing deficiencies and to visualize how the various parts of the boat would interact with each other. Production planners also used the models built during the design phase to develop and lay out the

manufacturing and assembly process.

The final stage was building prototypes for testing, which usually meant racing to see if the prototype performed to design goals and expectations. If the boat did not perform as expected, modifications were made or designs changed until the design goals were met. This process, while costly, led to Yamaha's generally good reputation.

Owner support

Like many sailboat manufacturers, Yamaha Motors disappeared from the North American marketplace in the late 1980s. Today, it still designs and manufactures sailboats but only for the Japanese domestic market. However, the company still sells parts for the earlier models.

solid fiberglass with some marine plywood coring used to increase panel stiffness for flat surfaces, for example, around the companionway. As mentioned, molded-in stringers and ribs are incorporated under the foredeck to provide additional strength and stiffness.

The hull-to-deck joint is unusual, even to Yamaha, I think. Product literature for the Yamaha 25 and 30 shows an outward flange. However, at least on the Yamaha 25, it is more complicated than that. The top few inches of the hull are built in a C-shape, creating a recess or channel running the length of the hull underneath the T-shaped aluminum toerail (see photo on Page 47). The deck flange bears on the top of the C.

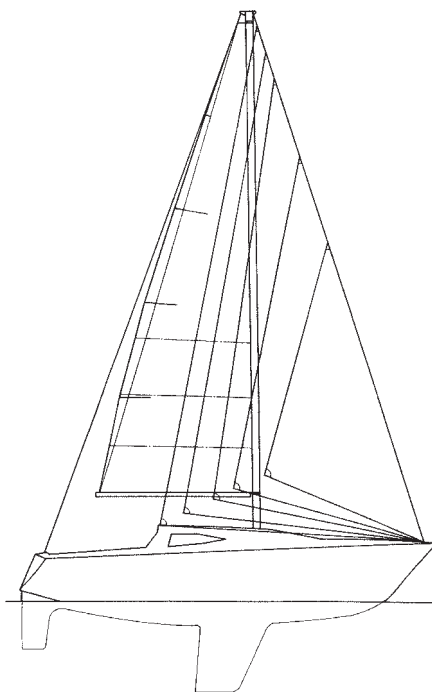
The horizontal surfaces of the deck and hull are glued and mechanically bonded. Monel rivets are used along most of the joint, except at the bow where the toerail is through-bolted. The joint is somewhat protected by the tumblehome of the topsides, which will take the brunt of the impact from less-than-artful dockings.

The cap shrouds are secured to stainless-steel chainplates that are bolted to the main bulkhead. They seem appropriately sized for the rigging loads. The aft lower shrouds are secured to plates bolted to the sidedecks, with a stainless-steel backing plate belowdecks. The forward lowers are similarly secured but with additional support coming from a stainless-steel rod that runs diagonally back down to the main bulkhead. These supports for the lower shrouds are evidently sufficient for the rigging loads of a 25-foot boat since the deck is robustly constructed. The owners' group does not report any associated problems. I did not note any flexing of the sidedeck when pulling vigorously on the lower shrouds.

Under way

The winds were very light the day of our test sail, but I can say the Yamaha 25 will ghost beautifully under jib alone. Though it's a different model, a husband and wife in my local sail fleet owned and raced a Yamaha 33 for several years. They spoke highly of its performance under sail and felt it was at its best when working to windward.

The PHRF rating for the largest fleet of 25s — albeit just four boats



Yamaha 25

LOA: 24 feet 9 inches
LWL: 19 feet 3 inches
Beam: 8 feet 11 inches
Draft: 5 feet 5 inches
Displacement: 3,750 pounds
Ballast: 1,435 pounds
Sail area: 283 square feet
Displ./LWL ratio: 235
SA/Displ. ratio: 18.8
PHRF rating: 210

— is 210, roughly the same as a C&C 25. A J/24 rates 171.

When you lift the center panel of the V-berth you'll find a single-cylinder Yanmar diesel. This is a very unusual installation. The engine, a model YSB-8, has a horizontal cylinder. Yanmar produced three models of horizontal, raw-water-cooled, single-cylinder engines of 8-hp and 12-hp between 1974 and 1980. In general, raw-water-cooled diesels require a bit more maintenance than freshwater-cooled engines. So check engine condition and maintenance records during a pre-purchase survey. A blower was standard equipment to help remove engine heat and fumes. The engine in *Escape*, George Zimmerman's Yamaha 25, which I test-sailed, started quickly and was surprisingly smooth for a single-cylinder engine.

The overall height of the engine is low enough that it can be easily tucked under the V-berth. Overall engine access is good. The 6.6-gallon,


stainless-steel fuel tank is mounted in a wood-paneled locker on the port side just forward of the bulkhead. It is vented up through a nearby stanchion — another nice touch. Access to the fuel tank is easy. In fact, George told me of removing his tank and taking it ashore for cleaning when he encountered a problem with contaminated fuel. Motoring range is said to be at least 100 nautical miles at 5.5 knots.

Placing the engine under the V-berth frees up room elsewhere and helps balance the boat. But it does necessitate a long driveshaft with a center support bearing where the shaft passes through a frame in the bilge between the transmission and the strut and Cutless bearing. The propeller ends up just aft of the keel. This location significantly reduces prop walk when backing. Hence, these boats can be easily turned to port or starboard when backing out of a slip.

Summary

The Yamaha sailboats were well designed and constructed. The performance of the Yamaha 25 lives up to the design goal of a cruiser/racer.

The Yamaha 25 should be a good choice for anyone who wants a boat for daysailing or club racing. The creative use of space belowdecks also makes this boat a good candidate for cruising with a small family. More good news is that replacement parts are still available from Yamaha Motors. A Yamaha 25 will not be easy to find since most owners of Yamaha sailboats tend to keep them for a long time. But they are worth the hunt.

Used models of Yamaha sailboats are found mostly in the western United States and Canada. Yachtworld, the on-line sailboat brokerage <<http://www.yachtworld.com>>, usually has six to eight Yamahas for sale. As they are not well-known, these quality boats can prove to be a good value. Yachtworld shows the average asking price for a 1977 25-foot C&C and a 1977 Yamaha 25 to be in the \$8,000 to \$12,000 price range. The Yamaha, however, has an inboard diesel. 

Resources

Yamaha websites:

<<http://www.yamahasailboats.org>>
 <<http://www.sailboatowners.com>>

Seeking the perfect dinghy

Here's one that comes pretty close to ideal

by Bill Kinney



Bill and Lisa were surprised at how well Pudgy sails, given its blunt bow and wide beam.

SPACE ON THE DECK OF ANY CRUISING vessel is tight. Because we have so many things to carry and still need space left over to actually do the work of sailing our boats, it seems we can never have everything. This was brought home to us in a big way when we started shopping for our cruising dinghy. Small is best when the dinghy is on deck, but small is quite the opposite of what we want when hauling supplies out to the mooring. Our friends had advice based on strongly held opinions. It seems that sailors feel as sure about their choice of dinghy as they do their choice of religion, and they seem to make both choices pretty much for the same kinds of reasons.

We tried to approach the dinghy problem with open minds. Rather

than select a specific approach and then try to see how we could make it work, we tried objectively to list all of the things we hoped a dinghy could do for us. Maybe, we thought

“Small is best when the dinghy is on deck, but small is quite the opposite of what we want when hauling supplies out to the mooring.”

optimistically, the solution would then be obvious. The standard solution for dinghy service these days seems to be the 10- to 14-foot inflatable, either a RIB or a hard floor powered by an 8- to 15-hp outboard. This seems to be a functional, useful boat for the job, but we wondered if thinking outside the box would get us a solution more suited to our needs.

Although our boat, *Fetchin' Ketch*, is not small (40 feet overall), its cen-

ter-cockpit design breaks the deck space into smaller sections than an aft-cockpit boat has. The center cockpit occupies the space under the boom where many dinghies live and

because it is a ketch, the mainmast is farther forward and the foredeck quite a bit shorter than a sloop of the same length.

The mizzen-

mast is an additional obstruction.

The wish list

Like any wish list involving boats, several of our desires were mutually exclusive and would have to be compromised.

- We wanted a dinghy that would fit on the foredeck with enough room left over to work the windlass and sails.
- For convenience, safety, and secu-

Limitations of double-duty dinghies

by Dan Spurr

On a small boat, it is indeed tempting — for reasons of cost and space — to rely on one rigid dinghy or inflatable that can function as both ship-to-shore transport and also as a life raft, should that dread day come when one must abandon ship. There are scenarios in which such a dual-purpose craft can succeed in its duty, mainly in relatively calm seas. Let's say your big boat begins taking on water. You look for the leak, man the pumps, try to contact help on the radio, and begin collecting your abandon-ship bags. You also lower the dinghy/raft over the side and tether it to a breast or stern cleat, ready to throw into it your stuff and yourself at that last fateful moment.

But it seems that the majority of sinkings occur in bad weather; indeed, it's the weather — mainly big seas created by high winds — that, for one reason or another, cause boats to sink. So the life raft must be extraordinarily stable to stay upright when slammed by large, breaking waves. The test begins immediately, with the raft tethered to the mother ship. Can it survive slamming against the topsides? Are the tether and its attachment points strong enough to survive the shock loads on it?

All quality life rafts have some sort of ballast system. Most common are ballast pockets arranged around the perimeter of these rafts that automatically fill with water when deployed. The Givens hemispherical ballast system is a large inverted cone-shaped bag that fills with water and is reputed to keep the raft upright even in hurricane-force conditions.

Even ballasted life rafts can flip in the right combination of wind and waves. Survivor accounts of persons trying to board rafts from the water describe having to right upside-down rafts. Once part of the bottom is raised from the water (usually opposite the boarder), wind and wave action can easily

flip them. In the cold and wind, it isn't easy to right a raft, not even in magazine- and safety society-sponsored tests in calm water. Try it sometime, and you'll begin to understand the vulnerability of rigid dinghies in survival conditions. During my 11 years as editor of *Practical Sailor*, we tested many life rafts and found boarding and stability to be important issues.

Once the weather and seas moderate, yes, in a rigid dinghy you can rig a sail and attempt to make progress toward land, rather than drift with the wind and currents — but only if it's upright and clear of water. So you must weigh this advantage, and a cost-savings of perhaps a few thousand dollars, against the superior stability and habitability of a dedicated life raft.

To my mind, if you're going offshore you really ought to have both a good rowing and motoring dinghy, and a life raft. Your preparations and planning should give you the best possible odds of surviving a calamity. I tend to discount the money excuse because, given the cost of the big boat, sails, electronics, travel, and other expenses of cruising, the price of a life raft isn't that much. Besides, in some areas you can even rent them. Space a problem? The raft might live on deck underneath the lashed, upside-down dinghy, or (and I've done this on small boats) stored in a valise in the cockpit where it minimizes the volume of water in the footwell. A custom bracket on the stern pulpit also is possible.

Having said all this, I must admit to not having tested the Portland Pudgy and would welcome hearing from anyone who has. It certainly appears to be a clever concept with much thought given to its multi-functional design. Noteworthy are features such as handholds on the bottom for aiding in righting the boat from a capsize, a compass, and intelligent stowage.

It should fit on deck in a "ready-to-go" state. In other words, if it was an inflatable, it had to fit fully inflated.

- Our new tender had to be able to carry the two of us, our dog, and a reasonable load of supplies.
- In the water it had to be stable enough to use as a fishing or diving platform.
- We enjoy rowing for exercise and sightseeing, so a good rowing hull was high on our list.
- A sail rig would be a nice plus.
- Durability was important. We did not want to be stranded somewhere by a dinghy with a hole in the side.
- Light enough to get on deck easily.
- Did I mention we wanted this whole magic package at a *low price*?

While it might seem as though we were asking for a boat to do everything, there were characteristics that we did not consider to be very important to our situation. A high-speed hull was not something we had on our list. We were also not looking for a boat that would fold up and store belowdecks. We did not anticipate towing our dinghy often, so towing characteristics did not matter. All of these characteristics were not considered to be negatives; they were just things we were quite willing to pass on if the rest of our list was a match.

Needless to say, after making this long list the choice was still not obvious. The length restriction seemed to be the one that was the most difficult. To have room to run the windlass we really needed a dinghy to be no more than 8 feet 6 inches overall. Our first try was an 8-foot Fatty Knees. This classically handsome, well-built, and fun boat, is the dinghy of choice for Lin and Larry Pardey. We found that it rowed and sailed very well. After a couple of months of use, however, we decided that it was too small on the inside for the two of us to use in comfort. It also lacked the overall carrying capacity we felt would be needed while cruising. Although as seaworthy as a boat that size can be, it was tender enough that it took some care when boarding, and there was no way we could see ourselves climbing back into it on a routine basis after swimming or diving.

It was beginning to look like we

“Needless to say, after making this long list the choice was still not obvious.”

were going to have to compromise and go the route of an inflatable that could be stowed belowdecks.

Aha! The solution?

At the spring boat show in 2004 we saw a new dinghy design. It seemed to come as close to meeting all of our criteria as possible and had unexpected benefits. Designed from the beginning to be a useful dinghy and to meet the requirements of a four-man life raft, it met our size needs and looked like it had a good collection of features and a thoughtful design. Unfortunately, the display boat was just a prototype, and the company was not yet ready to take orders. We figured we had some time yet before leaving on our cruise, so we put the Portland Pudgy at the top of our dinghy list and kept our eyes open to see if something else came along in the meantime. Two years later, the Portland Pudgy went into commercial production, and we were among the first to send in our money.

Several well-known authors have expounded on the benefits of using the ship's dinghy as the primary life safety vessel. If one has to leave the mother ship, it is particularly attractive to be able to sail and/or row toward safety instead of drifting helplessly waiting to be found. The Roths

and the Pardeys have made this case, the Pardeys going so far as to create additional flotation and stability for their Fatty Knees tender using fenders. A decade or two ago, the only commercial alternative was the inflatable Tinker. This boat came close but did not match enough of the items on our wish list to get us excited, and this British-made boat was expensive.

The Pudgy is a hard-shell boat, designed to serve the dual functions of everyday dinghy and lifeboat. With its unsinkable construction, the (optional) specially designed sea anchor, and exposure canopy, it seems to meet most of the criteria for a lifeboat. (See sidebar.)

Met the criteria

Plus, this little boat met all of the criteria we set for our dinghy. At just over 7½ feet long, it gave us all the room we could hope for on our foredeck. Despite the short length, its wide beam, carried nearly the full length of the hull, offers lots of cargo room, even with two adults and a dog aboard. Admittedly, a Pudgy would get a bit cozy for routine use with more than two people. For a boat of its size, it is amazingly stable, almost as stable as an inflatable. Through the magic of good design, it manages to still look good even with proportions



Even though their boat is 40 feet long, the Kinneys' dinghy could not be longer than 8½ feet. At 7½ feet, the Portland Pudgy leaves a little space for working the windlass and headsails, above. At 128 pounds, Pudgy is too heavy to launch and retrieve by hand over the lifelines, but using a halyard and bridle, it's easily raised with a winch, below.



But be reasonable about it

by Jerry Powlas

On *Mystic*, we have a kayak for a dinghy and two survival suits as provision against losing the mother ship. An inspection of most marinas would show that perhaps one boat in every 100 or 200 has a dedicated life raft. The rest have dinghies of one sort or another, most of which would be of limited use in an abandon-ship situation. The Portland Pudgy certainly looks like it would offer her crew much more protection and utility than an ordinary dinghy in such a situa-

tion. She also looks like she would be less stable than a dedicated life raft, but she would be more mobile.

There are levels of safety. Most small general aviation aircraft do not carry parachutes. Hunters do not wear flak jackets and, although I wear a helmet when riding my motorcycle, I do not wear it when I drive my car. Until Big Brother interferes, recreational boaters may choose how safe they need to be.

I like that.



High freeboard helps keep water out. With just one person — and maybe a dog as lookout — the transom is slightly elevated, and the dinghy skims along easily, at left above. With two, the transom is immersed and the boat is trimmed well. Wide beam and generous buoyancy make Pudgy almost as stable as an inflatable, above. High freeboard helps keep water out. Upside down, at left, you can see the rollers for maneuvering on land, and the twin daggerboard trunks. The sailing rig and oars break down to fit inside the hull.

that one normally would associate with clunky.

The boat is double-hulled, with the space below the deck filled with foam for flotation. The remaining space is accessible through three hefty hatches. The sail rig and the oars fit inside the hull with room to spare for emergency supplies or routine storage.

The Pudgy comes with a robust pair of jointed oars. The oarlocks are a clever interlocking design that holds the oars so that a moment's clumsiness doesn't send them for an unscheduled swim. For really serious rowing, oars a foot or so longer than the standard 6-foot 6-inch ones would be a good addition, although they would not then store inside the hull. Rowing was obvi-

ously something the designer expected to be done in this boat, and the hull form supports that intent.

A deep skeg gives the Pudgy a nice

straight track. With one person aboard, the transom is clear of the water, resulting in minimum drag. It slows down a bit when loaded with two full-size adults and gear, but it still moves along in a well-mannered way.


Good stability

The sail rig is a fun addition. The hull has such great initial stability it stands up to sail well even to gusty afternoon winds on San Francisco Bay. Of course a boat with a 7-foot waterline is not going to set speed records, but with the two leeboards and the deep rudder, it does well even to windward. The reefable gaff rig can be carried above the exposure canopy, allowing a shipwrecked crew to make progress toward civilization. We haven't used it to save ourselves, but we have had a lot of fun with it as a sailing dinghy. Even fitted with the rated 2-hp outboard, the Pudgy will not set speed records, but we are not type-A personalities who need to get somewhere in a hurry.

At 128 pounds, it is neither remarkably light nor heavy for a boat this size. It is not a boat that we can simply

manhandle over our lifelines, but using the whiskerpole and spinnaker halyard as a crane, one of us can lift it aboard without help.

Here are current prices: \$1,895 for the boat, \$895 for the sail rig, \$1,298 for the carbon-dioxide-inflated canopy, \$295 for the sea anchor, and \$99 for a boarding ladder. Other options such as a bailer and solar panel, also are available.

Clearly, no single boat design works for everyone. But all things considered, for our current and anticipated needs, this little boat seems to do everything we require and was the best compromise we could find. Working through the same process could get you a very different "right" answer. 

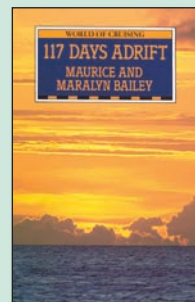
Resources

Portland Pudgy Inc.

48 Tyng Street
Portland, ME 04102
207-761-2428
dhulbert@maine.rr.com
dpaley1@maine.rr.com
<<http://www.portlandpudgy.com>>

For further reading ...

In their classic, *117 Days Adrift*, Maurice and Maralyn Bailey tell of survival via life raft and dinghy after their sailboat was sunk by a whale in the Pacific. This book is available from the Good Old Bookshelf <<http://www.goodoldboat.com/bookshelf.html>> or by calling 763-420-8923.



THIS MORNING I PARTICIPATED IN A peaceful pastime that I dearly love: sailing. Now as I write this, the wind howls outside, the temperature has dropped into the 30s, and the calendar says it's late March. How, you may wonder, can an old codger like me say I've been sailing at this time of year? Given just a small tidal pond, a slight break in the early spring temperatures, and a radio-controlled model sailing vessel, my pastime is possible. "Windling" it's called, although I'm not sure whether that term is accepted by the more established radio-control sailors.

Many folks in the seaside community in which I live might mistakenly call it a "childish pastime." The local policeman stopped his patrol car to ask, "Somethin' ya got for Christmas?" when he saw me unloading my model boat and sailing gear from my car. True, it has affected me the same way at times. This being a small community, I wouldn't like for the others to whisper to one another, "That old Taylor guy must have entered his second childhood... playing with toy boats!" At the very least, however, I make the local hardware store owner happy selling me all the AA batteries I need to sail my boat.

Actually, my RC Laser model is more than a toy: she (we always call boats "she," even a 4-foot boat is a "she") is registered with an international one-design racing class and has her own USA sail numbers. There are rules and a racing schedule, including local and national regattas. I'm not sure I'm good enough to enter the nationals, but who knows? I used to be pretty good at racing full-sized sailboats.

Feeling like a kid

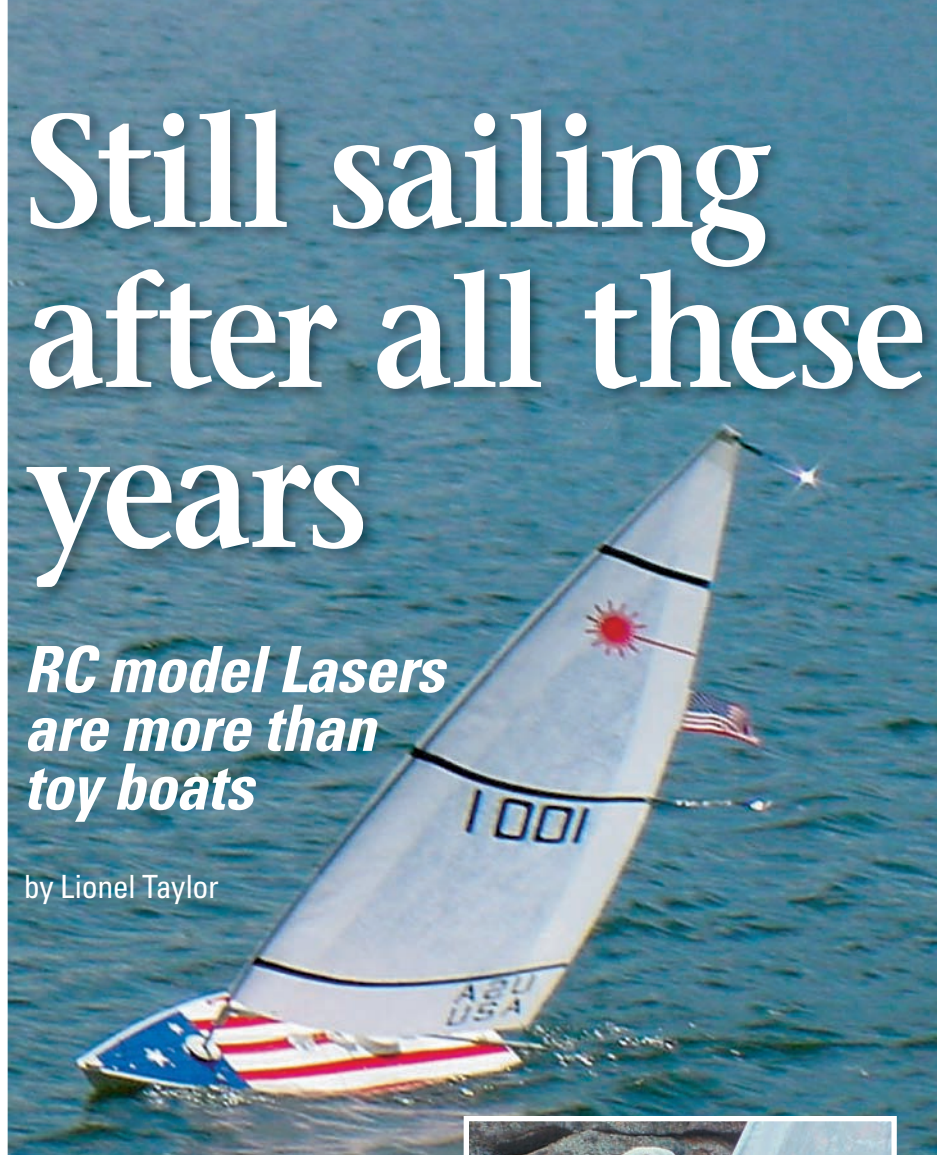
In spite of all this, I could be a prime target for querulous comments when I appear at the local post office in early spring garbed like an old fisherman in my muddy boots, old rain jacket, finger-less sailing gloves, and Mystic Seaport sailing cap.

I do feel a bit like the kid I was many years ago when I used to sail my toy boat on a string on the Bronx River in Westchester County, New York. The river was not very wide at that point and anyway I, like most kids, sailed in my bare feet. Maybe that memory is what got me windling some 60 years later. Or maybe it was

Still sailing after all these years

RC model Lasers are more than toy boats

by Lionel Taylor



the sail on a piece of board my grandson, Forest, gave me to play with on my son's farm pond in Vermont. Anyway, I feel like a kid again when I watch with glee as my model boat maneuvers about the pond, strictly under the control of my right index finger. Back and forth she goes: now on a beat with the sail hauled taut; now on a run with the sail boomed out; now and again heeling to a sudden gust of wind. All this as I sit back on the sternsheets of my rescue dinghy, which is carefully pulled up on the side of the pond, and watch.

I do have one loyal follower about my age who apparently doesn't think the pastime is childish and who comes down to see me windle when he's out for his daily walk. He is not a "windler" himself, but he owned a full-sized sailboat that he gave up for an old "stinkpot." I think he secretly misses his sailboat.

We talk about sailing terms like length overall and speed over ground. "I bet she's doing 2½ to 3 knots now,"



Steve Lang's boat, top, looks patriotic whether she's racing in earnest or simply tearing up the surface of a Colorado pond during practice sessions. Toy boat? For kids only? Steve says the Laser will keep the kids entertained, perhaps, but it will also give adults something to enjoy at a mooring during cocktail hour.

Historical background

A little bit about the RC Laser model boat and its history as told by Abigail Kelly in the publication *Model Yachting*:

"In the late 1980s and early 1990s, model sailing seemed to be winding down. The numbers of sailors were dropping and competitive and leisure sailing wasn't as popular a pastime as it once was.

"Jon Elmaleh, an accomplished radio-control sailor and boat designer, as well as an industrial designer, saw an opportunity to revitalize the sport he loved. He wanted to create a production boat that would fulfill two goals: expand the ranks of competitive sailors and make the sport more accessible to the general public.

"Jon approached world-renowned yacht designer Bruce Kirby with these objectives. The full-size Laser, designed by Bruce, seemed to be a perfect design model. It gave them an extensive marketing base (at the time more than 160,000 full-sized Lasers had been produced). Jon was confident the hull design could be applied to a successful model boat.

"Together Jon and Bruce adapted the full-sized racing dinghy to suit the needs of RC sailing. The RC Laser was developed, as was its big sister, as a one-design class that could be controlled by the manufacturer. It was also developed as an inexpensive, easy-to-assemble boat for all levels of model sailors. This made it accessible for both new and experienced sailors and also provided serious model racers with a closely controlled one-design class.

"The first RC Laser was sold in 1995. Since then, distribution has grown from a few hundred domestic boat sales a year to an international following."

he'll say to me about the model's performance. I've tried to encourage him to get a boat so we can windle together, but his wife, who was along on the last visit, put in a silent negative vote by turning away from the discussion.

To try and make the woman feel there may be something normal about me after all, (she is a friend of my wife — who supports my pastime — and I wouldn't want my actions to affect their friendship), I said, "I only do this in the *cold* weather. I sail my 23-foot Pearson Ensign in the summer."

Time marches on

Fast-forward another five years since I wrote those words. I am now 84. I have gotten so long in the tooth that my mobility has become a problem. I've had to sell my big boat because I can't safely sail her and I don't want others to possibly put their lives on the line because of my ineptitude.

So I've become part of the old saying, "Old sailors never die, they just miniaturize the size of their sailboat." I can still windle.

However, because of my age some things have had to change. When I was younger, I used to sail from the high side of the pond. Because my model boat draws 16 inches, I had to wait for a pretty high tide before I could sail. It meant launching from a position down on my knees and bending over a 15-inch-high bank to get the boat into the water. Recovery was equally difficult because sometimes I could not get the boat back to the exact spot where I'd launched her and where the bank was at its lowest. This often meant water in my sailing boots, which made me none too happy.

Then, when I found I could not get up from my knees anymore, I had to change my launching spot.

Across the pond was a sandy beach, shallow but usable. To use this area, I had to change my sailing attire from shorts and sailing boots to long pants and hip boots. I have to walk out almost 12 feet to get to where the water was at least 17 inches

Sail handling is a breeze. In any breeze.

Marshall Catboats are easy to sail, roomy, strong and stable. Sailors of all ages and abilities are having tons of fun racing and cruising Marshalls from New England to Florida, and even to the West Coast. Simply a great boat to daysail, race or 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



**MARSHALL
CATBOATS.**

SEA FROST®

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



www.seafrost.com

Resources

Radio-controlled model sailing website

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



With his radio-controlled Laser, Lionel, at left, extends his sailing seasons by snatching a rare nice day in early spring or late fall. His 42-inch Laser is no toy. Since they were introduced in 1995, more than 8,000 of these boats are sailing in the U.S. Many more are sailed internationally. The beam is 14 inches, mast height is 73 inches. The boat weighs 8 pounds. This diminutive Laser is registered with an international one-design racing class and has her own USA sail numbers. There are rules and a racing schedule, including local and national regattas. Because she draws 16 inches, Lionel modified a chair to accommodate her keel while he rigs her for sail, at right.



deep. With my 8-pound sailboat in my right arm (sails flapping madly), I've had to use a walking stick to keep my balance. At least, the distance I had to bend over was minimal and I could retrieve at any point along the beach.

Dual-purpose chair

I have a folding chair with an oblong hole cut through the seat. It's wide and long enough to accommodate the keel. I can position the boat on the chair, assemble the sails and rigging, and then sit in the chair to observe her sailing maneuvers when she is in the water.

I still have a rescue boat, except that I had to buy a small inflatable because my dinghy was too heavy to drag into the water if I had to use it. However, the pond is almost landlocked except at one end where the tide enters, so the risk of losing the model boat is not too great.

It is easier to launch the boat at the beach than it was across the pond and I can park my car, loaded with my boat and all the gear, close by. With my folding chair in hand, it takes two trips to the beach over level ground with no bank to contend with. And I can sail all year round.

I occasionally still get interested spectators who want to know about my boat and the sport of windling. I try to drum up a little interest in sailing model boats because the pond is big enough to put a buoy or two in the middle and do a little racing around them. I've had little luck so far.

Model boating and boat racing used to be a popular sport many years ago, enough to have results reported

in *Yachting* and other sailing magazines. National and international regattas were held in salt and fresh water in Britain and the United States with suitable prizes for the winners. The wooden boats were principally built by the owners... not sold, like mine, as a finished package. And, of course, they were not radio-controlled. That was to come later.

Got away from them

They sailed pre-set courses corralled by their owners in a rowboat. With a strong wind, their model racers sometimes got away from them nonetheless. I can remember hearing about skippers rowing as fast as they could and not being able to catch up with their larger model boats.

Today, there are still many model boats built by their owners and others, some with parts already cut for ease of assembly. They range in size from smaller than my boat, an RC Laser (length 42 inches, mast height 73 inches, beam 14 inches, weight 8 pounds) to a lot larger.

We are organized by the American Model Yachting Association (AMYA), which sponsors sailing clubs and regattas. Their brochure proclaims it to be a "not-for-profit organization open to all interested and dedicated to promoting the designing, building, racing, and preservation of all model sailing yachts."


Steve Lang, of the Model Sailing Center in Evergreen, Colorado, says, "The RC Laser has — as one of the most remarkable features — a broad appeal. The Laser is extremely

forgiving, allowing novices to learn by making mistakes — mistakes that have no negative consequences to the boat. Kids can play bumper boats all day long with their RC Lasers with absolutely no damage.

"The newest toy for the big-boat set is the Laser. Because of its size it is easy to carry and stow. Boatowners can carry their model boat with them onboard. Whether on a mooring or at anchor the Laser is ready to keep the kids entertained or give adults something to enjoy during cocktail hour."

Racing around the harbor is a hoot, no matter who is at the controls.

"The model boat is the clear choice for bridging the generation gap," Steve continues, "A granddad or a dad can relax and enjoy a day of fun sailing with the kids. Kids of all ages will love zipping around the lake or harbor. It is a terrific boat for quality family time."

I agree with everything Steve says. The RC Laser is a model boat for everyone. There aren't many sailors who would not have fun windling. 

For further reading ...

Lionel Taylor has a thing about sailboats whether small or large. He has just completed a new book, *The Ensign Story*, with a foreword by Everett Pearson. This book

can be ordered from Flat Hammock Press <<http://www.flathammockpress.com>> or by calling 860-572-2722.



Are brokers necessary?

Yes, says this seasoned seller, sometimes they are

by Ken Textor

AS A LIFELONG DO-IT-YOURSELFER, I've generally agreed with those who say, "Selling a boat isn't on a par with diesel-injector engineering. Anybody can do it."

"Why," most of us ask, "should I pay someone 10 percent of the selling price when I can keep all that big-time loot in my pocket with just a little extra work?"

For the last 30 or so years, that selling philosophy has served me well — mostly. In unloading nearly a dozen boats, big and small, wooden and fiberglass, I've always completed the task on my own. Sometimes it has taken a little longer than I thought it would.

Make that a lot longer. There were times of frustration and annoyance and there were some unnecessary expenses. But in the end, I eventually got my asking price — or very nearly so.

Selling *Hazel G*, however, was a different project entirely. With this boat, I was definitely in Yacht Territory, not just Used Boat Land. Offering a 1967 35-foot Allied Seabreeze

in superb shape meant that I had to wade far into the Sea of Five Figures, rather than just take my usual dip in the deep end of the Pond of Four Digits. Still, with an asking price just this side of \$40,000, I didn't foresee any big problems with *Hazel*. After all, some SUVs cost that much and more and they're a lot less fun to own or use.

I briefly considered involving a yacht broker. Then I remembered those bad experiences with brokers when I, or a friend, was on the other side

seems to be a matter of economics. A 10 percent commission on \$10,000 or maybe even \$40,000 evidently doesn't warrant as much effort as a 10 percent commission on \$100,000. I thought *Hazel* deserved better than that and first tried selling her on my own.

Tried advertising

At the outset, I signed up for a few months of classified advertisements in a big-circulation boating magazine that's well known for its extensive classified ads. I also tried some ads in my local newspaper and a Maine-based flea market weekly. (Don't laugh. Boats with \$20,000 price tags have been

sold in *Uncle Henry's Swap or Sell It Guide*.) Feeling pretty frisky about my computer skills, I also tried a couple of online sell-by-owner websites. All this advertising set me back more than \$700. But since it was the middle of the boating season, I figured midsummer buyers would be active and enthusiastic, and *Hazel* would go pretty quickly, particularly since she was in the water,

“When the ads began appearing, I smiled in anticipation. And then there was silence. June passed with nary a phone call.”

of the equation as a buyer. Although they rarely admit it, many brokers are enthusiastic sales agents until you mention the size and/or price range in which you're looking to buy. If it's under 30 feet or less than \$20,000, I've found it gets increasingly difficult to get them to answer specific questions, return phone calls, and even honor appointments to show a boat. This

Hazel G, Ken's 35-foot Allied Seabreeze, was a project boat for five years. He restored her beautifully and simply before deciding that a smaller boat would be a better fit for his lifestyle.

on a mooring, in pristine condition, and ready to be sailed away.

When the ads began appearing I smiled in anticipation. And then there was silence. June passed with nary a phone call. Ditto July. I called the phone company to complain. They laughed and told me my phone line was fine. In August, a couple of people finally called. Both tried to talk the price down over the phone, sight unseen. My smile began fading. Another guy called late one evening to rhapsodize on the old boat he had just sold. He was nearly in tears over his loss when he remembered he was supposed to be asking questions about my boat, which was possibly his next boat.

He asked something about the rig, which prompted me to remind him that *Hazel* is a yawl. "A yawl?" he said. "Oh, I don't want a yawl." After he had hung up, I wondered about his sobriety. One caller actually knew all about the Seabreeze design, its enthusiastic fans, and legendary sailing capabilities. He asked for a full listing of her specifications and equipment that I had made up, complete with pictures and specs similar to a high-end yacht brokerage's presentation. I sent the package via Priority Mail and never heard from him again.

Low-ball bidder

Word of mouth then smoked out a gentleman who actually wanted to see the boat. After driving five hours up the coast, he spent the entire day aboard *Hazel*, examining this, harrumphing over that, poking and prodding everything in sight as well as some things that were pretty much out of sight. He asked for a sea trial under power, which I promptly conducted. Then he began hinting that a further sea trial under sail might also be necessary. I drew the line on that one and he said he understood. The next day, however, he called back with an offer 25 percent below the asking price. He explained that he'd need a lot of money left over to make the changes and upgrades he wanted.

Drawing again on my seriously depleted well of diplomacy, I suggested he might want to continue looking for a boat more suited to his numerous requirements. I had some more colorful things to say after I hung up.

In early September, when renewal notices for the advertisements started coming in, I began wondering whether I should continue. Then Old Neptune himself stepped in and decided the matter for me. On a whim one afternoon, I went down to our community dock and immediately noticed that *Hazel* seemed to have sustained a change of address. As the first whispers of the afternoon sea breeze were blowing gently, *Hazel* appeared to be executing a neat little do-si-do amid the other moored boats. With the remnants of her failed mooring, she was heading up the Kennebec River

toward a low-slung iron bridge. My eyes popped. With a pounding heart, I finally caught up with her in my skiff, averting disaster. But there I was, without a mooring and two months still to go in the boating season. Finding my two-year-old mooring in the murky waters of the Kennebec was a dicey proposition at best. And spending some \$1,000 on a new mooring for a boat that might be sold in a couple of weeks seemed dopey. So I dropped an anchor and sat down to consider my options. Then the lightbulb went on.

A feasible option

I picked up the phone, dialed, and asked, "Dave, did you once tell me you've sold a couple of Seabreeze sloops?" While anchored in the river, I decided the yacht broker option might not be so bad after all. Dave

Beware of the scams

Selling a boat on your own, particularly through the Internet, can bring out the scam artists. To avoid falling into the clutches of a flimflam man (or woman), it's important to recognize how they like to work.

"It's a common trick," yacht broker Dave Perry said when describing one notorious con game involving one of his clients.

The client had an open listing with Dave, who is based at Robinhood Marine Center in Georgetown, Maine. An open listing means that although Dave was representing the boat, the owner also could sell the boat on his own. And that's where the trouble began.

The owner was contacted by a prospective buyer who wanted to buy the boat, sight unseen. The buyer seemed well-informed and certain it was the right boat for him. He even offered to send a bank cashier's check to put a down payment on the boat. After they agreed on the deposit amount, the buyer said he had to send a check somewhat over the agreed-upon amount. The seller could then send back the difference and they'd proceed with a survey and closing from there.

"He came to me because it didn't sound quite right to him," Dave said

of his client. And sure enough, when the cashier's check arrived, it turned out to be bogus. Had the seller not checked with Dave and simply sent back the difference, he would have lost that money and never heard again from the so-called buyer.

The story brings into focus the first rule of avoiding boat-selling swindles: never deal with a buyer who wants to buy your boat outright, sight unseen. Even if he suggests using an escrow account pending survey and closing, those too can be phoned up.

Another tipoff is a buyer who wants to deal only in the wire transfer of money or a buyer drawing funds on a small foreign bank. Nigerian bank transactions should be treated with particular suspicion.

When using any type of Internet money service, always type in the website address yourself, rather than clicking on a link. Otherwise, your computer may be accessed directly by the site operators.

For more tips on Internet sales scams, visit the Internet Crime Complaint Center at <<http://www.ic3.gov>>. The site is a partnership between the Federal Bureau of Investigation and the National White Collar Crime Center.

“And surprisingly, by the end of January prospective buyers were making the trek to Maine to see *Hazel*.”

Perry worked at nearby Robinhood Marine Center, a full-service boat-yard in George-

town, Maine. I'd known Dave for a few years. I'd seen him at local boat shows and delivered a few boats for some of his clients through my part-time boat delivery service.

He said he had indeed sold a few Seabreezes in the 20 years he'd been in the business. "Would you like to try to sell the yawl version?" I asked. Having never seen the boat, he cautiously said he'd be interested. Then, with hope springing eternal inside me, I played my self-serving trump card. "We could even put it on one of your moorings and you'd have it right there for any walk-in traffic you get on weekends," I suggested.

Dave thought that was a fine idea and became even more enthusiastic after he went aboard *Hazel* and had a look around. "You've really done a nice job on her," he said. "I don't think we'll have any trouble finding someone interested in her."

And so began my first relationship with a yacht broker. As it turned out, Dave isn't a yacht broker like those I had dealt with in the tony harbor towns of Connecticut, Massachusetts, and other suspect territories south of Maine. He knew something about a wide variety of boats and, more importantly, a wide variety of boatbuyers.

"I won't show your boat to just anybody," Dave said as we signed the listing papers in his office overlooking Knubble Bay. "Every boat has a certain appeal, and you have to match the right people with the right boat."

Classic looks

In the case of *Hazel G*, that meant finding someone who appreciated the classic looks of the Seabreeze design as well as my five-year rehabilitation of the vessel. That rehab effort was guided by my determination to keep the systems and the sailing of a boat simple. I didn't gum things up with complicated hot and cold pressurized water systems, sub-Arctic refrigeration and freezer options, loads of Star Trek electronic gear, or complex sail furling, battens, and reefing stuff. If you want all the comforts of home, I reasoned, why leave home?

The listing agreement I signed gave Dave six months to sell the boat, after which I could choose to continue to use him as the broker, revert to myself as "broker," or do something else entirely. Since it was late September, I figured I didn't want to be advertising the boat through the long, cold Maine winter — a seemingly unlikely time for boatbuyers to be lurking amid the

snowdrifts.

As the boating season wound down, potential buyers did indeed become

scarce. Although Dave assured me late autumn is a prime season for boats to be bought and sold, only three potential buyers took the time to look at *Hazel*. But I was impressed with the questions they asked through Dave. All of them clearly knew the Seabreeze pedigree. They asked telltale questions about the centerboard (bronze or aluminum?), the mizzen (useful or spurious appendage?), and the tiller (heavy weather helm or balanced?).

When I finally hauled the boat for the season and put it in our boat barn, Dave became even more optimistic. "Having it stored inside will really show a buyer that you take good care of the boat," he explained. "That's important to a smart buyer."

Selling in winter

And surprisingly, by the end of January prospective buyers were making the trek to Maine to see *Hazel*. "Do you actually sell some boats in the middle of winter?" I asked Dave.

"I've got mortgage payments all year round, so yes, I have to sell boats in the winter too," he replied.

"Good answer," I thought. "Here's a broker who really treats the process as a job."

By spring launching time, out of perhaps another half-dozen serious, financially qualified lookers, we actually had a legitimate offer. Prior to the legitimate offer, the illegitimate offers were more amusing than offensive. For instance, there was a request to rent the boat temporarily to the prospective buyer, who was going through a divorce and needed a place to live for a few months. That optimistic buyer said the sale would be completed when the divorce was finalized. Another offer was so low that Dave exhaled loudly and expressed relief when I said I wouldn't even consider responding to it. "I was hoping you'd say that," he said.

After I accepted the legitimate offer, Dave definitely earned his 10 percent commission. Although the offer was very near the asking price, it was made "subject to survey." Past experience, both my own and that of others, has




taught me that many buyers use a surveyor's report to whittle down the final selling price. If the surveyor didn't like the condition of the paint job, the buyer may try to reduce the final selling price by an amount that will pay for new paint. Surveyors can and do find many legitimate problems with older boats. But they also note a lot of tricky-track stuff that has little to do with the boat's seaworthiness. (Are all your oil-spillage placards in place?)

List of problems

At any rate, the buyers of *Hazel* did indeed come up with a list of small problems, many of which Dave talked them out of attempting to apply to the final sales price. He pointed out that most of the problems had nothing to do with the boat's seaworthiness and therefore did not reduce the boat's value. Some above-the-waterline problems did have a minor impact on *Hazel's* seaworthiness, and I corrected them myself.

Below the waterline, there was one problem with the centerboard cable and Dave stepped in on that one. Since the new owners wanted Robinhood Marine Service to perform some dry-dock upgrades to *Hazel* anyway, Dave volunteered the yard's help to address, at no charge to me, a cracked swage fitting the surveyor found. In the end, the offer stayed intact until the sale was completed. It took about two weeks between the signing of the purchase and sales agreement and the closing.

Would I use a broker again? If it was Dave Perry, absolutely. Other brokers, though, need to be vetted, especially for boats selling for less than \$20,000. That seems to be the point at which many yacht brokers think the 10 percent commission isn't worth much effort.

So if you are selling a sailboat for which you'd rather not take late-night phone calls from slightly intoxicated sailing romantics, check out your potential broker's recent history of sales in your price category. Even better, ask if he (or she) has sold a boat like yours before. Then chat at length about your boat's pluses and minuses. At some point, you'll know if the broker is for you. Like any do-it-yourself project, the more time and effort you put into working with a broker, the better it turns out. 

Fiberglass

"Itching for fun"



Supply

Fast Friendly
Service Plus Great Pricing
Shipping Worldwide Daily:

Core Materials- Divinycell & Balsa Core
System Three Epoxies
WEST System Epoxy
Fiberglass, Carbon, and Kevlar Fabrics
Premium Vinyl Ester and Polyester Resins
3M Boat Care Products and Abrasives
Surf and Sailboard Materials & Components
Tools and Supplies
Boat Building Supplies

No Minimum Order

Check out our catalog at:
www.fiberglasssupply.com

Or call: 509-493-3464

Located in Bingen, WA



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.

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

A Whole New Delivery System

Simplicity in epoxy adhesive use has finally arrived! Just drop System Three's new cartridge into a standard size 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. After you're done put the cap back on and the cartridge is ready to go whenever you next need it.

Three different epoxy adhesives to choose from:
QuickCure 5, T-88 Structural Adhesive, SilverTip GelMagic

System Three SilverTip Marine Product Series
• products on purpose •

SYSTEMTHREE



Get your Free Epoxy Book today, Call: 1.800.333.5514 or Visit us at: www.systemthree.com

Boats



Herreshoff 32

1932. Hull #3 from MIT plans. Built '96 as reproduction boat. LOA 32', LWL 20', beam 5'6". Cedar planking, oak ribs, bronze fasteners. Blocks, hardware from original patterns. Forerunner of the Fishers Island 23. These long, narrow, easily-driven hulls were a European concept introduced here by L. Francis Herreshoff. Custom trailer covers. 3-hp OB on motor mount. True classic Sunday racer. Kansas City, Mo. Photos via email. \$20,000.

Larry Gillen
larry_gillen@sbcglobal.net
816-454-1386



Ericson 32

1974. Prettiest boat in the marina. Fine, freshwater example of a top-quality Bruce King classic. Five-time Mac participant has great running Atomic 4, RF and FB main. Fresh Awlgrip '06: dark blue. New upholstery throughout. Lots of custom features, including mahogany-rimmed 36" wheel, teak butterfly hatches and cockpit sole. Pushpit seats featured in *Good Old Boat* November '99. Owners buying a bigger boat. Yankton, SD. \$22,500.

Bill Dimmitt
wdimmitt@pionet.net
712-277-4736



Pearson 31 Mk II

1988. Wonderful, freshwater vessel. Seven berths, professionally installed Webasto offshore forced air diesel heater, H/C

pressure water, Autohelm 3000, new Raymarine GPS, new 9' inflatable dinghy, Harken RF UK 150 genoa, UK mainsail w/line reefing. All lines lead aft, 3 Lewmar 2-speed ST winches, gennaker w/snuffer. Completely equipped, ready to sail! Bayfield, Wis. \$45,000.

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



Bayfield 29

1983. Rigged as a sloop w/Pro-furl 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) or
763-572-8797 (evenings)



Alberg 35

1963 sloop. Hull #85. Yanmar 3GM30F diesel 1,200 hrs. Good sails, H/C pressure water, refig. Monitor windvane, tiller autopilot, 2-burner propane stove. Custom sea hood, front hatch, and companionway doors. Lovingly sailed and maintained. In Galesville, Md. \$23,000.

Bill and Mary Blazina
sailors23@verizon.net
814-643-5264



Storebro Royal 33

1984. For the sailor who appreciates quality. A unique vessel in Bristol cond. Well-built to handle

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

big water elegantly. Mahogany throughout gives a classic salty look. Second-to-none craftsmanship and quality. Center cockpit sloop from one of the finest yachtmakers in Europe. Sailed exclusively on Lake Superior. One of a kind on the Great Lakes. Comfortably sleeps 6, newer RF 150 genoa, H/C pressure water, FB main, dodger, electronics. Too many features to mention. In Ashland, Wis. Reduced price \$48,900.

Allan Carlson
jodellcarlson@hotmail.com
906-663-4937



Islander 32

1964 sloop. LOA 32'9", beam 10'6". Full-keel freshwater boat w/large cockpit. Deck-stepped mast. Mahogany interior (email for photos). Sleeps 6, V-berth, face-to-face dinette converts to double berth, 2 quarter berths. 15-gal holding tank, 10-gal water. Large lazarette, stern boarding ladder, Profurl RF added '00. Atomic 4 runs great. In Chicago, Ill. \$12,500.

Richard Gaul
Gardenquilt@mac.com
773-248-1551

Bayfield 29

1984 classic cutter. Full keel, freshwater boat. Wheel steering. Newer instruments, radio, and CD player. Yanmar 2 GM diesel engine. Standing headroom w/roomy head and large galley. In Bayfield, Wis. \$25,900.

Bill Jansen
815-734-7278
or 815-601-4965



Seaward 22

1988. Sails and rigging good shape. Well cared for, exception-

ally clean. Shallow draft, wide beam. Feels like a much larger boat below. Sails great! No trailer. 8.0 Evinrude, low hours. In Barnegat Bay. Reduced \$5,850.

David Zailik
bbsail2@comcast.net
732-244-8434

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 \$20,000.

Pat Rosato
203-788-1677



Columbia 26 Mk II

1969. New Haven, Conn. Sail away today! Completely restored past 5 years. New custom interior, new paint (in, out, top, bottom), new head, through-hulls, plumbing. New wiring throughout w/new VHF, depth, compass. New 8-hp Yamaha in custom soundproofed well. Complete sail inventory. Too much to list. Motivated seller. \$10,500. Pics via email.

Les Melich
CTWooddoctor@yahoo.com



Bayfield 25

1983. Full-keel, deck-stepped coastal cruiser designed by Ted Gozzard. Yanmar 1GM, Harken #16 SS ST winches, Racor fuel filter, 110% headsail on Harken RF. With standing headroom, marine head, and diesel engine, it feels larger than its 25' LOA, yet keeps slip costs down. In Absecon, N.J. Asking \$12,500. <<http://www.andy-lamb.com/danny/bayfield25web/bayfield25.html>>.

Dan Warburton
warburton8888-bay@yahoo.com
609-457-0154



Dickerson 36

1971 center-cockpit K/CB ketch. Strip-planked Philippine mahogany on white oak frames. USCG-documented. FWC 37-hp Westerbeke diesel w/1,500 hrs. New sails. Well-found coastal cruiser. In Midcoast Maine. \$24,000.

Bill Freeman
casafortuna@sisna.com
505-334-1673



Lazy Jack Schooner 32

1974. Classic Ted Herman design. Hull #4. Full keel w/CB, 38-hp Perkins. Heat and air, new interior, steering, batteries, charger, cockpit enclosure. Call for complete list of upgrades/equip. See *Good Old Boat* issue #16 2001 for article. In Charleston, S.C. \$43,500.

Manny Abraham
423-677-0604



Pearson Vanguard 32

1964. Hull #96. Beautiful rugged classic. Freshwater-cooled Atomic 4 rebuilt by Don Moyer. 155 genoa w/Harken RF, North main w/Dutchman, spinnaker, Edson WS. Bottom and deck professionally restored '05. Fully found, many extras. In Rock Hall, Md. \$17,900.

Conrad Hoover
CLHoove@aol.com
302-888-2722



Catalina 250

1998. Colorado lakes sailboat w/wing keel, tall rig, tiller, twin-axe trailer, and Honda 9.9 OB. Propane stove, sink, V-berth, private head w/Porta Potti, full-sized aft berth. Trailer has

a boom to raise/lower the mast and a steel tongue extension to load the boat on/off the trailer. RF, jibs (150, 110) and FB main. \$19,000.

Bud Curtis
bud.curtis@gmail.com
719-310-5827



Columbia 40

1965. Great cruiser/racer. Solid '60s glass hull draws 4'8". Full-length keel, Westerbeke diesel inboard, WS, new standing rigging and deck paint, recent Cetol on teak. Bimini, CQR and Bruce anchors. RF jib, FB main, spinnaker. Lots of mahogany below, pressurized water, alcohol stove/oven. Cushions in great shape. GPS, some charts, turnkey, ready to cruise or race. In Urbanna, Va. \$22,000 FIRM. <<http://home.earthlink.net/~jsavedge/pelago>>.

Don Savedge
dsavedge@earthlink.net
540-743-5057



Freedom 40 cat ketch

1980. Classic Hoyt-designed good old boat is a joy. Carbon-fiber spars, new main, new Awlgrip. DC refrigeration, hydraulic steering. Excellent cruiser, comfortable liveaboard w/efficient layout. Distinctive flush deck provides standing headroom throughout. More information at <<http://www.brightstar4sale.com>>. Owners motivated. Available for inspection in Boston Harbor. Don't wait too long to own this smart, head-turning vessel. \$95,000.

Lance Ryley
lance_ryley@yahoo.com
860-841-1591

Pearson Wanderer 30

1968. Exterior fully restored, including new, professional gelcoating of deck molding and professional Imron topsides. New deck surface, fiberglass cockpit coamings. Comfortable interior w/new upholstery. New Harken 40 2-speed winches,

new 26" lifelines, custom double-rail pulpit and split pushpit with 5-step swim ladder. Stored inside. For photos/info, go to: <<http://www.sailblogs.com/member/newp-wanderer>> and <<http://hometown.aol.com/pquorum/myhomepage/index.html>>.

Peter Allen
585-469-1007



Grampian 31 classic

1965. Hull #10. Solid fiberglass hull, teak interior, '94 diesel w/only 450 hrs. Many upgrades in '06 including new caprail, marine head, halyards, refinished exterior teak, Profurl RF still in box! Modified full keel steady under sail. Large cockpit and sail-sized storage in both lockers. Her classic lines and transom turn heads in every anchorage and marina. Annapolis, Md. \$17,500 OBO.

John Rodenhausen
skiffing11@yahoo.com
410-279-7154



Down East 32

1977 cutter-rigged, full-keel, comfortable and roomy, heavily constructed, capable of coastal/offshore cruising. Ideal for those seeking simplicity and safety. Standing rigging and deadlights '02, running rigging, sails, covers, electrical, plumbing, bowsprit, ground tackle, PV panel, 400-amp batteries, controllers '04-05. '92 Westerbeke 37-hp w/less than 1,400 hrs. Composting head. FB main w/Dutchman. Tiller. Exc sailing qualities. Specs/photos avail. <<http://www.downeastyachts.org/history/downeast32/index.html>>. Lake Champlain (Vt./N.Y. area). \$42,000.

Duane Nealon
homewright@taconic.net
518-658-9629

Pacific Seacraft Crealock 37
1995. Asking \$132,000.

Dave Roberts
352-495-3312



Hunter 27

1977. Affordable, Yanmar diesel, new mainsail, beautiful parquet floor, exc cond, includes all gear on board, call for details, \$6,500 OBO.

Sara DeBiase
s_suraci@hotmail.com
203-469-4895



Tripp Lentsch 29

1963. Hull #7. Rare Tripp-designed classic (see article November '06). Built in fiberglass by DeVries Lentsch. Well maintained and upgraded. Awlgrip red hull. Awlgrip/polyurethane deck. 4 berths. D/S, radar, Autohelm, new VHF. ST winches, RF jib. All sails including drifter and spinnaker w/pole. Holding tank, Atomic 4. A very able and attractive cruiser. In Conn. \$20,500.

Ed Holahan
203-367-3598



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/chartplotter '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



Down East 32

1976 world-cruising cutter (circumnavigated). Safe, roomy,

Good old classifieds

full-keel, fully equipped. Yanmar 2-cyl, AP, windvane, recent rigging and windows. No blisters. Inflatable w/OB. Structurally excellent, cosmetically very rough. Just returned from 3-year cruise. Steal *Tavarua* for \$25,000. In Florida.

Reuel Parker
parkermarine@bellsouth.net
207-691-5896



Allied Seawind ketch
1969. Hull #119. Sturdy, full-keeled, bluewater boat completely refitted by owner. Recent Imron dark green hull, dodger and sailcovers, lifelines, cushions. New RF jib, wiring, lights, and panel. Westerbeke M27 w/low hours, new engine mount. FB main and mizzen. I have generally sailed this boat alone; it sails and tracks beautifully. In Rockport, Maine. \$32,000.

David O'Neil
don@op-architects.com
978-448-5320



Vindo 40 (31-foot)
1973. Included in *Mate's World's Best Sailboats*. Built in Sweden for family cruising in the North Sea, Vindo 40s are known for their high degree of craftsmanship and ease in single-handing. Ideal liveaboards, bluewater cruisers. 31' LOA, 9'6" beam, 4'8" draft, full keel. Fiberglass hull, teak throughout, yard maintained, 25-hp inboard diesel (only 400 hours), too much to list! Offered well below market value for \$25,000. In Maine. <http://www.clovercottage.com/vindo40>.

Matthew Mayo
mayo77@pshift.com
207-374-5716



Viksund MS-33 motorsailer
1973 Norwegian ketch built to

Lloyd's-equivalent standards. Solid fiberglass, watertight bulkheads, double bottom, 35-hp Yanmar. Massive upgrade '03-04 prior to 6,000-mile voyage from Nova Scotia to Bahamas and back. RF, new rigging, new sails, Stack-pack, Air Head toilet, 12V refrig, 2 showers, swim platform, Spurs, 1500W inverter, electric windlass, Raymarine radar/GPS/VHF/D/S, 5 new batteries, Link monitor and much more. For details see *GOB* January '04; new book, *Sailing Away from Winter*, <http://www.sunnybrookyachts.com> or <http://www.silverdonaldcameron.ca/magnus.html>. \$59,000 USD.

Silver Donald Cameron
sdc@silverdonaldcameron.ca
902-446-5577



O'Day 28
1985. Fresh water only. Gorgeous anniversary model. Full teak-and-holly sole. Stiff but fast. Perfect family boat. Professionally maintained. RF 150 genoa, main w/jiffy reef and lazy-jacks, cruising spinnaker. Dinghy, custom steel cradle, extra-thick cushions, dodger, Bimini. Many extras. Full list, survey, pictures available. Beautiful cond. Surveyed May '06. In Bayport, Minn. \$22,500.

Bruce Humphrys
capnbruce@aol.com
763-427-3311



PS Crealock 34
1994. Pacific Seacraft with voyagemaker package; cutter rig w/running backstays. Turnkey, sailaway ready w/extensive equipment inventory. Beautifully maintained. Fresh water all but first year. Always covered during winter. FB main w/lazy-jacks, nearly new triradial flasher. Fully integrated electronics. Traditional bronze ports and cleats. Spacious saloon w/custom upgrades. Includes custom canvas cover, aluminum frame, steel cradle, AB inflatable, 4-hp Mercury OB. A classic beauty. In Bayfield, Wis. \$149,000.

Chuck Chism
Ctchism5211@msn.com
651-486-2872

Real Estate



SW Florida's sailing playground
Sail Charlotte Harbor and the Gulf of Mexico from your backyard! Waterfront homes, residential lots, and investment properties <http://www.flhomesbestkeptsecret.com>.

Roger L. Richmond,
Broker Associate
Century21 Sunbelt Realty
Bugattiboy@comcast.net

Wanted

Boat partner
Partner/share person for 30-foot sailboat. Long Island Sound, New Haven/West Brook area in Conn.

Pat Rosato
203-748-7849

Products

Brass & Bronze
Marine Hardware
By

DAVEY



STOCKED BY

R&W
Traditional
Rigging & Outfitting

Download our full catalogue at:
www.rwrope.com
866-577-5505
mainstay@csolve.net

12/24V CABIN FANS



Available in teak, cherry, or mahogany with brass or stainless steel bracket. Superb craftsmanship & design. Very low draw and long life with speed control.

250-888-9077
www.marinecabinfans.com

LED Lighting

- Navigation
- Cockpit
- Cabin

And other energy-saving products

Solar Panels, KISS wind generators & More!

HotWire

Ph/Fax: 727-943-0424
hotwiregam@aol.com

www.svhotwire.com

SplicingNut.com



MAINSHEETS



The Build it/Fix it Warehouse

Marine Plywood, Epoxy, Fiberglass, Varnish, Core, Caulking Canoe, Kayak & Dinghy Kits

Order online @
www.noahsmarine.com
Free Catalog!

(800) 524-7517
noahs@noahsmarine.com

SPADE ANCHORS

Quick Setting!
Exceptional Holding!
Now available in the USA!



- Galvanized Steel
- Aluminum Alloy
- Stainless Steel

Great Lakes Marine Specialties
800-821-0207 / 952-920-8500

SpadeAnchor.com



Dress your boat up for spring. Replace your deteriorated plastic builder's plate with one in Bronze from **Bristol Bronze**. For a complete catalog send \$5 to:

Box 101, Tiverton, RI 02878
• 401-625-5224 •

www.bristolbronze.com

Save Dying Batteries with BatteryMINDER!

The "charger with a brain," it conditions "sulphated" batteries and charges any type 12-volt. Batteries once considered beyond recovery can be brought back to long-term useful condition.

\$49.95 includes ground shipping

Call to order:

800-821-0207 • 952-920-8500

Online brochure, ordering:

www.navstore.com

Great Lakes Marine Specialties



BUGBUSTERS

Lead-balled companionway & hatch insect screens

Sogeman Inc.

Tel: 800-261-9004 Fax: 800-261-1165

www.sogeman.com



"Solar Powered!"

Round & Rectangular Marine Skylights

www.boatdeckprism.com

(250) 744-7564

DECK PRISM



Zephyrwerks
The Sheave
Factory

Custom Delrin Sheaves & Sheet Rollers

www.zephyrwerks.com

(360) 385-2720 edo@cablespeed.com

TUFNOL BLOCKS



JUST LIKE THE ONES YOUR BOAT HAD WHEN SHE WAS NEW!

STOCKED BY

R&W

Traditional
Rigging & Outfitting

Download our full catalogue at:

www.rwrope.com

866-577-5505

mainstay@csolve.net

Lifeline and rigging hardware from
Hayn Marine and Petersen Stainless
turnbuckles, eyes, forks, pelican
hooks, compression fittings,
adjusters and more...

haynmarine.com

800.346.4296



Hayn Marine

Hi-MOD
Made in UK



TOPCLIMBER

Climb up and OVER the mast by yourself.



ATN, Inc. • 3718 S.W. 30th Ave.
Hollywood, FL 33312 USA
954-584-2477 • Fax 954-584-2478
Toll Free 800-874-3671

www.atninc.com

atninc@hotmail.com

Solar & Wind Power

Authorized Dealer for:



- Kyocera Solar Panels
- Air-X & Rutland wind generators
- Isotherm refrigeration & Isotemp water heaters
- Powerline high-output alternators & isolators

Toll free: 877-432-2221
www.emarineinc.com

NewGlass2 Fiberglass Restoration

**Make Your Boat
Shine Like New**

**No Compounding
No Waxing
No Buffing**

www.NewGlass2.com

800-785-7675

KNOTSTICK

Measure boatspeed
mechanically
for any size boat.

www.knotstick.com

Box 6340, Vero Beach, FL 32961



Custom-made halyards,
sheets, vang, topping lifts,
outhauls and other running
rigging lines.

- Cajun XLE yacht rope •
- Double braid nylon •
- Dinghy braid • Rigging Kits •
- Anchor lines • Docklines •
- Shock cord • Marine rope •

Cajun Trading Company Ltd.

Box 916, RR#5, Yarmouth, Nova Scotia,
Canada B5A 4A9

Tel: 1-888-ASK-CAJUN (275-2258)

Fax: (902) 742-0006

E-mail: cajuntrading@canada.com

www.cajuntrading.ca



LED INDICATORS

red, green, white illuminated sectors
depict specific navigation lights

CURRENT SENSORS

flashing indication of burned-out
navigation light bulbs

PANELS

intuitive switching of navigation lights

www.navlightindicators.com



LEOFLEX-X

The latest technology in "synthetic Manila." Looks great and works hard. Designed for Tall Ships, but looks right on all Good Old Boats (including my Triton). Superior UV resistance, very strong, low stretch. Excellent value.

American Rope & Tar

1-877-965-1800

www.tarsmell.com

ENERGY-SAVING LED LIGHT BULBS



Sensibulb
Perfect for dome and reading lights.
Fits inside most marine fixtures.
Soft white, broad focus, low heat.

Wow! That's BRIGHT!

www.sensibulb.com
(631)-754-1945



Atomic 4 Parts

Campbell Sailer Propellers
for your Atomic 4 or
any other engine

nuclearengine.com
360-941-5623

Products, cont.

Rope for Running Rigging

- Five types of synthetic hemp—Plus natural hemp!
- Modern braided Dacron & exotics
- Full splicing service
- Shackles, thimbles and twine of all descriptions

STOCKED BY
R&W
Traditional
Rigging & Outfitting

Download our full catalogue at:
www.rwrope.com
866-577-5505
mainstay@csolve.net

Keychain Remote
Turn on/off your lights and more from up to 75 yards.
\$39.95
631-754-1945
www.sailorssolutions.com

Cruising Solutions
Rutland 913
\$995.00
+ S&H
* Smallest
* Quietest
* Most power in low wind
1-800-460-7456
www.cruisingsolutions.com

LE TONKINOIS (lay TON-kin-wah)

All-natural tung-oil based varnish. Two formulas: Original is more than 100 years old. Number One has more UV resistance and dries faster. No sanding between coats. Wipe with a damp rag. Very forgiving, sags and curtains are easily brushed away. Not brittle. Won't crack or peel. Moves with the wood. A beautiful glossy shine with very little effort. Easy cleanup. Perfect for the sailor who'd rather sail than varnish.



American Rope & Tar
1-877-965-1800
www.tarsmell.com

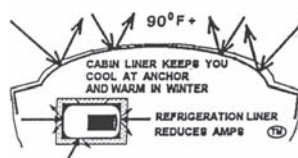
New! from PowerTiller
Tiller Mounted remote engine controls for Nissan, Tohatsu, Johnson, Evinrude, Honda, Yamaha, Mercury, Mariner
See a live demonstration at:
www.powertiller.net or call **(602)852-5707**

By hand
Fix IMPELLERS Fast
No tools
• Hand screw release
• Captive O-ring seal
• No paper gasket
• Install in seconds
Main engines and gensets
SPEEDSEAL
EASY SLIDER
PRACTICAL SAILOR verdict
"An essential piece of safety equipment"
800 675 1105
before 1pm Eastern Time
Action Demo
www.speedseal.com

Genuinely Marine LED Products

Rugged, waterproof, regulated, LED anchor, reading and spot lights, and replacement LED running (navigation) lights. Engineered specifically for the boat (yacht) market by experienced cruising sailors and manufactured in the world's greatest cruising grounds, the Fiji Islands. Lifetime warranty on all products. Custom work available on request

www.bebi-electronics.com
Phone: 679-885-3031

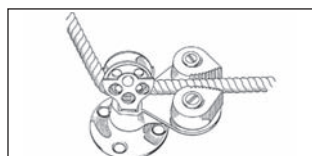


For new or old refrigerator boxes or to cool the boat's interior, use
Heat Shield
radiant space technology

www.heatshieldmarine.com
941-639-5279 • 800-896-2459
Fax: 941-575-4080
bill@fourwinds-ii.com

Traditional Marine Stoves

LITTLE COD
-1917-
Solid Fuel
Cast Iron & Porcelain
Heating
Cooking
marinestove.com 360 376 5161



Don't ruin your boat or sails with the bleeding rust of stainless steel. **Bristol Bronze** makes a wide variety of Bronze Cam Cleats including the Swivel Cam Cleat above. For a complete catalog send \$5 to:

Box 101, Tiverton, RI 02878
• 401-625-5224 •
www.bristolbronze.com

Smooth Sailing

OVER 30 YEARS

FOSS FOAM

Rudder Replacements
FOSS FOAM PRODUCTS
OF FLORIDA, INC.

7060 Hwy 41 North
Williston, FL 32696

Tel: 352-529-1104
Fax: 352-529-1106
www.newrudders.com

Cal • Hooks Marine • Sovereign
Catalina • Irwin Spindrift • Com-Pac
Marine Innovators • Starwind Caliber
Endeavour • Starrett • Captiva
Mirage Tanzer • CSY • Morgan • TMI
G Cat • Nimble Watkins • Gulfstar
O'Day • Traditional Watercraft
Hunter Marine • Pearson

If you're a sailor,
we've got a "site to sea"
www.GoodOldBoat.com

Small ad, small prices:

- standing and running rigging •
- lifelines • furling gear • winches •
- line • windlasses • travelers •
- wire and terminals • blocks •
- vangs • clutches • etc. •

Problem solving is our specialty.
We're a rigging shop specializing in
discount mail order. Free catalog.

Rigging Only

Phone: 508-992-0434
Email: sail@riggingonly.com
Web: riggingonly.com

UNSCREW-UMS™ broken-screw extractors

Remove damaged fastenings. Minimal damage to wood. Hollow tool uses stub as guide. Sizes to remove screws from No. 2 to No. 24, lags, nails, and drifts.



T&L TOOLS
24 Vinegar Hill Rd., Gales Ferry, CT 06335
Phone: 860-464-9485 • Fax: 860-464-9709
unscrew-ums@tltools.com
www.tltools.com

FIBERGLASS SUPPLIES

CALL FOR FREE CATALOG
SAME DAY SHIPPING

Quality Resins
Polyester, Vinylester, Epoxy
Gelcoats & Gelcoat Guns
Pourable Urethane Foam
Mats, Wovens, & Biaxial
Remgrit Sawblades
Vacuum Bagging Supplies
Sandpaper, Paint Supplies
Safety Supplies

Technical Assistance
800-231-6537
www.lbifiberglass.com



973 North Road Rte 117
Groton, CT 06340

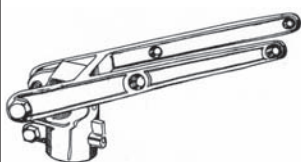


Quickly detects loss of raw cooling water, most common problem of marine engines and gen sets. Can save thousands of \$\$ in engine repair.
www.borelmfg.com
800 824 4449



Nav lights control panel. Graphic indicating LEDs. Separate breakers/sw's for each circuit. Frees up breakers on main panel.

www.borelmfg.com
800 824 4449



Take control of your helm with a Rudder Post Cap-Tiller Strap in Bronze from **Bristol Bronze**. For a complete catalog send \$5 to:

Box 101, Tiverton, RI 02878
• 401-625-5224 •
www.bristolbronze.com



WATERBOOT®
THE ULTIMATE MAST/DECK SEAL

Stop Leaks!

Waterboot has been proven to be the most effective, attractive and UV resistant mast/deck seal available to the sailing world today. Custom designed to fit any boat and easily owner installed.

www.waterboot.com
h2oboot@aol.com
ph/fax: 203-938-9704

Shhhhhh!
Quiet that noisy diesel with...

SPM Soundproofing Tile
Up to 90% diesel-noise reduction
www.sailorsolutions.com
(631)-754-1945



"SEA-CURE" is an inexpensive and effective means for the protection of your valuables while traveling in your boat or recreational vehicle. This safe is easily installed in any void space, such as a bunk or settee area, and comes in two sizes, which should accommodate most people's needs. The safe is available in a painted and a stainless-steel version and is available from World Wide Safe Brokers at:

Phone: 800-593-2893
Fax: 856-863-1208
info@worldwidesafebrokers.com
Mention this ad and get free delivery.



Marine Fastener Warehouse

Stainless Steel - Titanium
Silicon Bronze - Monel
Screws - Nuts - Bolts
Nails - Staples - Rivets

www.marinefastenerwarehouse.com

...or visit our store at...

<http://stores.ebay.com/Marine-Fastener-Warehouse/>

Classic Rope Fenders
Cotton • Hemp • Synthetic
Box 42, Beulah, MI 49617
231-88-4898
cdump71@hotmail.com



Self-fit mechanical rigging terminals. Available at quality rigging shops everywhere. Call for information on a rigger near you.

800-458-1074 • 305-758-1074
brooks@sailingservices.com

sailing services, inc.
USA Distributor

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>

Boat Deliveries

CROSS COUNTRY BOAT TRANSPORT



Specialized boat handling to 55 feet

Licensed • Insured • Storage
651-437-2454

Atlantic Yacht Delivery

New England, East Coast, Florida, and Gulf. Particularly intimate knowledge of waters between Chesapeake Bay, Long Island Sound, and Boston. USCG Licensed Master Mariner. Navy veteran. 35 years' experience. Sail/Power. Non-smoker, non-drinker. Good with a wrench.

Captain Bernie Weiss
Afloat: 203.969.5936 Ashore: 203.329.2503
www.AtlanticYachtDelivery.com

Clothing

There is nothing—absolutely nothing—half so much worth doing



as simply messing about in boats.

Shirts & Tote Bags

from
The Wind in the Willows
Toll Free 1-877-MESSING
www.MessingAbout.com

Cushions

'Tufted Topper'

The affordable marine sleeping solution



Custom-fitted to your V-berth, aft cabin or dinette, this one-piece 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

Websites

By-The-Sea

AN ONLINE BOATING MAGAZINE
BOATBUILDERS • RESTORERS
PLANS • KITS • SUPPLIES
OLD BOAT BROKERS • CLASSIFIEDS
www.by-the-sea.com

Boat Owner's World

The World's Most Complete Boating Portal:
Directory • Classified
News • Forum • Auction
www.boatowners.com

Get your sailing fix
any way you like it at
www.GoodOldBoat.com



Sails/Canvas

NATIONAL SAIL SUPPLY
Best sails for the money



New sails, used sails, furling gear, off the shelf or custom - But always at the lowest price - Try us!

Sailing doesn't have to be expensive

Phone 800 611-3823
Fax 813 200-1385
E-mail: NewSails@nationalsail.com
www.nationalsail.com

Minney's Yacht Surplus
minneysyachtsurplus.com
949-548-4192
1000s of Good Used Propellers & Sails

SUPERFURL HEADSAIL FURLING AND REEFING SELF-INSTALLED NO LUFF TAPES, INSTALLED FROM THE FOREDECK.

WWW.SUPERFURL.COM
SUPERFURL@AOL.COM
714-879-5161

Your online source for quality pre-owned sails!



www.northsailoutlet.com
1-800-SAIL-123. ext.948

Nautical Audiobooks
www.GoodOldBoat.com/audio.html



ATLANTIC SAIL TRADERS
BUY • SELL • TRADE • NEW • USED SAILS
Cash For Your Surplus Sails

- Huge Inventory of Used Sails
- Top Quality Custom-Made New Sails
- Canvas, Repairs, Alterations
- Roller Furling Systems, Line
- ALL AT DISCOUNT PRICES
- 100% SATISFACTION GUARANTEED

1-800-WIND-800
(941) 351-6023 • FAX (941) 957-1391
1818 MANGO AVENUE
SARASOTA, FL 34234

SERVING SAILORS WORLDWIDE SINCE 1985
Visit our website for our up-to-date inventory database
Web: atlanticsailtraders.com



Lee Sails Northeast
www.LeeSailsNE.com

Fully battened and traditional mainsails, furling and hanked headsails (biradial, crosscut and miter cut variable weight), storm sails, spinnakers and more. Outstanding quality, reasonably priced and warranted for two years.

631-665-6200
Toll Free: 1-877-665-SAIL (7245)
Quotes@LeeSailsNE.com

615 Pine Drive
West Bay Shore, NY 11706
Mention this ad for free shipping

Somerset Sails



- New & used
- Computer-cut cruising & racing sails
- Roller-furler and sail package deals
- Repairs

Call for lowest prices. Credit cards accepted.

8691 Main St.
Barker, NY 14012
800-323-WING (9464)
http://somensetsails.com



TRADITIONAL SAILS
CUSTOM FURLING PACKAGES
COMPUTER-DESIGNED SAILS
YAGER SAILS
CELEBRATING 22 YEARS IN BUSINESS!


We take the mystery out of buying sails.

SPINNAKERS: Cruising and asymmetrical
MAINS: Crosscut, radial design
HEADSAILS: Furling genoas radial design

P.O. Box 279, Veradale, WA 99037
Ph: 509-928-1964
Fx: 509-922-2772
Web: Yagersails.com

VISA AND MASTERCARD WELCOME

New & Used Sails
Buy • Sell • Trade
Discount Sunbrella
Wholesale plus Outfitting Pkgs
Furling Packages



7060 15th Street East, #14
Sarasota, FL 34243
Phone: 800-507-0119 • Fax: 941-758-2979
www.porpoisesailing.com

Sail Care 20 Years Of Service To Sailors



Over 100,000 Sails Cleaned
Call For Catalog (800) 433-7245
www.SailCare.com

So Easy to Install, Even a Motor Boat Owner Can Do It!



ALADO NAUTICA USA
Jib reefing/roller furling system

- World Renowned Quality
- Marine Aluminum Alloy
- Factory Direct Pricing - SAVE!!!
- Easy One-Man Installation (no special tools, no swaging, no need to go aloft)
- Lifetime Warranty

Shop and compare - No other maker comes close to giving you so much Quality and Value for **SO LITTLE \$\$\$.**
Prices start as low as - \$524.
Give us a call or visit our website. You will be GLAD you did!

Ph: 1-866-795-9293
www.aladous.com

Books/Video

Seven Seas
The Complete Store for the Complete Sailor
Expert rigging and service at catalog prices

We've moved to Lake Minnetonka!
600 West Lake St., Excelsior, MN 55331
(Shorewood Yacht Club)
952-470-0099

SAILING AWAY FROM WINTER
SILVER DONALD CAMERON




Sailing Away From Winter
A Cruise From Nova Scotia to Florida and Beyond
by Silver Donald Cameron

Pack your sea bag and enter their world. Your own horizons will be broadened as a result.

Karen Larson
Editor of Good Old Boat

www.silverdonaldcameron.ca
Buy it at Amazon.com today!

nauticalmind.com



The Nautical Mind
Marine Booksellers &
Chart Agents
tel: (416) 203-1163
toll free: (800) 463-9951

Boats

FATTY KNEES



Great fun begins with a great dinghy!

Fatty Knees 7', 8' and 9' models, easy to row and simple to sail and, most importantly, great fun.

Edey & Duff, Ltd., Dept. K
128 Aucoot Rd., Mattapoisett, MA 02739 (508) 758-2591
www.fattyknees.com

Services

Rapid Response Marine Services

Serving the Southeastern New England Boating Community

**Marine Electronics
& Equipment
Sales & Installation**

781-740-1418
www.rapidresponsemarine.net

*Where skilled craftsmen
produce top quality results at
competitive shop rates*



Bingham Boat Works LTD.

*We can build and repair your
fiberglass and wood projects*

906-225-1427
906-225-0050
Fax 906-225-0604
BoatsWeDo@aol.com

Boatbuilding

AS SEEN ON TV'S N.C.I.S.



You too can build the above 22' trailerable sailboat as featured on the hit TV series, N.C.I.S. Send \$9.95 today (refundable on first order) for our catalog of over 250 proven designs you can build too using plans, patterns and kits — no experience needed.

Glen-L Marine
Box 1804/GB
Bellflower, CA 90707
562-630-6258
www.Glen-L.com

RAKA EPOXY AND FIBERGLASS

We have several types of epoxy resins for coating, gluing, and composite construction. A huge selection of fiberglass in knitted biaxials, triaxials, woven materials, carbon, and kevlar, and all with the lowest prices anywhere. Call us, and we ship your order the same day.

772-489-4070

INTERNET CATALOG
www.raka.com



THAI TEAK MARINE CO., LTD.

ESTABLISHED 1972

MANUFACTURER OF
TEAK YACHT FITTINGS

COMPETITIVE PRICES
QUALITY GUARANTEED
FREE CATALOG

ORDER DIRECT
FAX: 0-11-662-933-1296
www.thaiteakmarine.com

www.epoxyproducts.com/
marine.html
603-435-7199

Restoration



Clear Penetrating Epoxy Sealer
"The Ultimate Wood Sealer"

*Stops rot and mold.
*Strengthens soft wood.
Oak and Teak Epoxy Glue
*Made for Oily and Acidic Wood.

**BRISTOL
FINISH**

Back to Nature
Safer Paint Stripper

Star Distributing
Restoration & Refinishing
Products
www.star-distributing.com
(866) 345 3658 * We Ship Daily * Dealers Wanted

**Remove 30 coats of varnish
and paint in 20 seconds.**
No Chemicals
No Sanders
Lead Safe
www.silentpaintremover.com
Ph# 585-924-8070

Remove Cured Silicone Safely and Easily

Digesil Gel is designed to
remove cured silicone from
virtually any surface.



Contact RPM Technology
973-463-1386
sales@rpm-technology.com

Long Beach Boat Company

Long Beach, Maryland
Atomic 4s overhauled and ready for
purchase or will overhaul yours.
• Small boat building & restoration •
• Older engines repair and parts •
• Large boat restorations also •

Bruce Gay
410-586-8233



Classified Deadlines

Issue	Date
July 2007.....	May 1, 2007
Sept. 2007.....	June 29, 2007
Nov. 2007.....	Aug. 31, 2007
Jan. 2008.....	Nov. 1, 2007

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: <http://www.goodoldboat.com/classified_guide.html> or call 763-420-8923.

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 1½ 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.

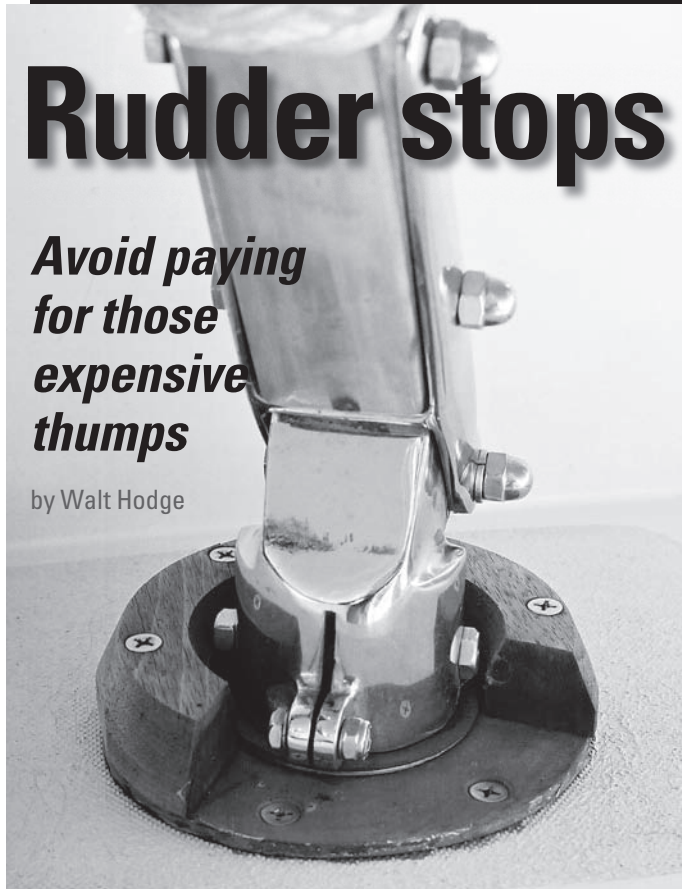
Good Old Boat advertisers (bless 'em)

Alado Nautica USA68 www.aladous.com	e-Marine, Inc/refrigeration65 www.emarineinc.com	Marshall Catboats56 www.marshallcat.com	Scan Marine78 www.scanmarineusa.com
Alpenglow Marine Lights76 www.alpenglowlights.com	Electro Systems14 www.es-web.com	Mast Mate80 www.mastmate.com	Sea-Cure/World Wide Safes67 www.worldwidesafebrokers.com
American Rope & Tar65, 66 www.tarsmell.com	Epoxy Polymers/Progressive69 www.epoxyproducts.com	Mauch's Sailboat Guide15 www.mauchs.com	Sea Frost56 www.seafrost.com
Ames' Point Boatworks26 www.amespointboatworks.com	Fatty Knees/Edey & Duff68 www.fattyknees.com	Messing about/Design Works67 www.MessingAbout.com	Seven Seas Books Online68 www.sevenseas-mn.com
Atlantic Sail Traders68 www.atlanticsailtraders.com	Featherman Enterprises85 www.feathermanenterprises.com	Minney's Yacht Surplus68 www.minneysyachtsurplus.com	Signet Marine84 www.signetmarine.com
Atlantic Yacht Delivery67 www.AtlanticYachtDelivery.com	Fiberglass Supply61 www.fiberglasssupply.com	Mobile Marine15 www.wewireboats.com	Silent Paint Remover/Viking69 www.silentpaintremover.com
ATN Inc/Topclimber65 www.atninc.com	Foss Foam Products66 www.newrudders.com	Moor Electronics61 www.moorelectronics.com	Silver Donald Cameron68 www.silverdonaldcameron.ca
Atomic 4/Nuclear Engine65 www.nuclearengine.com	Glen-L Marine Designs69 www.Glen-L.com	National Sail Supply68 www.nationalsail.com	Small Craft Advisor magazine86 www.SmallCraftAdvisor.com
Bebi Electronics Ltd66 www.bebi-electronics.com	Good Old Boat41 www.goodoldboat.com	Nautical Mind68 www.nauticalmind.com	Somerset Sails68 www.somersetsails.com
Beta Marine US82 www.betamarine.net	Great Lakes Marine64, 65 www.navstore.com	Nautic-Art scale models67 www.nauticart.com	Speedseal/ True Marine Direct66 www.speedseal.com
Bingham Boat Works69 906-225-1427	Hamilton Marine73 www.hamiltonmarine.com	Navlight Indicators65 www.navlightindicators.com	Spin-Tec Equipment75 www.spin-tec.com
Boat Owner's World67 www.boatowners.com	Hayn Marine65 www.haynmarine.com	New Found Metals78 www.newfoundmetals.com	SplicingNut64 www.splicingnut.com
Borel Manufacturing66, 67 www.borelmgf.com	Heat Shield/Everfair66 www.heatshieldmarine.com	NewGlass265 www.NewGlass2.com	Sport-a-Seat86 www.sportaseat.com
Bo'sun Supplies78 www.BosunSupplies.com	Heritage Marine Insurance75 www.heritagemarineinsurance.com	Noah's Fixit Warehouse64 www.noahsmarine.com	Sta-Lok/Sailing Services, Inc.67 www.sailingservices.com
BottomSiders77 www.bottomsiders.com	Hooper's Yachts75 www.hoopersyachts.com	Northern Breezes Sailing School78 www.sailingbreezes.com	Standout Yacht Fittings80 www.standoutyachtfittings.com
Bristol Bronze65, 66, 67 www.bristolbronze.com	HotWire Enterprises64 www.svhotwire.com	North Sail Outlet68 www.northsailoutlet.com	Star Distributing/epoxy sealer69 www.star-distributing.com
Bugbusters/Sogeman65 www.sogeman.com	IdaSailor Marine89 www.idasailor.com	Performance Propellers86 www.performancepropellers.com	Sun-Mar Corp86 www.sun-mar.com
By-The-Sea website67 www.by-the-sea.com	Indigo Electronics86 www.atomic4.com	Porpoise Sailing Services68 www.porpoisesailing.com	Superfurl/ Pacific Marine Rope68 www.superfurl.com
Cajun Trading Company65 www.cajuntrading.ca	J.R. Overseas Co28 www.JROverseas.com	PowerTiller66 www.powertiller.net	System Three Resins61 www.systemthree.com
Cap'n Remo/tiller control80 www.capnremo.com	Knotstick65 www.knotstick.com	R&W Traditional Rigging64, 65, 66 www.rwrope.com	Thai Teak Marine69 www.thaiteakmarine.com
CDI (Cruising Design Inc.)85 www.sailedi.com	LBI Inc/Fiberglass66 www.lbifiberglass.com	Raka Marine69 www.raka.com	The Coastal Passage80 www.thecoastalpassage.com
Celestaire24 www.celestaire.com	Lee Sails Northeast68 www.LeeSailsNE.com	Rapid Response Marine69 www.rapidresponsemarine.net	Tillermate85 www.tillermate.com
ClampTite75 www.clamptool.com	Little Cod/Navigator Stove66 www.marinestove.com	Rigging Only66 www.riggingonly.com	Tufted Topper/Sails East67 www.tuftedtopper.com
Classic Rope Fenders67 231-882-4898	Long Beach Boat Company69 410-586-8233	Rostand/Historical Arts71 801-280-2400	Unscrew-Ums/T&L Tools66 www.tltools.com
Cross Country Boat Transport67 651-437-2454	Marine Cabin Fans64 www.marinecabinfans.com	RPM Technology69 www.rpm-technology.com	Waterboot67 www.waterboot.com
Cruising Direct/North Sails82 www.cruisingdirect.com	Marine Diesel Direct86 www.marinedieseldirect.com	SailboatOwners.com83 www.SailboatOwners.com	White Water Marine77 www.whitewatermarine.com
Cruising Solutions66 www.cruisingsolutions.com	Marine Fastener Warehouse67 www.marinefastenerwarehouse.com	Sail Care Inc68 www.SailCare.com	Winchmate75 www.winchmate.com
Cycle Flush73 www.cycleflush.com	Marine Mail Order/MMO75 www.marinemailorder.com	Sailor's Solutions Inc65, 66, 67 www.sailorssolutions.com	Yager Sails and Canvas68 www.yagersails.com
Durabak Company83 www.durabakcompany.com	Marine Skylights65 www.boatdeckprism.com	Sailrite Enterprises Back cover www.sailrite.com	Zephyrwerks/Sheave Factory65 www.zephyrwerks.com

Rudder stops

**Avoid paying
for those
expensive
thumps**

by Walt Hodge



OUR 30-YEAR-OLD RANGER 28 HAS A BALANCED RUDDER AND is tiller-steered. While I prefer a tiller and like the feedback it gives, it unsettles me if I feel the rudder touch the hull, especially when the touch results in a resounding thump. I get a clear message, "You'll pay for that."

When we pulled *Gilded Lily* for bottom paint, close inspection revealed a crack in the rudder parallel to the rudder shaft, which we repaired. Payback.

I set out to eliminate the problem by building a tiller-stop collar that limits the rudder arc to port and starboard and am very pleased with the result. Ours is made of imported hardwood so dense I doubt it would float, but other materials could be oak, ash, aluminum, or high-density polyethylene.

**“It unsettles me if I feel
the rudder touch the hull,
especially when the touch results
in a resounding thump.”**


Start by fabricating a collar the same outside diameter as the upper flange for the rudder shaft, with the inside diameter just big enough to fit over the tiller head fitting. The stop collar needs to be tall enough to engage the pinch bolt on the tiller fitting. Drill the collar to match the flange bolt holes. You must replace the old bolts with longer ones at assembly. Everything should fit up to the bolt

holes in the upper flange.

Mark the limit of the tiller's swing to starboard and port. Be sure your marks are visible after the collar is installed, with the bolts in place. Using the reference marks and the centerline of the tiller shaft, mark the edges where you want the tiller to stop. Be sure to leave extra material for fitting when you cut the clearance for the tiller.

When you finish, your marks on the collar should resemble a letter "C" with the ends aligned to the center. When properly fit up, the rudder should not be able to touch the hull anywhere.

I rough-cut the stop on a band saw and finished the outside diameter, inside diameter, and tapered surfaces on a lathe. The holes were made on a drill press. The stop edges were marked as described, cut with a band saw, and sanded to finish. The whole job took about four hours.

Remember when you start this job that removing the tiller head will allow the rudder shaft to drop out of the shaft tube. The rudder has to be held in from below, either blocked up, if ashore, or with a sling made fast to the toe-rails, cleats, or stanchions, if afloat. 

A collar with stops prevents the tiller from swinging farther than necessary. This saves both the rudder and all parts of the boat that may be in its path. Best of all, the skipper no longer worries at the sound of loud thumps from somewhere below the waterline.



CUSTOM GRADE MARINE HARDWARE



ALL BRONZE
Cleats • Chocks • Port Lights
Boat Hooks • Oar Locks
Ventilators • Blocks
Miscellaneous Hardware



For more information and pricing contact:
Historical Arts & Casting, Inc.
5580 W Bagley Park Rd, West Jordan, UT 84088
(801) 280-2400
eden@historicalarts.com



THE jug sling or hackamore

A knot you can trust with your wine

by Geoffrey Toye

THE HACKAMORE KNOT IS WELL WORTH KNOWING. IT HAS AT least three distinct uses for which it is invaluable. The first of these is as an emergency hose clamp.

I once used the remarkable constricting power of this knot to jury-rig a flexible hose when there was no available hose clamp. I used thin and slippery cordage. To get extra pressure, I hauled on the non-loop ends one at a time, adding incrementally to the pressure, but with care not to over-tighten one side to the extent that the knot lost its symmetry. It worked for me in desperate circumstances when I had no alternative, but is not a serious or permanent substitute for a proper hose clamp.

The second of this knot's uses is that it can be tied around the neck of a bottle and then formed into a carrying handle. If the bottle has a rim, the knot in a smallish-diameter line will grip very securely to the neck while you demonstrate the epitome of sang-froid as your highly prized wine bottle descends into the cooling depths. It's never let me down, but you might just want to test it a few times before entrusting to it the safety of a 1965 vintage.

Thirdly, this knot can be used to rig a jury mast with the loop forward and two ends as shrouds. Alternatively,

The hackamore knot is one of several substitutes for a hose clamp.

Others include the single or double constrictor knot.

cut the loop into two ends and rig four stays. But I have never seen it recommended for the purpose as there are knots specifically designed for the job.

Decorative hitch

Form two loops as though beginning a decorative hitch for a key ring. Take the left side of the right loop and lay it over the right side of the left loop (Photo 1). (*Note: this may sound difficult, but following the photos is easy.*

Give it a whirl. Your editors were able to do this correctly on the first try and found it to be an amazing knot. —Eds.)



A hackamore knot on a jug. Join the ends to make a handle for lowering the bottle into the cooling depths.


Take the bight of rope at X and weave it under over under over until it emerges at the top of the knot as in Photos 2 and 3 (before and after, the ribbon traces the path through the

maze). The loop X and the ends Y and Z will not move from their positions from now on.

Slide your hand up under the knot and grasp the bight of rope N, where it crosses under the loop X, and while keeping the shape of the other parts of the knot as they are, draw bight N down the underside or back of the knot as you pull your hand out. It ends up crossing under the two ends Y and Z. (Before and after steps shown in Photos 4 and 5.)

Next, pull the other bight of rope (M), crossing over loop X down over the front of the knot until it ends up crossing over Y and Z. (Before and after steps are shown in Photos 6 and 7.)

The knot is now complete (Photo 8) and can be tightened on anything placed through its center (C). To tighten, take loop X in one hand, both ends Y and Z in the other and pull apart. The ends Y and Z can be joined with a bowline to form a loop of the same size as loop X, creating a convenient handle for carrying.

When you have mastered the hackamore or jug sling, watch how it moves when you tighten it, and you will notice that your hands are moving apart far faster and further than the inexorably tightening knot. This is velocity ratio creating serious mechanical advantage. I have crushed softwood to splinters with it; just look at the squashed hose in the photo. Please do not try it on your finger to see how tight it can be; not only will it crush the life out of your finger but there will be no easy way to get it off the hapless digit. Like all constrictor knots, it is designed not to loosen. 

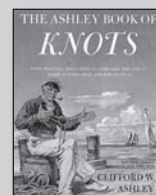
For further reading...

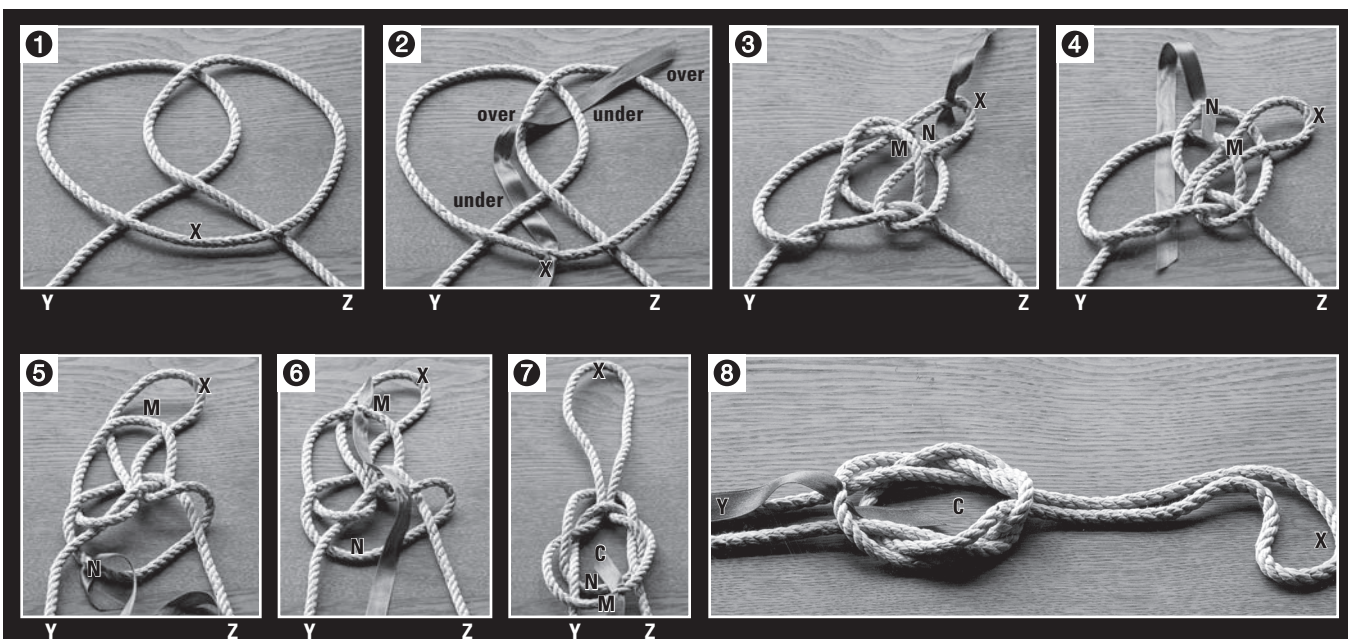
Cyrus Day
Knots & Splices



For another look at the hackamore knot, order Cyrus Day's *Knots & Splices*. Or refer to *The Ashley Book of Knots* for thousands of practical and not-so-practical knots. These books and many more on the subject of knots are available from the Good Old Bookshelf <[http://www.](http://www.goodoldboat.com/bookshelf.html)

[goodoldboat.com/bookshelf.html](http://www.goodoldboat.com/bookshelf.html)> or by calling 763-420-8923.





Lay down the line with two loops, one above the other and offset to the right (1). Take bight X, and follow the ribbon: under over under over until it emerges as a loop at your upper right (2 and 3). Slide your hand under the entire piece and pull bight N behind all the other parts (4 and 5). Pull bight M in a similar fashion (to N) down in front of all the other parts (6 and 7). The completed hackamore knot, with the center marked as C. The bottle or hose goes here. Then you tighten up by pulling on X and YZ to close up this constrictor knot (8). YZ can be joined to X to create a carrying handle.

CycleFlush

If Your marine toilet stinks, read this and solve the problem once and for all!

The water standing idle in the intake line stagnates from lack of oxygen. CycleFlush back flushes the stagnant water and eliminates the cause of the smell.

- No perfumes - No chemicals
- Simple installation
- 12 volt pump is ignition protected
- Works on electric and manual marine toilets
- Solid state technology
- Fail safe circuitry
- Works while boat is unattended
- State of the art microprocessor controlled



Water is back flushed overboard - no environmental impact
Programmed to flush for 6 seconds every 6 hours

1-337-436-6679

\$79.95 plus S/H



sales@cycleflush.com

Tritico Enterprises, LLC.,
921 Ryan Street
Lake Charles, LA 70601

www.cycleflush.com

HM HAMILTON MARINE

PORTLAND ROCKLAND SEARSPORT SW HARBOR MAINE

FREE
368 PAGE
CATALOG!

Located in the heart of traditional boatbuilding country, Hamilton Marine offers an extensive supply of marine hardware, fasteners, brass and stainless steel rail, rub rail, epoxies, paint, varnish and more. View/request our catalog online.



800-639-2715 hamiltonmarine.com

by Phillip Reid

All-purpose portable domelight

Extra cockpit light that also stows away



WE HAVE A DAVIS MEGA-LIGHT, COCKPIT VERSION, WHICH IS A seriously cool gizmo — ambient light for the cockpit in white, red, or yellow with a minuscule amperage draw, long-life bulb, and quality construction. It's perfect for leaving on all night as a low-level anchor light or soft light for just hangin' out. We discovered on our last overnight, though, that it doesn't quite put out enough light to play Scrabble at the cockpit table after dark.

I remembered that I had an extra 7-inch red/white dome light lying around following the refit of my Pearson 28. These are the most common interior all-purpose lights; they usually come with a 10-watt halogen bulb and throw a wide field of warm ambient light. Now you can get plug-and-play LED clusters in the same socket type for a direct replacement and lower power draw. But for a couple hours' entertainment or a specific task, the wattage demand is OK with me.


I cut out a piece of scrap Starboard polymer (wood would work just as well) to serve as a base, leaving three ears on it through which I drilled 1/4-inch holes for a hanging line. The line goes through a 1-inch brass ring, to which is also attached a short lanyard with a bronze dog snap on the end of it that snaps back around the line. Some duplex 16-gauge wire and a cigarette-lighter type DC socket plug with fuse completes the device. (I have a weather-resistant DC socket in the cockpit, but if you don't, you can use a longer lead and run it below.)

This will provide ample light for entertainment involving small print in the cockpit at night, and — double-duty is always a big plus — it will also come in handy as a portable worklight for the engine room or cockpit locker (I don't like being plugged in to shorepower). It took me



Phillip used \$10 and a few available parts to make a portable cockpit domelight, at left. The parts are laid out on the locker, at top above, and put away as a compact unit, at bottom above.

about an hour to make. (*Note:* if using in engine room where gasoline fumes are noticeable, do not switch the light on and off inside the engine room.)

The total cost to me, over and above what I already had, was \$10.27 including tax. An hour's easy work and this thing should last forever. Even if you have to buy the light, you can do the whole thing for \$25 to \$50, and you'll be able to light up your entire cockpit with white or red light, thus furthering one of the big goals of outfitting a cruiser — maximizing the usefulness of the cockpit as living space with simple, easily-stowed amenities that go away when it's time to sail. 

150 "GOOD OLD" USED SAILBOATS

www.hoopersyachts.com



SELDEN/FURLEX REGIONAL CENTER
QUALITY MASTS, RIGGING, SWAGING & BRAND-NAME
SAILING HARDWARE AT COMPETITIVE PRICES

HOOPER'S YACHTS

599 MANNING AVE S., AFTON MN 55001
651-436-8795 800-377-8795 fax 651-436-5925

Marine Mail Order

Quality Marine Hardware
at Discounted Prices

Portholes & Deadlights	Windlasses
Cowls & Mushroom Vents	Teak & Bronze Blocks
Gallows Frames & Bases	Cleats, Deck Prisms
Cabinet Hardware	Plumbing Hardware
Halogen & LED Lighting	Deck Fills
Forestay Levers & Bases	T-Track
Mast Steps	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

Simply Better Because It's Simple!

Roller furling the way it should be.

No ball bearings or complicated mechanisms to go wrong.

Created by sailors, for sailors, after years of
engineering in the marine environment.

UNCONDITIONALLY GUARANTEED!



CALL, FAX OR ORDER ON-LINE
TOLL-FREE 877. SPINTEC
FAX 530.268-9060
www.spin-tec.com

SPIN-TEC

Wish you had Self-Tailers, but can't
afford them? Now you can...

at a fraction of
the cost!

As Seen at
STRICTLY SAIL
PACIFIC



PATENTED
WINCHMATE

Self-Tailing Conversion

For Barient & Barlow '27-'32

415.460.5151

www.winchmate.com

CLAMP TITE
THE CLAMP-MAKING TOOL

800-962-2901 • www.clamptitetools.com

"I Love the ClampTite Tool...
A versatile, reliable addition to
any toolbox. Not just
for riggers!"

Brion Toss
The Rigger's
Apprentice



**Clamp or Band Anything
Any Size, Any Shape, Anywhere!**



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.

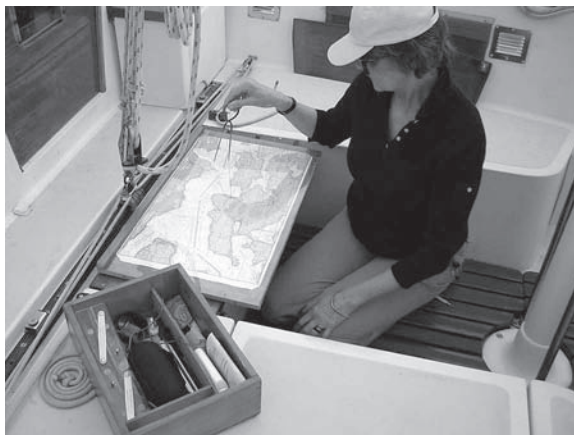
**Call us to discuss
insuring your good old
fiberglass, wood, steel, or
aluminum boat**

1-800-959-3047

860-449-5915 (fax)

P.O. Box 188 • Mystic, CT 06355

Cockpit piloting



Beth “models” their Ericson Cruising 31’s cockpit navigation setup. It folds away when not in use, at left, or can be spread out for a quick fix, at right. It’s out of the way when stored below also, bottom photo.

A way to keep charts handy to the helm

by Richard Smith

BETH AND I SAIL OUR ERICSON CRUISING 31 IN PUGET SOUND and north into the Canadian Gulf Islands and the shores of Vancouver Island. Even though we cross the Strait of Juan de Fuca and the Strait of Georgia, we’re seldom out of sight of land, sailing close to shore, keeping clear of rocks and kelp beds that swirl in swift currents and narrow channels. Our navigation consists of continuous piloting — not only for keeping *Kuma* out of harm’s way but also to relate everything on our charts to what we see in the real world — to learn more and simply for the fun of it.


The standard Cruising 31 has a navigation table that folds down across the end of the quarter berth so it can be used from the starboard settee. This works well but, because of the way we cruise, the nav station below is a solution for which we have no problem. We’ve removed the table and the quarter berth cushion, providing additional and more convenient storage for dinghy oars, crab traps,

foul-weather gear and such, while giving us more wiggle room for getting at the engine and cockpit-drain seacocks.

The heart of our piloting system is a 16-inch by 27-inch piece of well-varnished marine plywood. The board takes NOAA Nautical Charts 18423 and 18445 and the Canadian Small-craft Chart 3310. A piano-hinged piece of acrylic protects the charts and allows use of a grease pencil that is easily erased with a cloth.

The board fits neatly against the Cruising 31’s main bulkhead, just to port (the large side) of the off-center companionway. It’s held in place against the bulkhead by chocks on the bridgedeck and a turn-button at the top, just under the knotmeter and depth sounder. We frequently take it down for a longer, more convenient, look or to do course work.

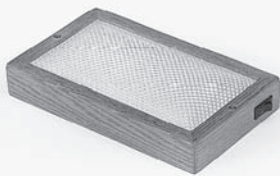
I’ve built an extension to the bridgedeck — a sort of raised cockpit sole that provides us with a little more room for plotting with the addition of a place underneath for a handy bucket and an instrument box that holds, among other things, the log book and tide tables, cruising guides, hand-bearing compass, dividers, parallel rules, pencils, masking tape, and a tiny digital camera. Before sunset we take this box and board below where they’re handy in planning the next day’s cruise.

I am frequently reminded that this is an unconscionably archaic way of knowing where we are, but it’s an important part of the joys of cruising for us...right up there with other tedious pursuits such as bird watching and building a fire in the Dickinson during damp, chilly, and gray mornings. 



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

Plastic brightwork

Faux-teak lessens annual maintenance tasks

by Gregg Nestor



The finished ladder with PlasTeak rungs. A comparison of the old and new, right top, and the installation job, bottom right.

WHILE I APPRECIATE BRIGHTWORK ON A SAILBOAT'S DECK, I'M not one who enjoys the annual maintenance that usually accompanies such esthetics. When we began our search for a new boat, this was an important consideration.


We eventually purchased a Pearson 28-2 that, for our tastes, has about the right amount of teak brightwork to enhance its sand-colored deck, while not accompanied by a heavy maintenance burden. As is the case with all sailboats, there is that one exception: the wooden rungs on the swim/boarding ladder. I'm sure that at one time the rungs on our ladder were made of teak, properly secured with rustproof fasteners, and judiciously maintained. However, years of use/abuse had taken their toll and, after being long ignored, they needed attention.

Rather than recondition, we opted for replacement. For about \$100 I could replace the six rungs with new teak



milled for a custom fit. Not a king's ransom, but we would also be buying future maintenance chores. There had to be another way.

A visit to the boat show uncovered a marine "lumber" made from recycled plastic milk jugs (polyethylene) called PlasTeak. It is UV-stabilized and colored throughout. It won't rot or stain and is resistant to salt water and most chemicals. For about the same cost as teak, I had wider rungs fabricated and milled out of the PlasTeak. I mounted them using conventional stainless-steel wood screws and, in a few minutes, the project was history and so was all future maintenance on our swim ladder.

How does it look? From about 6 feet away and without careful scrutiny, it's awfully hard to tell the difference between the PlasTeak and real teak. In fact, my wife is thinking about replacing our boat's teak toerail next. 

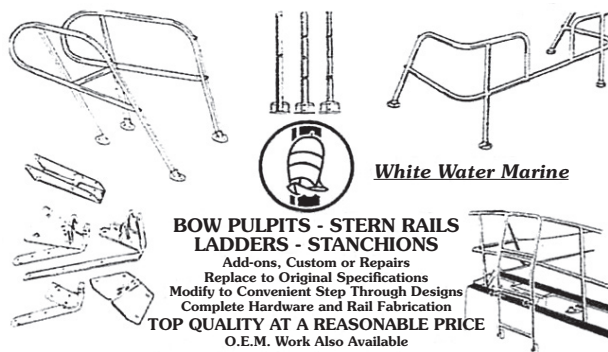


Save Your Aft!

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.

BottomSiders

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



White Water Marine

**BOW PULPITS - STERN RAILS
LADDERS - STANCHIONS**

Add-ons, Custom or Repairs
Replace to Original Specifications
Modify to Convenient Step Through Designs
Complete Hardware and Rail Fabrication
TOP QUALITY AT A REASONABLE PRICE
O.E.M. Work Also Available

White Water Marine

P.O. Box 610595 - Port Huron, MI 48061-0595
Phone 810-987-4837 • Fax 810-966-0597
www.whitewatermarineinc.com

New Found Metals.com

OWNERS OF ALL THESE BOATS
AND MORE HAVE CHOSEN
NEW FOUND METALS' PORTS



Alberg	Corbin	Islander	S2
Albin	Coronado	Island Freeport	Sabre
Allied	CS	Island Packet	Sagitta
Aloha	DeFever	Island Trader	Seafarer
Banner	Dickerson	Jeanneau	Sea Sprite
Bayfield	Dolphin	Kittiwake	Skookum
Beneteau	Downeaster	Lancer	Soverel
Bombay Clipper	Duffy	Lazy Jack	Spray
Bristol	Easterly	Little Harbor	Southern Cross
Brewer	Egg Harbor	MacGregor	Spencer
Cabo Rico	Endeavour	Mariner	Swan
C&C	Ericson	Mason	Swift
Cal	Excalibur	Mayflower	Sunberg
Caliber	Fantasia	Morgan	Tartan
Camper Nicholson	Freedom	Monterey Clipper	Tahiti Ketch
Cape Dory	Flicka	Nancy's China	Tayana
Cape George	Formosa	Nelson	Tenor
Cartwright	Freeport	Newport	Union
Cascade	Freya	Niagara	Vagabond
Catalina	Fuji	Nova	Valiant
C-Dory	Galaxy	O'Day	Vancouver
Celestial	Grampian	Owen	Vector
Challenger	Gulfstar	Pacific Seacraft	Voyager
Cheoy Lee	Hans Christian	Pan Oceanic	Wells Ketch
Chris-Craft	Heritage	Passport	Westerly
Coaster	Hinckley	Pearson	West sail
Columbia	Hood	Rawson	Whitby
Com-Pac	Hunter	Rhodes	Yankee
Contessa	Irwin	Roberts	Yorktown

Come to our website to see what sizes will fit your boat.

Call (888) 437-5512 or

Email: nfm@newfoundmetals.com

ASA School of the Year

NORTHERN BREEZES SAILING SCHOOL

Caribbean Vacation Courses

Safe, fun, learning . . .

. . . On the right size boats. We are flexible to meet your busy schedules while maintaining the highest standards. Our senior instructors have sailed across oceans!

- Flotilla - No Experience
- Basic Cruising/Bareboat
- Cruising Multihull
- Sail & Dive
- Advanced Coastal Cruising - "Tortola, St. Croix, St. Maarten"

Start Fulfilling Your Dreams . . .

Northern Breezes



Lake Superior-Bayfield, WI • Lake Michigan • 3 Metro Lakes
• Youth Camp • Leech Lake • Caribbean Islands

Northern Breezes Sailing School

3949 Winnetka Ave. N., Minneapolis, MN 55427

763-542-9707

NorthernBreezesSchool.com

SailingBreezes.com

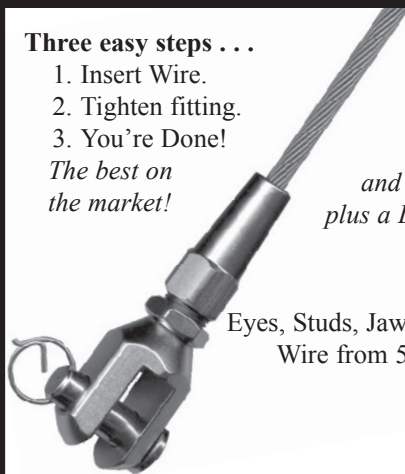
QUICK ATTACH® SWAGELESS FITTINGS

Three easy steps . . .

1. Insert Wire.
2. Tighten fitting.
3. You're Done!

*The best on
the market!*

*Strength, Quality
and Dependability . . .
plus a Lifetime Warranty!*



Eyes, Studs, Jaws & Turnbuckles
Wire from 5/32" to 1/2"

Stainless Steel
Hardware, Rigging & Fittings at Reasonable Prices

See our complete catalog and order on the Web!

www.BOSUNSUPPLIES.COM

*Or call toll-free for catalog
and to order*

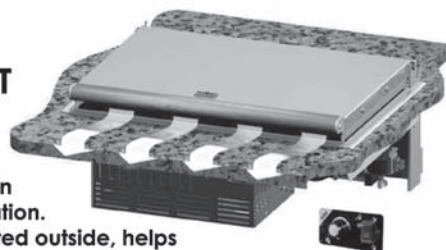
(888) 433-3484



wallas®

**SAFEFLAME
85 DP/DU
6,000 BTU
Diesel Stove
with 270 Blower Lid**

**UNIQUE
EFFICIENT
DESIGN**



- Safe no-open flame operation.
- Exhaust vented outside, helps keep cabin dry.
- Lid up: cooking. Lid down: cabin heating
- Superb marine grade construction, great looking.
- Easy to install, either flush or surface mounted.
- Super clean, variable output combustion process.

Importer & Distributor for North America:



2144 Westlake Ave N Suite D
Seattle, WA 98109
Ph: 206-285-3675
Fax: 206-285-9532
info@scanmarineusa.com
www.scanmarineusa.com

Color your wheel comfortable

Scandia Marine Products just introduced ColorWheelz, a wheel covering that gives any cockpit a color boost and makes steering more comfortable. The material is a thick outdoor vinyl coating similar to what has been used and tested for 30 years in parks on play structures. Once your wheel has been dipped, it's guaranteed for 10 years under normal use, and there is a 30-day money-back guarantee. The non-porous surface is easy to clean and stain-resistant. It's 20 to 40 times thicker than professional powder coating and you can specify how much material to keep on the spokes. ColorWheelz coatings are available in 13 colors and two finishes: gloss and textured. Turnaround time for the dipping process is usually one week. Pricing is by wheel size and is posted on their website.

Contact Scandia Marine Products, 651-433-5058 <<http://www.scandiamarineproducts.com>>, info@scandiamarineproducts.com.



Easy care doors with every option

Zarcor is offering a companionway door that does it all. These doors are custom-made for your boat of King Starboard, which is impervious to weather, never needs varnish, and is UV-stable. Door frames can be fitted with your choice of inserts: Plexiglas (transparent or translucent) or screens (three screen options are available). There are several locking systems for security. Your boat's washboards will still fit in their normal positions. You can remove the doors without tools. Is there anything you might want a companionway door to do that Zarcor inventor John Halter hasn't thought of? We didn't think so. \$795 buys a basic set of custom-fitted doors for your boat.

Contact Zarcor Products, 800-877-4797, <<http://www.zarcor.com>>, halter@zarcor.com.

Whistle while you ... fuel

Green Marine Products has invented a device to help boaters prevent fuel overflows in our sailing water when they refuel. Inventor Alan Orr devised this simple and practical device to eliminate this nasty problem. He created the Fuel Whistle, which is installed in the standard 5/8-inch fuel tank vent line. As you fill your tank, the displaced air produces a whistling sound until the tank is full. Turning off the pump when the whistling stops prevents an expensive and embarrassing fueling mistake.

The Fuel Whistle costs only \$29.95 plus shipping and can be purchased at <<http://www.FuelWhistle.com>> or in the

Good Old Boat on-line store: <http://www.goodoldboat.com/navigation_tools/accessories.html#fuelwhistle>.



To be featured on this page, items must be new products. If you would like to have your product featured here, please send an email to Michael Facius, michael@goodoldboat.com, or call him at 612-605-8319. By the way, readers, if you contact a marine supplier mentioned here or elsewhere in our magazine, please remember to tell the folks there that *Good Old Boat* sent you.

Feature boat



Vespera floats again, Continued from Page 32


absorbed. Instead, Stan plans to give people a chance to experience the cruising lifestyle and the decision-making process aboard a sailboat, learn the basics that they really need, and go home with individualized plans for further study.

Their first season was in Maration, Florida, because, Stan says, "The Keys are a good place to learn to cruise due to numerous hazards. Yet the Keys offer natural wonders, such as snorkeling, and a unique, almost foreign, flavor that comes with a laid-back island chain. The cruising hazards are what we teach people to deal with. We have reefs, fickle winter weather, ocean currents (the Gulf Stream), tidal currents, lots of shallow water, narrow winding channels leading to tight anchorages with poor holding ground, and wind...lots of wind." For more about this training program, visit their site at <<http://www.sailtraininginc.com>>.

Vespera has the accommodations to make it possible for two couples to take a one-week course. Stan and Kathy's master cabin is forward. Two aft doubles are arranged side-by-side. Each of these suites has its own head, shower, and dressing area. In a pinch, there are two very simple bunks just behind the anchor locker, which can be accessed only through a forward hatch.

"For use as a training vessel, we like the way six to eight people can sleep in dispersed areas and still have a central

gathering place in the saloon," Kathy notes. "And we like the windows." Stan adds, "There's a feeling in sailboats in general of being in a whiskey barrel, but not with *Vespera*."

We spent time with Stan and Kathy in that roomy and bright saloon on one of the prettiest days of September, 2006. *Vespera* had just been launched the week before. Stan and Kathy were rushing to finish all those vexing last-minute details before heading south down the river the following week. The mast was strapped on deck, but neither their boat nor their lives seemed to be in disarray as they began a new chapter together. 



STOWABLE
MAST-CLIMBING SYSTEM
"WHY DIDN'T I THINK
OF THAT?"

WILL BE YOUR RESPONSE

**FLEXIBLE
NYLON LADDER**

SAFE, SIMPLE,
EASY, UNASSISTED
ACCESS TO THE MASTHEAD
NO MORE WINCH GRINDING
FITS ALL SAIL TRACKS

MONEY-BACK GUARANTEE

[BROCHURE](#) [DETAILS](#)

800-548-0436

WWW.MASTMATE.COM

What ever you do, don't buy this publication...



The Coastal Passage



Because it's FREE!

Australian based and drifting world wide.
Free PDF downloads of entire editions
and much more.

Come have a sundowner with us at:
www.thecoastalpassage.com

TOP QUALITY COMFORTABLE LIFELINE CUSHIONS



Made with inner PVC tubing to keep lifeline wire from cutting thru closed cell foam pad. A pair will last many years. Custom built in any length you choose — in any Sunbrella® color. And still proudly handmade by the company that invented them —

STANDOUT YACHT FITTINGS
6826 Cliff Ave.
Longbranch, WA 98351
www.StandoutYachtFittings.com

\$58 per pair
— and up
plus UPS chg.

Order: (800) 622-1877 or Jo@StandoutYachtFittings.com

INTRODUCING



THE NEWEST MEMBER
OF YOUR CREW

A Wireless Tiller Controller for Hands Free Steering

- Single Handed Sailing Made Easy
- Stay Dry Below in Rainstorms
- Overboard Recovery
- Freely Move About While Under Way
- Single Handed Docking, Mooring Made Easy



For More Information and Ordering Call:
1.330.418.3010 • www.capnremo.com

Three-anchor mooring

I read the article on mooring systems (March 2007) with interest since, with the exception of a couple of years, I have always kept my boats on a mooring of one kind or another. One of the systems I tried was the three-anchor system. You may be interested in my experience with it.

Having wrestled with engine blocks and other heavy weights, the idea of setting out three relatively light-weight anchors appealed to me so I tried it. I ran into a problem right away. The water in my area has about 6 inches of visibility, so seeing what was happening 8 feet down wasn't going to happen. Thus, though I tried my best to lay the anchors out in the appropriate pattern, there was no way I could tell if I got it right.

It worked well for a while, but eventually it dragged. I hauled on the chain and brought up a big ball of chain with three Danforths sticking out. I amused myself for a couple of hours untangling it all. My conclusion was that soft mud is not the bottom of choice for that type of mooring. You need something that is going to bury itself and try to head for China. Perhaps it would hold better in hard sand.

For what it is worth, that is one sailor's experience with the three-anchor mooring system.

Gene Bjerke
Williamsburg, Va.

Mooring matters

I recognized myself in the March 2007 issue in the mooring systems article. The response I received from Bill Sandifer to my question concerning mooring weights and the correct size for my boats (one gone, one to be) sealed my loyalty to *Good Old Boat*. When my Sabre was severely damaged during a fall 2005 wind storm, I wrote inquiring about moorings. Bill's answer was well thought and sympathetic. Obviously he was not satisfied and did some extensive research on the subject. I now know more about moorings than most sailors with 30 years' experience.

Thanks for a great publication and a well-researched technical article.

Ken Yager
Bellmore, N.Y.

Cover kid

The boat on the cover of your March 2007 issue is an Aquarius 21. The Aquarius 21 and 23 were built by Coastal Recreation Inc. in Costa Mesa, California, during the '70s.

I wanted to buy a 23 back then but — as a high school shop teacher with three kids and house payments — it never happened. I started building my own boats on weekends and am currently finishing a Nimble 30, designed by Ted Brewer.

I love boats from the '60s, '70s, and '80s. You folks have a great magazine.

Tom Ybarrola
San Diego, Calif.

Further discussion on nav lights

With reference to Bill Kinney's informative piece on navigation lights (March 2007) and his reference to red-over-green masthead lights, there is one very good reason this combination has not been used. That is the fact there must be at least a 1-meter separation between the two lights. A PDF

with more information is available at: <http://www.uscboating.org/recalls/pdfs/bscscan75a.pdf#navlights>. The ruling is toward the bottom of Page 4. I seriously doubt a sailboat would have such an appendage on top of the mast.

Brian Cleverly
Sacramento, Calif.

Oil drilling platform paint

As always when the new edition arrives, I drop almost everything and start reading each item. As I'm still in the process of building my sharpie cat-ketch sailboat, I was intrigued by the article by Larry Franklin (March 2007). I'd like to know what bottom paint he used, as he mentioned it had been used on oil drilling platforms. I have investigated several products by Sherwin Williams that fit this description but would like to hear from him what he used.

Again, I want to compliment you on your good work. There are only two magazines I subscribe to these days, and this is the big one. Most of those that deal with sailing are "dream books." I'll never sail in the Indian Ocean nor own a \$1.5-million boat. I'll be happy if I can get my *Billy Bird* in the water this summer (or even next summer). I am getting older and have less mobility. But I have my dream!

Bill Chaney
Lakeside, Ohio

Larry Franklin responds

The material you are asking about is CeRam-Kote 54. It is manufactured and sold by: Freecom, Inc., P.O. Box 2119, Bldg. 1103 Industrial Airpark, Big Spring, TX 79721. Their website is: <http://www.ceram-kote.com>.

The factory people were very willing to talk to me and discuss my application. A Google search on "ceram-kote 54" will produce more than 700 hits that can be investigated for more information.

I don't know when I will get my boat back out of the water to be able to assess the results of my experiment. If it is not successful, it will probably be more due to my lack of skill in operating a spray painting rig than the fault of the material. I did not get as even or smooth a coat as I wanted, due to the compound curves of the hull and dodging around the bolsters of the trailer and the auxiliary bolsters that were holding the boat up while the spraying was being done. The sample chip I have is very much smoother than my final result was.

Larry Franklin
Gore, Okla.

Note from the technical editor: This material can be rolled on. Rolling will be much safer than spraying. The product specification safety caution is quoted on the next page:





7.0 Safety – Wear a charcoal-filtered mask, safety glasses, and gloves when applying CeRam-Kote Ceramic Epoxy coatings. Read the Material Safety Data Sheet (MSDS) completely to ensure that all safety procedures are followed.

Boat stuff at truck prices

I am a long-haul truck driver and also a fairly new sailor. I am in the process of redoing my 1974 Hullmaster 22. Being a truck driver, I realize truck stuff becomes sort of interchangeable with boat stuff. The Iowa 80 truck stop, for example, has a very large selection of lights that could be used on the boat. This link may help: <<http://www.iowa80.com/iowa80/shop?method=category&catid=LIGHTS-9>>.

John Rozema
Lindsay, Nova Scotia

Do-it-yourself hard dodger

As spring faded to summer, the mechanical restoration of my 1962 Pearson Triton neared completion. The next four problems were a dodger, boom crutch, solar panel mounts, and a vanishing budget. I decided to combine all four with

a hard dodger and Bimini extension. The project took six weeks and cost only \$450. Fall sailing on a boisterous Chesapeake Bay proved a complete success.

To achieve the aesthetic effect of a cloth dodger, I simply pop-riveted 1/8-inch Okume marine ply to an old aluminum dodger frame. The resulting structure was then glassed inside and out using 3/8-inch core-cell foam for strength (see photo at left). I can stand on it with no sign of give. Anyone can duplicate this effort, keeping in mind that plywood bends in only one plane. Just make sure that you have worked all the details on paper before you begin.

Phil Prosser
Bailey, Colo.

Protecting his amateur status

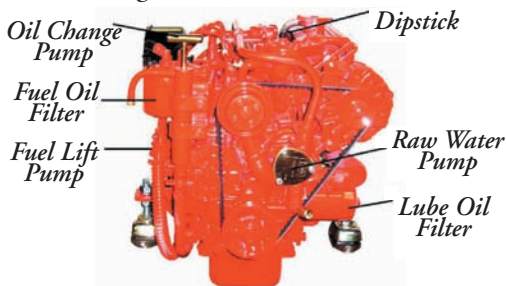
I just saw your generous offer (sign up a friend for a free half-year subscription and get a free issue added to your own subscription) in my latest issue and posted the message below to my yacht club, the Cascadians. The club's location is primarily the Pacific Northwest but not restricted to such. We have a poet in residence as well as many members with good old boats. The overall philosophy seems to mesh very well with what *Good Old Boat* tries to project.

I belong to quite a few forums where *Good Old Boat* would not be as good a fit. In order to protect your bank account, I certainly would not normally mention your magazine or its offer in such a public way. But the Cascadians are a wholly different matter. In my opinion they are exactly the

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.



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@betamarineinc.com

www.betamarine.net

**Buy
Quality
Sails
Direct
at 25-40%
Savings!**



It's the easy way to measure and order your own sails and SAVE!

www.cruisingdirect.com

FREE 2005 BUYER'S GUIDE call toll free: 1-888-424-7328, or fax: 1-888-237-2457

CD
CRUISING DIRECT
SAILS

MANUFACTURED AND SERVICED BY NORTH SAILS

group you are trying to reach.

My wishes regarding my own free issues — if any — are in the attached message. I want to maintain my amateur standing!

"I see that my favorite boating magazine, *Good Old Boat*, is offering free half-year subscriptions through current subscribers. If anyone is interested, send me your mailing info and I'll forward it on. There's a free issue in it for the subscriber, but I've already asked them to add it in some manner onto the sample subscription instead. So there's nothing in it for me, and I can say without financial bias that I sure enjoy their writing. The magazine has a strong orientation toward sailing philosophies, boat design, fairly technical do-it-yourself articles, and a sprinkling of art and poetry. I find the mixture appealing and recommend it without reservation... Besides, they're nice folks."

Roger Loving, a permanent subscriber
Boulder, Colo.

Glamour shot

Here is a photo (above right) of my 1972 Ericson 29, *Second Wind*, at Joemma State Park in Southern Puget Sound.

Jef Conklin
Shelton, Wash.

One-wing sailing

I enjoyed reading "Sailing with one Wing" (March 2007), but I would not spend much time beating into a strong wind



with only a jib. My boat has double lower shrouds. Steve Colgate's *Manual of Cruising Sailboat Techniques* states: "If beating to windward, however, to douse the main completely is a good way to lose a mast." He does not say that double lower shrouds make it safe to do so. The context of his remark suggests that his warning is important when beating for an extended period of time.

I think Colgate was thinking in terms of sailing in long-distance races and winds high enough to induce a racing skipper to shorten sail dramatically. Nevertheless, it seems prudent for most of us to use the main if we want to sail close-hauled with only one sail.

Mickey McGuffin
Sequim, Wash.

OBSCURE NECESSITIES

◀ **PowerThruster**
Make your outboard faster and save gas, too! \$79

Store hatch boards safely ▼
Keep boards scratch-free and out of the way in matching Sunbrella fabric. From \$74.95

◀ **Heal oxydized gelcoat**
Don't coat your hull with floor wax, let Island Girl Products heal and condition your chalky hull. From \$89.95

Fuel whistle ▶
Stop fuel spills! An audible warning when your tank is near full. \$29.95

▲ **Color-matched grill covers**
Now your grill cover can match sail, pedestal, and winch covers, too! From \$28

To order call toll free **877-932-7245**
or visit us online at **shop.SailboatOwners.com/gob**

Durabak...
it lets you walk on water

Specially Formulated Polyurethane non-skid protective coating

- Slip and fall protection.
- Protects against rust and other damage.
- Give & comfort that no other non-slip coating offers.
- Just "paint it on" with a roller.
- Resistant to saltwater, fuels and chemicals
- Bonds to metals, wood, fiberglass & concrete.
- Available in a variety of colors, textured & smooth
- Won't crack, chip or peel
- Also great for truck beds & boat trailers

www.durabakcompany.com
The Durabak Company
Tel: 303-690-7190 or Order Online

Jerry Powlas responds

Roger that, Mickey. I'd be pretty confident that it would not hurt my boat, but I could not speak for other boats. The main is really the better choice for that kind of work, but I did try a bit of that (sailing with just a jib) mainly to see if I could manage a man overboard situation without having to raise the main or start the engine. In my experiences, it would *not* be a good way to lose a mast.

Jerry Powlas
Technical editor

Oops! One Aussie less

I noticed Henry Cordova's article, "A Wooden Beauty," (January 2007). Regarding Ron Holland, he writes "...because Ron is an Aussie." Well, I'm sure Australia would like to claim Ron as one of its sons, but Ron is actually a Kiwi. I was at school with him and his brother, Kevin, at St. Paul's College in Auckland in the early '60s. Even then Ron was into sailing: he raced 18- and 22-foot Mullet boats (fishing dinghies with sails) on Auckland Harbor. My fellow Kiwis and I would appreciate it if you could make the correction.

Kevin Smith
Sao Paulo, Brazil

More on Ron Holland

I enjoyed the article about *Sinisterre* in the March 2007 issue. I'd like to correct an error that crept in to the paragraphs about Bill Tait. Ron Holland is a New Zealander, and

the boat that launched his design career was the quarter-tonner *Eygythene*. The spelling was an attempt to reflect the Kiwi's mangling of the English language. Incidentally, *Eygythene* was designed while Ron was working for Morgan Yachts in St. Petersburg, Florida.

Another *Finisterre*-type in Australia was based in the Brisbane area for many years. To my knowledge, she's still there.

Petrea Heathwood,
Mackay, Queensland

Other Finisterre sisters

Thought you might like to hear a firsthand account of *Winifred* as of November 2004. In Henry Cordova's article on *Sinisterre* and sisterships (March 2007), he mentions *Winifred* in the U.S. Virgin Islands performing charters. On our honeymoon, my wife and I enjoyed a nice day charter aboard, sailing from St. Thomas to St. John. There were several sailboats to choose from, but only one had the classic lines that called to this Allied Seawind II captain. Ahh...the ad brochure touted Sparkman & Stephens, mahogany, split rig...and she delivered. Of course, any sail down there is wonderful, and the Katherine Hepburn-esque lady captain of this vessel made the trip even more memorable. *Winifred's* webpage is <<http://www.sailwinifred.com/>>.

My memories are that *Winifred* was heavy, smooth, gave off the sounds of the water like a music box atop a grand piano, and she was the prettiest girl in the harbor. While I'm unsuited to the demands of a wooden boat, I imagine one

SIGNETMARINE



Because boats aren't square.

Reliability, accuracy and economy are why knowledgeable sailors specify SignetMarine's Traditional Series Instruments.

From our self-powered SL11 analog knotmeter, to our SL172 digital depth sounder, SignetMarine Traditional Series Instruments enjoy a reputation of unequalled time proven performance.

For over twenty-five years, SignetMarine has been the industry leader in traditional sailboat instrumentation.

Whether you're looking to upgrade your current SignetMarine system or purchase a new system, our Traditional Series Instruments are the right choice for your boat.

SIGNETMARINE • Torrance, CA • 310.320.4349 • 310.320-5026 FAX • www.signetmarine.com

like her would be as close to tempting me as any could. Our sail was with mainsail and headsail only, as the winds were generous, and I suspect Captain Sharon Allen didn't want to toss the fruit container below around too much. But she had plenty of get up and go and sailed like an absolute queen, even with the elevated headsail and raised main boom (no doubt a safety-oriented charter rig).

Once again I'm reminded of how small the world is when one starts talking about truly good old boats.

Ed Verner
Plant City, Fla.

Iraq has no boats

I've enjoyed seeing two issues of your magazine out here in Iraq. It's nice to see something with pictures of water. It helps me daydream about the time I've spent sailing. I appreciate that you send free copies to deployed service members. This is my fourth trip over since 9/11 and every little taste of home helps us out more than you can imagine. I just wanted to drop you a thanks from all of us!

Scott Simmons
U.S. Marine Corps

*More importantly, Scott, thanks to **you** from all of us!*

Send questions and comments to *Good Old Boat*,
7340 Niagara Lane North, Maple Grove, MN 55311-2655,
or by email to jerry@goodoldboat.com.

The Original FLEXIBLE FURLER

- #1 choice of cruisers, casual racers and daysailors
- Excellent reefing system
- Trusted by boat builders
- Proven Reliable
- Affordable

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.

CDI
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

An EXTRA HAND at the HELM

Tillermate



Ever wished for a **third hand** to hold the tiller steady so you can leave the helm for a moment?

Then you need **Tillermate**, a simple, robust and effective way to hold a constant setting when you're sailing single or short-handed.



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

ATOMIC 4 & UNIVERSAL DIESEL PARTS

ELECTRONIC IGNITION
For many popular 4 cylinder engines

FAST SERVICE, GREAT PRICES
CHECK THE WEBSITE FOR SPECIALS

**FEATHERMAN
ENTERPRISES**

717-432-9203 • 717-432-0846 (fax)
e-mail: fent@dejazzd.com
www.feathermanenterprises.com



MARINE DIESEL DIRECT



- More than 200,000 parts online
- Easy, secure online shopping
- Online parts manuals
- New featuring hard to find Atomic 4 parts

Torresen Marine, Inc.
www.torresen.com

Phone: 231-759-8596

www.marinedieseldirect.com

INDEPENDENT BACK SUPPORT



At Helm Station



Against Coaming



On Foredeck

The Ultimate in Portable Seating

Eight Sunbrella® Colors...\$94.95 Made in the USA.
Imitated... but never duplicated!



Ph. 800-870-7328 • Fax. 703-723-3742 • www.SPORTASEAT.COM

Repower Your Atomic 4!

(No, not a diesel!)



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

PerfectPitch Props

For Auxiliary Diesel & Gas to 40-hp

**Atomic 4
Westerbeke
Universal
Yanmar
Most others**



More thrust in forward and reverse.
Extended props to improve hull clearance.

Performance Propellers

44 James St., Homer, NY 13077
Phone 607-749-3165 • Fax 607-749-4604
performance.props@verizon.net
www.performancepropellers.com

SMALL CRAFT ADVISOR



MAGAZINE

"Likely to pick up where Small Boat Journal left off."
From a review in Good Old Boat

The only magazine focused exclusively on trailerable sailboats. Each issue is full of boat reviews, plan studies, boat modification articles, and tales of small-boat adventure.



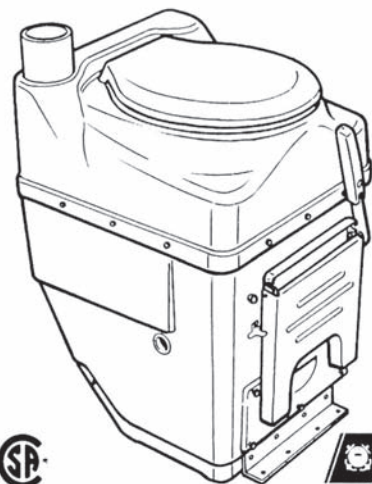
1-year sub \$26.95; (360)379-1930
P.O. Box 1343 Port Townsend WA 98368
www.SmallCraftAdvisor.com

COMPOSTING HEAD

SUN-MAR

No More Pump Outs!

- No ODOR • No CHEMICALS
- No HOLDING TANKS



For **FREE** brochure call:

1-800-461-2461

600 Main St., Tonawanda, New York 14150
<http://www.sun-mar.com>

The perils of over-choice

Nautical lessons from the grocery store toothpaste aisle

by Karen Larson

IT WAS FEBRUARY AS I PREPARED THE May/June issue you're holding in your hands, so forgive me if my nautical ramblings were inspired by a mundane visit to the grocery store. Still, while my inspiration began at the grocery store, all things have parallels in our sailing lives. All things.

I usually complain to the equally baffled stranger standing next to me at the toothpaste display. You've been there. Each brand offers versions with gel or paste, tartar control, fluoride, extra whiteners, stripes, and sparkles. At the risk of sounding old, it used to be a matter of choosing Crest or Colgate. What happened?

Whatever it was, it also occurred in other sections of the store. Take salad dressings, or have a look in the bread aisle. Try to buy a simple box of plastic storage bags. Ice cream! All right, I will sound old: I remember when ice cream came in vanilla, strawberry, and chocolate (and the chocolate wasn't all that outstanding either, compared with today's flavors to die for). So while we're drowning in the sea of over-choice, some of the "*New! Improved!*" products" have, indeed, been an improvement.

Nonetheless, it is possible that — when in search of that little point of difference — maybe the marketing folks went too far. Worse, I don't think they're done yet. I imagine a marketing professional standing behind a one-way mirror at the grocery store analyzing my every move. Which product did I look at first? Then where did my eyes travel? What did I eventually choose? How long did I stand there *absolutely frozen* by indecision?

We're guilty too

And who am I to talk? Nine years ago, my husband and I started a sailing magazine — *another* sailing magazine in a world full of sailing magazines... a magazine that was *not* about new

boats, the latest must-have gadgets, or how to go deeper in debt while somehow acquiring the illusion of being safer, sexier, or more up-to-date than the next sailor. We thought people would respond to a magazine that was *not* about owning the largest sailboat, traveling to the season's hottest cruising destinations, or full of the latest news about the America's Cup.

Respond they did. It has been a very satisfying adventure so far. We didn't go too far, I hope, in carving out a special niche of very special sailors: the do-it-yourself types who love and maintain a sailboat from the 1950s, 1960s, 1970s, 1980s, 1990s, or even into the 2000s.


Every special use

If you go off in search of the perfect sailboat, your dream boat, you will reach this same conclusion: there are specialized sailboats available for every use. There are sailboats that will sail the ocean blue and there are coastal cruisers. There are sailboats that go very fast (speed being a relative term, you understand) and sailboats that aren't all that fast but much more comfortable. There are sailboats that can get you into thin water, sailboats that point like a witch, sailboats you can trailer so you can have variety in your sailing life, and sailboats that are car-toppable and lightweight so the launch is simple. Some can be drawn up on the beach. Some can be lived aboard. Some can be singlehanded. Some are for relaxing and simply whiling away the hours. Some are for the guy in search of extreme sports. But none do it all, unfortunately.

Eventually, you must match your lifestyle and the sailing that you do to the boat that works best for you. Eventually you must (even while faced with so many good old boats) choose one and make it yours. In fact, depending upon the size and age and condition of the boats and your own energy level and aptitude for maintenance, it's

possible to own a fleet. You're not *really* limited to just one. Because these boats are such bargains, some people shopping in the used-boat market simply can't help themselves.

Shoppers for good old boats are confronted with all the problems caused by over-choice that we face at the grocery store toothpaste display. In fact, maybe the grocery store is a good training ground for buying a boat on the used market. Once you've figured out the advantages and disadvantages of each toothpaste offering, it is time to make a decision and move on. You can't stay there frozen by indecision forever. When it comes to your boat purchase, you will have made some compromises. However, with an older-model sailboat, at least you'll have fewer regrets if you find the one that most closely meets your needs and then set about with a toolbox to modify it so it will become exactly what you'd hoped.

Our magazine is here to help you make those modifications and look at it this way: the marketing people aren't standing somewhere with a one-way mirror analyzing your every move! 



The soul of sailing

You, and a boat, and a wonderful philosophy

by Matthew Goldman

THE TROUBLE WITH BEING POOR IS YOU HAVE TO LEARN SO MUCH. You can't just buy a beautiful boat and sail off into the sunset. First, you need to repair it. By the time you complete what needs to be done, half the summer is spent.

By the time I followed this procedure with a few different boats, I was nearly qualified to work in a boat shop. That's where I learned how I should have effected all of those repairs. And being more competent every year, I naturally take on larger and more involved projects... which take more time and money.

Being the timid, conservative type, I know my limitations. A 26-foot boat is enough for now. I can't keep up with all her repairs, even though she's docked behind our shop.

*What is it with sailboats, anyway?
Why are we dragged away from our homes
and forced to take them sailing?*

Is it wanderlust, a sense of adventure, or merely dissatisfaction with residing on dry land? The answer is, "Yes."

But I find that, in addition to these questions, there is something that runs deeper. That same emotion that moves you, when watching the endless surf drag back the shingle or watching the endless stream divide the coppice, also moves you while reaching over the rollers, mile after mile.

*A feeling of the infinite. A feeling that
life goes on no matter what. A feeling
of being a part of this world's pulse.*

Hang on for life

Then the wind picks up and the sea gets snotty and you literally have to hang on for your life. And that is grandiose, too, without pretension. For if you must die — and, Lord only knows, you must — why sit around the living room and watch the Green Bay Packers?

You need a green bay? I know just where to go. You need to float your trusty canoe down a placid stream through the forest? I know just where to go. You need a pond to watch a miracle... a dragonfly's emergence, perhaps? I can take you there.

*There's nothing to keep you from being
immersed: there's nothing to keep you
from soothing your troubled soul.*

Nothing except your 40 hours. Nothing except the roof to mend. Nothing except that cocktail party with people who bore you silly. I get caught up in all those things myself.

You need to make the most of your every hour. Life is a whirl... let yourself get caught up in the maelstrom.

*What do you mean, you have a boat in a
slip but no time to sail? There's really no
time to do much of anything else.*


If your spouse doesn't feel the call, go by yourself. If your marriage can't stand for each of you to have a separate avocation, you haven't a marriage but merely inhuman bondage. The stronger your love, the more you can be apart. A part of something larger than yourself. Take your children, take your cat, but go.

If all you can spare is an afternoon on the millpond, spare it. Go. Teach your kids to flip the canoe. Teach your cat to cut bait. Something will come of it, be assured... if nothing save perspective. Water teaches respect. Forces beyond our control — beyond all reason — teach us humility. Fog and gale and ice will always be with us. Ours is not to change this earth but to learn to accept her ways.

*A sail is not for taming the wind
but for taking advantage of it.
A paddle is not for moving rocks
but for steering your boat around them.*

With GPS and running lights and radar, one can still be humbled by the sea. With a carbon-fiber paddle and a Kevlar hull, one can still be rolled and dragged beneath a log and drowned. Smugness has no place upon the water. Long ago, I gave up the urge to race in boats, to compete with other people.

*The course I sail has no beginning, no end.
I need to lose and find myself,
to journey and sojourn.*

I used to resist mortality. Now I keep my weather eye on the voyage, not the harbor. Now I steer my frail craft by a light I must believe in. Now I rise on the massive swell that provides a view of eternal continuity. Science and logic provide us charts, the world provides the water, Heaven above provides the wind, but Spirit demands the tiller. 

IdaSailor Tillers are created using exceptional craftsmanship and only the finest mahogany and white ash. The result of this workmanship and care is a tiller you can be proud of. Strong, beautiful creations that look great when you're not sailing, and perform great when you are. Our tiller shop regularly builds custom lengths and dimensions, we can help with any tiller need.

A Beautiful NEW TILLER for your Good Old Boat



A full selection of tiller patterns to fit your boat, along with a full custom shop.



Toll Free 866-400-2204

www.RudderCraft.com www.IdaSailor.com www.TillerCraft.com

Sail the Difference!

Unifoil Kick-Up rudder systems are crafted from the highest quality materials. Patent-pending Unifoil designs focus on delivering convenience, unparalleled performance and exceptional value. Additionally, Unifoil Fixed-Blade rudders offer 5 blade sizes available in 3 materials for a solution to fit almost any boat and definitely any budget.



Complete "Drop-in, Sail-Away" Assemblies

316 Stainless Steel Gas Strut

Exclusive "One-Pull" Raising System

Computer Designed Performance

True NACA Airfoil Blade

Patent-Pending Design
All Stainless Steel Construction

sailboats@idasailor.com

Toll
Free

866-400-2204

World Class Steering



Greetings from Sailrite

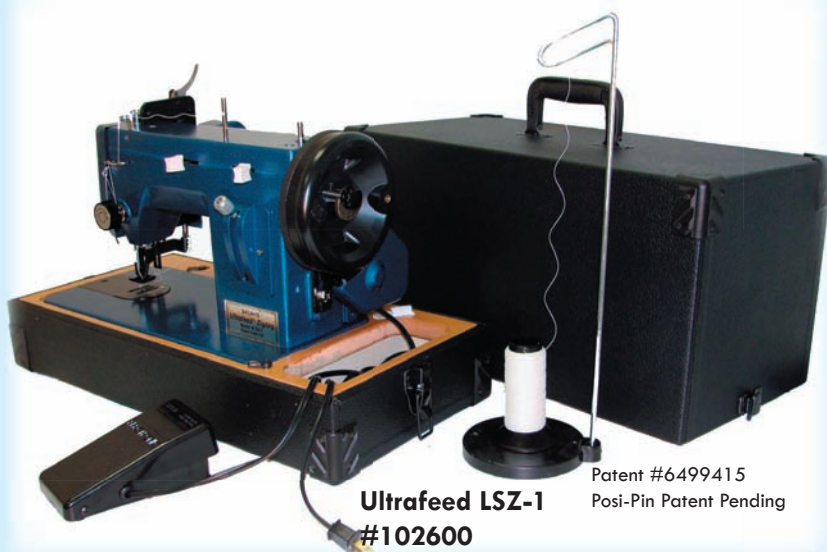
Canvaswork and Sailmaking are Sailrite's specialties and we're here to help you with your projects. Build it new, repair it, retro fit it— You can do it! Sailrite can help!
Call or email today to get a copy of our new 2007 Supply Catalog.

Matt Grant, Inventor of the Ultrafeed LSZ



1-800-348-2769

Sailrite's World Famous Ultrafeed™ machines feature a mechanical "walking foot" with built in welting tunnel for excellent material feeding and consistent stitch lengths. Whatever you need to do— build a dodger, make an awning, cover a cushion, sew up a sail, it's easier on a Sailrite Sewing Machine!



**Ultrafeed LSZ-1
#102600**

Patent #6499415
Posi-Pin Patent Pending

Tools



Thread



Kits



Fabric



Sailrite's catalog and website- www.sailrite.com includes kits for sails, dodgers, biminis, covers, bags, Sunbrella™, Dacron®, 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