

GOOD OLD BOAT



JANUARY/FEBRUARY 2006
Issue 46
www.goodoldboat.com



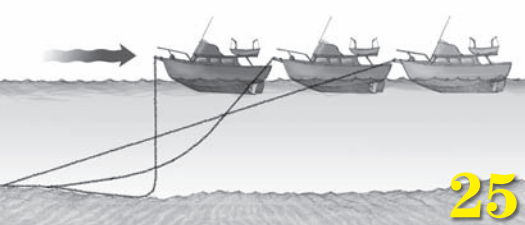
\$7⁰⁰ (Canada \$9⁰⁰ CDN)



7 25274 97035 3 02

On newsstand until February 28

GOOD OLD BOAT



About the cover...

Gary Miller offers *Good Old Boat* editors good advice, occasionally shoots a cover we absolutely must print, and writes an article for us from time to time. He's done it again with the cover to meditate on while deep in the heart of winter.

For the love of sailboats

4 Don Launer's Lazy Jack 32

He's a jack of all trades and master of most

BY KAREN LARSON AND TED BREWER

9 Islander Freeport 36

Built for comfort with Robert Perry performance

BY ED LAWRENCE

13 Renewed Serendipity

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

BY JIM SHROEGER

46 Freedom 25

An unconventional catboat with the advantages of small size

BY ED LAWRENCE

Speaking seriously

17 Standing rigging

How changes can affect the strength of a rig

BY TED BREWER

25 To have and to hold

The basic rules of anchoring — and staying put

BY DON LAUNER

29 Solo voyaging

How to equip your boat for the wild blue yonder

BY LOUK WIJSEN

42 Solar panels 101

Keep your batteries topped up with a slow but steady charge

BY DON LAUNER

51 Goodbye bed, hello storage

Converting an awkward quarter berth into a handy cockpit locker

BY JACK COMBS

71 Ready. Or not?

Emergency kit saves boat after sailor drills hole in hull

BY BILL SANDIFER



44



40

Just for fun

19 The legacy of Philip Rhodes

A pioneering designer of many early production fiberglass sailboats

BY BEN STAVIS

35 Solving the meat problem

Home canning is the answer for fridge-less cruisers

BY BONNIE DAHL

40 Winter reverie

The boat sleeps under snow now, but tropical sunsets will follow

BY CRAIG CARTER

44 The Good Life in coastal New England

BY JEFF SCHER

54 Mr. Renovation

Marine surveyor Tim Lackey makes a name for himself

BY AL LORMAN

58 Breakfast at Tiffany's

An Alaskan summer idyll

BY KAREN SULLIVAN



77

What's more

3 The view from here

See you at the boat show! – BY KAREN LARSON

62 Good old classifieds

74 Simple solutions

Kedging and warping – BY GEOFFREY TOYE

77 Quick and easy

New cushion covers – BY PAT BROWN

High bilge warning – BY BOB MACDONNELL

A 50-cent GPS holder – BY GEORGE ZIMMERMAN

81 Mail buoy

87 Last tack

Haulout melancholy – BY JERRY POWLAS

88 Reflections

Boyhood boating – BY MATTHEW GOLDMAN



88

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
Ed Lawrence
Dave Martin
Gregg Nestor
Bill Sandifer

COPY EDITOR John Vigor

ART 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

WEBMASTER Jerry Stearns
www.goodoldboat.com

46 – VOLUME 9, NUMBER 1

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: 763-420-8921

BUSINESS OFFICE: 1501 8th Ave. N.W.
Jamestown, ND 58401
Phone: 763-420-8923
Fax: 763-420-8921
www.goodoldboat.com

PERIODICALS POSTAGE PAID AT OSSEO, MN 55369,
AND AT ADDITIONAL MAILING OFFICES.

POSTMASTER,
SEND ADDRESS CHANGES TO: GOOD OLD BOAT
7340 Niagara Ln. N.
Maple Grove, MN
55311-2655

© 2006 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/\$110.95
OVERSEAS – \$49.95/\$95.95/\$140.95

www.goodoldboat.com

I

Our contributors



Ted Brewer (*Lazy Jack 32*, Page 8; *Standing rigging*, Page 17) 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.

Ed Lawrence (*Islander Freeport 36*, Page 9; *Freedom 25*, Page 46) is a contributing editor with *Good Old Boat*. His fuzzy friend is Adam the grizzly bear (a celebrity and neighbor in the Montana outback). Ed's the one in the ball cap.



Jim Shroeger (*Renewed Serendipity*, Page 13) 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 woodworking, which came in handy during *Serendipity's* restoration. He and his wife, Barb, sail *Serendipity* in the North Channel, revisiting anchorages they enjoyed in the 1980s in their Cal 28.



For the last 41 years **Ben Stavits** (*The legacy of Philip Rhodes*, Page 19) has been sailing, maintaining, repairing, upgrading, and restoring the 41-foot Rhodes Reliant, *Astarte*, that his father bought new in 1964. He maintains websites

about the Rhodes Reliant/Offshore 40 and about Philip Rhodes.

Don Launer (*To have and to hold*, Page 25; *Solar panels 101*, Page 42) is a *Good Old Boat* contributing editor. He is a USCG-licensed captain and author of the book, *A Cruising Guide to New Jersey Waters*. He sails his two-masted schooner, *Delphinus*, out of Forked River, New Jersey.



Louk Wijzen (*Solo voyaging*, Page 29) was a retired attorney and former merchant-marine officer. He kept his Bruce Bingham-designed Fantasia 35 cutter, *Noordzee*, in San Francisco Bay. We were grieved to learn that Louk lost his battle

with cancer in early October.

For more than 30 years **Bonnie Dahl** (*Solving the meat problem*, Page 35) has sailed all over Lake Superior with her husband, Ron, writing that lake's best cruising guide, *Superior Way* (now in its third edition). The two have also twice transited the Great Lakes



and cruised the eastern Caribbean and South America aboard their Columbia 10.7, *Dahlfin*.



Craig Carter (*Winter reverie*, Page 40) began boating while growing up on Long Island Sound. The family fleet consisted of rowboats, canoes, a Sunfish, and a carvel-planked runabout; Craig was tying bowlines before he could ride a bicycle. He and his wife, Carrie, currently sail their Pacific Seacraft Dana along the southern New England coast.

Ted Tollefson (*Solar panels 101*, Page 42) is a graphic designer who works and sails in central Minnesota. He cut his teeth racing E-scows back in the '80s. Presently he sails a 24-year-old traditional full-keeled cutter with lots of teak to keep up when he's not illustrating for *Good Old Boat*.



Jeff Scher (*The Good Life in coastal New England*, Page 44) is a New England-based commercial photographer who splits his time between Boston and Maine. While relatively new to sailing and marine photography, he has found himself completely addicted to the subject. Other examples of his work can be seen at <<http://www.jeffschers.com>>.



Jack Combs (*Goodbye bed, hello storage*, Page 51) is a retired mechanical engineer who has owned and tinkered with sailboats since 1964. *Quintessence*, his Bristol 29.9, has been in the family since 1979. He says the word "quintessence" means the final version or perfection of something, but the vessel *Quintessence* "must be regarded, even after 25 years, as a work in progress."



Al Lorman (*Mr. Renovation*, Page 54) moved to Washington, D.C., after graduate school to work as a reporter. After a short stint in journalism, he was led astray and became a lawyer. His first boat was a 1965 Pearson Commander. He now sails a Freedom 30 on the Chesapeake and has just bought another good old boat: a 1979 Dyer Dhow that the seller *insists* has never been in the water.

Karen Sullivan (*Breakfast at Tiffany's*, Page 58) discovered sailing in 1973 with a wooden Folkboat in New England. After 10 years on larger boats and traveling throughout the Caribbean, East Coast, and Gulf of Mexico,



she is back to her roots on a good old small boat, sailing out of Seward, Alaska.



Bill Sandifer (*Ready. Or not?* Page 71) is a contributing editor with *Good Old Boat* and a marine surveyor and boatbuilder. He and his wife, Genie, sail an Eastward Ho 32. They lived in the Gulfport, Mississippi, area until Hurricane Katrina came through. They lost their home but not their boat.

Geoffrey Toye (*Simple solutions: Kedging and warping*, Page 74) 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.



Pat Brown (*Quick and easy: New cushion covers*, Page 77) and her artist husband, Chris, live in Olympia, Washington, and cruise Puget Sound. Besides sailing, Pat fly-fishes, ties flies, writes, and renovates sailboats. Their current boat, *Avatar*, an Ericson 27, is the tenth boat she has refurbished.



Bob MacDonnell (*Quick and easy: High bilge warning*, Page 79) left Nova Scotia in 1980 for a few years and never made it back. A retired electrical engineer, he and his Australian wife, Judy, are residents of Vanuatu on their cruising catamaran, *Siddiqi*. They return each year to Brisbane, Australia, during cyclone season.



George Zimmerman (*Quick and easy: A 50-cent GPS holder*, Page 80) moved to the Puget Sound area 13 years ago. On a ferry trip he saw sailboats plying the waters there and has been hooked on sailing since. He lives in Olympia, Washington, and sails his 25-foot Yamaha sailboat, *Escape*. When not spending time with his family, working for the state, or sailing, he enjoys tinkering on his boat.



Matthew Goldman (*Reflections: Boyhood boating*, Page 88) grew up in southern Connecticut a mile from the Connecticut River and became addicted to boating. He has owned an assortment of small boats. He lives in Charlestown, Rhode Island, where he is a professional tool-maker and woodworker, poet and playwright. His 26-foot sloop, *MoonWind*, is a 1970 Chris-Craft Pawnee designed by Sparkman & Stephens.





(I'll be the one crouched under a chair sucking my thumb)

IT'S NOT THAT WE NEVER SAID NEVER... exactly. It's just that we *always* said that having a boat-show booth was unlikely.

We had our reasons:

- Too expensive for a little startup operation like ours, we figured.
- There's not enough margin in subscription sales. How many new subscriptions would it take to cover the costs anyway?
- Besides, some boat shows are poorly timed, coming as they do during the busiest part of our production cycle. Some even occur during our already-too-short boating season! What were they *thinking*?
- What's worse, Jerry and I are introverts. We're not sure how long we can survive in a large crowd...four or more days seems extreme.

"I'd rather be sailing," we'd agree. And that was that for another year. *Or was it?*

Michael Facius — who is our publisher, advertising sales director, and voice of reason — talked us into it:

- We're not exactly a little startup operation any more, he pointed out.

by Karen Larson

- A good subscription is hard to find, he said.
- Some boat shows happen in the winter, he noted.
- As for the introvert part, well, buck up! (I was hoping for a bit more compassion on his part.)
- Besides, we've never tried it.

That last argument did it! So we'll be trundling ourselves off — along with boxes of magazines and other stuff —

“Four days in a crowd is the true introvert's endurance test. Crossing Lake Superior is nothing!”

to two winter boat shows this year: Strictly Sail Chicago, February 2 to 5, and Strictly Sail Miami, February 16 to 20. Michael and his wife, Patty, will accompany your founding editors, Jerry and Karen, to the Chicago show. Mark Busta, our circulation and retail director, and Karla Sandness, our financial manager, will be at the Miami show. *(Hey! Wait a minute! How come those two get to go to Miami in February and I'm going to Chicago?)*

Four days in a crowd is the true introvert's endurance test. Crossing Lake Superior is nothing! Pedaling my bike up that last big hill near home is nothing! Driving across the country is nothing! By the last day in a big crowded place like Chicago...like Navy Pier...like the Strictly Sail show, you may find me crouched under a chair wearing an "I'd rather be sailing" T-shirt and sucking my thumb.

If I appear to lag a bit or if Jerry and I are standing back-to-back like a couple of drunks holding each other up, feel free to drag me out and wind

up that invisible Energizer Bunny mechanism on my back. If Michael is nowhere near to tell me to "Buck up," go ahead and let me know that

the show must go on and, in fact, that it is still going on.

I wish I could promise occasional flame-swallowing or juggling acts at our booth, but our talents lie elsewhere. Jerry and I may present a slide show in the seminar section in Chicago. But for the most part we'll be in a booth where we can meet you as you wander by. Please stop in. We look forward to seeing old friends and meeting new ones. ⚓

Don Launer's

Lazy Jack 32

*He's a jack of all trades
and master of most*

by Karen Larson

RENAISSANCE MAN WAS NOT A TERM in use when *Good Old Boat* contributing editor Don Launer was growing up prior to World War II. It was not a concept during his service as a sergeant/radio operator and repairman in the war, nor when he studied for an electrical engineering degree afterward.

It was not a term when he joined ABC as a television engineer and moved through the ranks to the title of engineering supervisor. At ABC he served at the leading edge of the television-broadcast revolution as it moved from simplistic live black-

and-white broadcasting to an entirely different medium with instant satellite transmissions and real-time news and worldwide special events.

From the age of 11, Don knew he wanted to be in broadcasting. He got his ham license, studied for the job, and was at the right place at the right time as television broadcasting got its wings. He led the technical teams that covered special news events such as presidential conventions, missile launches, and — for 20 years — all the Olympic games. He has two Emmy Awards on his mantel for Olympic coverage. That is one facet of the man who

was unknowingly the prototype for the term “Renaissance man” long before the term caught on.

Many would be satisfied with the combination of technical expertise and creativity involved with this career, but there's more to Don. He has the skills of a concert pianist and still plays daily on the piano his family owned when he was a boy. He tends an herb garden. He is a rather expert winemaker. But there's more.

Built a brick house

The year Don and Elsie Launer's second child was born, Don bought some books, a concrete mixer, and 28,000 used bricks. He knocked the old mortar off each brick and built the home in which he and Elsie (and the two children during their formative years) lived for 33 years until his retirement from ABC in 1989.

It shouldn't surprise any of us that this master of many trades also built his Lazy Jack 32 schooner from a bare hull, should it? That boat, named *Delphinus* after the constellation, is the focal point of the home on a waterway that he and Elsie share in Forked River, New Jersey. The boat-building project was conceived in the late 1970s as Don began contemplating retirement. He had sailed a number of boats as a youth and raced in a fleet of Lightnings in his 30s, although he gave up racing when he realized that the intensity of weekend racing does not provide a good escape from a stressful work week.

As a family man, Don has owned more than 18 boats during his life, including a 17-foot Picnic boat and a 22-foot Rhodes, both by General Boats (see his article in May 2005). Then there was an Essex 26, one of the few center-cockpit models in that

Delphinus, Don Launer's Lazy Jack 32, this page, is a familiar sight on the waters of Barnegat Bay near his home in Forked River, New Jersey. Don purchased the boat from Ted Hermann in 1980 as a bare hull, photo at top right. Then, as always, he did the work himself. These days he's a one-man band running a two-masted schooner from bow to stern. Despite an approaching 80th birthday, he makes it look easy.

“It shouldn’t surprise any of us that this master of many trades also built his Lazy Jack 32 schooner from a bare hull, should it?”

size range. The family made some memorable cruises on these boats, but as retirement loomed, Don says, “I wanted to retire with a good cruising boat. I began looking for a salty-looking shoal-draft, keel/centerboard boat with comfortable accommodations.”

He was unmoved by everything he saw until a friend showed Don a drawing of Ted Brewer’s Lazy Jack schooner. He knew immediately that he had found his retirement boat. Boat-builder Ted Hermann, on the North Fork of Long Island, N.Y., had commissioned this design and was building the fiberglass schooner at the time. In

all, 35 hulls were created before Ted Hermann ceased production. Don’s is hull #31. Since the boat was in production at the time, Don could have had a completed boat delivered, but what would our do-it-yourself Renaissance man rather do?

Old and crusty

When he decided that this was the boat and that he’d like to do the finishing work himself, Don was warned that Ted Hermann was “a crusty old New Englander.” Undaunted, he visited the boatworks and, following a tour, announced that he’d like to buy the





The living space on *Delphinus* is soothing and comfortable. Don says creating the interior was the most difficult part of the project since nothing's really square. All he had to begin with were the fiberglass liner, which established the galley area for example, and the patterns for bulkheads and other wooden structures. He used mahogany throughout, generally following Ted Brewer's accommodations plan.



interior furniture, particularly in the galley, was there. And the lead ballast had been installed. The ports had not been cut out and nothing else had been done. The rest was up to Don.

He worked a miracle and made it look easy, of course. By May, just five months later — while working full time, remember — Don had the schooner ready on the outside and launched her. Three months later, in August, he had her rigged and took his first sail. It took another year or two to complete the creation and installation of interior systems and furniture. The moment at which this sort of work is completed is harder to pinpoint. The work continues indefinitely, and maintenance begins where the installation projects end. In fact, they often overlap.

Nothing's square

"The interior is the most difficult," Don says. "Nothing is square or rectangular. Boats are composed of compound curves." Don says he remained true to Ted Brewer's interior layout "with very few changes." He was able to copy Ted Hermann's patterns for bulkheads and other interior wooden parts. That really helped to move the interior work forward. He used mahogany throughout the interior.



Delphinus was endowed with many modern conveniences uncommon to sailboats her size in the early 1980s: a freshwater shower in the cockpit as well as another in the head compartment, a built-in air conditioner with a seawater heat exchanger, heat supplied by electricity at the dock or by kerosene while cruising, a kerosene stove, a heat exchanger to heat water with the engine, pressurized hot and cold water throughout the boat, refrigeration and a freezer with ultra-insulation, a 12-volt washing machine, cable and telephone when tied up at the dock, a hi-fi...you get the idea. This was to be a thoroughly modern and infinitely comfortable cruising machine.

Delphinus sails like a charm. Her schooner rig looks complicated, but she is easily singlehanded. Her sails are boomed and self-tending. The skipper intones "ready about" to no one in particular, puts the helm over, and

boat as a bare hull. Ted Hermann, realizing no doubt that some do-it-yourselfers gave an entire line of boats a bad name, lived up to his reputation by replying, "I don't know if I want to sell it to you." In retrospect, Ted must have thanked his lucky stars many times to think that Don Launer bought and finished one of his boats. The excellent publicity he's created for it is immeasurable. For examples in *Good Old Boat*, see Don's articles in November 2000 about the club-footed jib and January 2001 about sailing a schooner.

Ted then ran Don through an interrogation about boat construction that lasted an hour and a half. Don smiles as he recalls the day. Apparently he passed the review because Don was allowed to purchase a hull. That hull was delivered in December of 1980. It was nothing more than a hull with a deck resting loosely on it. The fiberglass liner that established some of the

goes on his merry way. There are no lines to tend and there is no wild grinding on winches. In fact, this schooner, in classic tradition, has no winches.

As a sailboat, she has no bad habits to speak of. After sailing with Don, Jerry Powlas wrote the following glowing report.

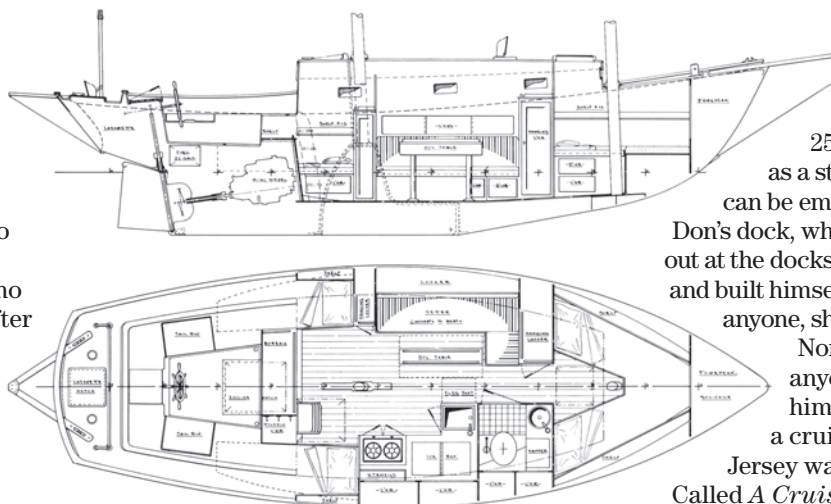
Seemed too small

“Thirty-two feet on deck seemed small to me for a schooner. I was expecting something cutesy that had a schooner rig for all the wrong reasons and suffered for it. Wrong. At 14,000 pounds this is a heavy boat that rode well in the short chop of Barnegat Bay. Under sail she was stiff, making her a good platform to work on. The schooner rig kept the sail area low and, combined with a fairly beamy hull, made her utterly stable. While she had a belowdecks autopilot, it was almost unnecessary. Don could bring her to closehailed and simply let go of the wheel while she sailed along straighter than most autopilots and many helmsmen could steer most boats.

“After that demonstration, I began to think a schooner rig made some sense even in a boat this small. But Don was not done showing off. As mentioned, tacks were done without tending sheets. Then he dropped the jib and foresail and hove to. He said, ‘She’ll hunt a little.’ She pointed into the wind with the main sheeted down hard to the centerline. Hunting was imperceptible. Dead nuts into the eye of the wind! (My sloop heaves to maybe 60 degrees off the wind.)

“Later, Don hove to and set an anchor. He made it look easy. He struck the jib and foresail and, when the boat headed up and started backing down all by herself, he let the anchor down, paid out the proper scope, cleated off, and let the boat slowly back down and set her anchor. Later, he reversed the process and sailed off the anchor without the engine. There is no question that this is an easier boat to sail than a sloop or cutter.

“There was no need to reef sails the



day we were out with Don but, as he explains it, at some point as the wind pipes up the foresail is taken in. When there is too much wind for the main and jib, the main is reefed. When that won't shorten sail enough, the main and jib are lowered and the foresail is raised by itself. Crews of the working schooners called this ‘being in foresail harbor’ because the boat was so stable.

“Delphinus sails like a charm. Her schooner rig looks complicated, but she is easily singlehanded.”

“The bottom line is that the Lazy Jack 32 is a cruising boat with lineage from the working schooners. The rig complements the hull perfectly. This may be the perfect rig for safe, easy, shorthanded sailing. It sure seemed like it that day.”

Singlehanded sailing

Don will turn 80 later this spring. But age will not prevent him from sailing, something he does primarily singlehanded and with great ease. In *Delphinus* he has created a boat that will allow him to sail safely and comfortably for years to come. For more on that topic, see Don's article, “Drifting into Old Age,” in May 2003.


Delphinus carries 30 gallons of diesel in two tanks and has two water tanks: a 30-gallon tank and a 9-gallon emergency supply to get a careful crew through until the big tank can be replenished. She has a Sealand MSD, a combination macerator and holding tank that uses formaldehyde rather than chlorine. And there's also a holding

tank that can carry 25 gallons and operates as a standard holding tank. It can be emptied at a marina or at Don's dock, where he is able to pump out at the dockside facility he designed and built himself. That shouldn't amaze anyone, should it?

Nor should it surprise anyone that Don busied himself with the creation of a cruising guide to the New Jersey waters that he calls home.

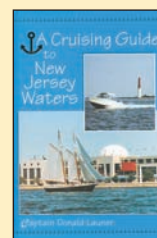
Called *A Cruising Guide to New Jersey Waters*, this guide, first published in 1995 by Rutgers Press, is now in its revised and rewritten edition, which came out in 2004.

Earlier in his love affair with all things sail, Don spent several years studying naval architecture through Ted Brewer's correspondence course. Ted's school is no longer in business, but Don gained a real appreciation for what goes into boat design, along with a respect for Ted Brewer. Perhaps this educational program formed the foundation necessary to pass Ted Hermann's tough oral examination in order to qualify for the purchase of an unfinished Lazy Jack hull. All things are related.

When Don decided that he'd like to write for boating publications, this energetic sailor decided that the U.S. Coast Guard captain's exam would give him more credibility as an author. So naturally he took and passed the six-pack certification. These days, Don is indeed the contributor to a number of marine publications including *Good Old Boat*. We're proud to have him as a part of our team. 

For further reading ...

A Cruising Guide to New Jersey Waters, this guide, by Don Launer, is now in its revised and rewritten edition, which came out in 2004. This book is available at <http://www.goodoldboat.com/bookshelf.html> or by calling 763-420-8923.



Lazy Jack 32

A shoal-draft schooner for family cruising

by Ted Brewer

FINDING THREE SIMILAR BOATS FOR COMPARISON purposes is never simple, but finding three to compare with a keel/centerboard schooner was impossible. So here we have two keel/centerboarders, one a cutter and the other a sloop, and a full-keel ketch to round out the group.

The Lazy Jack 32 began life as the brainchild of builder Ted Hermann and designer Dick Ketcham. When Dick passed away, Ted brought what preliminary drawings had been done to Bob Wallstrom and me and commissioned us to design the boat. Naturally, we had our own ideas on hull shape, rig, and other details. It was these, given the builder's requirements for her basic dimensions — specifically her shoal draft — that eventually developed into the Lazy Jack 32.

The design was created with coastwise family cruising in mind and with absolutely no pretensions of bluewater voyages. In that respect, I believe the Lazy

Jack 32 has been successful. She has proven to be well-suited for coastal and Caribbean waters and has developed a cult following of dedicated owners. These boats have crossed the Gulf, cruised as far as Venezuela and, despite their modest ballast ratio, have withstood some rather severe weather. Indeed, the Lazy Jack appears to have done everything her designer and builder desired of her and done it well. The table compares this little schooner to three very different yachts in her size range.

Tom Gillmer's Seawind II is definitely more of a deep-water boat than the Lazy Jack. With her husky displacement, good ballast ratio, and a ketch rig of moderate area, she is obviously intended for world voyaging. She is certainly as capable as any boat of her size. Given good seamanship and condition, you could take her anywhere. On top of that, like all of Tom Gillmer's work, the Seawind II is a ruggedly


handsome craft and is the one in this group to consider if you dream of circumnavigating the globe.

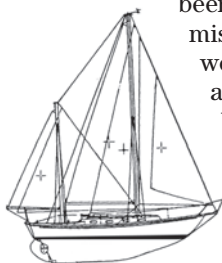
More performance

The C&C Corvette is a different kettle of fish. Here the emphasis, as with many C&C yachts, appears to be on performance. A high ballast ratio and a generous sail area combined with moderate beam indicate a yacht that will move out very nicely indeed. Her waterline is on the short side, but that will keep her wetted surface low to reduce resistance in light air, and she'll pick up length as she heels when it breezes up. Plus that short waterline will give her a nice low handicap for club racing. Handsome is as handsome does, and the Corvette would certainly be my choice of the four boats if I were in the market for an attractive family cruiser/racer with gunkholing capability.

The Island Packet 31 is the unusual yacht in this group. She features the longest waterline, the widest beam, by far the lowest ratio of displacement to waterline length, and a generous sail area in a cutter rig. Her beam and long waterline assure roomy accommodations for a small family, possibly the best in the group, and she will certainly perform well enough to suit the average cruising family. Her capsize screening factor is a bit on the high side, but I'd have no qualms about coastal cruising from New England to Florida or trips to the islands with an eye on the weather.

The Lazy Jack 32 is in a class by itself, of course. Either

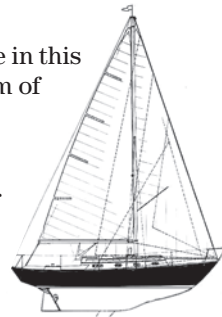
you want a schooner, or you don't. If you do, she is one of the few you'll find in her size range. It is always exhilarating to race a boat around the buoys, and it's a great adventure to conquer the oceans in a small boat. But a perky little schooner could be just the answer for those sailors who simply want to have fun sailing, cruising, looking cool, and attracting friendly smiles wherever they drop the hook. 



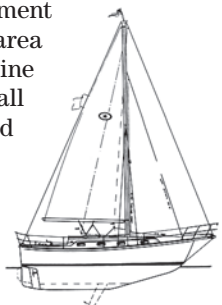
Seawind II



Lazy Jack 32



Corvette



Island Packet 31

	Lazy Jack 32	Seawind II	IP 31	Corvette
Year built	1973	1975	1984	1971
Designer	Brewer/Wallstrom	T. Gillmer	R. Johnson	C&C
LOA	31' 7"	31' 7"	30' 7"	31' 2"
LWL	23' 9"	25' 6"	27' 9"	22' 6"
Beam	10' 9"	10' 5"	11' 6"	9' 11"
Draft	2' 10"/6' 6"	4' 6"	3' 0"/7' 0"	3' 3"/7' 0"
Displacement	12,500 lb	14,900 lb	11,000 lb	8,545 lb
Ballast	4,000 lb	5,800 lb	4,500 lb	4,000 lb
LOA/LWL ratio	1.33	1.24	1.10	1.39
Beam/LWL ratio	0.453	0.41	0.414	0.44
Displ/LWL ratio	416.6	401.2	229.8	335
Bal/Displ ratio	0.32	0.39	0.41	0.47
Sail area	544 sq ft	555 sq ft	531 sq ft	444 sq ft
SA/Displ ratio	16.2	14.7	17.2	17.0
Capsize number	1.85	1.8	2.07	1.94
Comfort ratio	31.1	36.9	22.8	24.6

Islander Freeport 36

*Built for comfort
with Robert Perry
performance*

by Ed Lawrence

*BlueMoon, Scot Weiner's
Islander Freeport 36,
decorates the hillside
scene at Hungryman's
Anchorage on Santa
Cruz Island.*

IF YOU AND YOUR SPOUSE HAVE EVER DESIGNED and built a house (one of the few activities that rivals a married couple trying to anchor a boat in tight quarters amid a large audience), you may have learned that the process starts from the inside and works outward. First figure out how much living space you want, then decide where to put the fireplace and the shape of the roofline. Designer Bob Perry faced the same challenge when he designed the Islander Freeport 36 for Buster Hammond, presi-

dent of Islander Yachts, in October 1976.

Not to be confused with the Islander 36, an Alan Gurney design, the Freeport 36 is numbered among a gaggle of designs Bob Perry did for the company. Included are the Islander 28 (among his favorites), 32, and 34. All three of these had “typical” (read: flat) cabintops. The molds for the Islander 34 were eventually sold to Nordic Yachts, and the boat was relaunched as the Nordic 34.

“The IF-36 was designed around the

Pullman berth, which meant that the head would be located forward,” Bob says. “There also was the requirement that the engine be located amidships,” rather than farther aft, a more conventional approach. Actually, having the engine located amidships places weight in a more favorable location, and the non-traditional location may ease maintenance chores, especially when compared to working in a tight area below the cockpit sole.

“The Pullman was not an earth-

Dennis and Kathy Oelrich own our review boat, shown below. The Islander Freeport 36 shows the distinctive Islander cove stripe with the addition of a leading “F” to distinguish it from the Islander 36.





Dennis and Kathy Oelrich check out *Good Old Boat* magazine, above, while *Good Old Boat* readers have a chance to check out the comfortable interior of *Puget Sounder*, their Freeport 36, shown in the photos on this page. Note the Pullman berth in the photo below. *Puget Sounder* has the Freeport Layout B, which is unusual in that it features a double berth toward the middle of the boat. The head, shown above, is forward in this plan in the area usually occupied by the V-berth.

shatteringly novel idea, or necessarily unique," Bob says. "But at the time there were a lot of newcomers to sailing who were quite taken with the concept. The difference was that, to that point, no one had done it particularly successfully."

Straws for Pullman

Putting the double bed in the middle of the boat will increase the odds of a good night's sleep, especially in an unstable anchorage or on an ocean passage, as I learned during a San Francisco-to-Hawaii race when the off-watch drew straws to see who would sleep in the Pullman. In the case of the Freeport 36, lee cloths will keep crew in the berth on an extended port tack.

"Locating the head forward also meant that the cabin trunk had to be extended, which produced a longer cabintop than a traditional V-berth forward/head amidships design," Bob says. He notes that heads are not typically located forward by production builders "...because it's hard to do. That's the pinchy part of the boat, and it's odd shaped and hard to work in."

However, the cabintop isn't just long, its aft section is tall enough to produce 6 feet 7 inches of headroom in the saloon. The interior headroom produces tall cabinsides, too, that are accented by large, dark, acrylic ports. At first glance the ports may overwhelm her profile, especially if she happens to be gliding along next to a flush-decked

racing sled. However, give her another look, and you'll see that her forward-sloping, double-rail bow pulpit and sheerline slopes downward en route to the stern. This, coupled with a generous masthead sailplan (650 square feet of sail area), and she becomes softer on the eyes. That's especially true when a 150-percent genoa fills the gap between headstay and mast.

Locate three additional ports per side, as Bob Perry did, and spaces below are filled with light, light, light, even on the cloudiest Seattle day.

B came before A

Buster Hammond was unable to resist the urge to tinker with Bob's design, perhaps in response to the pressure of



the marketplace. In the process he created a chicken-and-egg question. The first Freeport 36 produced was Bob Perry's original design which, for unknown reasons, was called Layout B. Buster's revised version, known as Layout A, offered the typical V-berth-in-the-bow configuration. Bob's recollection is that sales were split approximately 50/50 between the two. To further confound shoppers, a third model with a center cockpit was added which, Bob says, "...is very scarce. I've never seen one."

The Freeport also had a roomy cockpit that introduced a feature not seen on sailboats to that point. "We designed a transom door that was the only one of its kind at the time," Bob says. This device has since been copied by many manufacturers and is standard on some 2000-era production models (see photo on Page 9).

Her underbody featured a low-aspect-ratio fin keel that "is more full than a Valiant because of the location of the engine and a full-skeg rudder," according to her designer. The combination caused Bob to be overjoyed with the boat's performance. "When fitted with a good suit of sails, we were surprised that she's as fast as the Islander 36. She is the boat that outperformed our expectations more than any other.

"A lot of people love her," Bob says. This is evidenced by an owner's group that today ranges from San Diego to Massachusetts, San Francisco to Texas, Washington to Mexico, and Alabama to Toronto. An active chat room is located at <http://groups.yahoo.com/group/FOGgers/>.

She sparkles

It was a pleasant experience to step aboard our test boat, *Puget Sounder*, and discover that owners Dennis and Kathy Oelrich of Kirkland, Washington, have maintained her in near-new condition. She sparkles.

As Bob says, these boats have a generous cockpit, a T-shaped area with seats for two port and starboard, and one more on each of the corners, the latter concealing a storage area and propane tank. Seats are 40 inches long and 18 inches wide with 14-inch-

high backrests. The distance between seats in the footwell is 38 inches, so it's possible to stretch out comfortably without playing tootsies with other crewmembers. Cockpit lockers port and starboard are 39 inches long and 35 inches wide, the port compartment having a space Dennis Oelrich describes as "a beverage storage area."

A 40-inch wheel provides the driver

with plenty of leverage on her rudder and puts his fingertips within close reach of primary winches.

Boats of this era typically were equipped with winches and cleats for halyards and sail controls on the mast, but there's plenty of space on the cabintop for stoppers if a skipper would rather have lines in the cockpit. The only downside of the arrangement is that, without a helm seat, the driver will spend a lot of time standing.

The cockpit also has two large acrylic ports on the bulkhead and two in the teak companionway doors, so light is unimpeded on its way belowdecks, even when a Bimini protects the crew from the elements. Her stern rail is large enough to house a barbecue and an outboard motor without interfering with crew comfort.

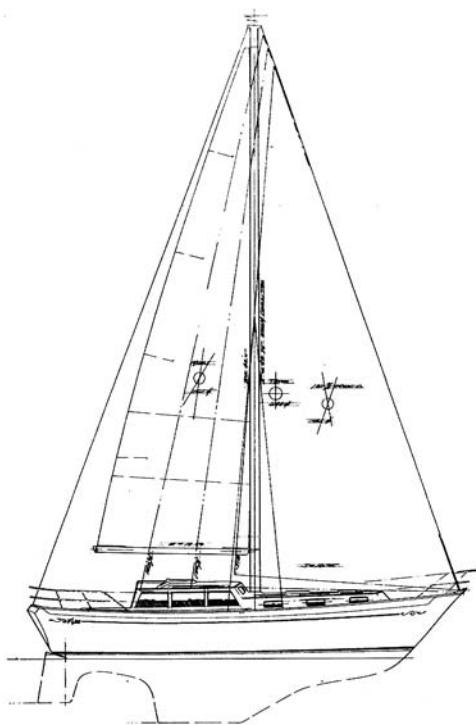
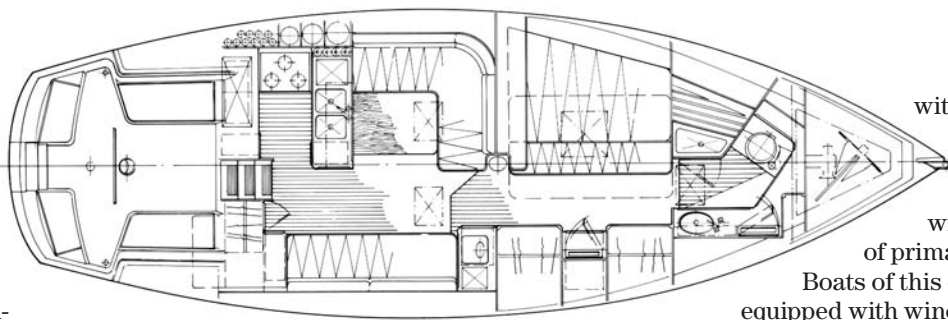
Belowdecks

Take four steps down the companionway ladder, and you will feel as though you have descended into a bigger boat. With nearly 7 feet of headroom, 10 feet of distance between companionway and the forward bulkhead, and 10 feet of space separating settee backs, the saloon has the interior volume of a storage container.

Add those six large ports to the equation and a large mirror on the bulkhead that reflects light and creates the illusion of space, and even a claustrophobic will feel at ease. Unlike many of today's mostly gelcoat interiors, a forest of teak, including a full-length, teak handrail to starboard (an excellent safety device) and shelving along the starboard hull, combine to create a downright comfy area in which to lounge. Woodwork and joinery were top-drawer when the company built the boat, as evidenced by *Puget Sounder's* finely finished surfaces.

An L-shaped settee to port offers either:

- an open area large enough for lounging on thick cushions
 - a dining area for 2 to 3 adults when a (nearly invisible) table hinged to galley cabinetry is elevated, or
 - a space large enough for three to six when the wing leaf of the table is extended across the aisle to starboard.
- So, take your pick: the table can be



Islander Freeport 36

Designer: Robert Perry

LOA: 35 feet 9 inches

LWL: 27 feet 6 inches

Beam: 12 feet 0 inches

Draft: 5 feet 3 inches

Displacement: 17,000 pounds

Sail area: 650 square feet

Ballast: 7,030 pounds

Displ/LWL: 365

SA/Displ: 15.66

Tankage: Fuel 70 gallons, water 120 gallons



Jim and Laurie Stover's 1981 Freeport, *Evanesence*, is as pretty inside as she is when viewed from a distance while flying her spinnaker. Jim and Laurie enjoy sailing around San Francisco Bay and the delta with coastal trips to Half Moon and Drakes bays.



used for Solitaire, Gin Rummy, or four-handed Texas Hold 'Em. (Actually, you could organize a bridge game if seating could be located for South.)

Naviguesser's table

For the non-card-playing member of the crew, the nav station offers a space in which to naviguess at a table large enough for proper charts. Since the boat was designed before GPS and other electronics became handheld devices and satellite radios became standard equipment on automobiles, cabinetry is large enough to house a VHF radio, a radar screen and, for sentimentalists, an eight-track cassette player along with a niche for pens, pencils, and the car keys. Because the electric panel is located on the aft bulkhead, changing fuses is a simple matter, even underway.

The U-shaped galley is a different story, one owner having described it as "a one-butt kitchen." Galley counters are 48, 56, and 52 inches long, respectively, when a wood cover is placed over the stove burners, so there's plenty of counter space in which to operate. However, if two people attempt to occupy the middle of the "U" simultaneously, it would be thoughtful to keep sharp knives safely secured for obvious reasons.

On the flip side, double sinks allow an assistant galley slave to rinse and dry dishes without interfering with the scrub person. There's plenty of room for dry storage in drawers and cabinetry.

A solid teak door provides access to the stateroom, a well-appointed area in which the skipper can ponder the

events of the day or play the viola. Ventilation is provided by opening ports.

The Pullman berth is 78 inches long and 5 feet wide, so the head of a tall skipper shall touch neither the saloon ceiling nor the end of the berth. Storage is in a sliding drawer below the berth, in enclosed shelves, and in a hanging locker to starboard.

Farther forward, the head is enclosed by a louvered door. Except for occasional traffic through the state-room by the off watch, placing the head in the bow makes sense. The area is large enough for showering comfortably without banging your elbows.

Performance

Lest you forget — given the amount of space herein devoted to creature comforts — the Freeport 36 is a vessel designed to transport crew under sail. It is not a dockside condominium.

I have two reports. The yin is that I signed on for a short cruise of Puget Sound on a day when winds were blowing like stink (20 to 30 knots), accompanied by 3- to 4-foot waves close enough to run into each other. Dennis and Kathy showed no reluctance to head out into these conditions, though we shortened the headsail to the size of a hanky and tucked a reef in the main.


It's a good thing that *Puget Sounder* is equipped with a dodger that kept waves and spray off her occupants as we sailed hard on the breeze with the rail tantalizingly close to the sea despite her high freeboard. (Even at that, my favorite 49ers hat still ended up in the drink.) Boat speed ranged between 5 and 6 knots in these conditions. Our

comfort level increased dramatically when we eased sheets and sailed on a broad reach, her shoulder tucked into the waves. She tracked well in those conditions.

On a second trip, when a high-pressure system blanketed the sound, the Oelricks sailed in light breezes en route to a rendezvous. Despite having only 4 to 5 knots of wind, *Puget Sounder* managed 3 to 4 knots and tacked without losing way. It wasn't long before she was over the horizon.

Many boats are evaluated on paper on the basis of mathematical ratios. In this case, those ratios would lead to the erroneous conclusion that the Islander Freeport will bring new meaning to the term "extended cruising." I was pleasantly surprised that she's capable of sailing fast.

Bob Perry says, "She's been a good old boat for a lot of people."

Still is. 

In memoriam



Piper, Bob Perry's faithful companion and officemate of 16 years, died on October 14.

Refit

Renewed Serendipity

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

by Jim Shroeger



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



SHE WAS A WRECK. WHEN I FIRST SAW HER, SHE WAS SITTING ON a derelict trailer with two flat tires. Her hull was faded from blue to dull gray. Somewhere along the way some intrepid soul who fancied himself a boat finisher had used a belt sander on the hull to try to remove the discolored gel-coat. (He was very successful.)

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

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

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

Unique hull design

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

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



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

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

Winter cover

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

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

As the Westwind is a medium-sized trailerable, her interior space is "compact." The original interior was done in mahogany. Because the cabin space was small we opted to use a light wood to create an airy and open feeling belowdecks. I found a significant amount of "culled out" oak molding at our local lumber yard. This material was offered at a reduced rate because it had defects. It was perfect for what I had planned. With sawing and planing, I converted the molding into planks that measured $\frac{3}{8}$ inch thick, by $2\frac{1}{2}$ inches wide. These planks were used to create all the interior trim for our Westwind.

Items made from this material include: a laminated mast-

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

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



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

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

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

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



Hatch and portlight repairs

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

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

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





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

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

Months of work

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

Strangely, the most expensive portion of the entire project was not part of the boat restoration. Back in the 1980s we had a larger sailboat and had the opportunity to spend several months cruising the North Channel in northern Lake Huron. We have always loved that area and have planned to return someday. *Serendipity*, with her shallow draft, is a


perfect boat for North Channel cruising. Getting her there on her own bottom would take more time than we have available. To solve this little problem, we decided to have a special road trailer built that would take *Serendipity* and us to the cruising grounds more quickly than sailing her there. The final product cost \$4,400. Before you say "Wow! That's a lot," stop and figure that having a trailer saves you launch and haulout fees and possibly even winter-storage costs. Just one year's fees for marinas in our area equal half the cost of our new trailer. So our trailer will pay for itself in two years.

Hurdle to overcome

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

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

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

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

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

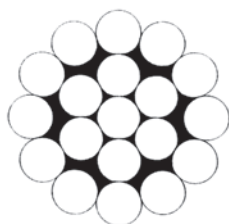


Standing rigging

How changes can affect the strength of a rig

by Ted Brewer

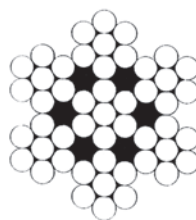
Wire construction



1 x 19



Dyform
1 x 19



7 x 7

IN RECENT WEEKS I'VE HAD SEVERAL inquiries from boatowners asking for advice on mast rigging. Their questions prompted me to write a few words on the subject. One of the queries was the advisability of switching over to the newer, more corrosion-resistant, type 316 alloy stainless-steel wire. Another dealt with the benefits of increasing the wire diameter from 1/4 inch to 5/16 inch on a boat that needed new rigging. These questions were easily answered. In both cases, my reply was, "Don't do it." The reasons are simple but perhaps not obvious unless you are a professional rigger or have been involved in design. First, a bit of background on yacht rigging.

A group of wires concentrically laid about a central wire is termed a "strand." The usual number of wires in a strand of yacht rigging is 7 or 19. A single strand, or a group of strands, forms a "wire rope," or "cable." Wire rope is designated by the number of strands, plus the number of wires forming each strand. The three basic types of wire rope (sometimes just called wire) used for standing rigging are shown above. The most commonly used wire rope in a yacht's standing rigging is 1 x 19 construction, which means that it is made of one strand, composed of 19 wires in all, twisted around a central core. This produces a rather stiff and strong wire rope.

Traditional yachts often use 7 x 7 wire, composed of seven strands, each of seven wires, as it can be spliced

around deadeyes, blocks, or cast thimbles. It can also be swaged. It is much more flexible than the stiff 1 x 19 wire, so it's often used for running backstays.

Even more flexible than 7 x 7 is 7 x 19 wire, seven strands each of 19 wires, but it is not used for standing rigging. It was long the standard for halyards as its great flexibility allowed it to be run over masthead sheaves. But 7 x 19 tended to develop "meat hooks" (protruding wires) with wear, and these took many a long, painful slice out of a crewman's hand, including mine. Fortunately, wire rope has been largely replaced for halyards by the development of low-stretch synthetic ropes and, as one of its numerous victims, I do not regret 7 x 19's passing.

More metal

Dyform wire rope is available in 1 x 7 construction in 3 mm and 4 mm diameter for dinghies and in 1 x 19 construction in larger diameters for yachts. As is evident in the illustration above, the Dyform wire simply packs more metal into a given diameter due to the unusual shape of the individual wires. This makes it both heavier and stronger for any given diameter or, conversely, slimmer and with less wind resistance for a given strength. It is also considerably more expensive. One company prices 6 mm Dyform at more than three times the cost of 1/4-inch type 304 wire. Note that Dyform comes only in metric sizes.

Stainless-steel rigging wire for

marine applications has been commonly made of type 304 alloy. This alloy contains 18 percent chromium and 8 percent nickel and is often termed 18-8 alloy. Type 304 has a lower carbon content than the similar type 302 alloy and thus has somewhat greater corrosion-resistance. Type 304 wire is relatively inexpensive, strong, and resists corrosion quite well. However, it does develop rust stains over the years.

Indeed, it is particularly prone to failure in swaged fittings in warmer tropical waters, as it suffers from crevice corrosion. The corrosion starts just inside the neck of the swaging, where the water can seep in. It eventually expands to a point where the swaging starts to split and peel like a banana. Complete failure is the inevitable result and often ends in the loss of the mast, unless the rigging assembly is replaced in time.

The more corrosion-resistant type 316 stainless steel is made by adding 2 percent molybdenum to the other components of the metal. Unfortunately, type 316 is weaker than type 304, as is shown on the breaking strengths chart on Page 18, and cannot be used size-for-size to replace type 304 wire. It is necessary to increase the size, and this is not always feasible for reasons that will be shown. There is also the matter of cost. For example, 1/4-inch type 316 will replace 7/32-inch type 304 but costs 80 percent more. The need for larger end fittings and other hardware will add to the cost as well. The question you must ask yourself is, "Will it last 80 percent longer?" I have to doubt it.

Cheaper but weaker

Galvanized wire is the least costly wire rope and can prove durable if properly maintained. Galvanized plow-steel wire is considerably weaker than stainless steel, but I have older catalogs showing galvanized aircraft cable in both 1 x 19 and 7 x 7 construction with strengths comparable to that of type 304 stainless. However, aircraft cable may not be readily available today.

“Fortunately wire rope has been largely replaced for halyards ... and, as one of its numerous victims, I do not regret 7 x 19's passing.”

Still, many handsome character yachts are happily sailing around our waters with galvanized 7 x 7 plow-steel rigging, properly sized for the loads, of course.

The secret to giving galvanized wire rope a long life is to soak it in a trough containing boiled linseed oil and then letting it dry before it is set up. After that, slush it down annually with a rag soaked in the oil. I have inspected galvanized 7 x 7 rigging close to 15 years old that was still in good condition as a result of this treatment.

The table below shows strengths of wire rope in the various diameters and materials. The difference in strength between type 304 and 316 alloys is quite substantial so it is, obviously, very dangerous to substitute 316 for 304 of equal diameter. The 7 x 7 wire is weaker still, so traditional rigs need to be given an increase in diameter also. This adds windage, of course, but that is rarely a major concern to the skipper who is in love with the gaff rig.

Since Dyform wire comes only in metric sizes, some compensation in diameter may be necessary. Also Navtec does not recommend the use of Dyform wire with hydraulic backstays due to the reverse lay. The wire tends to unwind with tension, and this has shown to result in undue stretch.

Hayn makes swageless terminals with specific cones to suit the Dyform wire. If swaged terminals are used, they must be purpose-built for metric wire.

The reader is cautioned that swaging Dyform is a controversial practice, and some riggers will refuse to do it. The concern is that there is not sufficient room for the metal to flow. Also, above 10 mm, the strength of the swaged fitting will be less than the wire because the commonly used mil-spec limits the wall thickness of the swage fitting for other reasons.

Designed for bronze

The illustration on Page 61 shows the measurements of marine-eye terminals as used on so many of our boats from the 1960s into the 1980s, and even today. These terminal dimensions were, in all probability, originally designed for the old bronze, hot-zinc socketed terminals (still a great end fitting if you can find them) and continued on unchanged through the era of the stainless-steel swaging. The terminal sizes shown are also similar to those available in swageless terminals.

Just to confuse you, I noticed in a recent catalog that the swaged marine

eye for 5/16-inch wire is now available to fit a 1/2-inch diameter pin as well as the more

usual 5/8-inch pin. I checked it out on my calculator, and the smaller pin is adequate for 5/16-inch diameter 1 x 19 wire, but the yield strength of the pin is too close to the 12,500-pound breaking strength of the wire to suit me. I have to believe the original designers knew what they were doing when they specified the pin sizes, and I do like to see some more meat around parts that are subject to considerable wear and corrosion.

When it comes to turnbuckles, I was surprised to see that one manufacturer makes an open body stainless-steel turnbuckle which, it says, can be used with 3/16- to 1/4-inch wire. It has a 3/8-inch pin, and the manufacturer lists the breaking strength of the turnbuckle at 8,000 pounds, which is below the breaking strength of the 1/4-inch wire. Also, some stainless-steel, tubular-body turnbuckles are made with odd pin sizes, such as a turnbuckle for 1/4-inch wire also fitted with 3/8-inch pins. I certainly would not use them on my boat or recommend them to a client going offshore. It's definitely a case of "buyer beware." A close study of the catalogs is necessary.

Pin size problem

Earlier I mentioned a problem in going to a larger-size wire diameter. The problem lies in the pin sizes. For example, the man who wanted to go from 1/4-inch wire to 5/16-inch did not realize that the terminal pin size would increase from 1/2-inch to 5/8-inch. That would mean the chainplates and the mast tangs would have to be reamed out to the larger diameter with a commensurate loss of strength. It might be safe or it might not, depending on how generous the designer was in specifying the original chainplate and tang dimensions.

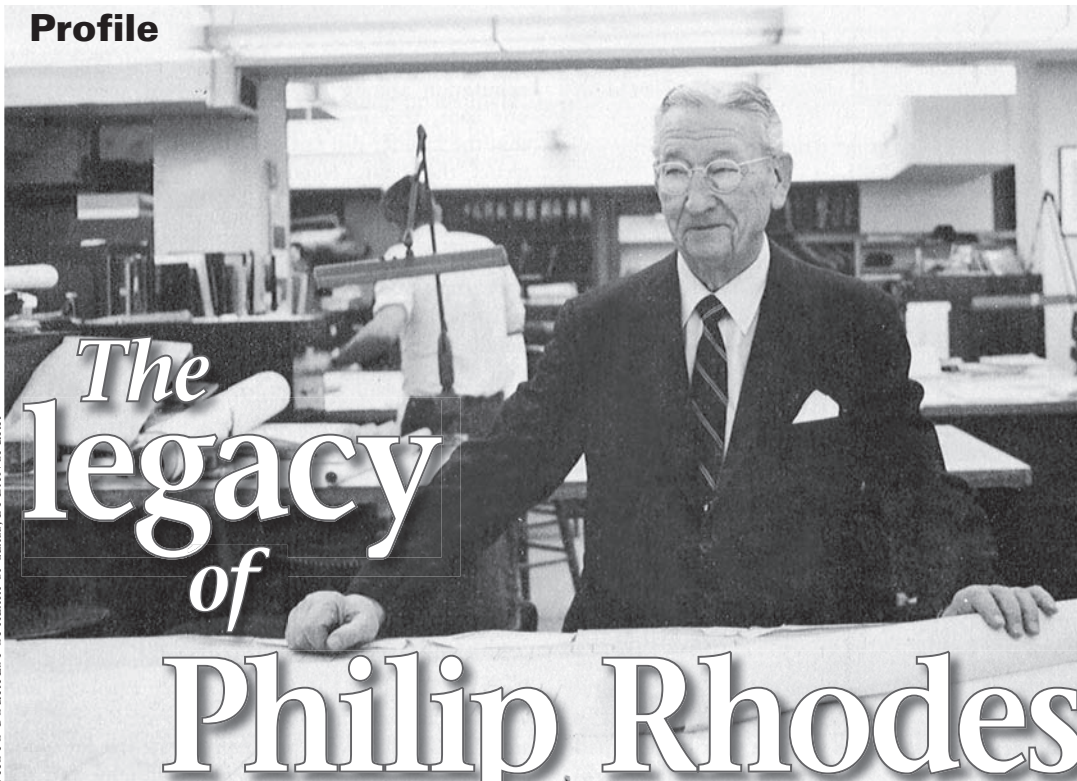
Of course, today you can buy a 5/16-inch terminal with a 1/2-inch pin, but I would not go that route. Instead, I suggested that my client increase to 9/32-inch wire that is 25 percent stronger than the original 1/4-inch, yet still uses the same 1/2-inch pin. Similarly, in upgrading from type 304 to type 316 wire, you must increase the wire

Continued on Page 61

Wire rope breaking strengths in pounds

Diameter in decimal inches		1 x 19 ss 304	1 x 19 ss 316	1 x 19 ss Dyform	7 x 7 ss 304	7 x 7 galvanized plow steel
.0625	1/16"	500				330
.0938	3/32"	1,200			920	735
.1250	1/8"	2,100	1,780		1,700	1,300
.1563	5/32"	3,300	2,500		2,400	2,020
.1875	3/16"	4,700	4,000		3,700	2,900
.1969	5 mm			5,294		
.2188	7/32"	6,300	5,350		5,000	3,930
.2362	6 mm			7,828		
.2500	1/4"	8,200	6,900		6,400	5,108
.2756	7 mm			10,826		
.2813	9/32"	10,300	8,700		7,800	
.3125	5/16"	12,500	10,600		9,000	7,933
.3196	8 mm			13,500		
.3750	3/8"	17,500	1,480		12,000	11,340
.4375	7/16"	22,500			15,600	15,340
.5000	1/2"	29,700			21,300	19,930

Note: Wire manufacturers' catalogues list "galvanized aircraft wire" as having essentially the same strength as stainless-steel 304 of the same diameter and construction.



Philip Rhodes stands over a set of plans at his Lexington Avenue office in New York City.

The legacy of Philip Rhodes

A pioneering designer of many early production fiberglass sailboats

by Ben Stavis

PHILIP L. RHODES (1895 -1974) WAS one of the most distinguished yacht designers of the past century. Indicative of his importance, in February 2005 he and Olin Stephens became the first two yacht designers inducted into the North American Boat Designers Hall of Fame at the Mystic Seaport Museum in Mystic, Connecticut.

A brilliant designer whose boats were beautiful, fast, seaworthy, and comfortable, Phil Rhodes was active for 50 years — from 1920 to 1970. And he was prolific; a listing of his yacht designs totals 386, most of which are sailboats.

Phil was a graduate of MIT's program in naval architecture and marine engineering (1918), so he had unusually strong academic credentials. Moreover, he was active on professional committees that reached into the boating world. These included the Motor Boat and Yacht Advisory Panel of the U.S. Coast Guard Merchant Marine Council, the American Boat and Yacht Council (ABYC), and the Measurement

Rule Committee of the Cruising Club of America (CCA).

Over the decades the list of people who worked in his office and later became distinguished designers or boating industry professionals in their own right, is its own hall of fame: Frederick Bates, R. P. Cook, Roger Cook, Richard Davis, Henry Devereaux, Mark Ellis, Weston Farmer, Ralph Jackson, Charles Jannace, Francis Kinney, Roger Long, Al Mason, James McCurdy, Joseph Reinhardt, Olin Stephens, Robert Steward, William Tripp, Bob Wallstrom, Winthrop Warner, and Charles Wittholz. It is easy to see why Phil Rhodes' influence was so pervasive.

Born on the river

Philip Rhodes was born in 1895 in Southern Ohio. From childhood he was enchanted by boats on the Ohio River: paddlewheelers, barges, and speedboats. His father was a manufacturer of wooden wheels, wagons, and carriages. After his father died his mother married a master carpenter. So Phil learned from an early age about crafting wood.

He designed and built his first hydrofoil speedboat at the age of 18

and soon was publishing articles in *Motor Boating* magazine. He graduated from high school in 1914 and from MIT in 1918, largely converted to the challenge of designing sailboats. His first job was a training position for naval construction at the Boston Navy Yard, followed by a job at the American Shipbuilding Company on Lake Erie, where he helped build ore carriers and became a practical

shipfitter. His later design work was strengthened by his understanding of shipbuilding techniques.

But sailboats were his love. His first sailboat design was a prizewinner in *Motor Boating's* Ideal Series in 1919. He married his high-school sweetheart, Mary Jones, in 1920. Around 1925 he set up his own office in New York, and in 1932 he became associated with Cox & Stevens, a prestigious yacht- and commercial-design firm. In 1935 the head designer died, and Phil succeeded him as chief designer.

A diverse portfolio

Over the course of his career Phil designed sailboats of all types, for all kinds of sailing needs. He introduced countless sailors to the water with his small boats, such as the 11-foot Penguin and the Rhodes 19. His coastal and ocean-racing boats, generally in the 40- to 70-foot range, were always serious competitors. A Rhodes-designed gaff cutter, *Skål*, was second in the 1931 transatlantic race (which was won by Olin Stephens' *Dorade*). *Kirawan*, a 53-foot Rhodes sloop, won the Bermuda Race on her first outing in 1936 against fierce headwinds.

Her sistership, *Senta*, carried her owner on a world cruise from 1969 to 1980. His 12-Meter, *Weatherly*, won the America's Cup in 1962. In 2000, a 40-year-old Rhodes 41 won the Bermuda Race, and *Bengalore*, a wooden

“In those days, among his clients, a yacht seems to have been more for racing and adventure at sea.”

cutter designed by Rhodes in 1928, was second.

His narrow one-design club racers (33 to 36 feet) are quick and agile. His family cruising boats (26 to 50 feet) are prized for their beautiful lines, comfort, and sailing ability. His trailersailer, the Rhodes 22, is popular on inland lakes. And his large ketches and motorsailers in the 70- to 150-foot range carry their owners and guests in style and comfort as they circle the Atlantic from the Caribbean to Maine to the Mediterranean and back. His range is amply illustrated by two consecutive designs in 1966 — a 122-foot three-master for a Rockefeller and a 12-foot aluminum sailing dinghy for mass production.

Phil designed a wide range of hull forms. Early in his career, he emulated Colin Archer's double-ended boats. One of these 1930 designs was converted into fiberglass in 1970 as the Traveller 32. When Alden schooners were popular in the 1930s, Phil designed schooners. When Baltimore clients liked the bug-eye ketch, he designed elegant ones, not unlike the beautiful Cherubini 44. He had no problem drawing clipper bows when clients liked them. Phil also designed light-displacement, fin-keel boats in 1932, 1944, 1946, and 1957 — all before the Cal 40 made fin keels popular.

One of his major contributions was the shoal-draft, keel-centerboard form. Phil developed this hull form in 1932 and used it often through the 1960s in his custom-designed racers and cruisers in the 40- to 55-foot range. They were a little beamier than his normal designs, to increase form stability, but are still narrow by contemporary standards. Of course they had a bit less draft. This configuration gave them less wetted surface area, so they were fast as

well as roomier below. Phil's famous 1955 transatlantic race winner, *Carina II*, was a superb example of this hull form. These keel-centerboard designs were the inspiration for the famous centerboarder, *Finisterre*, designed by Olin Stephens for Carleton Mitchell, who had asked Olin to make *Finisterre* similar to his previous Rhodes-designed centerboarder, *Caribbee*.

In shaping hulls, Phil was eager to test small-scale models. As a child, he had tested models of hulls in an Ohio canal. When the Stevens Institute of Technology's tank testing facility was built in 1935, he began using it immediately. His test boat was *Narada*. Her design was highly praised, and her test data provided the standards by which other performance-prediction methods were gauged.

Thoughtfully designed

Phil was thoughtful in designing accommodations. Whether on a 26- or a 76-footer, he designed cockpits, bunks, lockers, passageways, doors, and lockers that were ergonomically sensible. He was also creative and experimental. On different designs he tried putting the galley forward, midships, aft, and along one side opposite a dinette. On some boats he located the main cabin near the back of the boat. He had several ways of creating a real aft owner's cabin in moderately sized boats.

Apart from those boats with the dinette that converts to a double berth, exceedingly few Rhodes boats have a double berth. No matter how large and elegant the cabins, even if they were double cabins, they had two (distantly) separated beds, and not very wide

ones at that. On his boats in the 70- to more than 100-foot range, there is room for a bathtub in the

owner's cabin and two narrow bunks ... almost 20 feet apart. On *Copperhead*, he came close to having a near double berth, but deliberately made it narrower and put in a "stowage bin" instead.

Obviously the constraint was not space. According to Charles Jannace, a draftsman in Phil's office in the 1950s and '60s, the reason for the absence of double beds was simple: clients didn't ask for them. In those days, among his clients, a yacht seems to have been more for racing and adventure at sea. It wasn't the place for family togetherness or marital bliss. Phil designed boats for sailing, with narrow, secure berths at sea.

While each design was individually developed, when one looks at his overall output of designs, the connections between boats are clear. Each design is an iteration of a previous work. When Phil designed a keel boat, sooner or later the design would be tweaked into a centerboarder. This is clear in the pairs of keel and centerboard 33-foot, 42-foot, and 45-foot designs. Phil himself pointed out the connections between his designs when he wrote to a prospective client that a 45-foot centerboarder was essentially a smaller version of the 53-foot centerboarder, *Carina II*.

One also can see a recurring pattern in interior layouts. For example, in the 45-foot *Olsching*, drawn in 1953, Phil drew a dinette on one side of the boat and a linear galley on the other. This approach shows up in a late 1950s boat, in the 1963 Reliant, and in the Rhodes 22.

I have unique evidence of this continuity. The owner of *Piera*, a beautifully restored sistership of *Olsching*, visited my boat, a Rhodes Reliant. He examined my dinette table and spotted a specially fabricated hinge that enables the table to drop. His boat, built about

While working for Phil Rhodes, Charles Wittholz drew the lines of this 9-foot Dyer Dhow, one of the most popular sailing dinghies of all time.



a decade earlier on a different continent, had exactly the same hinge.

All of Phil's designs follow a set of underlying design principles. The boats are beautifully shaped and proportioned. The Rhodes sheerline is distinctive, rising to a fairly high bow, dropping aft of amidships, and rising modestly to the stern. Medium overhangs give the bow and the stern plenty of buoyancy and increase the waterline under sail. The construction was strong. He did not cut corners.

Phil wanted his boats to be driven hard in Gulf Stream storms, and he used large safety factors to cover the unpredictable stresses of driving into headseas as well as the realities of long-term deterioration of materials. For these reasons a surprising number of old wooden Rhodes boats, as well as 30- to 40-year-old fiberglass boats, are still in commission.

Compared to more modern boats the Rhodes hulls are narrow and heavy with slack bilges. They have less interior volume than the flat, wide, modern boats. Yet the Rhodes boats have a much more comfortable motion. They roll more slowly and pound less. Expressed mathematically, their comfort ratio is very high. People accustomed to modern, lightweight saucer hulls are astounded by the difference when they get on a classic Rhodes.

Pioneer in fiberglass

Phil Rhodes played a crucial role in the transition from the wooden era into the fiberglass era. In the mid-1950s, as Dan Spurr has chronicled in his book, *Heart of Glass*, dozens of individual and corporate boatbuilders and navies in the United States and Europe were experimenting with fiberglass. Dinghies, skiffs, and day-sailers were being successfully built of the new material.

In 1948 the Cape Cod Shipbuilding Company of Warham, Massachusetts, started producing the Rhodes 18 in fiberglass. The next year, Palmer Scott of New Bedford, Massachusetts, built the Rhodes-designed Wood Pussy in fiberglass. And that same year Bill Dyer's shop, called the Anchorage, in Warren, Rhode Island, commenced fiberglass production of the 9-foot Dyer Dhow, also a Rhodes design (though drawn by his draftsman Charles Wittholz).

Larger, auxiliary sailboats were



While most Bounty IIs were rigged as sloops, a few were yawls, such as hull #37, *Tiara*, above left, built in 1959, and long a familiar sight in Hawaiian waters. The 33-foot Rhodes-designed Swiftsure, above right, launched in 1958, was commissioned by Brian Acworth, who founded Seafarer Yachts in Huntington, Long Island; he had the boat built by G. DeVries Lentsch in Amsterdam, Holland.



next. In 1951 Dyer launched the 42-foot fiberglass ketch, *Arion*, and in 1955 a group of yacht club members in Oregon started building the 34-foot Chinook class. Phil was clearly involved in the earliest fiberglass experiments.

For his own initiation into large fiberglass boats, Phil found the perfect collaborator in Fred Coleman. In 1939, Phil had drawn the Bounty class (39 feet) for Fred, a Sausalito, California, builder who had pioneered inexpensive mass-production techniques in wood. Fiberglass had even more potential for mass production, so in 1956 Phil drew up the enlarged 41-foot Bounty II in fiberglass for Fred. Fred also asked William Garden, another naval architect, to provide structural details, such as the layup and tooling, including the deck mold — sort of getting a “second opinion.”

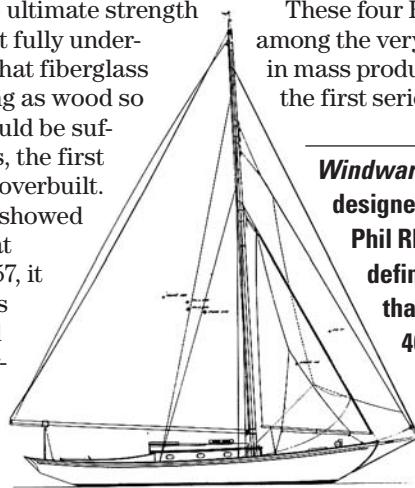
At this earliest stage of the fiberglass revolution, the ultimate strength of fiberglass was not fully understood. Phil figured that fiberglass was at least as strong as wood so wood scantlings would be sufficient. On this basis, the first boat was massively overbuilt. When the Bounty II showed in the New York Boat Show in January 1957, it was evident that this top designer trusted fiberglass. The fiberglass era for large sailboats had begun. The Bounty II molds were later

used to make the slightly revised and very popular Pearson Rhodes 41.

European-built

A number of other fiberglass auxiliary sailboats popular in the United States actually were built in Europe. In 1958, Brian Acworth, an Englishman living in Long Island, New York, set up Seafarer Yachts in Huntington. He asked Phil to design a 33-foot centerboarder for fiberglass production, which he called the Swiftsure. Brian had her built by G. DeVries Lentsch in Amsterdam, Holland, a major yacht builder in wood and steel, obviously eager to start in fiberglass. At about the same time, George Walton, a Maryland yacht broker, commissioned Phil to design a narrower, keel version of the Swiftsure to be called the Chesapeake 32. She was built by Danboats and Sanderson in Denmark.

These four Rhodes designs were among the very first fiberglass boats in mass production (Bounty II was the first series-produced auxiliary



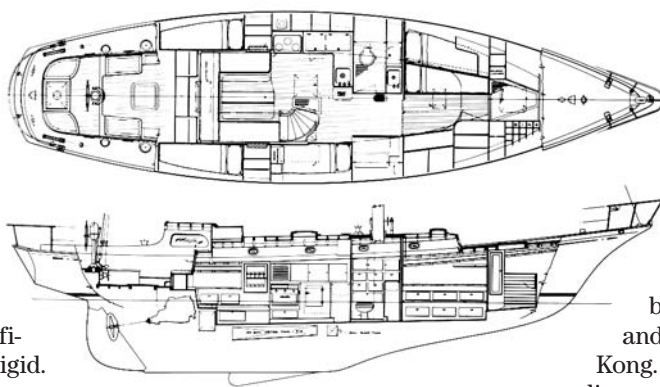
***Windward* is a 36-foot cutter designed in 1928. In this boat Phil Rhodes pretty much defined the hull shape that he used for the next 40 years — gorgeous sheerline and moderate, balanced ends. A sistership built in 1937 is still sailing.**

sailboat in fiberglass) and provided a large portion of the early testing and demonstration that fiberglass was suitable for building medium-sized sailboats. They also demonstrated that fiberglass hulls could be made thinner, though more flexible, thereby necessitating internal bulkheads and stringers to make the fiberglass structures sufficiently rigid. The original idea of making spars for the *Bounty II* of fiberglass was scrapped; fiberglass was too flexible. In fact, after *Bounty II*, scantlings for some of Rhodes' designs were not as heavy or strong. The first few Chesapeake 32s suffered from oilcanning and had to be reinforced with longitudinal stringers.

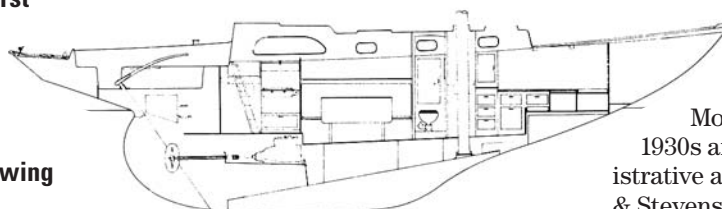
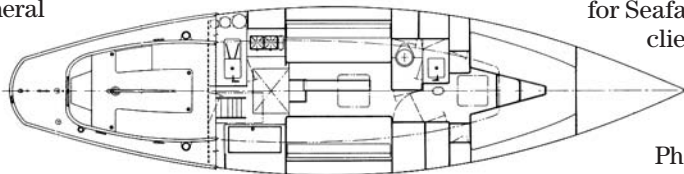
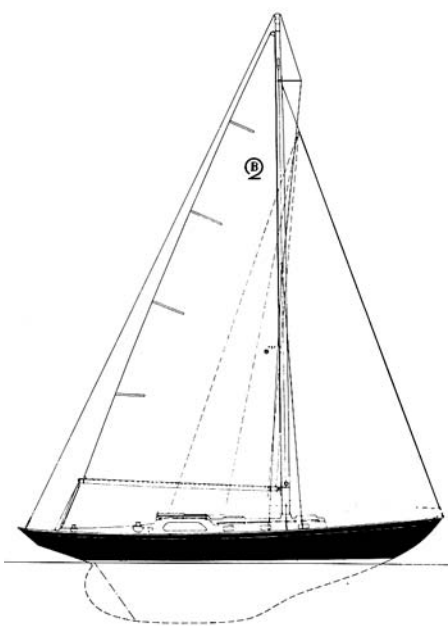
The next year, 1959, Phil designed the *Ranger*, a 28-footer, also for Seafarer. By then several other ground-breaking fiberglass boats were launched — the 25-foot *New Horizon*, designed by Sparkman & Stephens and built by Ray Greene; the 28-foot *Pearson Triton*, designed by Carl Alberg; and the Bill Tripp-designed, Hinkley-built *Bermuda 40*.

In 1960, industry standards for fiberglass production were published in *The Marine Design Manual for Fiberglass Reinforced Plastics*, written by the naval architecture firm of Gibbs & Cox. Now many designers and builders felt they could build fiberglass boats to established standards. The field blossomed with boats and designers, and Phil remained an active contributor to the fiberglass boat revolution. He designed the *Meridian* (26 feet), *Vanguard* (32 feet 6 inches), *Reliant* (41 feet), *Tempest* (23 feet), and *Outlaw* (26 feet). He also designed the popular micro-cruiser, the *Rhodes 22*, in 1968, as he approached the end of his career. That boat is still in production by General

The 39-foot wooden, pre-war *Bounty* was updated after the war as the 40-foot *Bounty II*. Launched in 1956, it was the first series-built fiberglass auxiliary sailboat. The design predates fin keels, spade rudders, and short overhangs. Phil Rhodes was noted for drawing beautiful sheerlines.



The 49-foot *Thunderhead*, designed in 1961, had an unusual interior. Her main cabin, with table and two berths, is aft. Amidships are the head, galley, chart table, and additional berths for the off-watch crew. A large cabin forward would be a particularly comfortable owner's cabin in port. Access to the cabin is through a companionway from the cabintop.



Boats of Edenton, North Carolina (see the article in *Good Old Boat*, May 2005).

The *Reliant* (1963) exposed Phil to some of the new risks of the new materials — piracy. The *Reliant*, a unique three-cabin layout in a 41-foot boat, was brokered by Lion Yachts in Connecticut and built by Cheoy Lee in Hong Kong. Phil was dismayed when he discovered that Cheoy Lee was soon marketing a virtual sistership, the *Offshore 40*. The plug used to make the *Reliant* mold had been altered slightly, the deck mold was mirrored, and iron ballast replaced lead ballast. Phil considered litigation but ultimately decided that only the lawyers would benefit from that approach. Similarly, a *Danboat 33* appeared that obviously was based on his Chesapeake 32 design.

These experiences soured Phil. He designed no more large boats for offshore fiberglass production. As a result, no centerboarders larger than the 33-foot *Swiftsure* were built in fiberglass. They exist now only as rare, treasured wooden boats, some of which have been restored to pristine condition.

Phil was never any company's "house designer," but he worked very closely with a number of builders. For Palmer Scott, a fellow MIT graduate, he designed eight boats. Bill Dyer's Anchorage commissioned eight designs. These two builders did some of the earliest experimental work with small fiberglass boats and must have given Phil confidence to take on the much larger *Bounty II*. Other clients included the South Coast Boat Building Company of Long Beach, California, which purchased nine designs, and Brian Acworth got five designs for Seafarer Yachts. Many individual clients purchased more than one design from him.

Commercial craft

Phil's design work ranged well beyond sailboats. He continued his early interest in motorboats and designed several large ones.

More importantly, in the late 1930s and early 1940s, his administrative activities expanded at Cox & Stevens, and he had more respon-

sibility for commercial and military work. When World War II broke out, the military portion of the firm's work skyrocketed. For a while Phil had 498 men under his direction, working on myriad aspects of a two-ocean war that required fighting ships, troop movements, and supplies.

After the war, in 1947, Cox & Stevens was renamed Philip L. Rhodes Naval Architects and Marine Engineers and continued to do a great deal of commercial and military work. Phil designed many boats for the U.S. Navy, including 172-foot wooden ocean minesweepers in the 1950s. He designed a fleet of police boats for New York Harbor. These won the praise of policemen for speed, stability, and comfort. He also penned garbage and sewage barges for New York City as well as cargo vessels, fireboats, dredges, and steam-turbo-propelled vessels for service on the Yangtze River. In short, if it could float, he could design it.

Work and play

Given these very broad professional obligations, the yacht-design section had its own leadership and staff. Phil discussed plans with clients and settled the basic parameters for new designs, but converting these ideas into drawings was the job of his talented staff. For many years Jim McCurdy was the head of the yacht-design section and had major responsibility for overseeing the drawings and engineering calculations. From 1952

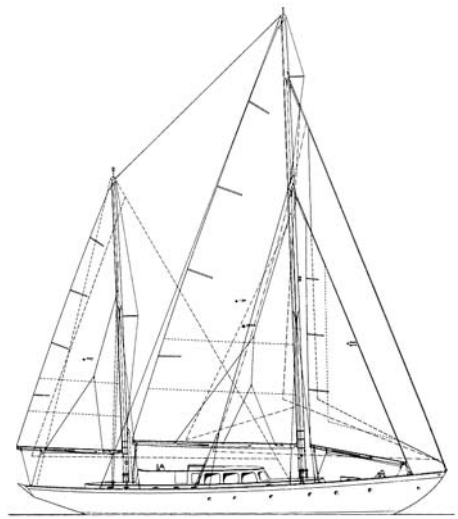
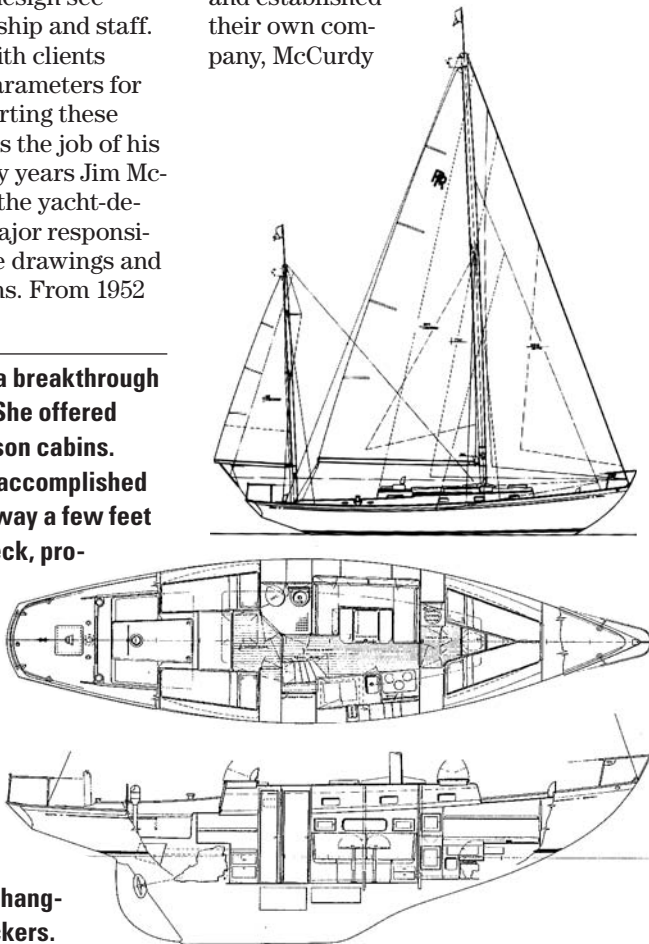
to 1966 Phil's son, Bodie Rhodes, who in 1952 had earned a degree in naval architecture and marine engineering from the University of Michigan, was one of several designers in the office. Another son, Dan, was involved in brokerage.

For all his brilliance as a designer, Phil was not a profoundly expert sailor. He sailed in three Bermuda Races, was in many other races, and certainly was a fine sailor, but he was hardly a world-class tactician or helmsman. His personal boat was the 25-foot, light-displacement *Nixie*, designed in 1933, deliberately a modest boat for a modest person raising three children during the years of the Great Depression.

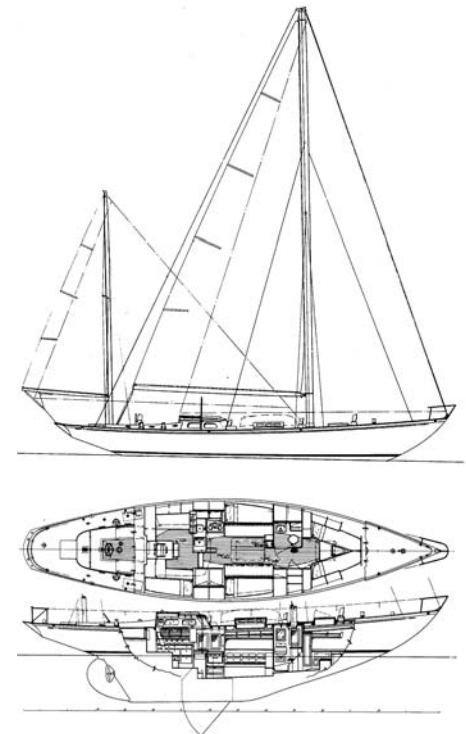
Later, in 1957, he owned a 52-foot aluminum twin-screw diesel express cruiser, adapted from a design to service offshore oil drilling rigs. The boat was used for weekend cruising as well as for hosting clients and guests and for observing America's Cup trials.

By the late 1960s Phil had slowed down. In 1966 Jim McCurdy and Bodie Rhodes formally left the Rhodes office and established their own company, McCurdy

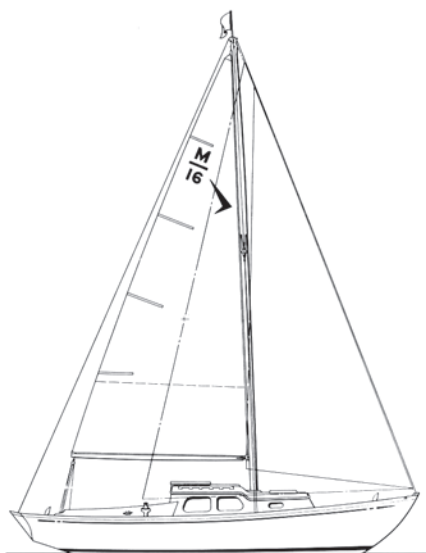
The 41-foot Reliant had a breakthrough interior design in 1963. She offered three separate two-person cabins. This unique layout was accomplished by an offset companionway a few feet forward of the bridge deck, providing access directly to the main cabin and leaving the aft cabin private. The dinette/double bunk to port and linear galley to starboard saved enough space so there could be a comfortable forward cabin with a sink, hanging locker, and other lockers.



The Rhodes 77 was a large centerboarder drawing only 6 feet 6 inches with the board up. She has a nicely divided rig. The interior provided three double cabins for the owner and guests aft of the deckhouse. Forward was space for a crew of three. A 97-foot stretched version had larger cabins and space for a crew of six (skipper, mate, cook, steward, engineer, and deckhand).



***Carina II*, a 53-foot centerboarder and big sister to *Olsching*, was designed in 1955 and immediately after launching won the 1955 transatlantic race. She continued winning for the next decade. Sadly, she deteriorated and sank at a mooring, damaged beyond restoration, in 2004.**

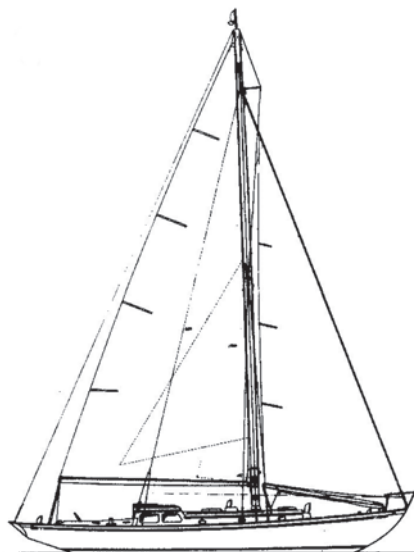


The *Meridian* was designed in 1961 and built of fiberglass. She is Phil Rhodes' pocket cruiser, only 25 feet long, sleeping four with 6 feet of headroom. With a full keel and jaunty sheerline, she is a little sister in the Rhodes family.

and Rhodes, in Cold Spring Harbor, Long Island. The last sailboat from the Philip Rhodes office was dated 1970. After that he continued to work in his office, did some commercial work, and continued to correspond with owners of his yachts, advise them, and share their adventures of racing or circumnavigation. He died in 1974, a year after Mary, his wife of 53 years.

Post script

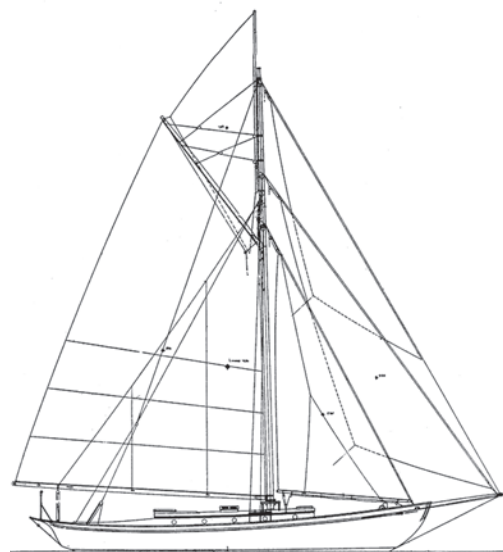
Phil's yacht archives, with hundreds of designs, were donated to the Mystic Seaport Museum, where they remain accessible to the public. The design



Olsching is a 45-foot centerboarder, designed in 1953. Several were built from her plans. They have been highly competitive racers and very comfortable cruisers. Sisterships are in Nantucket, England, and Australia.


files that the Mystic Seaport has are labeled "for research only," but they are wonderfully detailed plans for construction. The Reliant file, for example, has 25 sheets, including construction specifications for both wood and fiberglass, plans for wood or aluminum spars, and alternative layouts.

There are many small sheets with plans showing exactly how to make mast hardware — tangs, special fittings, and chainplates — how many bolt holes, what diameter, and where to place them. They specify exactly how to position the top hole and how much metal must surround the hole.



Skål, 48 feet overall, was designed in 1930, primarily as a seagoing cruiser, but she also was fast. In the 1930 Bermuda Race she finished 11th out of 42 and weathered an 80-knot blow on her return. The next year she competed in the transatlantic race. *Dorade* became famous for winning that race, but *Skål* did very well, coming in second. She is currently undergoing a complete restoration in France.

The aerodynamic shape and orientation of spreaders is also shown. Whatever affected the structural integrity of hull or rig was carefully specified and not left to the whim of builders.

The McCurdy and Rhodes company continued for about 30 years, obviously rooted in the Philip Rhodes yacht tradition but adapting to new ideas of design. They continued to provide designs for Seafarer Yachts. In the late 1990s, both Jim McCurdy and Bodie Rhodes died. Jim McCurdy's son, Ian, continues the corporate name and family tradition. 

More information

An excellent collection of Phil Rhodes designs is Richard Henderson's book, *Philip L. Rhodes and his Yacht Designs*, 1981, with additional printings in 1993. This book is now out of print and hard to locate. The simple way to get it is to ask a library to order it from inter-library loan. Occasionally it shows up in the used-book market at a high price.

On the web, check Ben Stavis' website <<http://astro.temple.edu/~bstavis/rr/rhodes.htm>> which can be considered an updating of Richard Henderson's book with photos and links for many Rhodes boats. The site includes photos of major restoration projects of classic Rhodes boats.

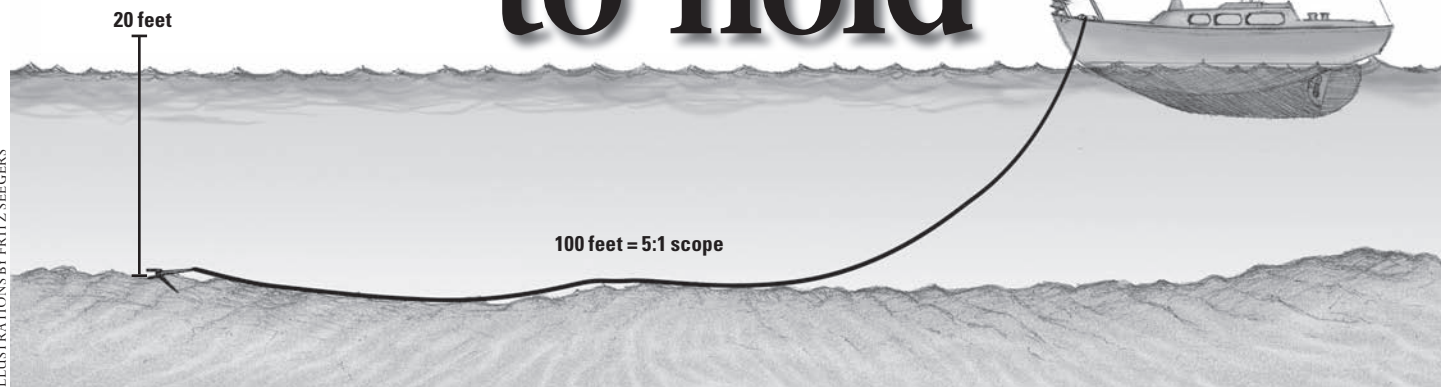
Plans for most of the original Rhodes designs are available at nominal prices from the Mystic Seaport Ship Plans Collection <<http://www.mysticseaport.org/library/collections/ships.cfm>>, shipsplans@mysticseaport.org, phone 860-572-5360.

For further reading ...

Dan Spurr's book, *Heart of Glass*, about the history of fiberglass boatbuilding, was an instant success with good old sailors when released in 2000. This book is available at <<http://www.goodoldboat.com/bookshelf.html>> or by calling 763-420-8923.



To have and to hold



ILLUSTRATIONS BY FRITZ SEEGER

The basic rules of anchoring — and staying put

by Don Launer

EVERYONE WHO OWNS A BOAT WILL have occasion to anchor at one time or another, perhaps when cruising overnight, clamming, fishing, swimming, or visiting friends by water. There are many variables when anchoring: the type of anchor and ground tackle; the composition of the bottom; the type, size, and windage of the boat; the speed and direction of the tidal flow; and the wind speed and direction.

The wind

This last factor — wind speed and direction — makes anchoring a challenge along our coastal waters. On large bodies of water the wind usually follows a daily recurring pattern, which is termed *diurnal*. This pattern ordinarily consists of winds being very gentle in the morning. Then around 11 a.m., little cat's-paws wrinkle the surface as the sea breeze picks up. Wind speeds from this sea breeze increase until about 4 p.m. and begin to die down toward sunset. As any boater knows, these afternoon winds can sometimes become daunting, much greater than those that were forecast.

This sea breeze along the coast is a very local effect. It is created when the air over the mainland is heated

by the sun and rises. Then cooler air from over the water blows toward the land to fill in the gap left by that rising air mass, creating the sea breeze. This sea breeze is also modified by the prevailing winds. Furthermore, the sea breeze will also change direction as the day progresses. In the Northern Hemisphere the earth's rotation causes this wind to shift clockwise during the day, as the wind tries to reach what is known as geostrophic equilibrium. (In the Southern Hemisphere this shift in wind direction is counter-clockwise as the day progresses.)

This makes anchoring a challenge.

“...by late afternoon the sea breeze will have shifted around clockwise, and your anchorage may no longer be protected.”

If you've picked a protected anchorage in the late morning or early afternoon, you can be reasonably sure that by late afternoon the sea breeze will have shifted around clockwise, and your anchorage may no longer be protected from wind and waves.

But have you ever wondered, when the wind was trying to blow the paint off your boat, exactly how many pounds of force the wind was exerting on your anchor line? There have

been several attempts to characterize the loads on an anchor system. Some approaches use a purely theoretical calculation of drag caused by wind. Other researchers have simply made measurements in actual conditions.

The published results vary so widely that it is difficult to rationalize their differences. The American Boat and Yacht Council (ABYC) has a table in their standard H40. In the latest revision they call the table “Design Loads for Sizing Deck Hardware.” For purposes of comparison, the design load for a 30-foot sailboat in 30 knots of wind (classed as a working anchor load) is 700 pounds. The same 30-foot boat is listed to have a design load of 1,400 pounds in 42 knots of wind (classed as a storm anchor load).

Direct measurements by naval architect Robert Smith, published in his book, *Anchors, Selection and Use*, give the loads for the same boat as 192 pounds at 30 knots and 375 pounds at 42 knots. This is a comparison between calculated loads and actual measured loads, but the ABYC table states that the loads are design loads, which certainly have a safety factor (although the ABYC does not say what the safety factor is), and the ABYC table claims

to account for wind, current, and wave action. Robert Smith's tests were conducted in a level area of the Columbia River with a fine sand bottom and a fetch of four miles to windward.

Fortunately, retailers and anchor vendors offer advice on the selection of anchor gear. Also, there is an excellent and well-reasoned section in *Nigel Calder's Cruising Handbook* that goes into great depth about the selection of anchors and rodes.

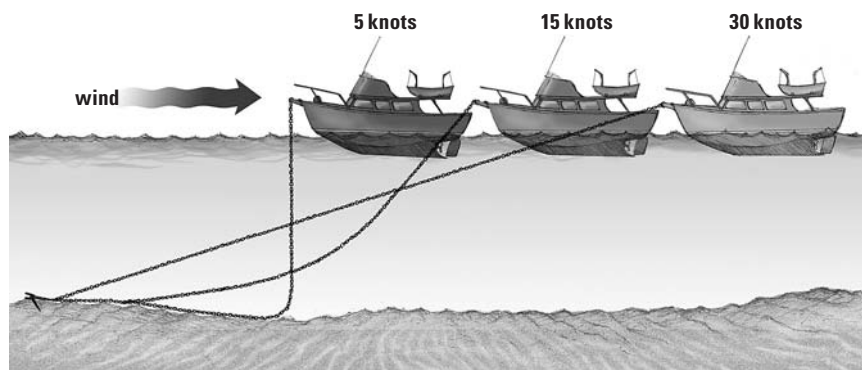
So putting actual numbers to the matter may be difficult, but doing something sensible in the way of designing anchor points and selecting gear is still possible.

In any case, it is good to remember that the force exerted by the wind on your boat and the strain on the anchor line increases as the square of the wind speed. In other words, as the wind speed doubles, the force becomes four times greater. For sailboats (or powerboats with a fly-bridge and tuna tower), the wind resistance is dramatically higher because of the larger square-footage exposed to the wind.

The anchor

Boatowners are very defensive when it comes to the type of anchor they use; they defend their choice of anchor with an almost religious vigor — so I will refrain from entering the fray by not suggesting any specific anchor type. Generally, manufacturers' ratings for anchors, nylon lines, and chain are dependable. The type of bottom, however, has a profound effect on any anchor's ability to set and hold. Soft mud, for example, can reduce holding ability by as much as 85 percent. Also be aware that a "bargain" anchor may not be such a bargain when the wind pipes up.

One of the blessings of modern anchor design is the high holding power compared to anchor weight. This is because, rather than depending upon deadweight, modern anchors are designed to make use of the pull of the boat, together with the forces of wind and wave, to make the anchor bury deeper into the bottom.



The anchor rode

To do this, we need to let out enough anchor rode to allow the anchor to lie nearly flat on the bottom. Aside from the anchor itself, the angle of pull on the rode is most important. The length of this rode is expressed as scope. This is the ratio between two distances: the length of the anchor rode and the distance from the sea bed to the deck of the boat at the point of pull. If the distance from the deck of the boat to the sea bed is 10 feet and we have let out 50 feet of anchor rode, our scope ratio would be 5:1 (see illustration on Page 25).

Most anchor manufacturers recommend minimum scope ratios between 5:1 and 7:1, but with high winds or a soft bottom, more scope is needed. Below 5:1, the holding power of an anchor falls off very rapidly, so many experts suggest at least a minimum of a 7:1 scope, if you have enough swinging room. Remember that in areas of high tides or when storm surges are expected, a respectable scope at low tide can turn into a poor scope when the tide or surge comes in.

Although we have been talking about anchor line, many boaters insist on using all chain for the anchor rode, since chain has the ultimate chafe-resistance. Their reasoning is also that the chain's weight causes a sag, called catenary, and as the boat surges, some of the catenary is taken up, absorbing the shock load.

Depending entirely on this catenary to absorb shock loads is not recommended. It takes very little force to make this sag disappear, leaving the boat at the mercy of what amounts to a solid bar of steel between the anchor and the bow of the boat. And when your bow is connected to the anchor with a solid bar of steel and starts pitching up and down in a chop,

something has got to give. This often results in the anchor being yanked out of the bottom. With an all-chain rode you need a cushioning for those jarring shock loads. A nylon line, with a chain hook at one end acting as

a snubber, is a simple way to take up these shocks. This snubber line should be of relatively small diameter to provide as much elasticity as possible, since the amount of stretch is inversely proportional to the square of the line's diameter.

Abrasion-resistant

An advantage of all-chain rode is that it cannot be cut by sharp rocks or coral or abraded at the bow chock. In addition, the chain's weight makes the pull on the anchor more horizontal, aiding in the setting process.

Additional factors to consider when using all-chain rode are that it is expensive, has a great propensity for collecting mud, and puts a large weight into the chain locker at the bow of the boat where it's not wanted. Also, with age some of the galvanizing will wear off and the chain will begin to rust.

It's in heavy blows that we need good shock absorption in our anchor system the most, an anchor rode of three-stranded nylon provides the best shock absorption. This is derived not from catenary but from the line stretching. However, an all-rope rode will be subject to chafe as it scrapes along the bottom, especially if some of that bottom is rocky. This all-nylon rode is also subject to abrasion where it passes over the bow chocks.

Nevertheless, nylon has excellent strength, abrasion-resistance and, of all the fibers available, it has the best shock-absorbing ability. At its normal working load of 11 percent of breaking strength, three-stranded nylon has a 23 percent elongation rate. At 75 percent of breaking strength, a 100-foot section of nylon will become 142 feet long. Rigger Brion Toss, on the other hand, suggests considering Dacron instead of nylon. Although Dacron doesn't have as much stretch as nylon,

“Boatowners are very defensive when it comes to the type of anchor they use; they defend their choice of anchor with an almost religious vigor...”

it does stretch. Also, although it doesn't

have the strength of nylon when nylon is dry, wet nylon loses 10 to 15 percent of its strength and becomes weaker than Dacron. Regardless of whether nylon or Dacron is used, the bow chock it passes through should have the smoothest, largest radius possible, and the line should preferably be protected by chafing gear at this point.

Chain adds weight

To protect an all-rope rode from bottom abrasion and to add more weight during the setting process, a section of chain is necessary. The length of this chain will vary for different regions. For lunch-hooks, as a general rule 6 to 12 feet of chain is more than enough chain in most anchorages, except where extensive outcroppings of rock or coral may be encountered, but the anchor rode should always include nylon or Dacron line... ideally, as much as possible. When anchoring overnight or in storm conditions, it is recommended that a chain length of one half to one full boatlength be used. In these conditions an all-chain rode could also be used, but it should have a nylon snubber.

When an anchor line is connected to chain, the chain should be at least half the diameter of the nylon line; that is, for a 1/2-inch nylon rode, you should use at least 1/4-inch chain. There are several methods for connecting these two components of the anchor rode. One is by using an eye-splice and thimble at the end of the nylon rode. A shackle is then used to connect the thimble at the end of the nylon section to the chain. This shackle should be one size larger than the chain. That is, if 1/4-inch chain is being used, use a 5/16-inch shackle to attach the nylon line to the chain.

One of the problems with using a shackle for this chain-to-rope connection is that, if the anchor hasn't broken loose when this connection reaches the bow chock, you have a problem. One trick is to join the rope and chain so there are no hang-ups as it passes through the bow chock. This can be done using a chain splice, which allows the attachment point to

come through the bow chock so the chain can be led into the gypsy of the anchor windlass. However, this splice can be tricky for the novice. An excellent reference work for this job is *The Complete Rigger's Apprentice*, by Brion Toss.

Chain types

There are many options in selecting the chain part of your rode. In the section on windlasses on Page 28, we'll discuss the requirements for the links of that chain.

Proof coil chain is made of low-carbon steel that is not heat-treated. It is usually designated as Grade-30, which describes its strength and will usually have "G3" cast into each link. Its name comes from subjecting the chain to tensile strengths until it breaks. This is its proof load. The chain's working load rating is usually 50 percent of the proof load. Although proof coil chain has comparable weight and strength to BBB chain, it is the least expensive of the three types, since there are fewer links per foot.

BBB chain (known as triple-B) is also a Grade-30 low-carbon steel that has not been heat-treated. It can be identified by the "3B" cast into each link. It has been the chain of choice for boaters for years since its added weight creates more of a catenary and its shorter links have less chance to deform.

High Test (HT) chain is made from high-carbon steel that has been heat-treated to increase its strength. It is Grade 43 and has a higher strength-to-weight ratio than either proof coil or BBB chain. It has "G43" or "G4" cast into each link. Its higher strength-

to-weight ratio means that for a given strength

there will be less weight in the chain locker. Although it has slightly longer links than BBB chain, many windlass manufacturers specify HT chain as the most compatible with their winches.

All these chains are galvanized by electroplating or hot-dipping. Hot-dipping is preferable because of the thicker zinc coating that is produced. Short sections of anchor chain can be purchased with a thin polymer coating that improves the chain's appearance and provides some deck protection. Vinyl coatings are also used. This makes the overall chain thicker but adds much more protection. Unfortunately, with coatings it's hard to tell what type of chain is being used, and the coatings have a limited lifespan.

Stainless-steel anchor chain is also available. This is 316 stainless. It is bright and shiny and has excellent corrosion-resistance. For any given size of chain, it is stronger than either of the low-carbon steel, galvanized counterparts, proof coil, or BBB, but not as strong as high-carbon HT galvanized chain. It is also considerably more expensive than any of the galvanized chains. It does, however, prevent rust stains on the foredeck and there is no galvanizing to wear off.

Windlasses

Large anchors firmly embedded in the bottom become almost impossible to break loose by hand, especially after a blow. Of course you can usually motor or sail them out, but that can be tricky if you're sailing solo. And you're usually left with an anchor very heavy with mud. For larger boats or for boats with older sailors an anchor

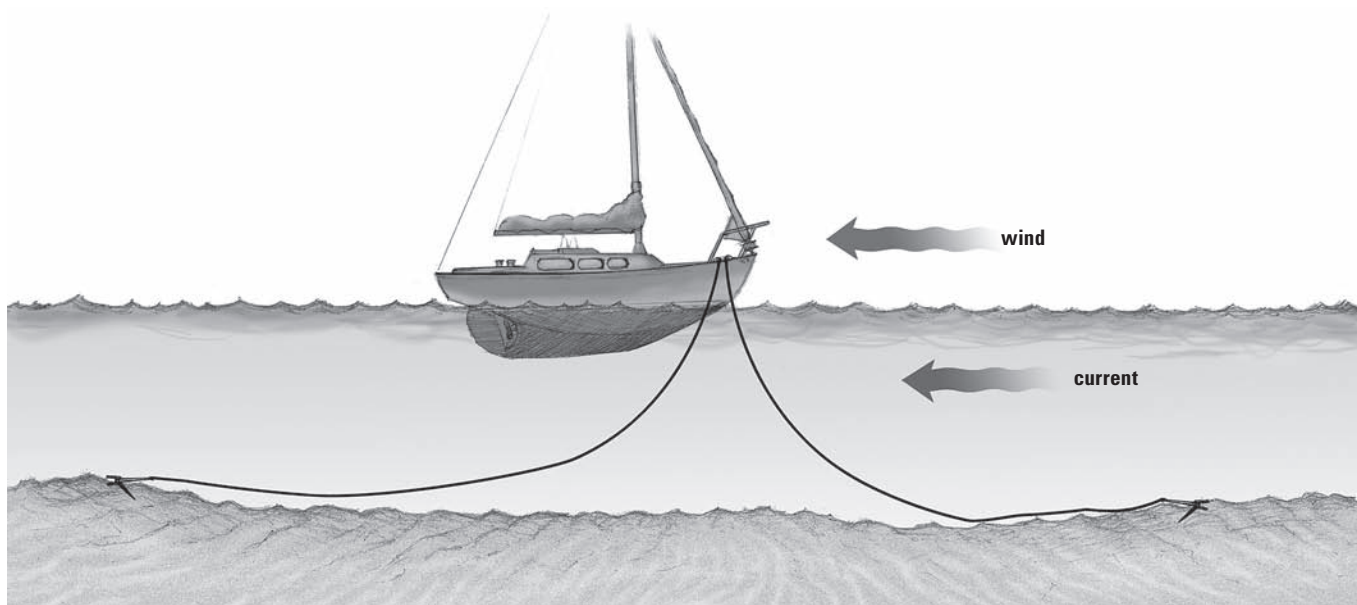
Resources

The Robert Smith book, *Anchors, Selection and Use*, 3rd edition

Send \$11.95 to: Isabelle Smith
1825 NE Fremont St.
Portland, OR 97212

Anchor tests run by the Safety at Sea Committee of the Sailing Foundation

<<http://www.vicmaui.org/2000/main.htm>> (Click: Resource. Scroll down to: Articles. Choose: Safety.)



windlass — electrical, hydraulic, or manual (vertical or horizontal) — is a great asset.

Most anchor windlasses have a drum, or capstan, for hauling up the line portion of the rode and a chain gypsy to haul up the chain portion. This chain gypsy has cutouts that must match the links of the chain being used. It's necessary, when buying anchor chain or a new windlass, to make sure the two are compatible.

When anchoring, many boaters use an anchor buoy, which floats above the anchor and allows the anchor to be retrieved vertically, enormously reducing the pull required to break the anchor out. However, one of the problems when using an anchor buoy for an overnight anchorage is that when there is a tide or wind change during the night, the boat can override the buoy's rode, which can become tangled in the propeller or rudder.

Dragging anchor

In most waters, 180-degree wind shifts are not unexpected. Added to this is the reversal of tidal currents along the coasts. So anchoring for an extended period can cause drastic boat swings while at anchor. But won't that anchor reset itself automatically following a wind or tide shift? Of course it *may*, but you're playing Russian roulette if you count on it. The only way to increase your odds substantially is to set two anchors.

The most effective anchor plan using two anchors is known as Bahamian mooring. With this system the anchored boat can swing through 360 degrees while affecting the direction

of pull on either anchor very little.

With two anchors deployed in a Bahamian moor, the risk of changing the direction of pull on the anchor is greatly reduced when there is a tide or wind change, and the boat's swinging circle is also reduced dramatically. The disadvantages of this anchoring system are that your swinging circle may not correspond to other boats anchored nearby.

It's also possible that one of the anchor rodes can become tangled in your prop or rudder. In addition, the two rodes can become twisted around each other as the boat swings around. These possibilities could make leaving in a hurry difficult if conditions in your anchorage deteriorate.


Grassy bottoms

There's one further consideration when anchoring in coastal waters: grassy bottoms. Most of us condemn this grass when it fouls the props of our outboards and for its noxious smell when tossed up on the beach or drawn into the head.

But bottom grass occupies an important place in the ecology of our waters, providing breeding grounds for essential parts of the food chain. Since grass requires light to prosper, it will not be found in deeper water, but deeper water is not usually where boats are anchored.

The problem when anchoring in grass is that the anchor may lodge itself firmly in a clump of grass and seemingly be well-set... until the wind picks up and the grass clump is pulled out by the roots. Then the anchor, with its flukes firmly embedded in the clump

of grass, will go dragging along the bottom and be incapable of resetting until it is pulled up and disengaged from its lump of sea bottom. There's no simple solution for this problem other than trying to make a visual inspection of your anchoring area and picking a bare spot with no grass. This not only preserves the grass, but it also allows for greater holding power.

Every time you anchor, the tide, wind, waves, and bottom conditions will be different and challenging. Although anchoring may seem to be a vexing problem, the rewards of boating include its multiple facets, one of which is the challenge of being faced with a problem and solving it based on your skill and experience. As knowledge and confidence in your boating skills increase, the pleasure of being on the water is also heightened. Safe anchoring is one of those skills. 

For further reading ...

The Complete Book of Anchoring and Mooring, by

Earl Hinz;
Staying Put,

by Brian

Fagan;

and *Nigel*

Calder's

Cruising

Handbook,

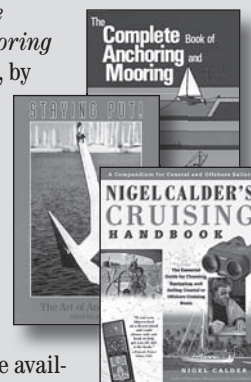
by Nigel

Calder. All are avail-

able at <[http://www.](http://www.goodoldboat.com/bookshelf.html)

[goodoldboat.com/bookshelf.html](http://www.goodoldboat.com/bookshelf.html)> or by

calling 763-420-8923.



Solo voyaging

How to equip your boat for the wild blue yonder

by Louk Wijsen

VISIT A MARINA, YACHT CLUB, OR BOAT show, and you will meet or hear of sailors who are planning a long cruise or circumnavigation. Many own older boats whose movements are not restricted by banks and insurance companies. A surprising number intend to go solo or with only one other person, usually a spouse or significant other.

I have met these happy and self-reliant sailors in ports around the globe, and I know that every day brings them a new experience or achievement. Satisfactory voyaging depends to a great extent on mindset, but the second most vital ingredient is proper equipment. There must be the proper tools as well as an energetic interest to make a cruise possible. Here is my list of what equipment makes singlehanded and shorthanded sailing safer and less exhausting.

The proper vessel

It goes without saying that the solo skipper must have the proper vessel in addition to the skills to sail her alone. For most people what constitutes a proper vessel is based more on assets than convictions. It is a happy coincidence that older boats are frequently of better construction than newer ones and that, because they are older, they are cheaper. I will not try to define a proper vessel, other than to state some of my own prejudices and preferences.

To leave no doubt that I am subjective, I reject any vessel that is aesthetically challenged. If you intend to spend much time on board a boat, she must be attractive to you. Would you want a significant other of whom you apologetically say that at least he is good at bringing home the bacon or that she cooks gourmet dinners? Fortunately, sailboats to sailors resemble taxes to politicians — rarely do they look unattractive.

For me, the boat must be strongly constructed. I know about new materials and methods of construction, breaking strengths and such, but I seek old-fashioned strength. I want a thick, overbuilt hull, a long keel, over-size mast and rigging, massive chainplates, and the like. These would raise building costs so much today that the boats would become too expensive for



Like other sailors, singlehandlers sleep better if their boat is equipped with heavy ground tackle, lots of chain, a dependable windlass, and a strong attachment point, such as this samson post.

most markets. Fortunately, scores of older boats meet these criteria.

For a variety of reasons, my preferred cruiser is of fairly high displacement. I also like double-enders. To offset the inevitably less-than-opti-

pretty and a joy to see but not to sail.

The boat must be small enough to allow one person to handle all tasks but not so small that even daring sailors doubt your good judgment. Something between 27 and 37 feet in length

“Satisfactory voyaging depends to a great extent on mindset, but the second most vital ingredient is proper equipment.”

mal sailing abilities of the heavy-displacement cruising vessel, she should have a high-aspect rig, as well as light-air sails. A cutter rig is most practical because it best allows adjusting the sail plan to the circumstances. A sloop will do. I reject gaff rigs and schooners and — for vessels under 40 feet — ketches and yawls. They are all

makes sense to me. Her full or long keel encapsulates the ballast. Her rudder is strongly attached to skeg or keel. She must have a functional interior with sufficient headroom to stand up and comfortable places to sit and sleep.

Some readers will be up in arms about my preferences. But every boat is a compromise, so subjectivity is

“We are discussing cruisers, not racers. No boat can excel at both.”

inevitable. For instance, is 27 to 37 feet really the right size boat for a particular skipper? It depends on many factors, such as the skipper's physique, the boat's design, and the planned voyages. Follow your own preferences and insights, but be aware that comfort and safety are increased if the boat tracks and heaves-to well and remains a stable platform in deteriorating conditions.

Fin-keel boats tend to be at a disadvantage in this regard but have attractive characteristics in other regards. Remember, though, that we are discussing cruisers, not racers. No boat can excel at both.

When all is said and done, the most decisive factor in making singlehanded voyaging safe and successful is the skipper. There's no better way to determine if he or she is up to the challenge than by setting sail and experiencing it.

1 A self-steering device

Few pieces of gear compensate for the lack of crew, but a good self-steering system comes close. If that robot keeps the boat on course while the skipper handles other tasks or rests, it is indeed a substitute for a competent helmsman and is taciturn to boot. It is foolish to go without.

The subject of electromagnetic and wind-driven self-steering is vast. The former keeps a compass course and demands adequate battery power. The latter keeps a course relative to the apparent wind and uses wind power. As for which one to choose when both systems are practical for the particular boat and voyage is a matter of resources. If the budget permits, the optimal solution is to have both.

If the sailing will be mostly coastal, buy an electromagnetic autopilot. They are more capable of steering precise courses in coastal areas dotted with navigation hazards and plagued by changing winds. Purchase one rated for nearly twice your boat's LOA and displacement. If the planned voyages are primarily blue-water passages, buy a wind-driven system, preferably one that operates or could operate independently from the boat's rudder and thus serve as

Vital and desirable gear

I can speak of the days long gone when passagemaking inventories of navigation instruments consisted of compass, sextant, depth sounder, and perhaps an RDF. It's not that we were all Luddites in those days. For the smaller yacht there was simply not much else available. Power consumption, weight, and size ruled out most of the more advanced equipment that began to appear first on ships.

Today's modern yachts, even those used primarily for daysailing, frequently sport more electronics than a freighter of 35 years ago. In my opinion, the keep-it-simple principle remains valid but only to a degree. No one should depend on gadgetry, but certain equipment does make sailing safer and easier and overcomes some



an emergency rudder.

Ultimately, your choice will be influenced by the kind of voyages you plan to undertake, your budget, the system's power consumption, complexity, and perhaps installment considerations. Unfortunately not all self-steering devices perform equally well on a given boat. Before you get out your checkbook, ask skippers who have experience with the particular model you're considering.

of the commonly encountered problems in solo sailing. This gear

is equally useful on the fully crewed yacht. Even the low-budget sailor can now take some of the pain out of singlehanded sailing.

I will not dwell on those items whose need or desirability goes without saying: good sails for heavy weather and light air, adequate ground tackle, a functional galley.

The most immediate disadvantage in singlehanded sailing is that the sailor's two hands remain in close proximity to each other. Skilled as they may be, this one pair can never fully compensate for the lack of other hands when tasks must be performed simultaneously in different locations. Planning and equipment can largely alleviate the problem. For this reason, I regard 15 pieces of equipment as either crucial or highly desirable for solo cruising.

In some situations you'll find that either the electromagnetic or the wind-driven system clearly outperforms the other. That is not as important a criterion as which one is incapable of steering the boat in all but optimal conditions. Avoid purchasing an underpowered electromagnetic autopilot simply because you intend to use it only in calms. The system must be capable of controlling the boat in adverse conditions. There is probably nothing on the market that can handle all conditions and all situations. Find one that does not force you to hand-steer or heave-to as soon as the wind picks up or a sea builds.

A compromise may be to purchase a windvane autopilot and a small electromagnetic tiller autopilot. Although incapable of steering the boat by itself, the tiller pilot can be put to work in conjunction with the windvane system and give it the input commands that normally would come from the vane's responses to changes in apparent wind. This creates a form of energy-efficient power steering that is unaffected by wind changes or calms. A friend successfully used this system on his heavy-displacement 43-foot ketch during a three-year circumnavigation.



6 A remotely controlled VHF radio

Occasionally a sailor must communicate by VHF radio with vessels or harbors. A handheld VHF used in the cockpit may suffice, but it is far better if the main VHF with its masthead antenna and greater range can be operated from the cockpit. Installing the primary VHF in the cockpit invites damage and theft; running back and forth between the helm and a radio is impractical. Mount a VHF radio with remote access microphone (RAM) capability inside the cabin. Install the RAM in the cockpit. That allows control of all the functions of the radio from the cockpit while the RAM serves as a remote speaker.

5 Radar

Having radar is far less crucial than most sailors assume. Radar is a great navigation aid, although it takes second place to the GPS chart plotter. Where radar is of great importance is as a lookout, especially in dense fog, at night, and in other conditions of poor visibility. It can give the solo sailor a badly needed margin of safety while he is belowdecks or occupied with other tasks. Purchase a radar that gives an audio alarm when targets show up in a designated area. In combination with an alarm or collision avoidance device that alerts to incoming radar signals, much of the risk of not maintaining a proper 24/7 lookout can be eliminated. Unfortunately, on smaller vessels the radar and collision avoidance device cannot be operated simultaneously since the radar signal will be read by the detector as a very strong signal very close — so close that it seems to come from all directions. I have the CARD radar detector. It will not break down if I leave it on when using the radar, but it will only detect my own radar. When operating the radar, I generally leave it on with the audio alarm turned off.

Mount a radar monitor on a heavy-duty bracket that allows it to swing out into the companionway so it can be observed from inside the cabin as well as from the helm.

8 Self-tailing winches

Self-tailing winches are more than a mere convenience for the solo sailor, but if the boat does not have them, contrary to what some believe, the rubber Wincher Self-Tailers that fit over top of non-self-tailing winches will work well. They require that the line be wrapped around the drum a sufficient number of turns to get the needed friction, which is what many critics overlook. I have used them on sheet and halyard winches and found that, even in gale-force winds,



they can hold a sheet until there is an opportunity to cleat it.



9 Sissy bars or mast pulpits

Often boats are advertised as equipped for singlehanded sailing, which usually means that halyards and other lines are led through blocks to rope clutches near the cockpit. Sometimes the arrangement works, but often when it's most needed it fails. A kinked line or similar problem will force the sailor out of the safety of the cockpit onto the deck.

I prefer not to lead halyards and reefing lines to the cockpit. Certain tasks remain best handled at the mast, but working there should be safe. A pair of mast pulpits and uncluttered space for safe footing will greatly increase safety.

10 Additional compasses

It is often important to keep a close eye on the course, even when down below or on a bunk. Installing a compass below-decks at the chart table and another one above the bunk makes life easier and safer. In the cockpit you may wish to install an extra compass that can be observed from under the dodger without moving to the binnacle compass.

11 Night-vision lights

When sailing at night, it is important to have adequate red light that does not destroy night vision but permits reading charts, making coffee and other tasks. Small red LED lights can light up spaces belowdecks without affecting night vision. Because their power consumption is minimal, they can be left on all night. Because of their low purchase price, you may wish to install them throughout the boat. At a very minimum, you must have one red light in the cabin, even if it's only a red bulb in a light fixture.

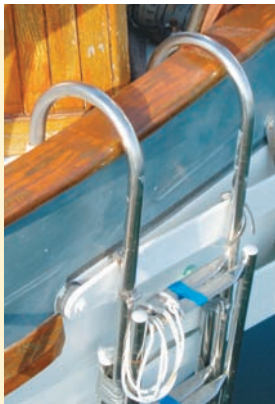
12 Boarding ladder

The great fear of many singlehanded sailors is falling overboard and seeing the vessel disappear over the horizon. You can take all sorts of measures to prevent falling overboard, but the danger remains. Some who fell overboard have made it back to the boat. With crew, getting back on board is usually not that difficult in moderate conditions. For the solo sailor the crucial question is if there is any way at all of getting back on board. Try it at anchor sometime, and you will likely find it very difficult or impossible, even under ideal conditions.

Very recently an acquaintance slipped overboard within sight of his home port in San Francisco Bay. His efforts to get back on board with the help of a jib sheet and in other ways all failed. With hypothermia and exhaustion setting in, he abandoned his efforts and began to swim to the

shore. He would have drowned if another sailboat had not spotted him. It is safe to say that if the solo sailor does not manage to get back on board quickly, he may never.

Some skippers install a rope ladder that can be reached from the water and pulled down, but these are difficult to climb in the best of circumstances. I resorted to permanently mounting a stainless steel folding ladder at the stern. It may look ungainly, but that is not as appalling as clinging to the boat without a means of getting back onboard.



13 Anchoring aids

A reliable anchoring system is an absolute must. Except on very small and light boats, heavy ground tackle is a necessity. The opportunity to get a good night's sleep in a less-than-optimal anchorage is priceless or at least demands as price a fairly heavy anchor and lots of chain. Defining what is a good anchor is like defining what is a good boat. The best way to arrive at your own preference is to try different anchors in poor conditions and with different types of bottom materials.

Not all anchors are equal. A Danforth-type anchor may work well with many bottom conditions but tends to kite over bottoms with lots of sea grass or weeds. This is particularly true for the lightweight Fortress. My preferred anchor is the Bruce, which has proved itself to me in many conditions and all kinds of bottoms: mud, sand, gravel, coral, and rocks. It sets quickly, can be broken out by positioning the boat above it, requires less scope than most, and has tremendous holding power. But if a rock of very specific dimensions lodges in the claw between the flukes, not even a Bruce can dig in. This never happened in the 25 years that I have



relied on Bruce anchors.

The Delta and Spade are other fine anchors. When anchoring in soft mud, drop these hooks from a stopped boat and allow them to sink into the mud for a few moments prior to backing up or exerting much pull. The CQR plow anchor remains popular, but it has a design flaw that could prove disastrous in certain conditions. If a sudden wind change causes the boat's heading to change quickly, the anchor will break loose if the rode is jerked from an angle greater than an angle in which the shank can be turned. Then the rotating movement and the great weight of the joint between shank and crown can flip the anchor over and cause it to be pulled upside down over the bottom. This flaw very nearly cost a friend his boat at Smugglers Cove on Santa Cruz Island.

In selecting an anchor, be cautious with imitations. An anchor may look like a Bruce or CQR, but was it manufactured under the same high standards? Particularly with these latter two anchors, I have seen knockoffs that I would never buy. A fairly small savings in purchasing anchors may cost you dearly.

A heavy anchor and chain demand the use of a manual or electric windlass. My preference is for an electric windlass that permits manual operation. That is not essential since winches can substitute if the electrical windlass malfunctions.

If the windlass is electric, the solo sailor should be able to control it not just from the foredeck but also from behind the wheel. In a crowded or small anchorage it may be necessary to remain at the helm and engine controls when dropping or weighing anchor. One way to achieve that additional control is to connect a three-position toggle-switch with a three-wire extension cord to the switching terminals of the windlass motor.



14 Stern anchor rode In minuscule or crowded anchorages or harbors where a stern anchor must sometimes be quickly set because of limited swinging room, it is a challenge for the solo sailor to do this while simultaneously setting the bow anchor or moving to a quay. The stern anchor will usually have a chain and nylon rode that must run out while the boat moves forward. It may kink or tangle at the most inconvenient moment possible, necessitating a series of dramatic maneuvers to avoid disaster and ridicule. To avoid that

irritation, some skippers install a reel for the rode at the stern, but that tends to be bulky and inconvenient. I purchased a reel with 185 feet of webbing and mounted it to a stern stanchion. This Ankarolina product is made in Sweden and is sold in the United States (see <<http://www.marinestore.com>>). It comes in three versions: a 17-inch reel with 185 feet of webbing in breaking strengths of 5,500 and 8,000 pounds and a 19-inch reel with 230 feet of webbing at a breaking strength of 8,000 pounds.

Once I drop the stern anchor with its short length of chain from the stern, the webbing runs out smoothly from the reel. Webbing has less elasticity than a nylon rode but is strong and easier to handle. When weighing anchor, once the webbing is slack, it rolls up quickly and effortlessly on the reel, which has a detachable handle for that purpose.

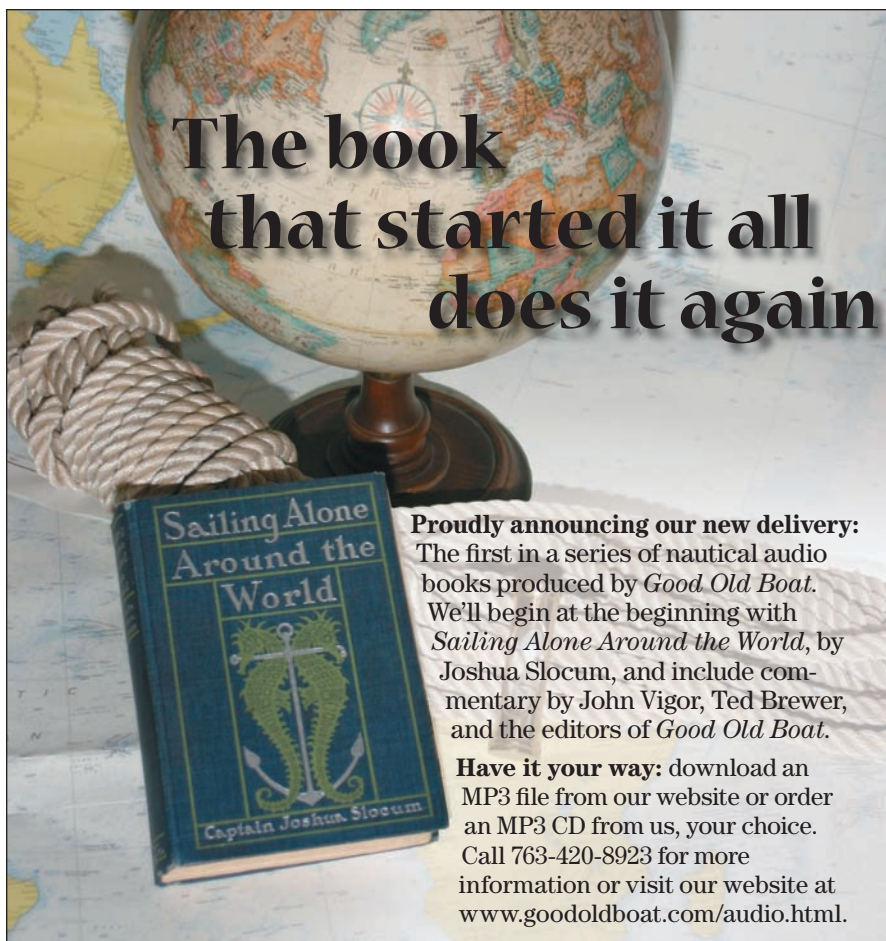
15 Docking aids Docking or tying up to a mooring buoy — when limited room, unfavorable currents or wind, and amused onlookers affect the operation — are to many singlehanded sailors the most feared challenges. At those times even an incompetent crewmember would be worth his weight in lead, if not gold. Fortunately, a number of gadgets are available that make these tasks simpler for the solo sailor. A Happy Hooker or similar device at the end of a long, preferably telescoping, pole will make it possible to get a line through an eye or shackle on a buoy without masterful helmsmanship. Similarly, a grappling hook and line thrown over a dock may get a line temporarily secured to the dock. In controlling docking and undocking maneuvers the availability of a midships-mounted cleat and the use of spring lines can remove the need for help of crew or bystanders.



The cost

Assuming that a boat has none of the above-discussed pieces of equipment, an investment of \$12,000 to \$18,000 will buy it all. That's a considerable expenditure, sometimes approaching the purchase price of an older boat, but it will pay off royally in safety and convenience.

If the budget is too tight and the choice lies between purchasing an older well-equipped boat with a good sail inventory or a newer, but minimally equipped vessel, safety considerations should steer the buyer toward the older well-equipped boat. ⚓



The book that started it all does it again

Proudly announcing our new delivery: The first in a series of nautical audio books produced by *Good Old Boat*. We'll begin at the beginning with *Sailing Alone Around the World*, by Joshua Slocum, and include commentary by John Vigor, Ted Brewer, and the editors of *Good Old Boat*.

Have it your way: download an MP3 file from our website or order an MP3 CD from us, your choice. Call 763-420-8923 for more information or visit our website at www.goodoldboat.com/audio.html.



Solving *the* meat problem

Home canning is the answer for fridge-less cruisers

by Bonnie Dahl

ON LAKE SUPERIOR'S NORTH SHORE one brilliant sunny day we met a lovely young couple who informed us that, in spite of having 10 days left for their holiday, they had to cut their cruise short and go into town (40 miles away) for supplies. It wasn't lettuce, tomatoes, potatoes, and other produce they needed. They were out of fresh meat.

This wasn't the first time we had heard of cruises being cut short because of the limiting time/distance factor of keeping fresh meat. Next to fuel, keeping fresh food, primarily meat, has been one of the biggest limiting factors in many cruises, particularly into wilderness areas. For those going on long passages or cruising in areas where fresh meat is not readily available (such as in some Caribbean ports), it's even more of a problem.

Many boats have iceboxes but when the ice is gone, the ability to keep food fresh quickly follows. Some sailors have solved part of the problem by adding refrigeration to their boats. While this certainly extends the life of fresh produce, unless you also have a separate freezer, keeping meat is still limited. With most refrigeration units there is only a small area next to the cold plate to keep small amounts of frozen meat and then only for a short time as they slowly thaw. Many sailors start out with seven or eight days of frozen meat and then turn to commercially canned meat. Those who have

followed this path know there is only a limited amount of canned tuna fish, hams, and Dinty Moore Stew that one can take. Certainly, freeze-dried foods help, but there's nothing like a tasty hot meal made with basic meat recipes, especially after a day of vigorous sailing or exploring in the wilderness. There is, however, an alternative, one we have used for more than 30 years, even with refrigeration and a freezer. We cruise with home-canned meat.

“When beef or hogs were slaughtered in the old days, the meat was preserved by smoking, drying, and putting it up in jars.”

Preserved in jars

It's an old idea. When beef or hogs were slaughtered in the old days, the meat was preserved by smoking, drying, and putting it up in jars.

The theory behind pressure canning is that the temperature of boiling water goes up with pressure: at 5 pounds pressure it is 228°F; 10 pounds pressure, 240°F; 15 pounds pressure, 250°F. Canning at 10 pounds pressure at lower altitudes (0 to 1,000 feet) and at 15 pounds pressure at higher altitudes (1,000 feet and above) is sufficient to destroy potentially harmful bacterial spores. In fact, the U.S. Department of Agriculture recommends pressure canning as the only safe method for canning low-acid foods

such as meat, poultry, and vegetables. When the jars are removed from heat a vacuum seal is formed with a rubber compound on the underside of their lids as they cool. This prevents any new microorganisms from entering and spoiling the food.

The process for canning your own meat is simple: pack it in glass canning jars and cook it at 10 or 15 pounds of pressure, depending upon your altitude, for 90 minutes.

Most kinds of meat can be home-canned. We have successfully canned chicken, meatballs, roast beef, pork

roast, round steak, pork chops, ground beef, ground turkey, and a basic ground beef/tomato paste mixture that can be used

for making chili or spaghetti sauce. It is also possible to can seafood: various kinds of fish, clams, and crabmeat. An added benefit of canning meat is that you don't have to use expensive cuts because the canning process tenderizes the meat. It also enhances the flavor, especially when spices are added in the canning process.

Basic tools

You need a large pressure canner. We use one that can hold seven quart jars. It is possible to can in pints by stacking a second layer of jars, staggered on the top of the bottom jars. Using quarts is more economical, giving four servings to the jar, whereas it is tight getting two servings from a pint jar.

“With good seals, we have used meat up to three years from the canning date.”

The glass canning jars used in home canning are commonly called Mason or Ball jars. They can be used over and over, and you can get replacement packages of additional rings and lids. Jar mouths come in two sizes: wide and regular.

Get wide-mouth jars for easier packing. Two brands of jars, lids, and rings in common use today are Kerr and Ball. They can be found in large grocery stores with the food storage bags and systems. You also need tongs and hot pads for handling the hot jars, a pitcher for pouring hot liquid, a number of clean cloths and towels, and any cooking utensils you will need for preparing the meat.

Basic canning steps

Thoroughly clean and rinse glass jars, rings, and lids. Check to make sure the rims of the jars are free of nicks and cracks. Discard inferior jars. Fill the jars with hot water to keep them warm until the meat is added. Remove the water just before adding the meat you will be canning.

Pack each jar with meat to within 1 inch of the top of the glass rim. Salt or other spices may be added. When using salt, it is better to use pure can-

ning salt since table salt contains a filler that may cause cloudiness on the bottom of the jar.

Add enough water to bring the liquid level to within one inch of the top of the rim. Don't overfill because the liquid will boil up in the canning process. If fat and little pieces of meat cling to the rim during the boiling process, the lid won't be able to seal. This is the primary cause of lids not sealing.

Slide a rubber spatula down the sides inside the jar and throughout the meat to break up any air spaces and get them to fill with liquid. You may have to add more liquid as the air spaces fill up. This is a very important step because the expansion of air under heat is many times greater than liquids and this may cause overflow of the liquid, impeding the sealing process of the lid.

With a clean cloth or damp paper towel, wipe all grease and bits of meat from the top and both sides of the glass rim. This is another trick to ensure that the lids will seal during the

vacuum process. Add the lids and tighten the rings. To get a good snug fit, moderately tighten the ring until it will go no more and then back off a half turn.

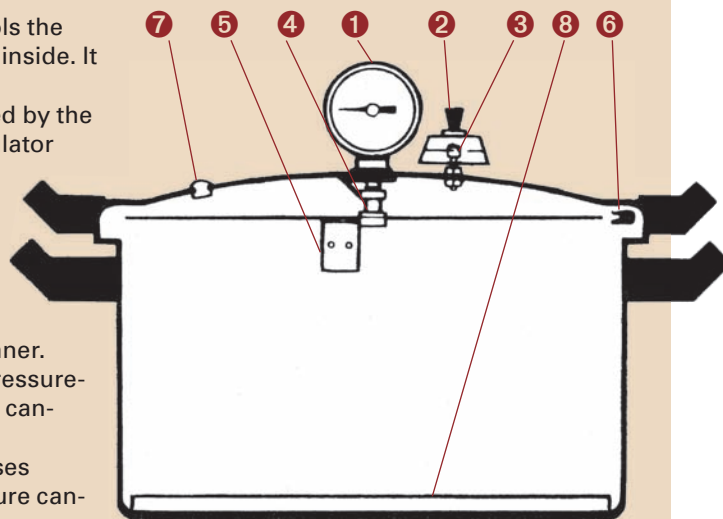
Place the canning/cooking rack that comes with the canner on the bottom of the canner. It is important to do this because jars standing directly on the bottom of the canner may break. Add 3 quarts of boiling water. **Trick:** if you add a couple of tablespoons of salt and white vinegar to the water, it will keep water stains from forming on the jars. Place the jars evenly in the canner without the sides touching, if possible.

Check sealing ring

Before placing the lid on the pressure canner, check that its rubber sealing ring is snug and in place. Always look through the vent pipe to make sure it is absolutely clean and free from any food or debris from previous canning runs. A good secondary measure is to clean the vent pipe with a pipe cleaner. It is also a good idea to move the air vent/cover lock up and down to make sure it moves freely. Place the lid on top of the canner and turn clockwise until it is in the sealed position. Most canners will

Parts of the pressure canner

- 1 The **pressure dial gauge** registers pressure in pounds per square inch (psi). The pointer moves on the dial indicating pressure in the canner.
- 2 The **pressure regulator** fits over the vent pipe and controls the amount of steam escaping, causing pressure to build up inside. It will jiggle in place when canning pressure is achieved.
- 3 Pressure is released through the **vent pipe**. When covered by the pressure regulator, excess steam escapes when the regulator jiggles.
- 4 The **air vent/cover lock** automatically “vents” or exhausts air from the canner. It acts as a visual indication of pressure in the canner.
- 5 The **locking bracket** on the inside of the canner body locks with the air vent/cover lock, preventing the cover from being opened while there is still pressure in the canner.
- 6 The **sealing ring** fits into the canner cover and forms a pressure-tight seal between the cover and canner body during the canning process.
- 7 The **overpressure plug** pops out automatically and releases steam in case the vent pipe becomes clogged and pressure cannot be released normally.
- 8 The **canning/cooking rack** is placed on the canner bottom to hold the jars off the bottom while canning. This prevents jars from breaking.



have some kind of markers on the lid and canner, which need to be lined up to get the two parts into a locked position. Another good indication of the lid being in the locked position is that both the handles on the lid and canner line up directly over each other.

The next step is to evacuate all the air in the system. To do this, turn the stove heat on fairly high. Soon you will hear water boiling inside and see steam rushing out through the vent pipe. It is important to let this steam continue escaping for 10 minutes to make sure all the air from inside the canner is evacuated.

Place the small pressure regulator on the vent pipe. You will see the pressure quickly rise on the pressure dial gauge if your canner has one. Note that the pressure regulator doesn't begin to rock or jiggle until it has reached canning pressure.

Canning pressure is achieved when the dial on the gauge reads 10 or 15 pounds, depending upon your altitude. It is only now that you begin timing your 90 minutes. The heat source on your stove may vary slightly over time, so it is important to keep checking the pressure gauge every 10 minutes or so and adjusting the heat accordingly to keep the pressure at 10 or 15 pounds or a little higher. Note that beyond the 15-pound pressure mark there is also a danger zone on the dial on some canners. If the pressure begins to register in this zone it is important to reduce the heat quickly, but not so much that the pressure falls below your goal of 10 or 15 pounds.

Let canner cool

After 90 minutes of pressure canning, turn off the heat. Allow the canner to cool on its own. Do not try to speed this part of the process up, as the jars could break. As the pressure drops in the canner, you may hear snapping or clicking sounds. These are the lids sealing as the vacuum forms.

Do not use the pressure gauge dial to determine when the pressure is reduced. Inside pressure is completely reduced only when both the air vent/cover lock and overpressure plug have dropped and no steam escapes when the pressure regulator is nudged. As a safety precaution always remove the pressure regulator first and let the canner continue cooling for another 10

Canning jars ready to process, at right. The finished jars, below. Note that a layer of fat has risen to the top with some meats.

minutes before removing the lid. Then open up the lid away from you to allow any residual steam or heat to escape.

You can now remove the canning jars with an oven mitt or special tongs. Put the hot jars on a clean towel on a counter. The liquid in the jars will continue to bubble, and the remainder of the lids will snap. When the jars are cool to the touch, check them to make sure all the lids have sealed.

There is a three-way test for this. The first is the click you hear as the lids snap into the vacuum. The second is that you can actually see a concave shape on a lid that has been slightly sucked in by the vacuum. But the most important test is to tap each lid with a fingernail. A sealed lid will give a clear metallic ring; an unsealed lid will give a dull thud. There is quite a distinction between the two sounds.

Jars with unsealed lids can be reprocessed. Simply remove the ring and defective lid, wipe down the glass neck and rim of the jar to remove any grease and meat, add more water up to the 1-inch mark, put on a new lid, (however, old rings can be reused) and pressure can these jars with the next batch.

If you cannot immediately re-can the meat, it should be refrigerated and eaten soon. Do not let it sit out at room temperature. It is also important to check each jar and throw away any cracked jars and all their contents. This is uncommon. Usually what happens with broken jars is that the bottoms fall out as you try to lift the jar out of the canner. Do not try to save any part of the meat as small pieces of glass may be embedded.

Before storing, rinse off the jars with hot soapy water and dry them. Jars can be stored with or without the rings left on since the lids are sealed. If you choose to leave the rings on, tighten them down. It is important to date and label each jar on the lid. Jars can be stored in the original divided cardboard boxes they came in. However, many sailors prefer not to have cardboard on their boats. We have used the open latticed plastic milk crates, which pack nine quarts nicely. If you



use this storage method, you need some way to protect the glass jars. We have used the plastic mesh sleeves made for protecting wine bottles. We have also used rubber mesh shelf liners cut to size and held in place with rubber bands. The tops of heavy socks also work well, and bubble wrap (with small bubbles) can be used.

With good seals, we have used meat up to three years from the canning date.

Canning specific meats

There are two ways of preparing meat for pressure canning: *raw pack* and *hot pack*. Raw pack is just what the name implies: you pack moderate-sized pieces of uncooked meat directly into the canning jar. One advantage to this method is that, because the meat is soft and pliable, you can pack more into a jar. However, it is important to resist the temptation to pack it in too tightly as this can cause jar breakage. Another advantage of this method is that it leaves fewer air spaces between the pieces of meat. Examples of meats



which lend themselves to raw packing are chicken, roast pork, and beef roasts.

For appearance (such as browning) and adding certain recipe ingredients, use the hot-pack method. Examples here are meatballs, pork chops, round steak, ground meats, and a mixture of ground beef and tomato. Adding seasonings, such as salt and pepper, is optional, however the flavors blend better when added in the canning process than when added during meal preparation. It doesn't make much sense to use up valuable jar space with bone, fat, and parts of the meat you don't eat. So regardless of which

method you use, remove these space wasters.

Chicken and turkey: We have been successfully using the raw-pack method for years. It is possible to can most parts of the chicken, but since many contain bone and skin, it seems to work best to can skinless, de-boned chicken breasts which, when raw-packed, fit nicely into the jar. Add water to within one inch of the top and one teaspoon of canning salt. Remove hidden air spaces with a rubber spatula. In the same way, cooked leftover turkey can be hot-packed with water, broth, or gravy.

Roasts — beef or pork: Any grade of meat can be used since tougher cuts of meat are tenderized in the canning process. Remove all bone and excess fat. Cut the meat into serving pieces that will easily fit through the mouth of the jar. If the contents of the jar will be used for stew or beef stroganoff, cut the meat into smaller pieces, which will also pack more meat into the jar. You may prefer larger pieces for making other beef or pork recipes. Raw pack adding a couple of bay leaves, one teaspoon of canning salt, and water to within one inch of the top rim of the jar. Some canning manuals indicate that it is not necessary to add water, but we have always added water with good results. We like the tasty broth it produces in the canning process. The broth can be useful in preparing many recipes.

Meatballs: Make up your favorite meatball recipe. Browning meatballs beforehand adds to their appearance and helps them hold together in the canning process. If you are making a large number of meatballs, brown them on large cooking pans in a 350°F oven, turning them once. Keeping the meatballs small, no bigger than one inch in diameter, will allow many more to be packed into the canning jar. Hot pack, adding water to within one inch of the top rim.

Pork chops: Pork chops are hot-packed primarily for appearance. Although any grade of pork chop or pork steak can be used, we prefer those that are a half-inch thick and have as little bone as possible. Butterfly pork chops work especially well as they are just about the right round shape to fit

nicely in layers in the jars and, when cut in half, can be used to fill up spaces. Remove all bone and excess fat, and brown them on both sides, adding salt and pepper to taste. Hot pack the chops into the canning jar. For extra flavor, add water to the browning residue in the pan and scrape up the bits and pieces to use when adding liquid to within one inch of the top of the jar rim. Use a rubber spatula to get rid of air pockets.

Round steak: This can be either raw- or hot-packed. Browning first really adds to the appearance of the meat, however. Cut it into strips or bite-sized pieces for pepper steak or stroganoff and brown with salt and pepper. Hot pack. Use water to retrieve the browning residue and flavor from the browning pan. Add this to your jars to within one inch of the rim.

Ground meats: These are browned and hot-packed mainly for appearance. Cooking beforehand also helps draw off any excess fat, which may be discarded before putting the meat into the

Troubleshooting

Food spoilage is caused by: jars not sealing, incomplete sterilization, and failure to follow recipes and exact timetables.

Jars not sealing is caused by: not leaving one-inch headroom between the liquid and top of the jar rim, using jars that are nicked or cracked or have sharp sealing edges, failure to wipe the jar rim clean before putting the lid on the jar, grease and food bits that have become lodged between the lid and jar, not screwing down the metal ring tightly enough, and turning the jars upside down while cooling.

Liquid loss from jars is caused by: packing the food too tightly into the jars; filling the jars too full with meat or liquid; processing at too-high a temperature or pressure; sudden variations or lowering of temperature in the canner — make sure the pressure has been completely reduced (air vent/lock has dropped, pressure released from vent pipe) before opening the canner; and lids that are incorrectly tightened before canning.

Jar breakage is caused by: using generic glass jars that are not made specifically for canning, overfilling or packing the jar too tightly, jars touching the bottom of the canner, using cracked or weakened jars, and lids that are incorrectly tightened.



Finished and waiting for a mealtime possibly months into the future: a ground beef and tomato mixture, at the left, and layers of pork chops, to the right. In bottom photo, these are wrapped in protective mesh sleeves and are ready to be packed in crates.

canning jar. The meat can be seasoned if you like. This allows the seasonings to blend during the canning process. Hot pack the meat into jars, adding water to within one inch of the top of

the rim. It adds a lot of flavor to first add the water to the browning pan to retrieve leftover bits and pieces of meat and the browning residue. Ground meats that work well are beef,

turkey, and sausage. A canned mixture of ground beef and sausage bakes up nicely into breakfast egg casseroles. It takes about one and one half pounds

Continued on Page 50

Cooking with canned meat

The following recipes are made with quart jars of meat

Barbecued pork chops and potatoes

Remove fat from the top of a jar of home-canned pork chops. Put one layer of meat on the bottom of a pressure cooker. (A pressure cooker is different from a pressure canner. See note below.) Add one layer of potatoes, scrubbed and cut into quarter-inch slices, and a layer of sliced onion. Cover with a layer of barbecue sauce. Repeat layers: meat, potatoes, onion, and barbecue sauce until meat is gone. Add water to canning liquid to make one cup and pour over the contents. Cook under pressure for 10 minutes. Let the cooker cool slowly. Serve with the sauce poured over meat and potatoes. Yield: 4 servings.

Note: add one can of Bean With Bacon soup and one can of water to leftovers for a tasty soup with zip.

“Oven-baked” chops with scalloped potatoes

Remove fat from the top of a jar of home-canned pork chops. Boil the meat and canning liquid 10 to 15 minutes. Layer the meat on the bottom of a 9 x 9-inch cake pan. Empty the package and seasonings from a box of scalloped potatoes. Use canning liquid to make up the water and milk portions specified in the box directions and pour this over the potatoes. Bake at 350°F for 30 minutes. The flavors of this one are absolutely delicious. Yield: 3 to 4 servings.

Beef stew

Remove the fat from a jar of home-canned beef. In a large pot, add meat, scrubbed and sliced potatoes, two large onions cut into large pieces, a package of baby carrots, and a couple of cut stalks of celery if you have it. Sprinkle on the seasonings from a package of beef-stew mix and water according to package directions, using the canning liquid to make up part of the water portion. Boil 10 to 15 minutes. Cover, reduce heat, and simmer for another 30 minutes to allow the flavors to blend. Yield: at least 4 servings. This varies, depending on the quantity of vegetables added.

Beef in wine sauce

Slice two onions and brown them in some of the fat from the top of the canning jar of roast beef in a small skillet. Discard the rest of the fat; boil the canned roast beef and canning liquid with water (to equal 1½ cups) 10 to 15 minutes in a separate saucepan. Lower the saucepan heat and add the onion, a couple of bay leaves, and ¼ teaspoon each of thyme, marjoram, and oregano. Simmer 30 minutes, adding a little more water if the meat becomes too dry. Add 1 can of sliced mushrooms, or stems and pieces, and 1½ cups of red wine, and sim-

mer another 30 minutes. The trick to this recipe is the long simmering times that allow the flavors to blend. If you wish to thicken the sauce, add a blended mixture of equal parts of flour and margarine, one teaspoon at a time until desired thickness is achieved. Serve over rice or wild rice. Yield: 4 servings.

Meatballs and gravy

Boil meat and canning liquid 10 to 15 minutes. Keep the fat if you wish to add a flour/water mixture to make gravy after boiling. A really easy and tasty way to make a gravy sauce is to discard the fat before boiling and add one can of cream of mushroom soup after boiling. Simmer 10 minutes and serve with noodles or rice. Yield: 4 servings.

Spaghetti sauce

Adapt your own spaghetti-sauce recipe or brown two sliced onions and three crushed garlic cloves in some of the fat from the top of a jar of canned ground-beef-and-tomato mixture. Discard the rest of the fat from the canning jar and add the meat-and-tomato mixture to the onions and garlic. Add one cup of water and boil 10 to 15 minutes. Add one 4-ounce can of tomato sauce and one heaping teaspoon each of oregano, Italian seasoning, basil, parsley, and sugar. Simmer for 30 minutes, adding additional water if desired, and serve over cooked spaghetti. Yield: 4 servings.

Chili

Remove some of the fat from the top of a jar of canned ground-beef-and-tomato mixture and brown two sliced onions in it. Discard the rest of the fat from the canning jar and add the onions to the meat-and-tomato mixture along with one cup of water. Boil 10 to 15 minutes. Add two cans of stewed tomatoes, two cans of red kidney beans, and chili powder to taste. There is a lot of variation in the amount of stewed tomatoes and kidney beans that can be added, according to individual taste. Simmer for at least 30 minutes, adding more water if necessary. Yield: 4 to 6 servings.

Optional: when serving, top with sour cream or grated cheddar cheese.

Note: A pressure cooker is different from a pressure canner. A pressure cooker is used to cook foods quickly — three times faster than on the stovetop using a normal cooking pot. Five minutes of pressure cooking equals 15 minutes of regular cooking. Common sizes of pressure cookers are four- and six-quart cookers.

Winter reverie

*The boat sleeps under snow now,
but tropical sunsets will follow*

by Craig Carter

IT'S A COLD NEW ENGLAND WINTER morning. I'm up early to get a few sights of Jupiter before the morning twilight fades. Later on I'll work through the sight reductions and plot the lines of position against those I worked out yesterday for the moon. Winter is a fine time for brushing up on celestial navigation.

Following breakfast, I'm headed down to the marina to peek at the boat. My wife, the voice of reason, naturally asks why. Like any sailor, I have a mental catalog of reasons for visiting the boat off-season and, though most of them are groundless, I manage to

respond with one of the more reasonable and convincing: "Have to check the cover."

The pickup is cold. So cold that the gearshift seems immovable, as though it's potted in half-cured sealant. When I turn the ignition key, the engine groans despairingly before finally shaking to a start, conveying in no uncertain terms that I'm lucky — this time.

It's unusually busy in town. I stop at the post office and overhear the chatter. At first it's the usual winter saw: "Cold enough for ya?" "Burned two cords of wood already." Then I tune in to more urgent communiqué:

"It's gonna be a big one." "They're calling for 6 to 12." "I heard as much as 18." "Supposed to start around noon."

Snow is the order of the day. Outside, the air feels heavy with the weight of it, and I begin to feel a sort of tranquil, yet eager, anticipation. Like a schoolboy, I'm hoping it will come.

The marina is deserted. Aside from a gull standing indifferently atop a piling, I'm completely alone. All but one of the docks have been de-coupled and the various sections are corralled together in one area of the marina that seems locked in ice. Several boats have been left in for the winter, secured by lines doubled-up to the remaining dock.

Life support system

Bubbles stream up and hiss at the surface around them as though they are sustained by a peculiar life support system that keeps the ice pack from completely closing in and devouring them. The yard is packed tight with boats of all kinds: cruisers, racers, sportfishing, commercial fishing, and lobster boats. Some are under cover; many are not. Like hibernating mammoths, they lie in their sturdy cradles, sound asleep. The wind rattles some loose rigging, and the stillness is interrupted as though, in unison, they are snoring. Then it stops and all is calm. The giants don't awaken.

There's a menagerie of equipment to the side and rear of the yard office: piles of metal and steel stock, treated lumber, tie-rods, and U-bolts — the typical stuff of boatyards. There's a tired-out forklift and a hulking crane and even a pair of derelict trailers of the 18-wheeler variety. Behind all this boatyard miscellany, situated so as to almost make them impenetrable, are two giant plastic-over-metal-framed bivouacs, great cocoons that shelter vessels undergoing various degrees of transformation and rehab. Winter is a time of restoration and recovery in the boatyard. Even the Travelift, with its network of hydraulic veins and massive black wheels, sits silently on its steel runway, exhausted from the winter haulout.

I walk cautiously through the maze of boats, ducking under forepeaks and dodging protruding trailer tongues and outdrives. Amidst a row of deep-keeled sailboats supported by poppets and custom cradles, I eventually find

PHOTOS BY MARY JANE HAYES



Camelot, resting soundly beneath her canvas blanket. The clam-shell vents in her cover keep her breathing freely and when I open the zippered door and climb inside, I am immediately struck by a feeling of quiescence and privilege, as though I have climbed under the covers to join my wife in the darkness of a cold winter's night. Here, a mistress sleeps.

Delightful view

Under the winter cover, standing in the cockpit and looking over the cabin-top to the foredeck is a delight. A boat's very essence is revealed in the lines of her hull, but it's abovedecks where her natural beauty is complemented. As with jewelry, where it's easy to wear too much, she wears just the right combination: cleats, blocks, winches, runners, traveler — all perfectly located. Unlike jewelry, every bit of her hardware is ultimately functional and ideally suited for use. I stand for a moment longer, studying the sheer of the foredeck, the bulwarks and scuppers, the pulpit and lifelines, the swing of the tiller. As always, I'm struck by the overall intrinsic beauty ... the epitome of simplicity in design, the likes of which are so obviously absent in a world overburdened with mediocre product and uninspiring technology. I know of nothing else that makes this much sense.

I step down the companionway into the cabin, which is dark and cold but rich with memory and promise. The auxiliary diesel peeks out from behind the companionway steps, greeting me like an old friend, patiently awaiting the care and feeding of spring com-

“Amidst a row of deep-keeled sailboats supported by poppets and custom cradles, I eventually find *Camelot*, resting soundly beneath her canvas blanket.”


missioning. I take a closer look for signs of leaks or freezes. I put my hand on the oil filler cap and think, “Soon, my friend.”

The canvas cover shudders as the wind picks up, and I climb down the ladder and zip the doorway shut just as snow begins to fall. I re-lace one of the cover ties to relieve a section that is beginning to chafe, thus validating the basis of my visit.

Back at home, I set myself up in front of the fire and prepare to work through the morning sights of Jupiter.

There's an assortment of sailing books and publications scattered about and the usual cover shots abound: scenes of cruising boats and sunsets in some distant tropical paradise.

“We'll be there someday,” my wife says thoughtfully. I nod and think of all the snowbound sailors who share this dream and of the snow falling silently in the sleepy boatyards where their capable vessels lie in wait.

“We will,” I think, “but for now, she sleeps.” 



SEA FROST®

COOL IT YOURSELF!

Refrigeration has never been easier. Sea Frost's super efficient BD — the ultimate, compact, 12 volt refrigeration conversion kit — comes pre-charged and ready for installation. This high quality, low draw unit joins our full line of Engine Drive, 110 volt and D.C. systems — considered the most reliable and energy efficient in the world.

Sea Frost — Quality at an affordable price.

www.seafrost.com

1-800-435-6708; sales@seafrost.com



Keep your batteries topped up with a slow but steady charge

by Don Launer

ON A BRIGHT, SUNNY DAY, WITH THE SUN DIRECTLY overhead, the sun supplies about 1,000 watts of energy per square meter. If all the energy across the sun's electromagnetic spectrum could be collected, it wouldn't take a very large solar array to supply all our needs on shore and on the water.

To convert a portion of this energy into electricity, we use photovoltaic cells (*photo*, meaning light, and *voltaic*, pertaining to electricity). But these systems are usually less than 15 percent efficient at the most, since, in the wide range of wavelengths that reach us from the sun, only a very limited range can be converted into electricity by these cells. In addition, the necessary grid on top of a photovoltaic cell can block some of the incoming light, and the solar panels are made from highly reflective silicon-based semi-conductors.

The cells used in a solar panel are generally constructed of one of several types of impure silicon, and each of these individual cells has a maximum output of about 0.5 volt. When light — in the form of photons —

strikes a cell, it knocks electrons loose. These electrons are directed so they create a current flow between the metal contacts at the top and the bottom of the cell and, combined with the cell's electric field, create a voltage from which the cell can produce power.

Types of solar panels

There are three basic types of solar panels available:

- **Monocrystalline** panels are recognizable by their black, round, or semi-circular cells, connected by silver wires. The use of these has dwindled in recent years.
- **Polycrystalline** cells use a different type of manufacturing process. These panels can be recognized as black, rectangular cells, closely packed together, resembling a tiled wall. Polycrystalline panels can reach about 11 percent efficiency and are a common product in the solar-panel marketplace.
- **Amorphous** panels are built up as a single unit with combinations of parallel and series cells and conductors linking them. Amorphous panels, as the name implies, have a uniform surface with no apparent individual cell structure. Electrically, they are a combination of series and parallel cells and typically incorporate numerous by-pass diodes, which give them a distinct advantage where shadows are present. But, since amorphous panels only reach 6 to 7 percent efficiency (about half that of monocrystalline and polycrystalline panels), they need to be bigger for a given output.

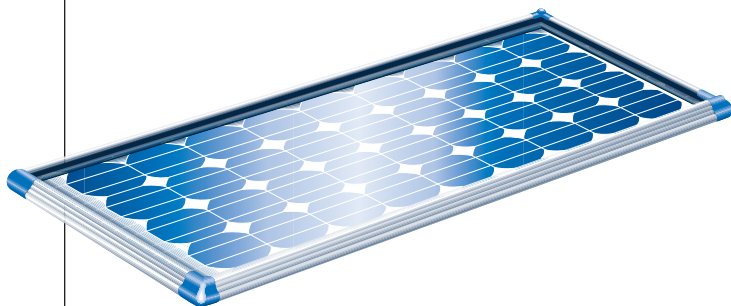
Amperage available from any solar panel is proportional to the area of each cell. The cost-per-watt of the three panels is about the same, and a rough estimate is that a solar panel system aboard a boat will run about \$6 to \$8 per watt, with amorphous panels at the high end of the price range. The space required is vastly different, though. For a given power output, the space required for the less-efficient amorphous panels is about twice that of the monocrystalline and polycrystalline panels.

All three types of panels — when properly cared for — have a life expectancy of more than 20 years. Typically, these panels will give about 80 percent of their rated output when they're 20 years old.

Panel mounting

Panels should not be in a location where they might be walked on, and they must be firmly attached so they can't be dislodged by wind or waves.

The performance of a solar panel is highly dependent on the panel's orientation to the sun, the latitude it's



A polycrystalline solar panel is easily recognizable by its structure, which resembles tiles.



Amorphous solar panels are characterized by their uniform appearance, with no cell-structure apparent

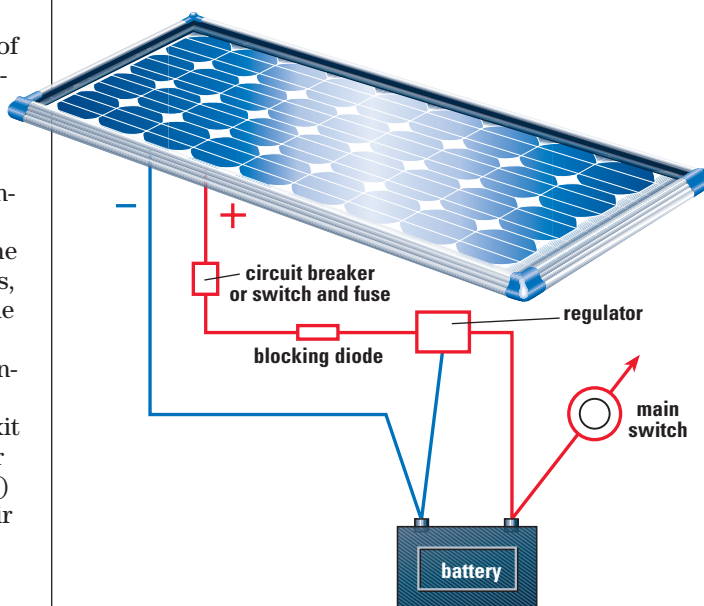
Layout and illustrations by Ted Tollefson

operating in, the season of the year, cloud-cover, time of day, shadows, and temperature. For maximum efficiency, it should be oriented at right angles to the rays from the sun.

Shadows on these panels are a big problem aboard sailboats. With monocrystalline and polycrystalline panels, a cell with a shadow on it not only doesn't contribute power, it also blocks the power generated by the other cells. The cells in these panels are wired in series, much like a string of Christmas tree bulbs, so when one bulb (or cell) is out, the whole string goes dark.

In mounting solar panels it is best to use framed panels with glass overlays. Particular attention should be given to possible corrosion where the electric wires exit the panels. Panels facing south, toward the equator (or north, toward the equator in the Southern Hemisphere) should be tilted at an angle to the horizon equal to their latitude for best overall results. Modifying this angle, due to the changing declination of the sun throughout the year, is also helpful. There are solar-panel-tracking devices available that perform this function automatically.

Sailboats on a mooring must take into account the direction of the prevailing winds when selecting the best position for a panel.



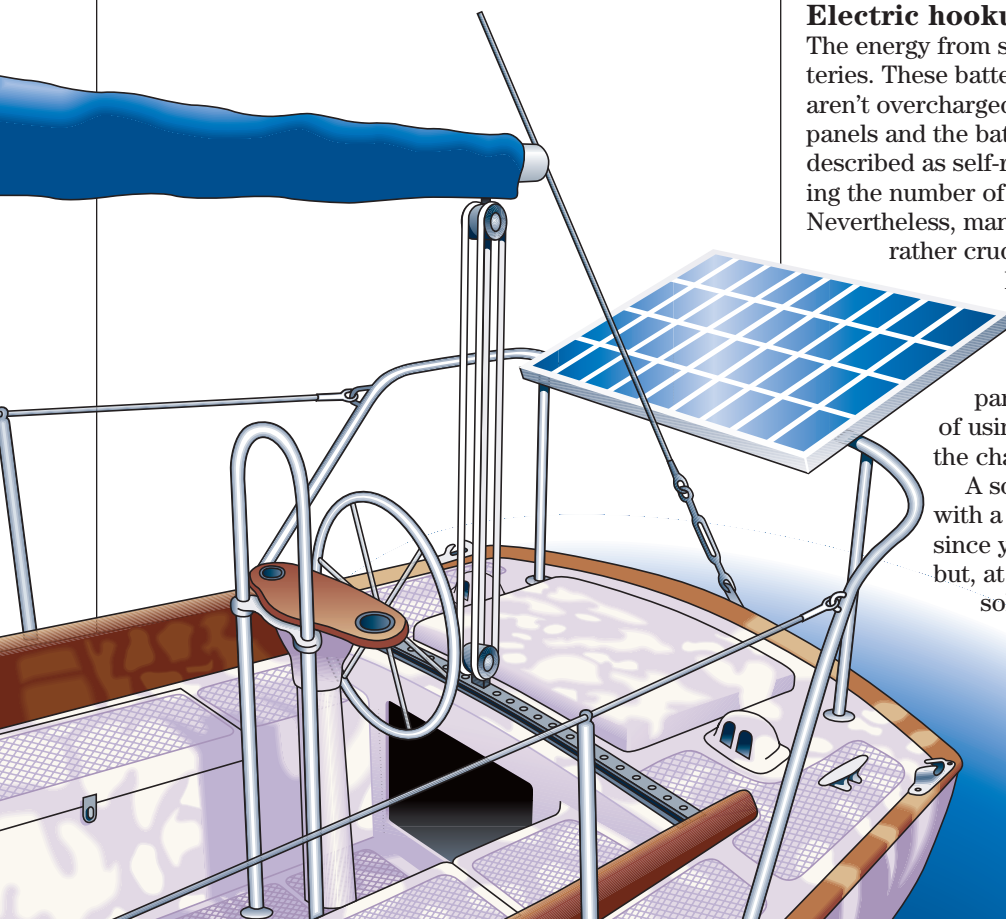
A typical wiring diagram for a single solar panel.
An ammeter can be inserted in the positive line from the solar panel for monitoring output.

Electric hookup

The energy from solar panels on boats is stored in batteries. These batteries will last much longer if they aren't overcharged, so a regulator between the solar panels and the battery is necessary. Some panels are described as self-regulating, which is done by decreasing the number of cells in the panel from 36 to 32 or 30. Nevertheless, many batteries have been ruined by this rather crude method of preventing overcharging.

Blocking diodes in the circuit are also necessary to prevent the panel from draining the battery at night or from a boat's alternator feeding into the panel and burning it out. The downside of using blocking diodes is that they reduce the charging voltage to the battery.

A solar panel's output voltage reduces with a rise in temperature. This is a paradox, since you want the most sunlight possible but, at the same time, the least heat. Thus, solar panels are at their most efficient on cool, sunny days. ⚓



The Good in coastal



Life New England



by Jeff Scher





Freedom 25

An unconventional catboat with the advantages of small size

by Ed Lawrence

ALLOW ME TO INTERJECT AN OPINION in search of a premise: it is easier to travel from the cockpit to the bow on a 25-footer than on a 70-footer. And it is easier to tack or furl a 150-percent genoa on a 25-footer than on the same Big Boat, especially when the wind is blowing more than 15 knots.

I could go on, but you get the drift: most tasks are more easily completed on small boats than on big boats. And one more thing: getting from Point A to Point B when they are 500 miles apart is more easily accomplished at 55 miles per hour with a boat on a trailer when compared to spending the time necessary to outfit the boat, make the passage via water, and work out the return trip.

So small boats are more easily handled, boats with small headsails are easier to sail, and trailerable boats may present the opportunity to explore faraway vistas.

Garry Hoyt was making these points in the late 1970s, just prior to introducing the Freedom 25, a catboat that makes sailing easy, even for beginners.

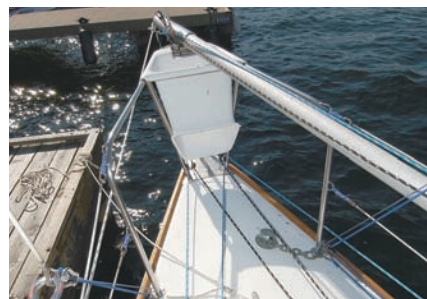
Of overlapping headsails, Garry says, "Genoas are one of the major reasons that sailing is more difficult than it need be. Their size makes them difficult to trim. Their size often doesn't match wind strength, which requires cumbersome sail changing. Off the wind, their shape is necessarily poor."

Hoyt brainstorm

Among early (patented) brainstormers that became reality are the Hoyt jib boom, a rotating bowsprit, and the single-line reefing system that's been pirated by anyone who can buy four blocks and some string.

Garry defied convention when he introduced the Freedom 40 in 1977. Designed by Halsey Herreshoff, the long, skinny ketch featured unstayed masts, nothing new to East Coast fishermen. As a pilot, Garry asked, "If old airplanes had wires supporting wings, but new ones don't, why doesn't the same logic apply to masts?" Good question.

The result: production models of Garry's Freedom 40 and 44 with unstayed carbon fiber masts and



wraparound sails. The boat had no engine. Garry called an auxiliary engine a “Freudian fixation, a petroleum boo-boo.” Instead, he fitted the boat with 16-foot sweeps. He was not alone in his thinking. Hinterholler Yachts produced more than 850 Nonsuch catboats between 1979 and 1991, and Tom Wylie’s WylieCat 30 has been produced in limited numbers since the mid-1980s.

It was therefore no surprise that, when Garry introduced the Freedom 25 catboat in 1981, it also featured an unstayed rotating airfoil mast, a fully battened mainsail, a fin keel, and a spinnaker that shoots from a tube with a pole that mounts like a gun on the bow pulpit.

Garry says, “The airfoil wing was aerodynamically engineered to produce less drag than conventional stayed masts and to optimize airflow over the sail. Its ability to rotate freely means maximum power on every point.” Under sail, it did require a bit of tinkering, however. Catboats are best sailed with the mainsail sheeted

a plumb stern, combine to produce a good-looking sailboat. She’s a sweet-heart.

Deck layout

Without a forest of wire supporting the mast; minus a genoa and its halyard, sheets, and furling lines; and with the mainsail halyard and controls led to the cockpit, there’s not a heckuva lot involved in sailing the Freedom 25. In fact, given a tiller manager of some sort or an autopilot, the crew’s major time-filler may be agreeing on a menu or watching for traffic.

Comfortable seats that provide room for two bodies on each side of the footwell are 20 inches deep, and have 20-inch-tall backrests. The mainsail traveler is mounted atop the companionway, so it does not compromise the space.

The tiller can be secured out of the way, allowing the dining table to be relocated to the cockpit for dining under the stars.

Since there’s little reason to go forward, the 10 lines on the bow that

“...there’s not a heckuva lot involved in sailing the Freedom 25... the crew’s major time-filler may be ...watching for traffic.”

with the leech to weather to overcome weather helm. To achieve that, the boom is sheeted to weather while the mast rotates to leeward where — when properly aligned to the elements — it is sheeted in place by a “mast tiller,” a line led aft to a cleat.

The power of the rig, however, eventually became its undoing. “It was more troublesome,” Garry says, “because, even with sails down, the mast would make way, which wasn’t always desirable. So they were more difficult to dock. And they would sail when on a moorage. So we came up with a more customer-oriented, fixed mast.” These were built into more than 50 percent of the boats produced.

Often overlooked in the dialogue regarding the perceived idiosyncrasies of the Freedom (and those of her designer), is that the Freedom 25 is a looker. Her tall rig, matched with an aft-sloping cabintop and sheerline, along with a nearly plumb bow and

manage the spinnaker and patented Hoyt Gun Mount are of little concern. Nonetheless, while going forward I learned that I’d have to become used to not having shrouds available as handholds. No matter, she’s fitted with lifelines and 24-inch-long teak handrails on both sides of the cabin-top.

Belowdecks

For the same reason that it is not necessary to move 40-some feet from cockpit to bow on this 25-footer, crew won’t become short of breath belowdecks when traveling from the companionway to head and V-berth.

Interior spaces are highlighted by ash joinery accented with oak trim. The cabin sole is teak-and-holly plywood. The highlights of the main cabin, one not-so-vast space with enough headroom for a five-footer, are settees port and starboard long enough to seat four adults in a very



On facing page, *Tomcat*, a Freedom 25, is proudly sailed by her new owner, Tim Blanchard, and her former owner, Tom Cawrse. Remove the mast-supporting stays, the jib and its associated sheets and halyards, and lead all remaining lines to the cockpit. What have you got? *Freedom* to enjoy the scenery and to maintain a lookout for other boats. Also on facing page, *Tomcat*’s proud name, the mast tiller for the rotating mast, and Garry Hoyt’s Gun Mount spinnaker pole. This page, the interior is uncluttered and simple with ash joinery and oak trim.





upright position. In use, the portable dining table is fastened to the companionway steps. That complicates movement to the cockpit at mealtime, but the table is sturdy enough to support the weight of an adult.

Surrounded by wood joinery and accented by a bronze freshwater pump, the galley looks particularly yachty, despite being Lilliputian. An 11- x 13-inch stainless-steel sink provides a place to store dirty dishes and a two-burner alcohol stove provides a place to heat beans. A cooler is stored at the companionway.

The aforementioned settees extend aft under the cockpit and widen into quarter berths measuring 6 feet 6 inches that could be used as double berths if the occupants were paying very close attention to their caloric intake or were very well acquainted. At the least, she'll sleep four, with skipper and bunkmate in a 6-foot 6-inch V-berth in the bow.

Garry Hoyt's reputation extends to holding portable potties in great disdain. To that end, he fitted the Freedom 25 with an enclosed head plumbed to a holding tank with overboard bypass for use offshore. It would be unfair, however, to compare this space to a head on a 70-footer.

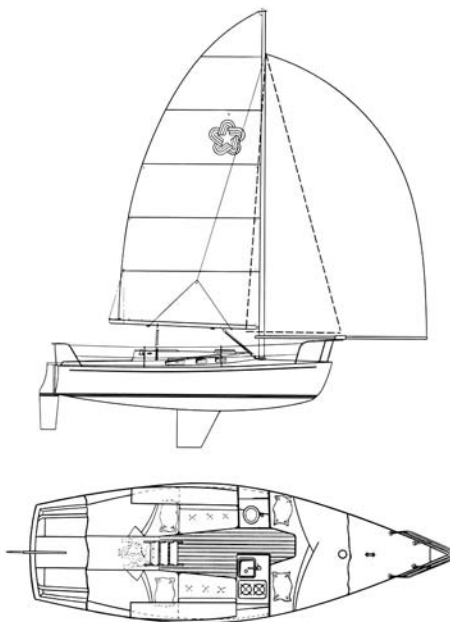
Construction

Freedom sailboats were constructed by Tillotson-Pearson Inc. (TPI) to which Garry eventually sold his company. TPI has been on the cutting edge of fiberglass construction for the three decades that began in the 1970s. As a result, these boats have aged gracefully.

The hull is finished with gelcoat, under which is a hand-laminated fiberglass structure. Both hull and deck are cored with balsa, which offers a lighter structure than solid

fiberglass, with similar rigidity but a quieter ride. The hull-to-deck joint is an inward-turned flange sealed with 3M 5200 adhesive and bolted through the teak toerail. That's a method still being used by most manufacturers in 2005. Her outboard rudder is fitted with pintles and gudgeons beefy enough for a 30-footer.

The external fin keel is bolted into a deep sump, using the same method



Freedom 25

Designer: Garry Hoyt
LOA: 25 feet 8 inches
LWL: 20 feet 0 inches
Beam: 8 feet 6 inches
Draft: 4 feet 5 inches
Displacement: 3,500 pounds with engine/3,800 pounds without engine
Sail area: 260 square feet
Ballast: 1,025 pounds
Tankage: 10 gal. fuel, 10 gal. water, 10 gal. holding tank

TPI employed on J/Boats. While she's lightweight and easy to haul on a trailer, the Freedom 25 is a fin-keel boat which must be hauled and launched by a lift or crane, limiting her utility as a trailerable weekender.

Like any boat constructed in the era, she's worthy of close annual inspection and maintenance. That deck fittings may leak is a reality to be faced, so cored sections should be examined for sponginess. The bedding compounds used in 1981 are not of the quality found in a chandlery today, so there's always the possibility of leaks at ports and the hull-to-deck joint. However, owners of 25-year-old boats report few failures.

Performance

Ultimately, the Freedom 25 is about Garry Hoyt's desire to produce a boat that sails quickly and easily. This she does. With the assistance of the new owner, Tim Blanchard, and former owner, Tom Cawrse, I was aboard for a short sail on Seattle's Lake Washington in dying breezes.

No problem. She was underway seconds after removing the sail cover and marched smartly across the lake in 4 to 5 knots of wind. My guess is that speed ranged between 4.5 and 5.5 knots on a tight reach. Owners say she'll maintain speeds of 4.5 to 6 knots comfortably in up to 15 knots of wind, at which point they tuck in a reef.

Lacking jib sheets, tacking and jibing are as simple as putting the helm over. The major shortcoming of a catboat, however, is an inherent inability to point close to the breeze. Garry's solution: "Hoist a vestigial triangle-shaped sail on the spinnaker halyard, and performance will improve measurably." I'll take his word for it.

Sadly, many casual sailors view hoisting a spinnaker as an action akin

The interior offers headroom for a five-footer, straight-backed settees port and starboard, sleeping arrangements for four, a Lilliputian galley, and an enclosed head. The removable dining table is fastened to the companionway steps, a complication for movement back and forth to the cockpit during mealtime.

to going to sleep on a railroad track. In most cases that fear can be eliminated by a competent instructor, two or three additional crewmembers, and practice.

Garry describes this condition as "spinnakerphobia," a condition that "has kept more shorthanded cruisers clutching the stern than mal de mer." The alternative, he says, is his Gun Mount, "which is drastic, but utterly painless."

Taking this medicine requires removing from your memory banks the vision of a spinnaker pole, spinnaker sheets, and guys. The replacement is a 16-foot pole that slides through a swiveling sleeve (the mount) atop the

bow pulpit.

Setting the spinnaker is a simple matter of attaching the tack and clew of the spinnaker to sheets at each end of the pole and hoisting the sail. To accomplish this you don't leave the cockpit.

Once aloft, the sail is trimmed or doused by merely pulling the pole into the proper position and releasing sheets or guys from the cockpit. Get it? It is ingenious and perhaps easier to deal with than a bowsprit and asymmetrical sail. I'll admit that it took me a few minutes to fully understand the concept but, having done that, I'm convinced.

Conclusion

So in the final analysis we have a boat that's easy to sail under main alone, even in light air... a boat that will go to weather with the addition of a Dacron napkin in front of the main... a boat that will go very fast under spinnaker... a boat that can be easily singlehanded or sailed by grampa and gram. ⚓

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

ASTRA III B

All-Metal Sextant \$510



plus 11.95 shipping

STAR FINDER \$34

For serious navigators!

Best way to identify isolated stars and planets in view, or to predict locations of bodies not yet in view. Star base, templates, instructions.



All Weather SEXTANT CASE \$98



Waterproof, floats, and perfect for travelling. Check it as baggage if you like. The ultimate protection for your sextant, with room for other things, too. Matte black or pleasing canary yellow. Foam inserts accommodate Astra IIIB sextant. Plath and Freiburger models \$4 more.

DIGITAL COMPASS WATCH

Timex, Indiglo, waterproof, alarm, chronograph, polyurethane buckle strap



\$49.95

INFRARED THERMOMETER

Palm sized device measures temperature at a distance. Simply point it at an object to get its temperature. Effortlessly measure the temperature of water over the side, your engine, car or trailer tires, your refrigerator, an air conditioning or heater outlet, the drink just served, or yourself. It's fun finding new uses for it.



\$49

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



416 S. Pershing, Wichita, Kansas, USA 67218

1-800-727-9785

Int'l +1-316-686-9785

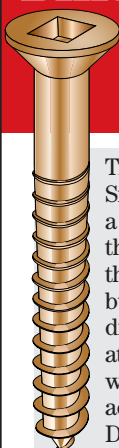
Fax +1-316-686-8926

www.celestaire.com

View the complete catalog on-line!

email: info@celestaire.com

Square Drive Silicon Bronze Boat Building Screws



Traditional Cut Thread Silicon Bronze screws have a significant advantage over the more common rolled thread screws, as most boat builders know. The full body diameter shank helps create an important seal as the wood swells. Combine that advantage with a Square Drive recess, and you have a boatbuilding screw that is both easy to drive and effective as well. We stock 35 sizes, from #6 x 1/2" to #14 x 3", all in Square Drive!

Write for FREE catalog!

McFEELY'S
SQUARE DRIVE SCREWS

PO Box 11169 • Dept GOB
Lynchburg • VA • 24506-1169

RogueWave

Yacht Sales & Services, LLC.
Your Choice for Blue Water Sailing Vessels!
www.roguewaveyachtsales.com
410-571-2955

"Jolie Brise" 1984 Bristol Channel Cutter, Offshore Equipped \$129K



Bernie is sailing the boat from Newport, RI right now! The BCC is one of the very best sea boats you can have. Just ask him.



TaShing Tashiba Pilothouse 31, 1987 completely rebuilt, repowered and waiting for you to take her anywhere in any weather. Don't get a trawler, stick with sail.



Kate and Bernie of RogueWave welcome the opportunity to serve the sailing community. Let us guide you through the process of buying your

dream boat or selling your old friend.

Call us at: 410-571-2955



Solving the meat problem, Continued from Page 39


of ground meat to fill a canning jar.

Use the canning liquid instead of the water called for on the seasoning packet directions.

liquid for 10 to 15 minutes somewhere in the recipe preparation.

When provisioning a boat for short-term or long-distance cruising, it becomes important to use all available resources. Adding home-canned meat to your ship's stores increases the variety of possibilities in meal planning. For those with limited refrigeration or on long-distance cruises in remote areas, it also provides an important part of the diet that may not otherwise be available.

When we were on an extended cruise in the Eastern Caribbean and Venezuela, there were many times when meat was not available or, if freshly butchered in the open market, it was somewhat less than desirable. Because we were going to be gone for many years, we took along 70 quarts of home-canned meat, which gave us more than 140 meals.

In the final analysis, what we really like about having canned meat on board is that it brings us one step closer to achieving the independence we cherish in the cruising life. 

Basic ground beef and tomato mixture:

This preparation is like the above except that after browning and seasoning with salt and pepper, approximately one 8-ounce can of concentrated tomato paste is added to the mixture for each canning jar. It is then hot-packed into canning jars to within one inch of the rim. No additional water is needed. Because minimal seasonings are used, this mixture can be used in many different recipes: hot dishes/casseroles, chili, and spaghetti sauce (see the sidebar on Page 39 for specific recipes).

Chicken, beef, or pork mixture: Be creative. If you have leftovers when canning, brown strips of chicken, beef, or pork. Hot-pack them with water and pressure can them. The mixture can be used with packaged seasonings for fajitas or rice dishes.

Using canned meat

When using canned meat, check the jar for any possibility of spoilage. The lid should snap off nicely, releasing a little pressure. If it doesn't, if there is any indication of mold, or if there is a bad smell, discard it immediately. As a precaution if you are unsure, boil the liquid-meat mixture 10 to 15 minutes. This brings out odors not apparent in the cold meat. After boiling, if it does not smell or look right, don't taste it to make sure it is bad; just throw it out.

In the canning process, any fat left with the meat will rise to the top, producing a barrier between the meat and the vacuum at the top of the jar. This fat can be discarded or used in making sauces and gravies.

With a little adjustment, most of your favorite recipes will lend themselves nicely to use with canned meat. The important thing to remember is to always boil the canned meat and

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



SPARTAN BRONZE

MARINE UL LISTED

SPARTAN MARINE HARDWARE

340 Robinhood Road
Georgetown, Maine 04548
207-371-2542 Fax: 207-371-2024
800-325-3287
www.spartanmarine.com
email: info@spartanmarine.com



SMALL CRAFT ADVISOR

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.

"Likely to pick up where Small Boat Journal left off."
From a review in Good Old Boat

1-year subscription \$26.95
Phone: (360)379-1930
P.O. Box 1343 Port Townsend WA 98368
www.SmallCraftAdvisor.com



These new pigeonholes, easily accessible from the cockpit, were a nice byproduct of the real project: turning a quarter berth and a shallow cockpit storage area into a large cockpit locker. After all, how many beds does a 30-foot boat *really* need?

Goodbye bed, hello storage

Converting an awkward quarter berth into a handy cockpit locker

by Jack Combs

OUR BRISTOL 29.9, *QUINTESSANCE*, was built in 1978 when most builders' brochures made much of how many people a boat could sleep: SLEEPS FOUR! SLEEPS FIVE! This all-important number for our boat was six. That has now been reduced to five because the space that was the quarter berth has been converted to a cockpit locker. Most sailboats in this size range built in the 1970s and '80s had quarter berths and, in most cases, these quarter berths have quickly become storage spaces — very inconvenient and inefficient storage for items that would be better stowed in a cockpit locker.

On our boat, the transition of this space from berth to stowage began early. I concluded that I was too old to sleep in a berth that I had to get into and out of endwise. You don't even have to be old. Our daughter, then 14, while sleeping in the quarter berth, had what has to be the worst kind of night terror. Half-awake, she thought for a few awful moments that she was in a coffin.

The first modification was having the quarter berth cushion made into two pieces so the batteries could be accessed in spite of all the stuff that was farther back in the space. This was done by the upholsterer at my re-

quest during a routine recovering job. The smaller forward part is 21 inches long, fore and aft. The aft part is the remainder of the original. Totally removing the larger aft section of the 5-inch cushion was the next step. This helped increase the storage volume but did nothing to make it more convenient. All the while in the back of my mind, I had the idea of converting the quarter berth space to a cockpit locker.

Hatch already present

This idea had suggested itself partly because the harder part of the work,

the hatch itself. The depth was about 8 inches. This very small locker space was a rectangular box formed in the fiberglass deck liner above the quarter berth and protruding about 8 inches down into the quarter berth space. Cockpit access to the converted space could be achieved easily by sawing out the fiberglass box. The larger part of the work would be the addition of a bulkhead to separate the new cockpit locker from the cabin interior.

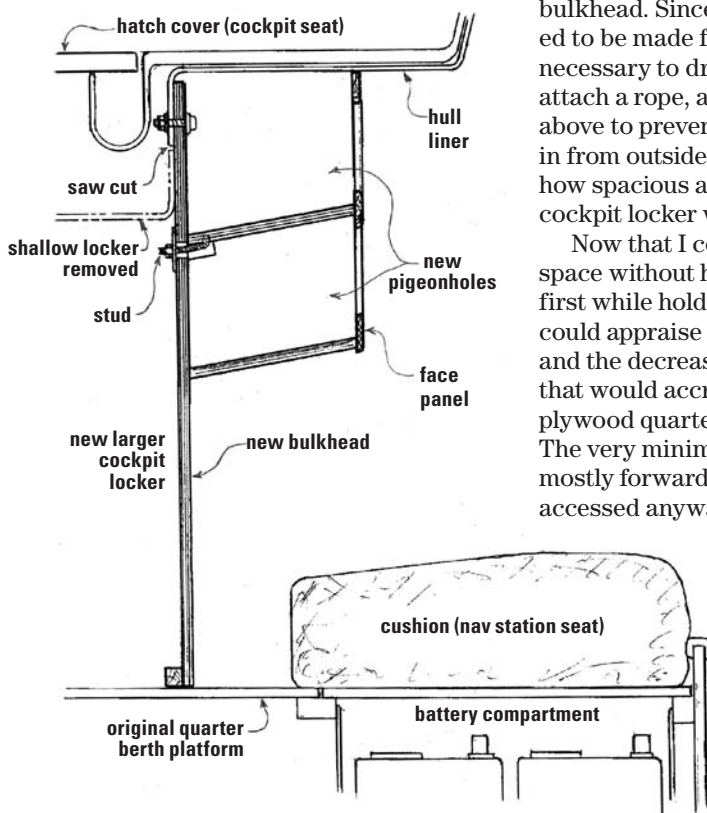
Creation of the bulkhead required planning and some basic decisions. The forward part of the quarter berth

“When it comes to taking a saw or drill to fiberglass, most boatowners experience a certain ‘crossing the Rubicon’ feeling.”

the creation of a hatch lid in the port cockpit seat, complete with gutters and drains, was already done. In our boat there was already a full-sized hatch lid on the port side identical to the one to starboard. It offered access to a small under-seat locker just large enough to hold winch handles and a few small cleaning supplies. This space was just the area covered by

cushion serves as the seat for the chart table/nav station. It needed to remain. This cushion also lifts out for access to the batteries beneath. These considerations set the forwardmost location for the bulkhead just a few inches ahead of the forward vertical surface of the original locker, so I decided to use this surface of the box to locate and attach the top of the new bulkhead.

Section looking to port



With the bulkhead located farther aft than nav station seating required, there was room to have a small locker on the cabin side of the new bulkhead. This locker could be about 8 inches deep fore and aft and extend downward from under-deck level to about 15 inches above the battery access. This has proved to be very useful storage; it's handy to the companionway and nav station without detracting from the basic cabin volume. The space under it and aft of the cushion became the ideal place to stow the companionway boards, an added bonus.

Crossing the Rubicon

Simply sawing out the box sounds easy, but when it comes to taking a saw or drill to fiberglass, most boatowners experience a certain "crossing the Rubicon" feeling. I was no exception and hesitated a lot, but after checking and re-checking which areas could be sawed from inside and which from outside considering all the various impediments, I decided to go ahead. Using several power and hand saws, I removed the box except for a small downward projecting portion of its forward vertical surface left to

serve as an attachment for the new bulkhead. Since the final cuts needed to be made from below, it was necessary to drill a hole in the box, attach a rope, and secure it from above to prevent its falling. Looking in from outside, I was pleased to see how spacious and handy this new cockpit locker was going to be.

Now that I could get into the space without having to crawl head-first while holding a flashlight, I could appraise the increased volume and the decreased convenience that would accrue by removing the plywood quarter berth platform. The very minimal space beneath it is mostly forward where it can still be accessed anyway, so the advantages

of a flat bottom surface for the locker plus the desire to simplify the bulkhead construction prevailed; I decided to leave it. The hull outboard of the quarter berth was finished with mahogany ceiling strips. These

strips were cut a few inches aft of the planned bulkhead location, removed, and stored for later use. I decided not to remove the approximately 2-inch deep ceiling support frames that were glassed to the hull, as these might serve as attachment for something or other later on.

Made a template

Prior to any cutting, I made a bulkhead template of cardboard and thin plywood, perfecting it by trial and error and allowing for the distance between the ceiling inner surface and the hull by measuring with a scale slipped between the ceiling strips. The bulkhead would extend vertically from the quarter berth platform upward to the cockpit seat/deck underside and horizontally from the engine compartment panel and cockpit footwell outward to the hull. The bulkhead was cut from ½-inch plywood using the template and by shifting it an inch in the process to add an extra inch to the bulkhead's horizontal width.

The bulkhead would have to be installed in two pieces, so I sawed it

on a vertical line a few inches inboard of the outer lower corner. I fastened the larger inboard piece in place with machine screws through the fiberglass portion left at the top. I secured its bottom and inboard edges with screws and glue using wooden cleat strips. With the major part of the bulkhead in place, the exact location of the final trim of the ceiling strips could be determined, and that cut was done. The outboard part of the bulkhead, still with its extra inch of width, was held in place behind its mating portion, marked, and then removed and trimmed at the vertical cut, making it fit to the already installed inner portion and to the hull. This removed most of the extra inch I had allowed as a hedge against errors in this final fit-up. It was secured to the inner part with a screwed and glued batten and to the hull with glued corner blocks. The very slight gap on the forward side of the batten joint was filled with wood filler and sanded smooth.

Pigeonhole locker

The location of the new locker for the forward side of the bulkhead didn't allow room for doors to be opened conveniently. Since it would be used for small items anyway, I decided that this should be an open pigeonhole locker with three spaces on each of two levels. I marked the design for this on the original template and made the assembly of shelves and partitions of ½-inch plywood. The partitions in the upper tier were staggered ½ inch from their counterparts below to permit the use of screws in all the joints. The face panel would hide this offset. The shelves were angled from the horizontal by 10 degrees, sloping downward toward the bulkhead to help retain items in the pigeonholes against boat motion, a technique I had used previously with good results.

The finishing touch was the mahogany face panel for the forward plane of the pigeonhole assembly. I made the face panel separately as a glued assembly using the ceiling strips I had removed earlier. The mahogany would protrude into the openings, not only covering the edges of the shelves and partitions but also providing a lip all around to keep things from falling out. I planed the strips for flatness and uniformity and cut and fitted the parts

using a pattern marked on a piece of plywood. The pattern provided some trim allowance on the top and inboard edges, and the gluing was done right on the pattern using small bar clamps screwed down to the plywood and wedges to force the parts into contact.

I attached the shelf assembly to the bulkhead temporarily while I trimmed and fitted the face panel. Then I took both parts home to varnish the face panel, paint the shelf surfaces, and glue the face panel to the shelf and partition edges in the location that I had marked earlier while in the boat.

Threaded studs

The final installation of the pigeonhole locker used epoxy glue and 1/4-inch stainless-steel threaded studs through the bulkhead with nuts and fender washers. The studs were epoxied to the shelves using small corner blocks. The holes in the bulkhead were over-size, about an inch in diameter, to allow for adjustment. These studs, used for the earlier temporary attachment for fit-up and for the final installation, were a big help. The edges of the shelves and the face panel adjoining the hull-to-deck liner, which could not conveniently be glued as part of the main installation, were caulked with 3M 5200. Painting — including a touch-up of the pigeonhole interiors — and the addition of two mahogany finishing strips outboard to hide the sawed ends of the ceiling strips, and the job was done.

The pigeonholes, though a byproduct of the original intent, are a big

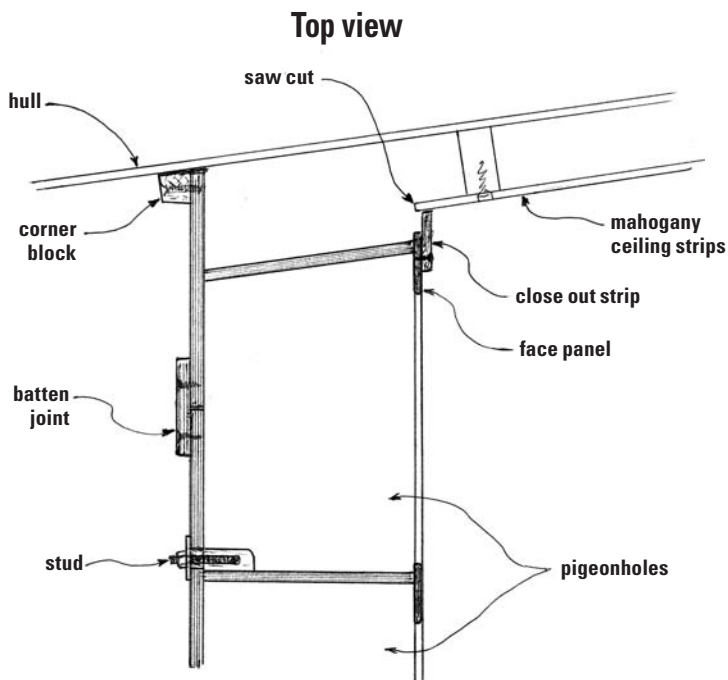
asset in their own right. They hold a variety of things that you'd like to have close to the companionway: safety harnesses, flashlights, chafing gear, deckplate keys, and sail ties.

The new cockpit locker has been a big improvement as well. There is now a good place to stow water hoses, a proper place for a fire extinguisher accessible from the cockpit, and so on. Cleaning supplies are now kept in a secured bucket where they can't spill, and there is room for a sailbag, fenders, canvas weathercloths, and more.

Worked at home


I did as much of the work as possible at home. All the plywood used was common exterior-grade fir ply. Corner blocks and cleats are pine or fir, except for one that is beneath the lower shelf and exposed in the cabin. This one is of varnished mahogany.

I used 3M 5200 adhesive for gluing to the hull. I glued the shelf assembly and the face panel with epoxy. I also used epoxy to glue the face panel to



the shelves and the shelves to the bulkhead. The metal hardware is stainless steel. The finish on the face panel consists of stained paste wood filler, two coats of Z-spar Captain's Varnish, and two coats of Defthane satin urethane rubbed with medium rubbing compound to a semi-gloss. The paint in the interior of the pigeonholes is a dead flat, deep gray-brown acrylic latex. The rest of the painted work was done with Pettit EasyPox white. The work was a part-time effort completed over a period of about two weeks, and the final installation of the pigeonhole locker was the only part that required the help of another person.

We have cruised with this modification for two seasons and are pleased with it. Getting out cockpit cushions or fenders is much easier when you don't have to go below and crawl into the "black hole" for them, and the pigeonhole locker provides useful storage close to the companionway without obstructing movement or making the cabin interior seem smaller.

We have also discovered that it's very seldom that a 30-foot boat needs to sleep six. 



The new deeper cockpit locker on Jack's Bristol 29.9 has room for a bucket to contain cleaning supplies, a fire extinguisher, canvas weathercloths, water hoses, fenders, and a sailbag.

Mr. Renovation

**Marine surveyor
Tim Lackey
makes a name for himself**

by Al Lorman

HOW PUFFED UP WOULD YOU FEEL IF almost 3,000 people a month admired your handiwork? Tim Lackey's boat projects get at least that many admiring glances and he still manages to be a pretty humble guy.

Most of us don't have more than one or two good old boat restorations in us; Tim is planning his fourth. He Awlgripped his first sailboat, a Pearson Ensign, in 1999. It was the success of that experience, he says, "that has led to all this silliness." The "silliness" includes a much-admired restoration of a Pearson Triton, completed in 2001.

Three years ago he bought a 1963 Lyman 23 sleeper in need of some work, and during the winter of 2004-05 he spent most of his free hours turning the gutted hull of another Triton into an elegant daysailer of his own design. And to make sure that there's another project in the pipeline, he recently bought a fire-damaged 1964 Allied Seabreeze 35 yawl as a "long-term project."

Amid all of this, he built a two-boat "boat barn" in his North Yarmouth, Maine, backyard, meticulously documented all of his work on several websites of his own design, and also found time to earn a living as a marine surveyor in the summer and run a

snowplow in the winter. And he's already started work on what he calls Version 2.0 of the boat barn. Tim also does most of the cooking and cleaning around the house in which he and his wife, Heidi, live.

Tim, 38, is well on his way to doing what most of us can only dream of doing: turning his hobby (obsession?) into his vocation. In fact, he now has an umbrella organization, Lackey Sailing, LLC, and a website, <<http://www.lackeysailing.com>>, that serves as the portal to his various sites and endeavors. If Lackey Sailing, LLC, gives the impression that Tim is on his way to becoming a sailing conglomerate, that may not be much of an exaggeration.

A lifetime in boats

Tim has been sailing since he was 10 years old. Originally from the greater New York area, his family moved to Portland, Maine, in 1976 to "escape the rat race" for the "cleaner, more relaxed lifestyle in Maine." Tim relates that "shortly after settling in Maine, my parents bought a new Pearson 30. My mother had sailed on her parents' cutter as a child, but otherwise the whole boating experience was new to them. I was enrolled in a junior sailing program and learned to sail on Turn-

abouts and Widgeons. I never took to dinghy sailing, in general, and always preferred the sailing experience in larger boats."

The seeds of his conglomerate can be seen even at this point. "I used to build crude wooden sailboats and powerboats and would float them on moorings in our swimming pool," he says. "I had a whole fleet and even had a little boatyard on one side of the pool where I would haul out and 'maintain' these boats. Later, I took it upon myself to renovate (several times) an 8-foot fiberglass dinghy that we had. I experimented with a few different paint jobs, inside and out, which, I suppose, was a hallmark of things to come."

"After several years of successful racing and cruising in the P-30, my parents made the bold move to step up to a 1980 C&C 40, a dealer demo boat that was basically brand-new. This boat remained in the family for nearly 20 years. It was on this boat that I spent most of my formative years, racing and cruising extensively



with my family. I always enjoyed this, and by my mid- and later teens was frequently taking care of the boat myself between weekend races. This was probably the start of my love for boat maintenance and projects, though I doubt I knew it at the time."

Indirect path

Tim says he knew fairly early on that he would spend his life with boats, but here, too, the path was not always direct. After high school he enrolled at the Maine Maritime Academy because it offered classes in naval architecture, "a career in which I thought I was interested," he says. "Interestingly enough, I never ended up taking a single naval architecture course; at some point I decided that this was too heavily involved in mathematics and engineering, subjects which didn't particularly interest me. I never really wanted or intended to ship out as a merchant mariner either, though I seriously thought about doing it for a few years just to get a start at something."

After graduating from the academy, Tim spent several years as a launch operator, a year working in the glass shop at Hinckley Yachts (which he credits with his knowledge of fiberglass even though he recalls it as a difficult and challenging year), and then working on the management teams at two local marinas, one with a working boatyard attached. He readily concedes that "it soon became clear that what I didn't like was working at the behest of others: under their schedules, deadlines, and rules." Tim says that this combination of experience, coupled with his overall boating love

and knowledge, eventually led him to the marine survey option as a career. He started the surveying business as a part-time job but soon jumped into self-employment full time, even though he wasn't sure he was ready for it. "Fortunately," he says, "I managed to survive."

Powerboat phase

Tim admits to an early detour through powerboating. Before buying the En-

sign, he owned a 25-foot Aquasport center console, a 31-foot Rampage sport fisherman, and a 26-foot Mako. "I got into saltwater fishing for a time," he explains, "thoroughly enjoying the sport even though I wasn't much good at it. For a while I contemplated commercial tuna fishing, which at the time was big here in Maine, hence the large 31-footer. It soon became clear that it was way too much boat and commitment for me, and I traded



On facing page, Tim Lackey's well-known project boat, *Glissando*, a Pearson Triton, shows off on the water after her refit. The inset shows a second Triton in its "before stage." Tim later converted this boat into a daysailer. He continues to buy and renovate boats, but *Glissando* is part of the family. In the midst of his projects, Tim took the time to build the boat barn, at right, in which to work. *Glissando* waits outside while two others get needed attention inside: the daysailer conversion and a classic Lyman 23.



Tim at work on his daysailer. This like-new boat, based on what was a derelict Triton hull, has a 12-foot long cockpit, a small cuddy cabin, and a brand-new Vetus engine. Tim sold this project boat, which he calls the Daysailer, almost as soon as it was finished.

down to the 26 Mako for a year before I became thoroughly bored with fishing and powerboating and then made the switch back to sail — where I always knew I'd end up."

Tim credits his powerboat years with helping develop his approach to sailboats: "The powerboat years are important because they highlighted for me how important it is to do things myself and also how important it is to maintain relative simplicity. The powerboats were over my head financially and also from a maintenance standpoint, but it's where I really began to learn how to maintain my own boats. The costs involved in hiring work out, which I still did at the time, drove me to this mantra of self-sufficiency that I now herald."

Enter the Ensign

Tim bought the Ensign in 1998. The same year he met Heidi, who would become his wife. They soon decided that a cruising boat, rather than a small daysailer, now fit the bill. He quickly identified the Triton as a likely successor to his beloved Ensign; both, of course, are Alberg designs. They bought their first Triton in 1999 and began what turned into a 21-month-long project, one that created *Glissando*, one of the web's better-known boats and the subject of a website that serves as a virtual how-to guide for most sailboat issues <<http://www.triton381.com/>>.

Tim says he started the website because he found the sites of other Triton owners "incredibly helpful." He and Heidi decided, after they bought the boat, that "it would be nice to put together something simple documenting my own project, since the other websites I had referred to had proved so instrumental to me. I never foresaw how the site would grow or what a following might arise."

While Heidi had sailed only once before she met Tim, she soon became a willing co-conspirator in Tim's projects. While her labors have been limited to making very impressive cabin and cockpit cushions for *Glissando*, "no one is more supportive of my interests and obsessions than Heidi," Tim says. "It was at her insistence that I built a dedicated boat barn, and she

utes away in Falmouth Foreside.

While Heidi works in the accounting and reporting department of a large local bank, Tim is his own boss and can take off for a sail whenever the weather and his schedule permit. Tim usually daysails several days each week and admits he rarely goes more than a day without at least checking on *Glissando*. Tim and Heidi annually take a several-week cruise along the Maine coast as well as several weekend cruises. Tim claims that he bought the larger Seabreeze so they could take along their two dogs, the dogs having found *Glissando* a bit crowded.

He says the most significant lesson he learned while restoring *Glissando* was that "time is the most important factor in any and all boat projects. A lack of time to spend working is the main reason behind many failures. I was fortunate enough to be able to adjust my boat-working time upward as required to complete the project within the allotted time frame; I had

a launch deadline that I never intended to miss. If I had not been able to dedicate nearly full-

"The costs involved in hiring work out, which I still did at the time, drove me to this mantra of self-sufficiency that I now herald."

time to the project during many of the months, I would never have completed the project within the time frame."

time to the project during many of the months, I would never have completed the project within the time frame."

The time problem

Tim says that he now counsels would-be boat restorers "to seriously and honestly address the time issue from their end. A lack of time for the project (which is natural with family and work commitments) will end up forcing unwanted delays, which in turn lead to a general loss of interest in a never-ending project. Most people have far less time available for a big project than they care to believe, even using their pessimistic projections. Unfortunately, this leads to many languishing — and even abandoned — projects."

On his website, Tim says, "We are sailors at heart, but there is always room in a sailor's life for a small powerboat, particularly one as classic as a Lyman." Tim bought the boat in Massachusetts in early 2004. Although it came with a trailer, Tim decided that

Virtual friends

The *Glissando* project gave Tim cult status among many sailors, and his willingness to share his time and experience with strangers by email helped create for him a nationwide circle of "virtual" friends. Tim regularly corresponds with numerous sailors by email. The guest book on *Glissando's* website has been signed by hundreds of visitors, and since 2003 the site itself has received an average of 2,800 hits a month. Tim and Heidi live in North Yarmouth and moor *Glissando* 20 min-

“Most people have far less time available for a big project than they care to believe, even using their pessimistic projections.”

the trailer would not serve his purposes. “We wanted our own trailer, no matter what, since the whole purpose of the boat was to be able to take her places on our own, as well as haul and launch her seasonally ourselves, allowing for extended boating seasons without worry about spring and fall storms on the coast.” So, in a scenario familiar to most boat-owners, Tim spent more to have a first-rate trailer built by Loadmaster Trailer Company than he paid for the Lyman (for confirmation of this, see article on Page 13). To save shipping charges, he drove to Ohio to pick up his new trailer, drove back to Massachusetts to pick up the Lyman, and brought her back to Maine. Although she has her own website, the Lyman has not received — nor needed — the attention the Tritons have received.

Custom Triton daysailer

Tim conceived the idea of building a daysailer based on a Triton hull because of his love for the sailing abilities and the lines of the Alberg hull. And because he was also honest enough to admit that “much as I enjoyed the obvious pleasures of sailing *Glissando*, and despite the fact that there were still plenty of smaller projects to complete, I had to face up to the thought that I actually missed having my project boat in the backyard.” While a 28-foot cruiser is small by today’s standards, the Triton hull creates a superb platform for a daysailer keel boat, a type enjoying a recent comeback, although most of the new daysailers seem to start at about 36 feet and carry price tags in the six figures.

Tim’s design for what he calls the Daysailer features a 12-foot long cockpit, a small cuddy cabin, a new Vetus diesel engine and, of course, Tim’s fastidious attention to detail. The boat had been on the hard for at least 12 years and was regarded as a “true derelict.” Tim picked up the boat for a song, had it hauled to Maine, and literally gutted it. Everything else is, or will be, new.

The Daysailer is the first boat that Tim has built specifically for resale. He plans to keep *Glissando* even after the Seabreeze project is complete.

Glissando will continue to live near Tim in Falmouth Foreside, while the Seabreeze will be moored in a yet-to-be-determined harbor in Penobscot Bay. In fact, Tim identifies the Daysailer as “the basis of my newest enterprise. I have now formed Lackey Sailing, LLC, to serve as the main umbrella under which I operate as a business.” Because Tim is also a marine surveyor, he says he “will never survey a boat on which I work, nor work on a boat that I have surveyed.” Indeed, until Tim created lackeysailing.com, the *Glissando* website did not disclose the fact that Tim is a marine surveyor, thus passing up endless free advertising.

Sticking with glass


Although a Maine resident, Tim hasn’t been particularly attracted to the wooden-boat revival largely led by his Maine neighbor, *WoodenBoat* magazine. “My whole background and experience is with fiberglass boats,” Tim explains. “I know that I am more skilled with fiberglass than with wood and, as a man who knows his limitations, I realize that I am best served working in this particular medium. I don’t knowingly resist the wooden boat culture; I love wooden boats and their resulting culture here in Maine. But I prefer for the moment to stick to what I know best. There’s no denying that fiberglass boats require substantial maintenance and eventual repair and, as one skilled in that area, I am happy to continue working with the material.” Nonetheless, he doesn’t discount the possibility of one day working with more wooden boats.

Beyond completing the Daysailer and restoring the Seabreeze for his own use, Tim’s plans for the future are to build a business focused on the preservation of classic fiberglass sailboats. Tim and Heidi also have selected a new venue for the business and for their

home; they’ve just bought 50 acres in Whitefield, a small inland town conveniently lo-

cated close to the mid-coast of Maine. There, Tim has already started work on a new boat barn large enough to hold two boat bays, a workshop, and an office. The planned start for their home is spring 2006. “The new land will help offer even greater potential for spec and commissioned boat projects,” he says, “as well as provide us with a quiet, idyllic setting away from the inexorably increasing bustle of southern Maine.”

A big unknown for Tim is whether future boat buyers will be willing to pay him a fair price for a plastic classic that is essentially a new boat. Tim’s Triton Daysailer, launched August 26 and listed for sale at \$89,900, costs less than a new production boat of comparable quality, but more than if the buyer were to do the work him or herself.

Few of us, though, have Tim’s combination of vision, attention to detail, and artistry — and the skill to put all three together in a memorable boat. So if anyone can make a go of rebuilding plastic classics, Tim Lackey is probably that person. Two months after the Daysailer was launched, he had a contract for her sale. 

***Pixie*, an Allied Seabreeze 35, was a fire-damaged wreck when Tim brought her home. *Glissando* will sail out of Falmouth Foreside in Maine; *Pixie* will be based in Maine’s Penobscot Bay. Tim admits to being in love with the sailing abilities and the classic lines of Alberg hulls and others of the same era.**



WHAT ARE YOUR FAVORITE SAILING memories? Do you flip through last summer's mental photo album searching for a scene to replay that'll get you through a string of cold winter days? Does smiling remembrance of that sparkling beam reach as the afternoon sea breeze filled in banish the November in your soul? It sure does mine, and I get lots of practice living in Alaska with its abundance of winter.

But one image always returns to the November theater inside my head. I call it Breakfast at Tiffany's. Roll the scene ...

It begins in Prince William Sound's Serpentine Cove, halfway up Harriman Fiord. The diesel heater is aiding and abetting the folly of two warm-blooded humans and a tiny puppy trying to spend a comfortable July night amid billions of tons of ancient ice. Flocks of nimble scoters and murrelets rise and fall and fly like wind-driven leaves over the submerged moraine that bounds the cove. Drifting past them is an occasional seal draped luxuriantly over a bergy bit, like a movie starlet in an icy spa. Serpentine Cove is safe for anchoring *Minstrel*, a Pacific Seacraft Dana 24, because the glacier at its head has retreated and now calves on the beach. Still, beachcombers need to be careful.

What passes for "night" in midsummer Alaska soon brightens into a still morning, and we are alone in a water-color wonderland. Bergy bits from last night's calving of Harriman and Surprise glaciers fill the turquoise fiord like a free-form crystal sculpture garden. It's full of animal ice shapes just waiting for our imaginations to find them. On such a reflective landscape, there can be only one theme: go slowly.

Unmarked channel

So slowly we weigh anchor. (Alaska's deep waters really do make you "weigh" it.) Slowly we pick our way to the shallow unmarked channel over the bar and leave the cove. Slowly we dodge this way and that around blue ice sculptures, pausing to admire the most fantastic shapes. Slowly we arrive within a mile of the gigantic tide-water confluence of Barry, Cascade, and Coxe glaciers.

We shut down the engine, and slowly we drift to the sound of ... huh? Rice

Breakfast at Tiffany's

An Alaskan summer idyll

by Karen Sullivan

Fantastic ice shapes await our imaginations. On facing page, blue ice sculptures in a floating crystal garden, at right. Drifting past the cove was an occasional seal draped on a bergy bit, like a movie starlet in an icy spa, above.

PHOTOS COURTESY OF WWW.IMAGES.FWS.GOV



Krispies? What a surprise to hear the familiar Snap! Crackle! Pop! coming from every bergy bit all around *Minstrel*. OK, time for breakfast! Lacking Rice Krispies, we opt for hot oatmeal and coffee. We chill orange juice that doesn't need chilling, with hunks of 10,000 year-old ice. Even the cool blue air is so crisp and clean and good we swear we could gain weight just breathing it. Alfresco dining in a boat cockpit couldn't get any better than this.

Another surprise ... glaciers are noisy. Booms, rumbles, and cracks punctuate the Rice Krispie melting sound. It's like breakfast at a construction site. But the scene is a stunning blue ice visual. Surrounded by floating crystal, we decide it's more like Breakfast at Tiffany's.

A third surprise ... amid a flock of seabirds in shoal water half a mile away, suddenly appears a sustained exhalation that looks like a geyser. We can't fathom what kind of creature, in this kind of habitat, could breathe like that; we are 80 miles inland from the open ocean. But then one, another, and a third humpback whale surfaces, swimming in a tight circle while seabirds dive through their hanging mist-breath columns.

Complete silence

We are in an awesome cathedral. It stuns and humbles us into complete silence. We drift, watch, listen, and dream for an hour as the massive freshwater outflow carries *Minstrel* and her rapidly shrinking bergy companions south down Barry Arm toward College Fiord. We feel the first gentle puffs of glacial wind, that have been blowing overhead until now, sinking to the water's surface to blow us home.

Wordlessly, we raise the mainsail and pole out the genoa and sail wing-and-wing out of this place that defies description. We have been given an extraordinary gift of summer wind and blue ice to be savored and treasured for the rest of our lives, especially in winter. ⚓



Subscribers, Do you receive your *Good Old Boat* newsletter?



One of the extra things we create, here at *Good Old Boat*, is our bi-monthly newsletter exclusively for subscribers. But we've learned that some of our readers don't receive it. It's an informal and fun addition to your magazine issues which you can receive via email or postal delivery. Your choice.

We don't want you to miss it!

If you're not receiving your newsletter every other month (between each issue of *Good Old Boat*), please get in touch:

Karla@goodoldboat.com or

763-420-8923

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

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

landfallnavigation.com

LANDFALL NAVIGATION
OFFSHORE OUTFITTERS

electronic charts
paper charts
SOLAS flares
life rafts
foul weather gear
navigation software
MOB equipment
inflatable PFDs
cruising guides
almanacs, pilots
tethers
jacklines
clocks, barometers
instruments
EPIRBs
watermakers
drogues
sea anchors
abandon ship gear
rigging cutters
medical packs
night vision
sextants

See our catalog online
or call for a free print catalog
800-941-2219

VISIT OUR RETAIL STORE Exit 6 off I95
151 Harvard Ave., Stamford, CT 06902

Just the Nuts & Bolts

HOW TO:

- Troubleshoot & Repair Engines
- Install Electronics
- Wiring & Plumbing
- Renovate Interiors
- Repair Fiberglass
- DIY Projects
- **FREE Expert Advice & more!**

DIY **boat owner** **the MARINE MAINTENANCE MAGAZINE**

Boat Owner's Guide To Used Boats
CLASSIC GLASS: Best Used Boats

How to Install Hardware in Cored Decks
Stemdrive Repowering
Diesel: Calculating Torque Gear Ratios
Electrical: Batteries and Charging PM
Electronics: Transducers: Improving Signal Performance
DIY Projects
Hot Water from Engines
Lock and Jiffy Doors
Saltwater Engine Flushing Devices
Retracting Marine Trestle Galley

SAILBOAT RIGGING
Sail Training for Spirit and Performance

FREE HELPLINE Search on Page 18
www.diy-boat.com

Subscribe to
DIY boat owner Magazine
& receive a FREE
Painting & Refinishing CD-ROM

\$19.95 value

www.diy-boat.com • 1-888-658-2628

diameter to obtain the same strength and, again, the problem of incompatible pin sizes crops up. You would have to increase to 1/4-inch type 316 wire to get strength equivalent to 7/32-inch type 304; then the pin size of the terminal jumps from 7/16-inch to 1/2-inch. It is quite probable that the chainplates can be safely drilled out to suit, but there's no way to guarantee it without measuring and calculating carefully.

In some situations, custom-made fittings will solve problems caused by changes in the rigging schedule of a yacht. Rigging Only can supply some custom fittings. If you go this route, you may want to buy extras because replacements will be hard to find.

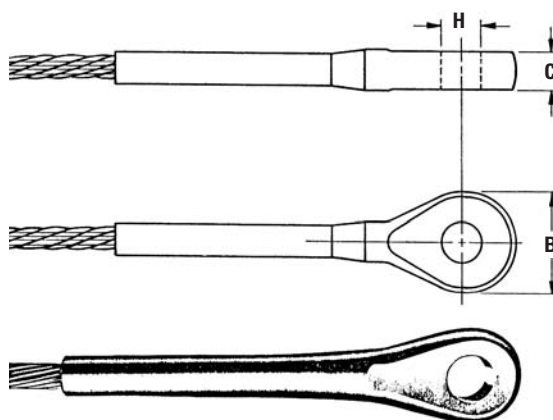
Even more confusion exists when you get into "aircraft" terminals. These terminals are available in both jaw and eye type, but use a smaller pin than marine eyes. A 1/4-inch "aircraft" eye uses only a 3/8-inch pin, instead of a much more robust 1/2-inch. The fork-style terminal is often used with single-plate mast tangs, instead of the more common double-plate tang, and I would avoid these like the plague on any boat much larger than a daysailer.

Not cost-effective

I do not include rod rigging as I have not used it to any extent on my yacht designs, and I do not find it to be cost-effective for the typical cruising sailboat. Rod does have advantages of excellent corrosion-resistance, lighter weight, and smaller diameter for less

Rigging terminal dimensions in inches

Wire diameter	B	C	H	Pin size
3/32	.625	.219	.260	1/4"
1/8	.625	.219	.260	1/4"
5/32	.750	.281	.323	5/16"
3/16	.875	.344	.385	3/8"
7/32	1.000	.406	.448	7/16"
1/4	1.125	.469	.515	1/2"
9/32	1.125	.469	.515	1/2"
5/16	1.375	.594	.640	5/8"
3/8	1.375	.594	.640	5/8"
7/16	1.625	.719	.765	3/4"
1/2	1.875	.844	.890	7/8"



Resources

Rigging Only

508-992-0434, <<http://www.riggingonly.com>>

Hayn Enterprises

800-346-4296, <<http://www.hayn.com>>

Navtec

203-458-3163, <<http://www.navtec.net>>

windage. Its main disadvantage is that it can fail unexpectedly, as the signs of failure are difficult to detect. If you are a serious cruiser/racer you may find it to be affordable and advantageous for your sport. If so, I would suggest that you contact an experienced rigger for advice and an estimate.

I would add one note. It is obvious that shrouds can slat around considerably when they are on the lee side of the yacht. Most sailors realize that toggles must be fitted to prevent damage to the turnbuckle from the banging around.

The other alternative is to use toggle-type turnbuckles. However, few sailors think about the ends of the fore and aft rigging and, here, toggles are recommended at both the top and bottom on all headstays in order to allow for the twist of the catenary under a press of sail.

Finally, regular inspection with a very strong magnifying glass is essential to head off rigging problems. Rust is the first sign of a potential failure in stainless steel. The use of a penetrating dye is particularly helpful in detecting minute cracks in swagings, turnbuckles, and toggles. Careful polishing of the rigging can eliminate the small pits that allow corrosion to get a start.

Remember that like a chain, standing rigging will be as strong as the weakest component in the path of tang, fitting, pin, wire, fitting, pin, chainplate. There is nothing gained by upgrading only one of these "links," and everything is downgraded by making any of these parts weaker. 

the sailors best mate...
...almost
Tillermate

While sailing short-handed, Tillermate holds the tiller in a constant position. Secure the helm while you work the winches or trim the sails! Controls the helm from free to locked.



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

NEW! SUPER COMPACT SAILDRIVE 280



TECHNICAL DATA: Using a Honda, water-cooled, 2-cylinder four stroke, 12.5 h.p. gas engine with electric start...

- Stroke volume: 280 cm3
- Electric: 10 amp charge - 12 volt
- Weight: 110 lb incl. fiberglass mount
- Propeller: 12" x 8" folding or fixed

The engine is rubber mounted, has no vibration and is extremely quiet. The engine has enough power to push boats up to 8000 lbs. A very nice replacement for transom mounted outboards. All underwater parts are epoxy coated.

only \$6,300

Sold by
ARNE JONSSON BOATWORKS
2041 GRAND ST., UNIT 23 • ALAMEDA, CA 94501
510/769-0602 • FAX 510/865-3512
www.saildrive280.com • sales@saildrive280.com

Replacement for old OMC and VolvoMB2/S0S saildrives

Boats for sale

Harstad 31

1976. Crealock-designed trailer-able motorsailer. Aft cabin w/6'5" berths, new cockpit and V-berth cushions, Yanmar 20-hp diesel, ketch-rigged, added pilothouse, 4 AGM batteries, 125-amp alternator, smart regulator, wind gen, 4-bladed prop, 3-axle trailer w/new rims and radial tires. \$33,000. Available with '99 Dodge ext cab, 4-dr, 2-wd w/Cummins diesel. Also available 9' RIB w/8-hp elec-start Honda. Photos and more at <<http://www.dreammaker32.com>>. In Palatka, Fla.

Jock Ames
860-575-2896



Bristol 27 Weekender

1968. Pictured in *Good Old Boat* March '01 article by John Vigor. Grand 8.5' cockpit and Herreshoff-style cabin w/4 good bunks and unique swiveling table. Bronze ST winches and cleats. Heavy Danforth nestled under sole. Elec-start OMC 9.9-hp 25" shaft. Not as Bristol as she once was; needs varnish and TLC, but hangs tough and will carry you anywhere. 6 stands included. Near Boston, Mass. \$5,300/BO.

Frederick Corey
508-397-2309



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 fastened. 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. Reduced price \$10,000.

Larry Gillen
larry_gillen@yahoo.com
816-454-1386



Hinckley B40

1964 custom yawl, '89 Westerbeke 46 (1,470 hrs), dark blue hull, white dodger, new sails and covers. New Simrad AP w/remote, D/S, water temp, log, radar, VHF, manual windlass, bronze fire-place, sun shade, cockpit cover. Lying Ocean City, N.J., \$119,500. <<http://www.picturetrail.com/gallery/view?p=999&gid=1692466&uid=450721&members=1>>

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



AMF Paceship 26

1980. One owner, fresh water, 8 North sails in exc cond. Twin headfoil, 3 jibs, 1 main. Halyards all direct to cockpit. BMW diesel, steel cradle, sleeps 5. Great family sailing boat. In Hudson, Wis. \$12,000.

Chuck Eichacker
772-229-1808

Hartley 39

1976. Lying near Hurghada, Egypt (Red Sea). Our much-loved home since 1976, but we must sell due to illness. For full particulars see <<http://www.geoscrib-e.ca%5Ccapritaur.html>>. We *nearly* made it around the world!

Frank & Jaci Sibble
604-685-0491



Mason-designed classic

31' traditional sloop, 7/8 rig. Steel

Most of our classified ads appear on the
GOOD OLD BOAT
website:

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

hull. Honduras mahogany bright-work. Sitka spruce spars. Wooden blocks and cleats. Anchor winch. All equipped. Comfortable, seakindly cruising vessel. Built '80; sailed exclusively on Lake Ontario. At Whitby, Ont. Marina. \$35,900 CND.

Donald Smith
intrepidlady64@hotmail.com
905-728-9042



Ranger 29

1973. 6' headroom, almost queen-size berth athwartships (custom), dodger, custom sun awning, cockpit cushions, and shower, '03 North main and 150, 135, Ulmer Tapedrive 110, 170, staysail, spinaker. S-H 150 wind, '05 Emron red paint, Atomic 4. Fresh water until '01, CD/AM/FM, Plexiglas hatchboards. In short, a lotta' fun for not a lotta' money! In Greenport, N.Y. \$12,500.

Drew Shemella
Shemandr@optonline.net
516-747-6979

Sea Sprite

In commission in Newport Beach, Calif. Asking \$19,500.

Lou Libbey
libbey@cox.net
949-721-9042

Falmouth Cutter 22

1984 Lyle Hess design. Built by Sam L. Morse Company. Cutter-rigged, trailerable ocean-going cruiser. Yanmar IGM diesel. Heavy displacement pocket cruiser in exc cond. Finished in Spanish cedar, all lockers cane-covered. Refit for bluewater cruising '02, including staysail RF, lazy-jacks, watermaker, radar, radar reflector, refrig, SSB, stereo, 3-burner stove w/oven, and cockpit enclosure. Fatty Knees sailing dinghy, Honda OB. Loaded. Must see! Baltimore, Md. \$75,000. <<http://www.falmouthcutter.com>>.

Manuel & Roz de Lizarriturri churruca@falmouthcutter.com
410-419-2722



52-foot schooner

Designed and built by Reuel Parker in 1986. Wood and epoxy construction. Total refit '02. LOA 63', draft 3'4" board up, 9' board down. Currently being refit for certification as a Coast Guard-inspected vessel. Sleeps 6 in 2 separate cabins. Great Bahamas boat. New Yanmar (54-hp) diesel. Ready to go. In Fort Pierce, Fla. \$195,000.

Bill Smith
772-529-9275



Whisstock 17

Amazing classic British design built '97 in Knife River, Minn. Epoxy over heavy wood. Serious pocket cruiser w/everything. Queen V-berth, 2-burner stove, sink, head. Feels like a 24'-footer. Sail open water, anchor in 2 feet, or run her up on the sand beach. Near Bristol cond. Custom trailer. Owner will deliver. Price negotiable. See website <<http://stephanhoglund.com/catinfo.cfm?CatID=pC%2001>>.

Stephan Hoglund
218-387-1752 or 218-370-1314



Nimble Kodiak

1998. Ted Brewer-designed motorsailer. One owner. Fresh-water only. Yanmar 18-hp diesel, dual steering stations, shoal draft. Standing headroom 6'4". Tanbark sails, VHF, stereo/CD, AP, Horizon S/D. Upgraded lighting. Pilothouse cushions professionally recovered. Sleeps 4. Alco-

hol/electric stove, refrig 12v/120v. Bimini, sail cover, mizzen cover. In Holland, Mich. \$35,000.

Mark Mow
mtmow@earthlink.net
574-848-7044



Sea Sprite 28

1985. Hull #48. Sailed about 4 weeks each summer. Bristol cond. Virtually all systems new, replaced, restored. Professionally maintained. Stored inside during off-season. Very lightly used 9' Zodiac (new '01) a negotiable extra. Pictures by email. In Sturgeon Bay, Wis.

Peter Schloss
pmslaw@kc.rr.com
816-792-4242



Golden Era 26

1985. Modified Herreshoff fiberglass cutter. *Oriana*. Beautiful classic lines w/ bronze stanchions, portholes, bow pulpit, w/teak throughout boat. This classic turns heads everywhere she goes. 15-hp Yanmar. Marine survey '03. 6'2" headroom, 3'11" draft. Full keel. GPS, Autopilot, VHF, solar panels, more. A distinctive sailboat w/traditional elegance; will evoke many hails of "pretty boat!" Beaufort, N.C. \$25,000.

Matthew Besch
matthewbesch@yahoo.com
305-923-5687

Bristol 29.9

1978. Epoxy barrier coat bottom '97. All new in '04-'05: standing and running rigging, DC elec panel and main wiring, 220 AH AGM house bank, start batt, Groco RW strainer on engine, engine hoses, interior cushions, Dutchman sail-flaking system, Rule 2400-gph bilge pump, Whale manual pump, head pump assy, Delta 22# anchor w/50' 5/16 HT chain and 200' rode, Bruce 25# w/150' rode, Origo 3000 gimbaled stove. \$35,000.

Michael Shopenn
336-558-8339

Stone Horse 23

Sam Crocker design, Edey & Duff built. Hull #143. Navy blue Awlgrip, teak cockpit and hatches, and bright trim. Westerbeke diesel 10-hp less than 350 hours. Wood/coal heating stove, Bruce and Danforth anchors. Semi winter cover, Bimini, more. Well maintained. In Annapolis, Md. \$19,500. Check *Good Old Boat* issue 22 and <<http://www.stone-horsesloop.com/sailingmagazine.pdf>>.

Pierre Wagner
clairierre@verizon.net
202-332-5501

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
800-476-2190

Wanted

Propane stove and tanks
Looking for good, used, reasonably priced propane or CNG stove and tanks/equipment for installation in a sailboat located in Wisconsin.

Glenn Norstrom
651-647-0285

Restoration

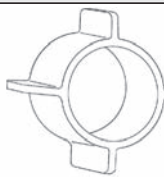
Remove 30 coats of varnish and paint in 20 seconds.
No Chemicals
No Sanders
Lead Safe

www.silentpaintremover.com
Ph# 585-924-8070

Donations

Donate unused or spare boat parts and supplies or whole boats to **The Sailing Program**. We've been teaching sailing and boat repair for over 15 years with the support of sailors like you. **Contact Captain Scott 800-815-0242**

Products



Don't ruin your sails with the bleeding rust of stainless steel. **Bristol Bronze** makes a variety of sizes of the Mast Wythe/Cranz Iron shown above. For catalog send \$5 to: Box 101, Tiverton, RI 02878 • 401-625-5224 • www.bristolbronze.com

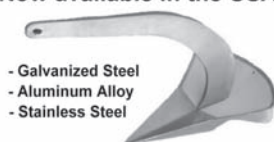
Like a good boat:
strong, simple, beautiful.

sailor BAGS
Hand-sewn bags made from soft, flexible sailcloth. Perfect gifts. See our whole line of rugged totes, duffels, and more at www.sailorbags.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

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

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

LineCatcher™ Dock Lines Always Within Reach



- Vinyl holder and flexible hook will never damage your hull or rigging
- Coiled line can be pulled off flexible hook if not within arms length
- Made in USA

Toll Free: 1/(877)-MOORING (666-7464)
Fax: (781)749-0202

LineCatcher, Inc., Hingham, MA
Visit our site for other marine products www.dockcatcher.com
Dealer inquiries invited

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

Products, cont.

ATN "Sailing should be Simple and Safe"

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

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

LBIF

973 North Road Rte 117
Groton, CT 06340

SEA-CAM

See our website or call
for free DVD

COLOR Underwater video camera with 66 Ft of cable & white LED lights. Use it with onboard TVs, camcorders or computers. Ideal for hull and running gear inspections. OR, just watch the fish swim by. Everyone is mesmerized exploring the underwater world with SEA-CAM.

www.borelmfg.com
800 824 4449
Borel Manufacturing Inc.

IdaSailor Marine
idasailor.com
(208) 375-2204
Toll Free (866) 400-2204
sailboats@idasailor.com

RUDDER UPGRADE
Improve your boat's helm balance, handling, pointing and speed with a modern high-performance rudder blade or complete rudder assembly. Lifetime warranties.

Call Toll Free 866-400-2204
OR VISIT US ON THE WEB: IDASAILOR.COM

IMPROVED PERFORMANCE
for your: Com-Pac, MacGregor, West Wight Potter, Venture, Buccaneer, Chrysler, Newport, Balboa, Catalina, O'Day, Aquarius, Hunter and many, many others.

SAIL THE DIFFERENCE

**LOVE BOXED WINE?
HATE THE BOX?**

Try the TAPSACK! IT'S A WINE BOTA. Drop in the full bladder from your favorite 5-liter boxed wine. IT'S A WATER BAG. Fill the provided inner bladder with fresh drinking water. You can even freeze several bladders to chill your icebox.

www.fairtradewind.com

Make old fiberglass shine like new!

- Restore oxidized fiberglass
- Easy application – wipe on, no buffing or rubbing
- Will not wash off with soap and water, not a wax
- Lasts over 12 months
- Guaranteed

As seen in Practical Sailor

POLIGLOW

complete kit
\$54.95 add
\$7.95 s&h



800-922-5013

VISA M.C. AMERICAN EXPRESS

Miami Lakes, Florida

www.poliglowproducts.com

Cape Horn
Integrated Self-Steering
Renders others Obsolete

Internally connected to yacht's steering system

for one circumnavigation
Guaranteed
or 28,000 miles

www.capehorn.com
mail@capehorn.com
1 800 CAP HORN 450 479-6314 fax -1895
316 Girouard St. Oka QC Canada J0N 1E0

"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.

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

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

90°F+
CABIN LINER KEEPS YOU COOL AT ANCHOR AND WARM IN WINTER
REFRIGERATION LINER REDUCES AMPS

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

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

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

By hand

Fix IMPELLERS Fast

- Hand screw release
- Captive O-ring seal
- No paper gasket
- Install in seconds
- Kits for most pumps

No tools

SPEEDSEAL
EASY SLIDER
PRACTICAL SAILOR verdict
"An essential piece of safety equipment"

Action Demo
800 675 1105
before 1pm Eastern Time
www.speedseal.com

MOISTURE METERS for fiberglass and wood

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.

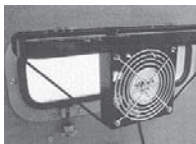


GRP-33 • Skipper Plus • Sovereign

J.R. Overseas Company

502-228-8732
www.jroverseas.com
sales@jroverseas.com
Marina Drive, Prospect, KY 40059

Port Fan



Versatile ventilation!

- 3 mounts included: bulkhead, port, Velcro
- Quiet, 70,000-hr. motor
- 2 speeds, low energy needs: 0.5 amp on high; 0.25 amp on low
- Portable: Use it where you need it!

Solar Panels, KISS wind generators & More!



Ph/Fax: 727-943-0424
crew@svhotwire.com
www.svhotwire.com

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



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/

GFO Dripless Packing

Virtually dripless, Easy to install, Solves leaking problem, Long lasting, Rarely needs adjustment

also
Solar Panels, Wind Generators
High Output Alternators,
Refrigeration & more!

e-Marine, Inc
www.emarineinc.com
877-432-2221

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

Shutup!

Up to 90% diesel noise reduction
with **SPM Soundproofing Tiles**
P.O. Box 737, Northport, NY 11768
631-754-1945
www.sailorssolutions.com



DECK PRISM

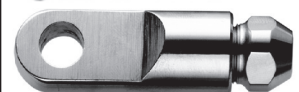
Round & Rectangular
Marine Skylights
www.boatdeckprism.com
(250) 744-7564



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

STA-LOK®

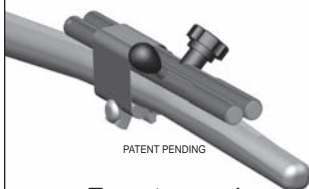


Self-fit mechanical rigging terminals
Available at quality rigging shops
everywhere. Call for information on
a rigger near you.

800-458-1074 • 305-758-1074
brooks@sailingservices.com

sailing services, inc.
USA Distributor

All NEW **Tiller Mounted**
engine controls **ONLY** from
PowerTiller.com



- Easy to reach
- Simple to operate
- A great value
- Just clamp it on!

602-852-5707
www.PowerTiller.com



Custom-made halyards,
sheets, vang, topping lifts,
outhauls and other running
rigging lines.

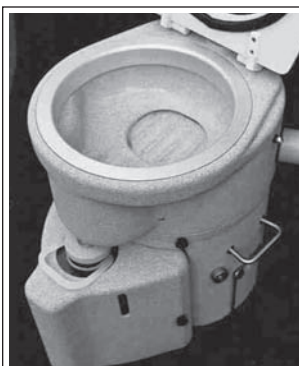
- Cajun XLE yacht rope •
- Double braid nylon •
- Dinghy braid • Rigging Kits •
- Anchor lines • Docklines •
- Shock cord • Marine rope •

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



Finally!
A compostor that
will fit in your boat!
www.airheadtoilet.com
740-392-3642

Traditional Marine Stoves



Solid Fuel
Cast Iron &
Porcelain
Heating
Cooking

marinestove.com 360 376 5161

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

Products, cont.

LEOFLEX-X

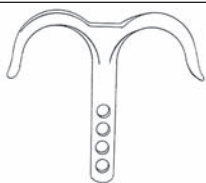


The latest technology in "synthetic Manila." Looks great and works hard. Designed for Tall Ships, but looks right on all Good Old Boats (including my Triton). Superior UV resistance, very strong, low stretch. Excellent value.

American Rope & Tar

1-877-965-1800

www.tarsmell.com



Keep your expensive oars from being stolen with a Double Oar Retainer from **Bristol Bronze**. For complete catalog send \$5 to:

Box 101, Tiverton, RI 02878

• 401-625-5224 •

www.bristolbronze.com

Atomic 4 Parts

Campbell Sailer Propellers
for your Atomic 4 or
any other engine

nuclearengine.com
360-941-5623

Microlog

High Quality Replacement Panels



>DC System Monitor >Backlight
>Epoxy Coated Aviation Aluminum
>Best Marine Grade Components

We do refurbish or custom build also
www.micromediaplus.com

1.888.723.4534 or 450.664.2664

Mariners Hardware



For more information or Catalog:
Web: www.MarinersHardware.com
Tel: (707) 765-0880

Classic Rope Fenders

Cotton • hemp • Synthetic

Box 42, Beulah, MI 49617

231-882-4898

cbump71@hotmail.com

Boatbuilding

www.epoxyproducts.com/marine.html
603-435-7199

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

BUILD YOUR OWN BOAT & SAVE!



Proven plans & kits make it simple to build your dream boat. Send \$9.95 today for huge catalog, refundable with order.

Glen-L Marine

Box 1804/GB66

Bellflower, CA 90707

562-630-6258

www.Glen-L.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

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

New England Chrome Plating Inc.

Specializing in Boat Parts:

Plating, Polishing and Powder Coating

• Chrome • Brass • Gold
• Copper • Nickel

www.newenglandchrome.com

860-528-7176

Boat Deliveries

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

CROSS COUNTRY BOAT TRANSPORT



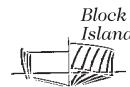
Specialized
boat
handling
to 55 feet

Licensed • Insured • Storage

651-437-2454

Surveyors

A. H. EDWARDS MARINE



Yachts &
Commercial Vessels

Tony Edwards (AMS)

P.O. Box 1120

Block Island, RI 02807

(401) 466-2655 phone

(401) 466-5248 fax

Accredited Marine Surveyor

Member: SAMS, AMS, ABYC, NFPA

Websites

Boat Owner's World

The World's
Most Complete
Boating Portal:

Directory • Classified
News • Forum • Auction
www.boatowners.com

By-The-Sea

AN ONLINE BOATING MAGAZINE

BOATBUILDERS • RESTORERS

PLANS • KITS • SUPPLIES

OLD BOAT BROKERS • CLASSIFIEDS

www.by-the-sea.com

Books/Videos

Books Online

www.sevenseas-mn.com

Seven Seas

2827 Dupont Ave. S.
Minneapolis, MN 55408
612-879-0600

nauticalmind.com



The Nautical Mind
Marine Booksellers &
Chart Agents
tel: (416) 203-1163
toll free: (800) 463-9951

300 Maritime Titles

Nautical Films

- Hollywood Movies • Travel
- DVDs & Videos • Instruction
- Seamanship • Many, Many More

Or write us at: P.O. Box 7218, Missoula, MT 59807

FREE SHIPPING ON ORDERS OF \$49 OR MORE!

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

P.O. Box 544

Kearney, MO 64060

Phone: 816-628-4336

http://www.nauticart.com

Sails/Canvas

**SUPERFURL HEADSAIL FURLING
AND REEFING SELF-INSTALLED
NO LUFF TAPES, INSTALLED
FROM THE FOREDECK.**

WWW.SUPERFURL.COM

SUPERFURL@AOL.COM

714-879-5161

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 239 693-5504

E-mail: NewSails@nationalsail.com
www.nationalsail.com

YAGER SAILS

CELEBRATING 20 YEARS IN BUSINESS!

COMPUTER-DESIGNED SAILS
CUSTOM FURLING PACKAGES
TRADITIONAL SAILS

SPINNAKERS: Cruising
and asym-
metrical



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

**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 - \$499.

Give us a call or visit our website.
You will be GLAD you did!

Ph: 1-866-795-9293

www.aladous.com

Sail Care 20 Years
Of Service
To Sailors

Over 100,000 Sails Cleaned
Call For Catalog (800) 433-7245
www.SailCare.com

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



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



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, rea-
sonably 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://sometersails.com

Minney's
Yacht Surplus
minneysyachtsurplus.com
949-548-4192
1000s of Good Used Propellers & Sails

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



Recognized as the most efficient method of combating the effects of condensation, Ventair is available in bunk pads of 6'6" by 39" wide. Material can be joined to fit queen or king size bunks. Indestructible and impervious to oil, detergent—once fitted you can forget about it and enjoy a mold and mildew free mattress.

Now in our 3rd year in the US, more and more boaters are discovering there IS an answer to the problem. Practical Sailor said "a simple product with a big result. That's the best kind."

954-926-2838

www.ventairusa.com

VENTAIR USA
INCORPORATED

Good old classifieds

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

Boats



Rich Passage
Minto
Sailing
Dinghy
360 769 3972
Port Orchard, WA
www.richpassage.com

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

Classified Deadlines

Issue	Date
May 2006	Mar. 1, 2006
July 2006.....	May 1, 2006
Sept. 2006.....	June 30, 2006
Nov. 2006	Sept. 1, 2006
Jan. 2007.....	Nov. 1, 2006

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)

- \$35 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 including their ads.

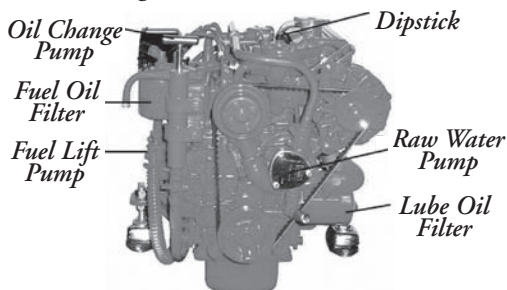
Our advertisers

A.H. Edwards Marine.....66	Fawcett Boat Supplies82	Mauch's Sailboat Guide73	Sailing Program63
Air Head Dry Toilet.....65	Featherman Enterprises.....87	McFeely's Square Drive Screws49	Sailor Bags/Market Marine.....63
Alado Nautica USA67	Fiberglass Supply.....73	Messingabout.com/ The Design Works.....68	Sailor's Solutions Inc.....65
Alpenglow Marine Lights.....76	Foss Foam Products.....65	Microlog.....66	Sailrite Enterprises.....Back cover
American Rope & Tar.....64, 66	Glen-L Marine Designs.....66	Minney's Yacht Surplus67	Sea-Cure/ World Wide Safe Brokers.....64
Atlantic Sail Traders.....67	Good Old Boat.....31, 34, 59	Mobile Marine73	Sea Frost41
Atlantic Yacht Delivery.....66	Great Lakes Marine Specialties.....63, 64	Moyer MarineBack cover	Seven Seas Books Online67
ATN Inc./Topclimber.....64	Hamilton Marine75	National Sail Supply67	Silent Paint Remover/ Viking Sales.....63
Atomic 4/Nuclear Engine.....66	Hayn Marine65	Nautical Mind.....67	Small Craft Advisor Magazine.....50
Beta Marine North Carolina.....69	Heat Shield/Everfair64	Nautic-Art/Spotwood Studios.....67	Somerset Sails.....67
Bingham Boat Works.....66	Heritage Marine Insurance75	New England Chrome Plating.....66	South Shore Yachts.....85
Boat Owner's World.....66	HotWire Enterprises65	New Found Metals70	Spartan Marine50
Borel Manufacturing.....64	IdaSailor Marine.....64	NewGlass2.....63	Speedseal/True Marine Direct.....64
Bo'sun Supplies.....82	Indigo Electronics72	Northern Breezes Magazine.....69	Spin-Tec Equipment.....83
BottomSiders.....77	J.R. Overseas Co.....65	Paneltronics.....72	Sport-a-Seat.....50
Bristol Bronze63, 65, 66	Knotstick.....63	Poli Glow Products64	Sta-Lok/Sailing Services Inc.....65
By-The-Sea Website.....66	Lakeland Boatworks78	Porpoise Sailing Services.....67	Superfurl/ Pacific Marine Rope Co.67
Cajun Trading Company.....65	Landfall Navigation.....60	PowerTiller65	System Three Resins.....73
Cape Horn Marine Products64	LBI Inc Fiberglass.....64	R&W Traditional Rigging.....63, 64, 65	Tank Tender/Hart.....87
CDI (Cruising Design Inc.)69	Lee Sails Northeast.....67	Raka Marine66	Thai Teak Marine66
Celestaire.....49	LineCatcher Inc.....63	Rapid Response.....66	Tillermate61
Classic Rope Fenders.....66	Little Cod/ Navigator Stove Works.....65	Rich Passage Boats.....68	Torresen Marine71
Cross Country Boat Transport66	Maine Boatbuilders Show72	Rigging Only.....63	Tufted Topper/ Sails East-Midwest.....67
Cruising Direct/North Sails.....60	Marine Fastener Warehouse.....65	Robertie Wood Craft.....77	Unscrew-Ums/T&L Tools.....64
DeBond 2000/Marine Formula.....78	Marine Mail Order/MMO.....84	RogueWave Yacht Sales49	VariProp USA.....70
Dickinson Marine70	Marine Skylights.....65	Sail America boat shows86, 89	Ventair USA Inc.....67
DIY Boat Owner Magazine.....60	Mariners Hardware66	SailboatOwners.com70	Yager Sails and Canvas.....67
Durabak Company.....60	Maritime Titles67	Sail Care Inc67	
e-Marine, Inc/Dripless Packing.....65	Martek Dinghy Davits.....84	Saildrive 280/ Arne Jonsson Boatworks61	
Epoxy Polymers/Progressive.....66	Mast Mate.....79		
Fairtradewind/Tapsack64			
Fatty Knees/Edey & Duff68			

BETA MARINE

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

sales@betamarinenc.com

www.betamarinenc.com

ASA School of the Year 2004

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 - "Spanish Virgin Islands"

Start Fulfilling Your Dreams . . .

Northern Breezes



Caribbean Islands • Lake Superior-Bayfield, WI
Lake Michigan • 5 Metro Lakes • Leech Lake • Youth Camp

Northern Breezes Sailing School

3949 Winnetka Ave. N., Minneapolis, MN 55427

763-542-9707

www.sailingbreezes.com

The Original FLEXIBLE FURLER

- #1 choice of cruisers, casual racers and daysailors
- Excellent reefing system
- Trusted by boat builders
- Proven Reliable
- Affordable



Hunter
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

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

dickinson

Top Quality Marine Products by
Dickinson Marine

Sea-B-Que Small, Large
and the new
Sea-B-Que Round!

Marine Grade Stainless
Steel

Many accessories available



and the **NEWPORT**
direct vent heater!

Available in two sizes
Models P9000/P12000

Provides comfortable
dry heat and the ambiance
of a fireplace.

Clean economical and
easy to use

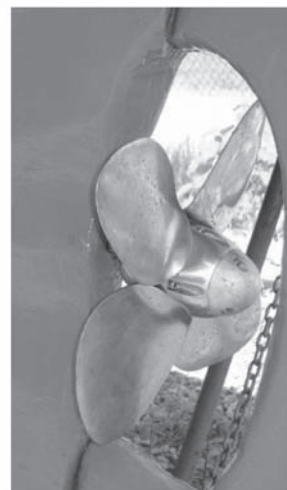
Comes complete with
flue accessories and ready
to install, just supply fuel!



Ask your dealer about Dickinson today!
or call 1 (800) 659 9768 or see us at
www.dickinsonmarine.com



DINKYPROP



VARIPROP

**SAME BOAT. Just a whole lot
faster... both under power and
under sail... with her new
VariProp feathering propeller**

www.VariPropUSA.com

Catalina Hunter O'Day MacGregor

Do you own one? Now there's a web site just for you.
News, owner reviews, discussions, boats for sale, acces-
sories, photos, specs and a giant searchable database.
C'mon by; you're one of us!

CatalinaOwners.com
HunterOwners.com
OdayOwners.com
MacGregorOwners.com
SailboatOwners.com

Go

By owners, for owners. Not affiliated with boat manufacturers.

NewFoundMetals.com



1975 2005
30 years

Opening Portlights
in 316 Stainless, Bronze
and TriMatrix

Deck Wash
Distributed by
JABSCO



Cleats & Chocks



Smart Door Catch
(patent pending)

Call (888) 437-5512 or
Email nfm@newfoundmetals.com

Emergency kit saves boat after sailor drills hole in hull

A FELLOW SAILOR TOLD ME HE WAS installing a new water-tank fill pipe and almost sank his boat. He said he was tired of filling his water tanks from inside the boat and wanted a deck fill for the tanks. He purchased the proper fittings: deck fill, large-diameter fill hose, 90-degree elbow for the tanks, and so on. He started on the starboard tank, routing the fill line from underneath the bunk top, through the space between the settee back and the hull, through the galley locker, and up to the underside of the deck fill pipe. All went well, and in about three hours the project was complete.

On the port side there was a problem. The fill pipe wouldn't fit between the settee back and the hull. There should be enough space, shouldn't there? There had been plenty on the starboard side. After studying the matter he determined that the stringer for the settee back had been sloppily installed by the builder and, if cut away, would open up room for the fill pipe to pass between the hull and the settee back. Little did he know how right he was about "open up."

He selected a hole saw, just bigger than the fill pipe ($1\frac{1}{8}$ inches). He checked to make sure the hole saw and the drill to power it would fit in the space in which he was working between the hull and the settee back. He calculated the required angle to penetrate the beam and proceeded to cut his hole. He had not gone $\frac{3}{8}$ inch when he noticed water around the saw. He reversed the drill so he could determine the source of the water and was looking for the water source with a trouble light when the bulb went out.

"No problem," he thought, "I'll get a spare bulb." No spare? He had forgotten that he used the last one the week before. Meanwhile, water was running into the boat in a steady stream.

Could it be? Had he drilled a hole through the hull? The boat was float-

Bill Sandifer's collection of emergency spares. Know what you've got and where it's stashed.

ing in its slip. A hole in the hull could be a problem, a large problem. He was sinking. What to do?

Calm down. The bilge pump was coping with the water, but he couldn't leave the boat like this ... and oh yes, it was getting dark on a Sunday evening

...and he was all alone on the pier.

If he had made a hole in the hull he should be able to find it on the outside. He was alone, darkness was falling, and there might be stingray jellyfish in the water. But what choice did he have? He donned a swimsuit and went



Universal
WESTERBEKE



mase
GENERATORS

VOLVO
PENTA
YANMAR
marine

- More than 200,000 parts online
- Easy, secure online shopping
- Online parts manuals

 **Torresen**
Marine, inc.
www.torresen.com

3003 Lake Shore Drive Muskegon, Michigan 49441 ph 231-759-8596

www.marinedieseldirect.com

“Could it be? Had he drilled a hole through the hull? A hole in the hull could be a problem, a large problem. He was sinking. What to do?”

over the stern. The water was cool but not freezing and, blessing of all

blessings, there were no stinging jellyfish. He knew approximately where the hole must be, but he had forgotten his dive mask. Still, he was able to locate the hole by feeling around.

What he had not accounted for in his calculations prior to drilling the hole was that the hull takes a sharp inward turn just below the settee reinforcement. He had drilled parallel to the upper hull and into the lower hull. He had not drilled all the way through, thank goodness, as he would have opened a 1½-inch hole. “Calm down and think,” he told himself. He remembered he had some underwater epoxy, but had he actually put it aboard? If so, where was it? And was it any good?

Back on deck, he located the underwater epoxy and quickly mixed some up. He put it on a putty knife, went overboard, and found the hole. He forced as much into the hole as he

could and climbed aboard to check the leak. No luck, water was still running in. He thought of using a sponge to fill the hole, but it was too small for that, about the diameter of a pencil. He had already used half of the available underwater epoxy and had only one more shot at filling the hole. This time he had to get it right.

Sandwich bags

He was sitting in the galley in his swim trunks (his wife would kill him for ruining the upholstery) when he realized he was staring at a box of plastic sandwich bags. That was it!

He put the remaining epoxy in the center of one side of the sandwich bag and used the bag to work the epoxy into the hull. The sandwich bag kept the epoxy together and provided a seal between his fingers on the outside and the hull on the inside so that this

time when he pulled his fingers away from the hull, he didn't pull the sticky ep-

oxy back out of the hole with them.

Quickly now, he regained the deck and went below to check his work. No leak. It had worked! He was able to reach into the space between the hull and the settee back and feel the new epoxy from the inside of the hull.

By the time the epoxy had set up it was dark, and he didn't have a light except for a very powerful 12-volt searchlight. He figured he could use this to light the area between the hull and the settee back but forgot the amount of heat generated by such a light. As he told me this tale, his arm was still sore from the burns he received from the light, but at least he had saved his boat.

He also had some conventional epoxy and fiberglass cloth in his emergency supply kit and decided to put a patch on the inside of the hull in case the underwater epoxy came loose or wasn't as strong as he had hoped. He

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 \$295

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

MAINE BOATBUILDERS' SHOW *The Rite of Spring*

March 17, 18 & 19, 2006
58 Fore Street • Portland, ME 04101
Hours: 10-6 Fri & Sat, 10-4 Sun

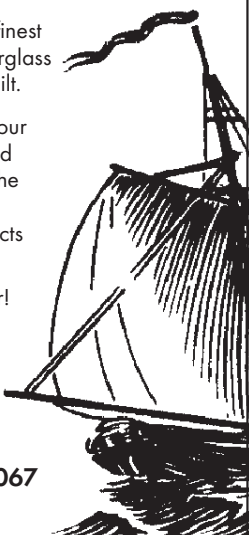
Come see the finest wood and fiberglass boats being built.

Come get all your problems solved as YOU meet the builders of the boats or products at THIS show!

Sail and power!

Hosted by:
Portland Yacht Services
(207) 774-1067

See the listing of exhibitors and how to get here at www.portlandyacht.com



PANELTRONICS

For over 25 years an *Industry Leader* in quality, service and delivery of electrical panels.



Standard and custom instrument panels for all gas and diesel configurations.

Waterproof DC circuit breaker panels fully ignition protected.



Frames and enclosures for both mechanical and electrical protection.


Design and engineering assistance available. Call today for Catalog.

Paneltronics, Inc.
11960 NW 87th Court
Hialeah Gardens, FL 33018
Toll Free: 1.800.367.2635 • Ph: 305.823.9777
Fax: 1.800.833.7802
Visit our Website: www.paneltronics.com

Made in the U.S.A • ABYC Compliant

cut some cloth patterns and mixed the epoxy with the fiberglass to create a pre-impregnated patch. By the light of the searchlight he positioned the pre-saturated pieces of fiberglass patch over the area of the hole.

This epoxy, with the heat of the light on it, solidified quickly, and he was satisfied the repair was now strong enough to get through the night. He would check on the boat in the morning. What he would have done if the underwater epoxy had not worked, he is still not sure. He figures he might have gone down with the ship.

The moral of this story is to keep your emergency supply kit aboard at all times. Know where it is located. Consider light bulbs, flashlights, and even sandwich bags as emergency spares. Be sure you have underwater epoxy. Try applying it on a piling or dock ladder, so you have some experience using it. Have a plug or plugs to fill a hole as part of your emergency supplies. If you give careful consideration to what's in your kit, you may never need it. But being prepared is part of being a sailor. 

Mobile

Marine Electrical Services, Inc.

Custom Marine Electrical and Instrument Panels



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

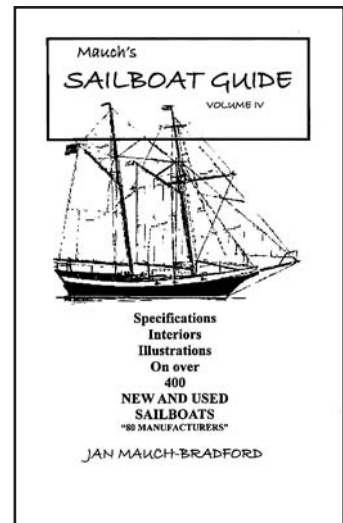
5-7 Perry Way, Unit 11
Newburyport, MA 01950

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)

Fiberglass

"Ttching 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

The SilverTip Marine Epoxy Series, available only from System Three, are the first to utilize modern epoxy technology to create products that are exceptionally easy to use and offer spectacular performance.



Finally boat building and repair epoxies have caught up with contemporary science.

No Powders.

Never again will you have to mix fluffy, obnoxious powders and dusty fillers into a general-purpose epoxy resin to produce compromised adhesives, fairing and filleting compounds that are inconsistent and under perform. SilverTip Series products come ready to use with resin and hardener systems optimized for specific end uses. Any necessary fillers are correctly incorporated at the factory where they belong. You won't have to eat our dust anymore.

No Compromises.

Each SilverTip Series product has been designed from the ground up and optimized for its specific application using 21st century technology. All you do is measure and mix dustless liquids and pastes. This approach makes uncompromised epoxy products possible. For 30 years boatbuilders have had to suffer with general-purpose resins, recipes and bins of hideous powders only to come up with less than perfect epoxy compounds. No more. Not with SilverTip.

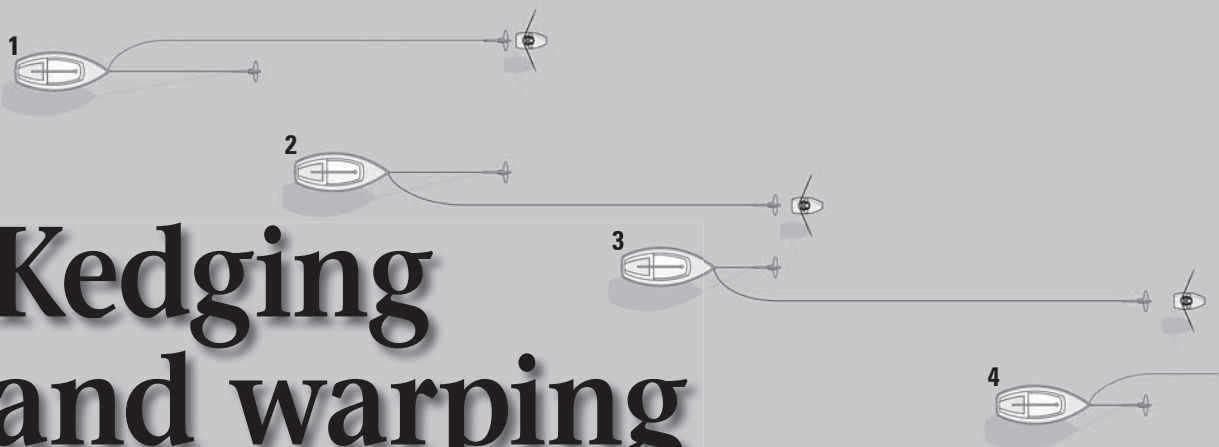
Get your \$29.00 SilverTip Trial Kit at systemthree.com so you can experience and test these high performance epoxy products. Included in the kit is a \$10.00 coupon redeemable towards a future purchase of SilverTip Products.

SYSTEMTHREE



Get your SilverTip Trial Kit today, call: 1.800.333.5514 or visit us at: www.systemthree.com

Kedging and warping



TED TOLLEFSON

How to move your stranded boat by human power

by Geoffrey Toye

MY EDITION OF THE *OXFORD ENGLISH DICTIONARY* LISTS THE origin of the word “kedge” as “uncertain” but goes on to describe it as “a verb meaning to move a ship by means of a hawser attached to a kedge (noun), a small anchor for the above purpose.” In *The Boat Owner’s Practical Dictionary*, Denny Desoutter adds that this secondary anchor to the main, or bower, anchor may be used for temporary stops where security is not a priority, to back up the bower anchor, or to haul a vessel off a mudbank or otherwise move her.

Alan Lucas, in his *Encyclopaedia of Boating*, gives the only description I have encountered that echoes my own view that two kedge anchors may usefully be carried aboard. The *Oxford Companion to Ships and the Sea*, edited by Peter Kemp, suggests the word kedge was originally cagger,

an early derivative of the verb to catch, as in catch the bottom, dating from the 14th century. This work defines the

modern kedge as a secondary anchor aboard a boat and seldom seen nowadays aboard a ship.

The noun “kedge” defines the function, rather than shape, of anchor. The kedge may be any self-setting anchor. Choice of style will be a matter of the skipper’s preference, governed by the nature of the bottom. My boat carries a modest selection of anchor types but my favorite kedge is the Bruce anchor, developed for North Sea oil rigs. This anchor exemplifies what a kedge should be, having excellent ability to dig itself into sand or mud, even fine shingle, and

achieving this on a relatively short length of rode. It will often claw onto rock, can even do some limited service as a drogue in deep water, and has two handling features that recommend it: it is easy to grip, so a relatively heavy anchor does not have to be manhandled, and it has no moving parts to jam up on pebbles or mangle fingers. It also breaks out well.

The best answer

Ground tackle is an area in which some modern skippers are remiss. This is remarkable when “Drop the hook!” is the best answer to a multitude of crises. I will not cast off my mooring in our creek and head out over what is a treacherous estuary bar unless the sails are hoisted (or ready for immediate hoist), crew are wearing life vests and harnesses,

“Before engines were reasonably reliable, the kedge and warp played a vital auxiliary role in moving the vessel in confined spaces.”

the auxiliary engine is running sweetly, and two anchors are ready to be let go. The bar channel runs close to the rocks of what is usually

a lee shore and seas run steep there. If the engine were to cut out, there would not be time for any action other than getting a hook set at once. That is not the time to reveal that your kedge anchor is light enough to stand in for a missing cuff-link or is buried in a locker.

How many times over the years have I seen smart yachts powering over that bar, not an anchor in sight, sails neatly furled in an impeccable sail cover... everything utterly dependent on the continued good health of electric sparks or diesel injectors?

1. The sailboat is anchored using its main anchor. Someone rows the tender ahead and drops the kedge anchor.
2. The sailboat is pulled ahead to the kedge anchor and the main anchor is hauled aboard. A second kedge anchor is rowed out with the tender and dropped ahead of the first one.
3. The sailboat is pulled ahead once more to the second kedge anchor and the first kedge anchor is retrieved. That first kedge anchor is then rowed out once more to serve in the same capacity.
4. Puff, puff, puff! The process is repeated as the sailboat is hauled up a stream, off a shoal, across a marina, or out of harm’s way in any number of situations.

Before engines were reasonably reliable, which was not so long ago, the kedge and warp played a vital auxiliary role in moving the vessel in confined spaces. When my recently purchased vessel came to the creek, she was not in good shape for sea, so I had her hauled in on a trailer, then craned in. The nearest access for the crane was some distance from the refit mooring. Rather than risk her untried diesel, I laid out a continuous system of lines from the crane to the mooring...and stopped worrying.

Controlled movement

Warping is a skill much to be desired. In a harbor, warping may permit a controlled means of moving a vessel slowly and deliberately, avoiding the faster, but unsafe, speed necessary to achieve steerage way under power or sail. When a strong line connects you from where you are to where you want to be, you have as near certainty on water as you can hope for. Kedgeing is one method of warping.

A few years ago I found a local skipper standing on the beach staring balefully at his motor vessel, an open double-ender of around 26 feet. She was aground on a sandbank in the middle of the estuary, the diesel inboard would not start, and the tide had started to come in. He was not a skipper of great experience and did not know what to do. I suggested that we kedge her back to her mooring in one of the little creeks a half or three-quarters mile distant.

We borrowed two anchors from my boat and two long warps. He went aboard his vessel while I worked from my little pram tender. One warp was looped over his samson post

and the neatly coiled warp, together with its attached kedge, was passed down to me in the tender. With the Bruce hooked conveniently over the transom, I rowed toward our destination until I ran out of warp. Then I pushed the anchor over the stern with my foot. Returning to the motor vessel, I took the second kedge and warp aboard the dinghy with the bitter end of the warp once again looped over the samson post.

Haul and set

At this point, having pulled on the first warp to set the first kedge, he hauled up his bower anchor. As he hauled in slowly and steadily on warp number one, I rowed ahead letting out warp number two. As he came up to kedge anchor number one, I got to the end of warp two and dropped kedge two, quickly returning to collect kedge one and repeat the operation as many times as necessary. It worked like a charm. At no time was the vessel not secured to a set anchor. If we had been obliged to stop for whatever reason, the vessel would have been safe (see illustration).

In this description, the value of two kedge anchors becomes apparent. The evolution can be achieved using bower and kedge but, since the large bower cannot be taken aboard the tender and is more laborious to handle on board the parent vessel, this is a slower task and much less handy.

An all-chain rode would have been out of the question; a lightweight anchor is essential. But it must set quickly, hold well even on a short scope of cable, break out when required, and not be a hazard to the person handling it. Thus the kedge emerges, not as a poor cousin unfit for the



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

HAMILTON MARINE

Portland Rockland Searsport Maine

**FREE
320 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

prime duty of bower anchor, but rather as what may be the best designed, most efficient anchor aboard.

This implies that the kedge anchor may be relatively costly, and I therefore deploy mine judiciously, not risking it when it is not needed. When anchoring to brew up a cup of tea, have a picnic, or get out the fishing rod, I use my lunch hook instead. This is the cheapest, nastiest, rustiest, lowest of the low, used only where it would truly not matter much if it dragged. Nor would it break the heart or the bank if it were snagged up and lost.

No dragging

When using the dinghy to lay out the kedge, unless some individual circumstance decrees otherwise, the warp being payed out should be coiled aboard the tender rather than aboard the parent vessel, so the person rowing does not have to drag it through the water or risk its getting caught up beyond his reach on the foredeck of the main vessel. Caution must be exercised when handling even a small kedge anchor aboard the unstable platform of the tender, which is why I like to hook the anchor over the transom and shove it over with a carefully applied foot. An alternative method may be to have a very short line, with a stopper knot a few inches from its end, attached to the tripline eye of the anchor. That way the anchor can hang over the stern with the knot wedged against the transom until you take your foot off the line. One of my kedge anchors is a high-tensile aluminum Fortress type, similar to a Danforth, which works best on a sandy or muddy bottom. That lightweight anchor is a boon on sore-back days.

Note: I don't have to include a warning not to loop an anchor-attached line around body parts, do I? Your knife should be instantly accessible. And while we're on the subject of safety, be careful when using a small tender in open water. Tenders cause many fatalities.

Other than duties as stern and backup anchor, probably the most frequent use for the kedge is pulling the boat off after going aground. This may be when the vessel runs her keel too hard onto a shoal to be brought off by sail, engine, or other means. If conditions permit, the kedge may be taken out by tender into deeper water and the parent vessel hauled out to it. It may be possible to use a winch or windlass to make life easier. Bear in mind that your vessel

may have sustained damage to her hull, so wrenching her into deeper water may cause further damage.

Heave a line


If conditions are too hazardous for a tender, a larger vessel may be able to assist. One method is to attach a heaving line to the tripline eye of the kedge and send that line to the other vessel so her crew can bring your kedge aboard and take it to deeper water for you. A well-set anchor may get you off when a modest engine fails to, and it may be too late for that anyway if the tide has dropped. One must be aware of relevant regulations since use of another's vessel may imply legal ramifications such as liability and salvage.

A factor to consider in tidal waters is the possibility of a seiche, what a landsman might term a surge. This is a very long swell that causes the ocean to rise and fall bodily, usually just a few inches where I sail. In tidal inlets, grounding on a falling tide can leave the boat hard aground within seconds, the water several inches below her marks and falling. However, all may not be lost, since a seiche may cause the water to rise again after a few minutes. It has been known for the crew of small boats to jump over the side to get a shoulder under the hull or wade out with the kedge only to find themselves facing the hazard of a rapidly deepening rush of water, despite the fact that the tide is ebbing. The possibility of a seiche is local knowledge well worth having.

Less dramatically, in a crowded anchorage, particularly where vessels are moored stern- or bow-to, as is the practice in the Mediterranean, a kedge taken out by tender or dropped on arrival may facilitate a cleaner departure. However, there may be harbor regulations that forbid this practice. A kedge may be semi-permanently shipped as a stern anchor. This is convenient if required to let go on arrival to allow quick retreat from a tight or uncertain anchorage.

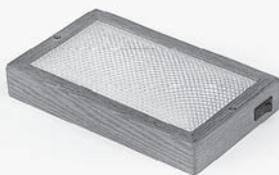
Deploys more quickly

The kedge ordinarily cannot replace the heavier, more secure, bower anchor with its chain. However, since it is lighter and has rope rode, it can be deployed more quickly and, if necessary, remotely from the vessel. This is difficult or impossible for bower anchors. Also, it is much less trouble to set the kedge for a short stay, as long as there is an alert anchor watch. In deep water it may be possible to anchor on the kedge, while recognizing its limitations, whereas the bower, with the entire length of an all-chain rode hanging straight down, would be extremely heavy to lift. A short length of chain attached to the kedge promotes some horizontal pull but principally avoids damage from chafe against the bottom.

The expression "to tide over" means to enable someone to withstand a difficulty, such as when you give a friend some money to tide him over until he gets a job. The expression probably dates from the days of sail when ships heading from mainland Britain out into the western approaches would often be headed by the prevailing southwesterlies. With the wind on the nose, when the tide turned foul they could only sit it out by anchoring until the tide turned in their favor once again. The light and handy kedge was the ideal anchor for the task of tiding over. 

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

New cushion covers

Upholstering for those who hate to sew

by Pat Brown

MY HUSBAND, CHRIS, AND I HAVE BEEN SAILING IN THE PACIFIC Northwest for 15 years on a variety of sailboats. We look for older sailboats to purchase, upgrade, and eventually sell after enjoying them. We buy when the price is right and the potential exists for improvements we can do on our own and ultimately realize a profit when we sell. The one enhancement I can be sure of with each boat is that new cabin cushion covers will be needed. Having them done professionally is expensive; making them myself is the only alternative. Nothing makes an older sailboat appear uncared for more than ratty, faded, and dated upholstery.

Armed only with an ancient Kenmore sewing machine, circa 1960, I have made more than 80 cushions to date. By shopping in fabric outlet stores, it is possible to cover five to six cushions for about \$60 to \$70.

I agonized over the first set: first taking off the old upholstery and using it as a pattern; then tracing to the new material, cutting and sewing strips for the cording and boxing; and eventually sewing all the pieces together. Then I learned that, by using a piece of ¼-inch plywood for the bottom to which the material could be stapled, sewing was simplified and used less material.

The cushions can't be reversed, so the only part showing is the cushion top and the front boxing. I have further simplified the process by omitting the cording and sometimes use a method which eliminates the boxing (as shown in the photo, above right). Because the top cushion and the boxing are held in place firmly by the stapling, they maintain their form and don't creep out of shape.

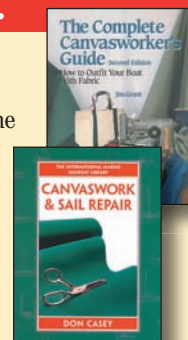
(Note: Use outdoor plywood. Seal it with epoxy. Use galvanized or stainless-steel staples. These are available from Sailrite. —Ed.)



If there's one thing that improves a boat during a refit, it's a new set of cushion covers. Pat Brown figured this out in a hurry ... and one thing more: to make it easy, staple the cloth to a plywood backing. This holds the cushion in place and sacrifices nothing in the way of comfort. It's neat, trim, and fast.

For further reading ...

Anyone can sew cushion coverings and canvas items for a boat. That was the founding premise of Sailrite as well as the concept which propelled Don Casey to the top of the sailing best-seller lists. *Complete Canvas Worker's Guide*, 2nd edition, by Sailrite's Jim Grant, and *Canvas Work and Sail Repair*, by Don Casey, are available at <<http://www.goodoldboat.com/bookshelf.html>> or by calling 763-420-8923.



Continued on next page



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

Robertie WoodCraft

www.Robertie.com

Quality
Value
Beauty
Tradition

Specializing in Marine Furniture

Cockpit & Salon Tables
Racks & Cabinets
Clocks and Weather Instruments

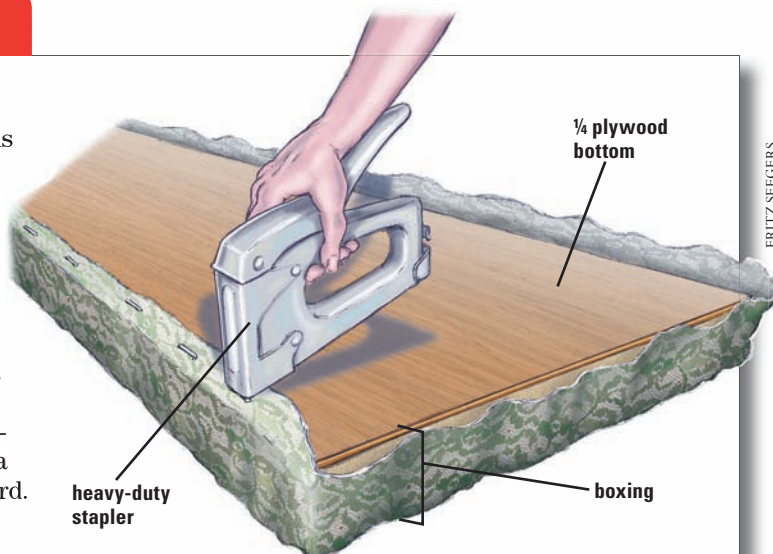
Quick and easy: cushion covers

Simplified procedure

The procedure has been simplified over the years. Here is my simple system for recovering cushions for those who hate to sew:

- Measure the cushions and purchase material compatible with your boat interior.
- Remove the old upholstery (or cover over it).
- Place the cushion on the material top-side down, and trace around it, leaving a ½-inch allowance.
- Measure the depth of the cushion (the boxing) and cut and sew strips together long enough to go all the way around the cushion. Leave at least a 6-inch-wide allowance for sewing the boxing to the top piece and 4 extra inches to wrap under and be stapled to a plywood board.
- Using a heavy-duty needle and upholstery thread, sew the top and boxing together.
- Clip the corners of the material for a smooth fit.
- Cut a piece of ¼-inch plywood to the exact size of the cushion.
- Arrange the cushion in its new cover on this plywood form.
- Invert the whole thing so the plywood is on top.
- Stretch the material taut and, using heavy-duty staples, attach it to the plywood (as shown in the illustration).

If you choose to use cording between the top piece and the boxing, cut a strip 4½ inches wide the same length as the boxing. Wrap the material around a similar length of cot-



When attaching the fabric to the backing, use stainless-steel or galvanized staples and stretch the fabric tightly. Boxing is the long narrow strip that goes around all sides of the cushion. (If you prefer, you can skip the boxing and cut the top cover longer to cover front and back sides and wider to cover the sides in the way that a cardboard carton manages a corner. The cushions on Page 77 were done in this way. Note how the fabric on the top wraps around the front of the cushion and is stapled out of sight below.)

ton cording and, using a special cording (or zipper) foot on the sewing machine, stitch as close to the cording as possible. Sew the finished cording strips to the top and then to the boxing strips. This process gives a first-class look to the finished product. The rest of the process is the same.

I have just completed cushions for our 1972 Erickson 27. After we refinish some brightwork and freshen up her painted areas, we will explore Puget Sound in *Avatar*. After that she will go on the market to be followed by another boat needing our TLC. ⚓

Resources

Sailrite

800-348-2769

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

Sharpie "Charlevoix"

- Classic feel with "retro" style
- Shoal draft
- Trailerable with 8-foot beam
- Easy handling
- Daysailer or weekender



Lakeland Boatworks of Middleville, Michigan, has been manufacturing wood and epoxy recreational boats from 16 to 32 feet for some years now, and their product line has been significantly enhanced by the arrival of their newest creation, the "Charlevoix", a classic yet retro 32-foot ketch.



Lakeland Boatworks Inc.

phone: (269) 795-9441

web site: www.lakelandboat.com

e-mail: lakelandboat@core.com

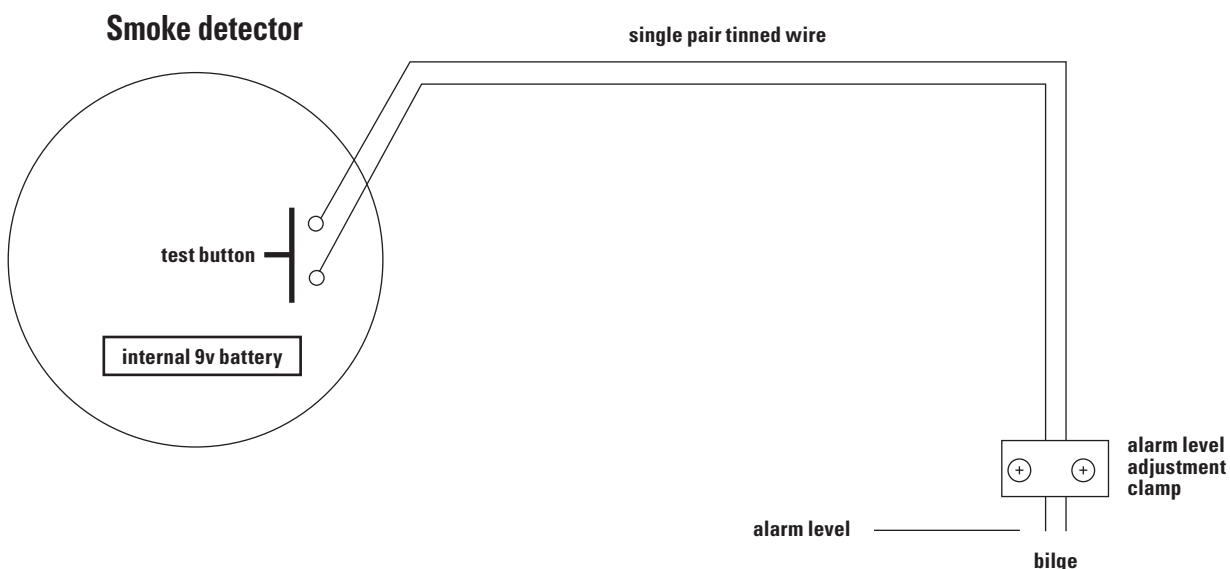
Marine Formula™
DeBond
2000®

Removes
3M™ 5200

Silicone Rubber
Caulks & Sealants
Black Rub Marks
Most Graffiti
& Overspray
Adhesive Residue

(561) 575-4200
11924 Forest Hill Boulevard, Suite 22-213
Wellington, FL 33414-6258

www.marineformula.com



High bilge warning

Detecting that faulty bilge-pump switch

by Bob MacDonnell

IF YOU HAVE NEVER HAD A BILGE LEVEL SWITCH FAIL, SOONER OR later it's bound to happen. For a few bucks you can buy a stand-alone, battery-operated fire (smoke) detector. It doesn't have "boat" written on it, so the price is right. Make sure your detector has a test button. Using a two-wire cable such as lamp wire or, better yet, tinned wire in the form of a twisted pair, connect one wire to each side of the test switch. Locate the other end of the twisted pair in your bilge a little higher than the normal level switch.

A faulty level switch will soon be drawn to your attention. And if your detector has a low battery alarm, as most do, you can't even forget to replace the battery. While it's sitting there, it also still acts as a smoke detector. ⚓



Solder the wires across the test switch, above. This inexpensive alarm serves two important functions: it works as a smoke detector while monitoring your bilge for high water.



Mast Mate™

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

A 50-cent GPS holder

*Out with liquid soap,
in with GPS*

by George Zimmerman

WITH PRICES BECOMING MORE REASONABLE, I BROKE DOWN and purchased a handheld GPS. I chose a Garmin GPSMap 76. Handhelds eat batteries, so I purchased a Garmin 12-volt powercord, which I plug into an outlet near the cabin hatch. The 6-foot cord enables use of the GPS throughout the cockpit.

The problem: I have a 25-foot, tiller-steered sailboat. The lack of a pedestal that comes with wheel steering made it difficult to use the GPS in the cockpit. No matter where I put it the GPS was in danger of being knocked about or stepped on as I tacked, jibed, and shortened sail. It needed to be in a protected setting where I could easily monitor my boat's progress on the chart and check on the speed and course heading. I also needed the ability to pull it close to read chart details like contour lines, buoy markers, and so on.

The attached 6-foot powercord added to the difficulty of finding a suitable setup. Garmin sells a holder for its handhelds, but it has to be attached to the boat with screws (read: holes in the boat), does not adequately protect the GPS, and is not very sturdy. Other holders I inspected were equally lacking. I wanted a holder that met my needs.


The solution came to me at a swap meet. I discovered a used teak soft-soap dispenser holder (West Marine # 403248; \$29.95) that could hold my GPS. The location of the grooved

Neat and secure, George's swap meet soap dispenser does what the specifically designed GPS holders couldn't: it slips in and out of the cockpit locker on a hook — no holes were drilled in the boat for this installation. The parts for the project are shown below.



dispenser-holding slots allows enough room to place my handheld inside the holder with the powercord plugged into the back of the GPS. I bought the holder for 50 cents.

I hang this holder from the front of the cockpit locker using a modified Christmas-wreath hanger as shown in the photos below. I measured and cut the hanger to size. Using brass screws, nuts, and plastic washers, I attached the hanger to the holder. Then I glued a kitchen sponge to the back of the holder, to cover the screw ends and nuts and to protect the outside walls of the locker from scratches. The sponge also ensures a snug fit of the holder against the locker. To obtain a better fit for my GPS in the holder I lightly sanded the grooves intended to hold the liquid-soap dispenser.

This holder securely contains my handheld GPS, provides protection from the sail work done in the cockpit, allows for easy removal for close-up work, looks nice, and can be tucked away when not in use. All for the grand total of 50 cents, not counting the cost of the GPS, of course. 



Mail buoy



Charlevoix sails!

Joe Rahn, president of Lakeland Boatworks, has been positively gleeful about their new Charlevoix Sharpie, which was introduced at the Annapolis Sailboat Show in October. Now we see what all the fuss was about. She's a beauty.

Joe writes, "Two things came up over and over again [in Annapolis]. The lounging cockpit was extremely inviting to women... and people said that even though there was low headroom, the cabin was quite spacious. With 12 feet of berth space on the port side, most felt that it was ample room for their family. Add in the float-off trailer and most felt the Charlevoix Sharpie was the perfect weekender."

Editors

Catch of my life

Thanks so much for the awesome September 2005 cover photo from a bluff overlooking the White Lake Yacht Club. That sharp classic good old boat on the starboard side is *Alabar*, our beloved 1966 Wayfarer Islander 32. Originally "splashed" from a Lapworth design from the '50s, more than 200 of these rugged and beautiful sloops were produced by Wayfarer Yachts, the predecessor to the Islander Yacht Company. Learn more at <<http://www.islandersailboats.com>>.

Next to my wife, Mariana, *Alabar* (Spanish for "praise") is definitely the catch of my life, and she has never looked more fetching than on your cover lounging aside her WLYC pals!

Bruce Benson
Grand Rapids, Mich.



The Lakeland Boatworks Charlevoix Sharpie is a gem at sail, at top, and up close, above. Her cushioned backrests in the cockpit were a hit with sailors at the Annapolis Sailboat Show.

Formica rehab

I am the owner of a 1969 Columbia 22 which I restored about 8 years ago. Many boats of that era had the bulwarks made from plywood covered in imitation teak Formica. As you know, it looks horrible. A couple of years ago I decided to try to make it look better. I lightly scuffed it up with some very fine sandpaper and wiped on a couple of coats of Min-wax over semi-gloss Poly Varnish. It still looks great two years later, and it seems to be sticking to the Formica OK, although I haven't used the boat all that much. I would even go so far as to say that the average observer wouldn't know it wasn't the real thing.

Obviously, anyone trying this technique should test out a small patch before committing the whole boat to it.

Ken Koch
Cincinnati, Ohio

Copper water tank caution

A dangerous condition exists in some old boats equipped with copper water tanks that were fabricated with lead-based solder. Many years ago I bought a new sloop (a Robb 35 built by Cheoy Lee in 1962) and sent a sample of water from its copper tanks to a testing lab. The report came back noting a dangerous concentration of lead. Any owner of a boat with a copper water tank should take this precaution. Testing labs are listed in the Yellow Pages under "Laboratories." A request for an analysis should specify "lead."

Paul Campbell
Moodus, Conn.

Thanks to New Found Metals

This spring, the leaky old portlights on my 1979 O'Day 30 just couldn't be ignored any longer. They were sun-crazed. The frames were cracked. Some of the mountings for the dog posts had makeshift replacements, and others were breaking free. I wasn't too impressed with what was available at West Marine. Whatever was reasonably priced had all the design shortcomings of the old stuff. What was better-built cost an arm and a leg.

In *Good Old Boat*, I ran across an ad from New Found Metals. What

Mail
Buoy



a helpful bunch! They maintain a good website, respond to emails promptly, and always have somebody knowledgeable around to take a phone call. Better still, they build a handsome product at a reasonable price. I bought four new TriMatrix 7 x 15 portlights, which were shipped with excellent instructions.

Every time I ran into a problem, they were in my corner with solutions. When I removed the old portlights I couldn't find any two places where the cabin sides were the same thickness. (Did I mention that this is an old production sailboat?) No problem. Additional sets of mounting screws in various lengths were on the way. When I discovered that one of the new portlights had suffered some rough handling in shipping, there was a replacement part on my doorstep in two days. Questions about adjustment? Illustrated directions by email in minutes. Customer support could not have been any better. Now the work is done. The new portlights look great and are a decided upgrade over the original equipment.

Robert L. Hlady
Marion, Mass.

Fire extinguisher fuel tank

We modified a spent brass U.S. Air Force fire extinguisher to serve as a fuel tank for our secondhand Force 10 kerosene heater. I installed them in tandem vertically on the compression post. We sail a '77 Norstar Flicka. We didn't have room for the standard 2-gallon Force 10 tank. Nor did we want to run the mile of tubing from what would have had

to be a remote location. A little brass tank now resides on the compression post just below the heater. I've had two requests from non-sailors for espresso.

The extinguisher was purchased at a swap meet for \$8. A rummage through the electric lamp parts bins at the local hardware store produced the right brass bits for a filler cap. It had its own pressure gauge. The flare fittings used to plumb it in are rated at 1,500 psi., although the heater operates at only 3 to 10 psi. Cheap insurance. By replacing the discharge nozzle with a Schrader valve, it will absorb enough oomph from a small handheld bicycle pump to drive us both out of the cabin for 8 hours. So turn it down, Honey! Our cruising season can now include the cooler months of mid-winter. Summers in the Gulf of California will continue to be too brutal for us.

Bill Ronstadt
Tucson, Ariz.



Engine controls in reach

The article "Relocating auxiliary controls," by Bob Brodsky in the November 2005 issue speaks to an important control problem we tiller-sailors have under power. Bob addresses the single biggest disadvantage of a tiller-steered boat: finding a good place to mount the auxiliary engine controls.



The SOURCE for Sailing & Building Supplies

Sailboat Hardware
Paints & Varnishes
Rope & Splicing
Plumbing
Ground Tackle
Sealants
Expert Advice

Ports & Hatches
Ventilation
Epoxy
Charts & Books
Abrasives
Fasteners
Custom Rigging

All major brands!

Harken • Mas Epoxy • 3M • Schaefer

Please visit our store located on the city dock in downtown Annapolis. **Free docking & parking** while shopping at our store.
Open 7 days a week.

Ask for our
NEW
Catalog

110 Compromise St., Annapolis, MD 21401
(800) 456-9151 • (410) 267-7547 fax
info@fawcettboat.com
www.fawcettboat.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



Bob's surgery (pardon the reference to the orthopedic saw) gives him a safer working and entertainment space in the cockpit by placing the lever-style control on the top of the doghouse. His solution did not, however, completely eliminate the trip hazard associated with this type of control. And — as depicted in Bob's installation — the lever control required a large vertical space beneath the control for cable attachment and movement.

At PowerTiller, we have been providing our tiller-mounted remote engine controls to outboard owners for almost a year now. Those who have seen or used the PowerTiller have described our patent-pending control as “elegant simplicity.” The PowerTiller has none of the problems associated with lever style controls, and it mounts on the tiller (above, below, or on-the-side-of). Yet, from the helmsman's seat (or a standing position), its operation is quite familiar.

I'm happy to report that we are currently testing and will soon offer a PowerTiller for inboard auxiliaries like Bob's. The PowerTiller can be seen in action at <<http://www.PowerTiller.net>>.

**Bill LaJoie, owner, PowerTiller
Scottsdale, Ariz.**



brought out hundreds of can insulators for beer or soft drink cans. On one side was printed: “2005 Good Old Boat Regatta.” But the other side was emblazoned: “Cals Rule!” The reactions ranged from howls of laughter to feigned indignation. Some Columbia sailors bought a few and immediately began pasting Columbia logo decals over the offending message. Some Tartan sailors immediately retorted, “Just wait

At the Good Old Boat Regatta (GOBR) in Annapolis, above, held October 8 and 9, the race committee drops the starting line mark while racers wait for the course signal boards. Racer Jim Graham prepares for the GOBR Sunday start in *Cheater*, his 1964 Columbia 5.5-Meter, at left. *Cheater* placed second in the full-keel fleet, after *Scrimshaw*, an Alberg 37 owned by Charles Deakyne.



Regatta season

Is it our imagination or has there been an increasing number of good old boat and classic regattas lately? Good Old Boat has become personally involved in at least a half dozen these days. It all started with the Annapolis Good Old Boat Regatta, the granddaddy of them all, more recently referred to with affection as “the GOBR.” This active band of Annapolis racers just concluded their sixth season.

Our “granddaddy regatta,” the GOBR

The first day of the two-day regatta was cancelled due to high winds. Herewith, the report from co-founder Don Frye:

“So, were the crews of the 20 or so boats anchored off the party site at Sailor's Wharf disappointed? Maybe. But they decided to start the party at 0930 instead. First came the gathering over coffee and breakfast on the covered deck. Then came the luncheon goods and an impromptu food swap. The musicians started warming up just after noon. Things began seriously when Alfred Poor and the Cal 29 fleet started serving up Dark 'n Stormies. And so it went into the night.

Somewhere along the way, class warfare emerged. Alfred

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

Mail buoy



The USS *Constellation* Cup fleet steps out in this first race of what is sure to become a Baltimore tradition, at right below. *Alaris*, the winning boat is pictured at left. Owned by Mike Cranfield and Nick Iliff, *Alaris* is a Block Island 40. This classic sailboat

race, co-sponsored by *Good Old Boat* magazine, was held October 15 in the Baltimore Harbor as a fundraiser for the USS *Constellation*.

'til next year." Obviously, this is going to escalate.

"Sunday was a better day. Although overcast, the front cleared and left a 10- to 12-knot northwesterly in its wake. Ideal! At 1030, 52 of the original 79 entrants followed the committee boat as it dropped the starting mark and posted an 8.8-mile round-the-government-marks course. It was a classic GOBR race as experienced for the past five years. After it was over, what did everybody do? They partied! What else?"

The event is hosted by Shearwater Sailing Club and sponsored by *Good Old Boat* magazine and Heritage Marine Insurance. Legg Mason Funds joined the team of supporters this year, thanks to two-time Perpetual Trophy winner Legg Mason senior vice president Ed Poe.

As they have with each GOBR before this one, the racers knew how to adapt and have fun."

For more on this race and the winners, please visit the regatta page on the *Good Old Boat* website at <<http://www.goodoldboat.com/regatta.html>>.

USS *Constellation* Cup

One weekend later and in a place not far away (Baltimore Harbor, a bit farther north in Maryland, actually), the USS *Constellation* was the beneficiary of a brand-new regatta of classic sailboats. Christopher Rowsom, the executive director of the USS *Constellation* Museum, writes, "We had a great day for the race and the party afterward. The event was wonderful all around, and I think we will have 40 boats

next year! This should be the start of a great tradition."

Proceeds from this regatta go to further restoration and preservation programs on the USS *Constellation*. Entry in the event was open to sailboats designed before 1980. To participate in the challenge, sailboat owners and crews were asked to consider raising a minimum of \$10 per foot of vessel (registered LOD). Baltimore's USS *Constellation* is the last all-sail ship built by the U.S. Navy and the only vessel still afloat that was in active service during the Civil War. She is open to the public daily as a museum and offers many opportunities for learning about 19th century navy life, including hands-on demonstrations and tours for visitors and educational programs for school children. For more, visit the ship's website at <<http://www.constellation.org>>.

Pearson history

I was reading the article (in the September 2005 issue) on the Pearson 28, which I'm partial to. It's a fantastic small cruiser. The article says Pearson shut down in 1989 and production of this model ceased with the close. Actually, they discontinued the P28 after they introduced the P27 (there was a slight overlap of production) and the company shut down in early 2001. They filed for bankruptcy in February 1991; they sent me a letter indicating such.

**Justin Thompson
Lewisville, Texas**

Justin has possibly the largest collection of brochures printed about the good old boats that were manufactured in the past. He's in the process of making this storehouse of fantastic information available to other boaters through his website at <<http://www.sailinfo.com>>.



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



Up to 370 lbs. Capacity
120 Walled 316
Stainless Steel
Several Sizes Available
Universal Mounting
Easily Rotate or Remove
Integrated Cleats
2 Year Warranty

MARTEK
Marine Products

martekdavits.com
727.686.5020

Premium Davits at a Reasonable Price...

Hurricane compensation

I wanted to thank you for offering me last year's subscription for free. I was one of the hurricane Ivan victims who benefited from your kind offer of a year's subscription free to all the people who were trying to take care of personal issues related to the hurricane. Since I know how much I appreciated the offer, I was wondering if you are going to offer it to the Katrina victims as well. I am sure they were even more seriously impacted than we were and might not be able to continue their subscriptions without your support.

In the wake of a hurricane, there are so many urgent issues that need to be looked after, the priority for life's simple pleasures is many times not high enough to be acted on. Continuing to receive a magazine that delivers a diversion that focuses one's attention on something other than hurricanes has more impact than you might imagine.

Pat Johnson
Pensacola, Fla.

Our offer to hurricane victims is a standing offer, no matter what the name of the hurricane: we will renew your subscription for the coming year if you have experienced damage as a result of a hurricane.

This is a small compensation for what is often a very big loss, but it's our way of saying that you have our support and sympathy.

Following in Bob's footsteps

I've just gotten to the point where I can follow my cruising dream... I am 50 now and look to sailing to regain and retain my youth. My plan, since I can remember, has been to retire afloat. It is hard waiting until you can get free; some people die before it ever happens. So sad. If you can see a way to get free sooner, rather than later, you've got to go for it. Ignore what your financial planner is telling you about how much money you will need when you retire. Those formulas are for landlubbers. My living expenses will be going down dramatically as I move into retirement afloat.

A friend of mine recently moved to Hawaii to live out the rest of his days in paradise. He paid for his 1980s-era Cheoy Lee 32 outright, less than \$20,000. His slip costs \$369 a month. It includes power, water, telephone hookup (if he wants) along with cable TV. He gets access to showers, coin laundry, and trash removal. So let's see how this adds up: boat paid for, no property taxes on that, \$369 a month slip rent, no need for a car and all its associated costs because everything is within walking or bike-riding distance, food is available and cheap (and free for the diver or fisherman).

Last I heard he was banking half of his Social Security checks. He sails when he wants to, goes island-hopping where he wants to, and it costs way less than a life ashore. I intend to follow Bob's lead and do it exactly as he did. But let's keep this little secret to ourselves, because if word gets out, there could be a rush for the good life.

Ross Anderson
Shoreview, Minn.

Thanks for the newsletters

I really like the *Good Old Boat* newsletters. They keep me upbeat when there are no publications to scan. Stay well.

Bill Chaney
Lakeside, Ohio

Encore!

Thank you for the newsletter. Excellent job! I always look forward to *OUR magazine* and read every word. No kidding.

Andre Venables
New Paltz, N.Y.

*Subscribers, if you are **not** getting your newsletter please let us know by phone (763-420-8923) or email (karla@goodoldboat.com). It's a subscriber benefit that we're producing just for you so the gap between issues won't seem quite as long.*

Good Old Boat discovered

I discovered your magazine not because it was in my doctor's waiting room or because a discount subscription offer was my Cracker Jack prize, but because someone told me that your May 2005 issue contained an excellent commentary by Don Launer about the Rhodes 22 as a trailerable pocket cruiser by a legendary designer, and indeed it did. The other articles weren't too shabby either. I look forward to future issues. Eureka!

Sheldon Katz
Port Jefferson, N.Y.

Common sense information

OK, I'm hooked. Boathooked, that is. My wife and I have decided to make the jump to live aboard in the very near future. As is my custom, I bought the current issue to read before I subscribe. What a great magazine! I have restored Harley-Davidson motorcycles and have never found a source of info such as this before. Great job! I spent 20 years in the Navy doing repair work and I know good common sense information when I see it.

Those other magazines with the \$1-million-plus boats need a reality check. *Who does that?* Anyway, would you be so kind to send me the July 2005 issue, please? I bought September 2005 already on the newsstand. The decision was made way before I finished this issue. I just can't get enough of these and, yes, I'll be buying the CDs also.

Joel Leland
Lincolnton, Ga.

Send questions and comments to *Good Old Boat*,
7340 Niagara Lane North, Maple Grove, MN 55311-2655,
or by email to jerry@goodoldboat.com.



South Shore Yachts

Your Ultimate Source Of Parts & Information For C&C Yachts

- Distributor and Service Centre for **NAVTEC** rigging & hydraulics
- Parts & supplies for **CINKEL** and **HOOD** systems
- Full rigging services (rod, wire and rope)
- Yacht Brokerage
- Chandlery



Tel: 905 468-4340 - Fax: 905 468-1538
E-mail: service@southshoreyachts.com
1544 Four Mile Creek Rd., Virgil, ON
www.southshoreyachts.com



Come Sail Away!

Strictly Sail® Chicago
February 2–5, 2006

The Midwest's only all-sail boat show.

For tickets and show details visit StrictlySailChicago.com



Haulout melancholy

Wintertime on the Great Prairie

by Jerry Powlas



MARY JANE HAYES

PARADE REST! THE VOICE SHOUTED AT ME from long ago and far away. Haulout on the northern prairie is a melancholy time. There was a light frost on the finger piers, but the parking lot was still warmed by the earth. Boats stood in formation on their stands or in their cradles in two long rows. There would be more rows. Armies of yard workers and owners were gathering in the early morning mist to bring more boats ashore, winterize, fit covers, and add to the formation. "Parade rest!" *Assume a slightly more relaxed position, stay in formation. Rest. Await the next order.*

As I walked down the row of sterns, perhaps the analogy failed. Instead of the uniformity of troops on a drill field, I saw a riot of shapes, colors, and forms. How could there be so many ways to make a rudder, transom, or keel? There were the underbodies. The parts that were kept hidden below the water throughout the sailing season. In underbodies, at best, form follows function; at worst, form imitates form without sufficient reason. But in either case, the details varied from one boat to the next. There was no dominant form, no uniformity. But they all stood so very still — for a group of boats — pointing south... waiting, resting.

Along the rows I could see different levels of preparation

and involvement by the owners. Some winter covers were marvels of architectural inspiration and ingenuity. Some were professionally made form-fitting works of art. Some would clearly not withstand even the first winter gale. There are a lot of ways to skin a boat. The winter would test them all as the boats stood in their own company without their

crews. *Stay in formation... rest.*

I knew that the spiral of the seasons would move on and that most of the owners and yard workers

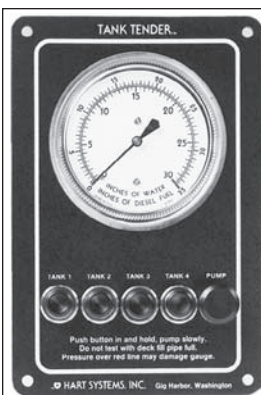
“There are a lot of ways to skin a boat. The winter would test them all as the boats stood in their own company without their crews.”

would be back in the spring to reverse the process. Perhaps there would even be mist in the air and frost on the finger piers. The rows of boats would still be there, waiting.

My thoughts went back to that drill field so long ago, to the formation of young men who would be sailors, all optimistic that the spiral of the seasons would include them in the coming rites of spring. Youth writes its own promises for the fates to keep.

"Parade rest!"

Assume a slightly more relaxed position, stay in formation. Rest. Await the next order... ⚓



TANK TENDER

The Original Precision Tank Measuring System!

Accurate tank soundings have never been easier when one **TANK TENDER** monitors up to ten fuel and water tanks. Reliable, nonelectric and easy to install. For more information please contact:



HART SYSTEMS, INC.

Phone: (253) 858-8481 • Fax: (253) 858-8486
www.thetanktender.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



Boyhood boating

When a pond and a river
were heaven on earth

by Matthew Goldman

I GREW UP ON AN OLD FARM IN CONNECTICUT. A HUNDRED YARDS behind the house was what we called “the cow pasture” — a boggy area beyond which were fields and orchards. It was fed by one little stream and numerous springs, and overgrown with alder trees and brush. It was the haunt of birds and frogs and one small boy.

When I was six, my father had a portion of the cow pasture dredged, creating a pond 100 feet long, half that in width, and deep enough to hide a hippopotamus. It was large enough to swim in summer-long and big enough for a hockey rink all winter, provided one was willing to shovel snow.

My father went to the state Extension Center and procured two milk cans (antiques now, no doubt) alive with fingerling fish: one of largemouth bass, the other with bluegills and sunfish. In a couple of years the pond was alive with fish, frogs, turtles, and muskrats — heaven on earth for a little boy ... but dirtier. I fished, I swam, and I chased whatever moved with a fine mesh net. I learned to eat bass and frogs’ legs, studied dragonfly larvae, and watched the wood ducks teach their young to swim.

Life was complete. Except that I needed a boat. A couple of steel drums and a wooden deck and — behold! I had a raft. The deck was nearly awash and was rather tippy. Every time I shoved with my pole, one corner went under water. My very first boat! I even tried a mast and a sail but without much real success. When I was 12 my father bought me a pram. I painted it royal blue inside and out. I had a miniature Navy anchor, a life jacket, and oars.


“ I fished, I swam, and I chased whatever moved with a fine mesh net...
Life was complete.
Except that I needed a boat. ”

Discovered the river

What more could I want? A lot. My father helped me build a trailer to pull behind our car. The pram and I discovered the Connecticut River, a mile down the road. We set a mooring and rigged a clothesline arrangement to an old pier. Two 20-foot shad boats were all the neighbors I had. I knew enough by then — and had permission — to venture off alone. Not very far. There were plenty of places to fish within a mile. I rowed and rowed and saved my lawn-mowing money. The following summer, I went to Montgomery Ward and bought a motor: three whole horsepower. Now I was Lord of the River.

About this time I started sailing lessons downstream in Essex. It was a 10-mile drive but only a 4-mile boat ride — not including the mile walk to the boat. With tide and current and wind to contend with, it took me at least an hour to go each way. An hour buzzing along in my little boat — what

utter bliss. In those days the boat traffic on the river was negligible: a couple of tankers a day bringing oil to Hartford, a few motorboats, occasionally a canoe. Weekends in the summer were rather busy, but still there was not the franticness of today. I never saw a cigarette boat until I was in my 20s. The craze for plastic kayaks was 30 years off.

Knowing enough to avoid the channel, a child of 14 could laze down the river any afternoon and stay out of trouble. And I learned the channel and had a chart almost immediately — my father had been a navigator in the Navy. And I learned to sail. Three summers I attended sailing school; we raced little Bluejays around and around the marks. I was overwhelmed by one consuming desire: to have a real sailboat of my own. With just enough money to purchase a sail, there was only one viable option: convert my 8-foot pram to a sailing boat. So I did. Life was complete. With 3-horse motor, 5-foot oars, and a sail, what could stop me from circumnavigating this little world? 



STRICTLY SAIL[®] MIAMI

PART OF THE MIAMI INTERNATIONAL BOAT SHOW[®]—THE GREATEST SHOW IN THE WORLD



February 16–20, 2006

Miamarina at Bayside

For tickets, parking and show details visit
StrictlySail.com or Call 800.817.7245



...look familiar?

We routinely restore engines that come to us in a condition similar to this old soldier, but only a fresh water cooling system can prevent Mother Nature from wreaking her havoc again after an engine returns to active service.



Moyer Marine's fresh water cooling systems combine the ruggedness of a traditional front mounted raw water pump with the increased efficiency of a modern four-pass heat exchanger.

atomic
100% MARINE

Moyer Marine inc.

P.O. Box 1109, Chestertown, MD 21620, U.S.A.

online parts ordering & info, www.moyermarine.com
parts phone 717-625-3891 parts fax 717-625-1587
technical services 410-810-8920



Self-Reliance Under Sail



FREE CATALOG

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.

Tools



Thread



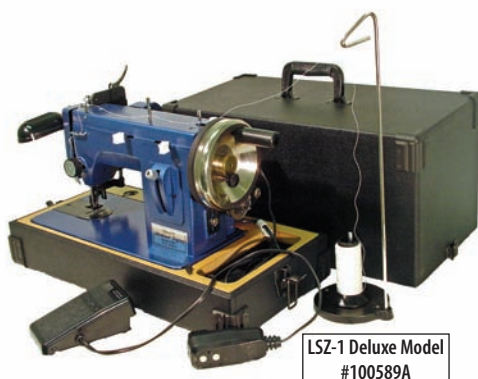
Kits



Fabric



ULTRAFEED™ MACHINES STARTING AT \$399



- New Posi-Pin Clutch guarantees consistent power*
- Ability to sew with heavy thread
- Super feeding - Walking foot
- Zigzag models*
- Portable industrial strength
- Long stitch length
- Amazing power
- Handcrankable models*
- Sew - sails, canvas, upholstery, crafts, drapery, leather, use for general sewing

*Available on select models

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!

Sailrite

(800) 348-2769

www.sailrite.com

e-mail: sailrite@sailrite.com

Churubusco, IN (260) 693-2242 • Ft. Lauderdale, FL (954) 779-2227