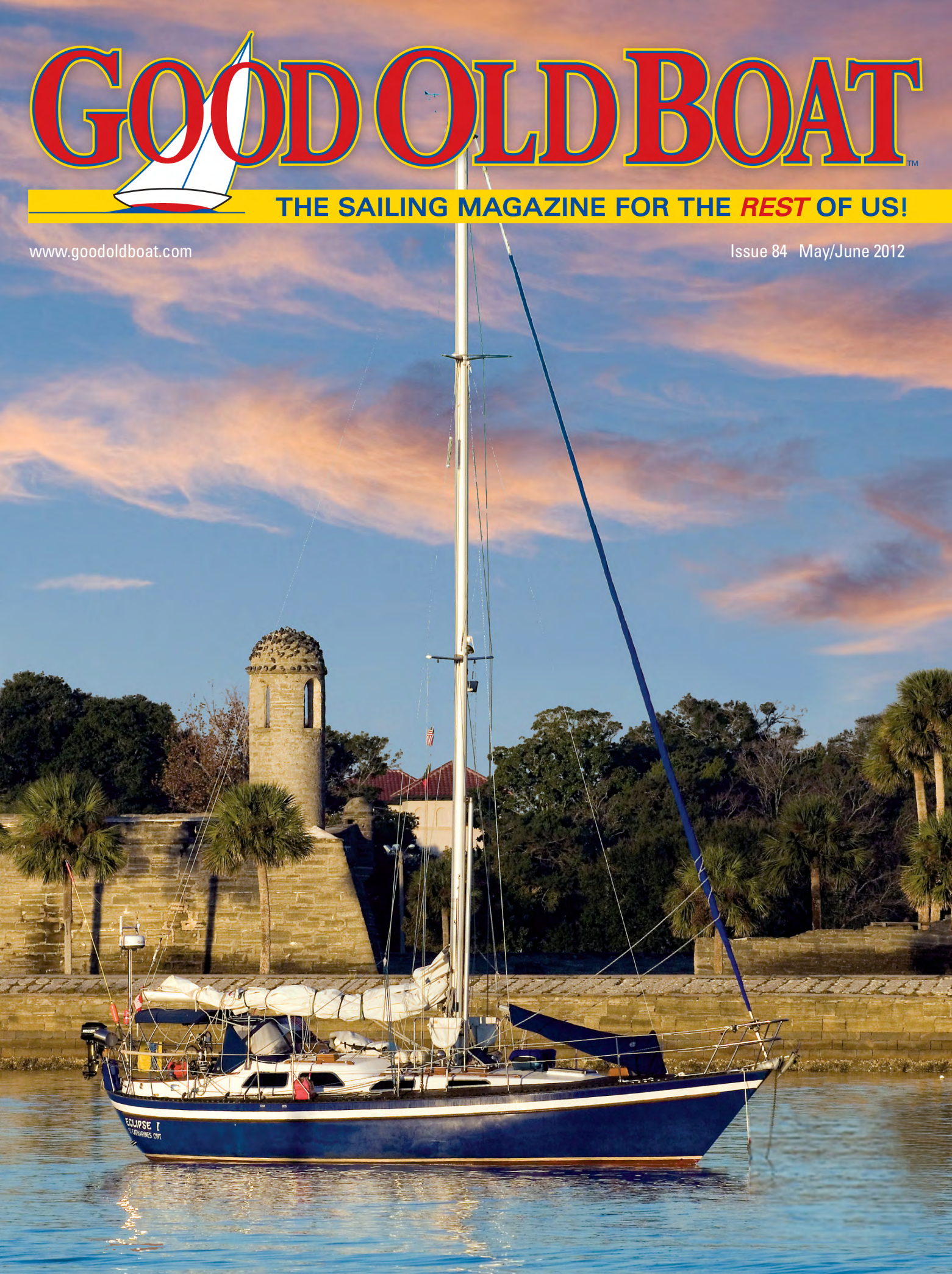
GOOD OLD BOAT™

THE SAILING MAGAZINE FOR THE *REST* OF US!

www.goodoldboat.com

Issue 84 May/June 2012



GOOD OLD BOAT™

THE SAILING MAGAZINE FOR THE *REST* OF US!

PLEASE DON'T STEAL OUR FILES!

We make our living selling good content to fellow sailors. If you give our files to others, you are stealing that content from Good Old Boat. Don't think of it as "sharing." It is theft.

We try to be fair and honest in all things we do on your behalf. We hope you'll treat us fairly and honestly in return.

Our issues are copyrighted. Please respect that.

HAMILTON MARINE

GREAT PRICES! GREAT STUFF!

HM eClub Sign up today!

FREE Catalog!

800-639-2715 hamiltonmarine.com

Typographical errors are unintentional and subject to correction.

MADE IN THE USA

SPARTAN MARINE

The foundry that outfitted the hardware for Cape Dory and others is still going strong! ***Traditional. Rugged. Made in Maine.***

Deck Cleats

Traditional styling. Four hole mounting.

Part#	Order#	Size	Description	List	SELL
SPT-C-203	**131546**	6"	Burnished Bronze	42.00	**35.99**
SPT-C-203PB	**131547**	6"	Polished Bronze	58.00	**52.99**
SPT-C-197	**131542**	7"	Burnished Bronze	61.00	**50.99**
SPT-C-197PB	**131543**	7"	Polished Bronze	77.00	**69.99**
SPT-C-207	**131550**	8"	Burnished Bronze	60.00	**49.99**

Bronze Jam Cleat

3" Jam cleat adequately handles up to 1/4" line. Two hole mounting for #8 fasteners. Burnished bronze. SPT-C-187
Order# 131540 LIST 20.00 **SELL 16.99**

1" Rail Chock

The overall length is 10-1/8" with a 1" width. Chock opening is 3-1/2" x 1-3/8". Max rope diameter is 1". Sold by the each.

Part#	Order#	Finish	List	SELL
SPT-C-232	**131552**	Burnished	55.00	**45.99**
SPT-C-232PB	**131554**	Polished	105.00	**104.99**
SPT-C-232CB	**131553**	Chrome	175.00	**167.99**

Locking Chock

Takes 1/4" fastener. Base dimensions: 1-7/8" x 7". SPT-C-206
Order# 131548 LIST 70.00
SELL 58.99

Mooring Pendants

Many sizes in stock!

ROCKPOINT ROPE

Poly Nylon Double Braid with Galvanized Thimble

YALE

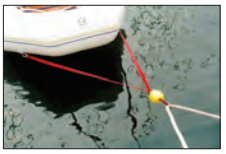
Premium Super Strength with Stainless Steel Thimble

YALE Ph. D Cruiser Fid Kits

Pre-packaged lengths, either 50 or 100 feet, of Ph. D Cruiser line that includes an aluminum Yale fid for splicing.

15% OFF!

Towing Bridle



Offers more stable and secure towing of inflatables and tenders than single tow line. 3800 lb red nylon webbing absorbs shock. Stainless hardware.
Order# 140309
List 67.45 **SELL 39.99**

LightShip

SOLLIGHT

A small, portable solar powered light that you can stick just about anywhere. Bright white & red LEDs. Lasts up to 8 hours on a full charge of sunshine. Weather-proof. 5" diameter. SPL-5408
Order# 743569
List 24.95
SELL 22.99

eGear LED Lanterns

6 Day: Ultra bright, compact & lightweight. Will run for 48 hrs on high setting and up to an amazing 144 hrs on low. Water resistant. Takes 4 AA batteries. 5.2" x 4.5". RVS-LT1304002
Order# 743605 List 19.95 **SELL 17.99**

10 Day: This ultra bright lantern has 240 hrs burn time on low setting. 40 hrs burn time on high setting. Uses 4 D batteries. Weather-Resistant. 360° light. 10.8" x 6.3". RVS-LT1301200 **Order# 743604**
List 39.95 **SELL 36.99**

Kanberra™ Odor Eliminator Gel

Uses the power of Tea Tree Oil to leave your air odor free and clean while working to prevent and inhibit mold, mildew, fungus, and bacteria in the air and on surfaces of the room. Eliminates odors at the source.

Part#	Order#	Size	SELL
KBA-KG02MAR	**741107**	2 oz	**18.99**
KBA-KG04MAR	**741108**	4 oz	**29.99**
KBA-KG08MAR	**741109**	8 oz	**47.99**

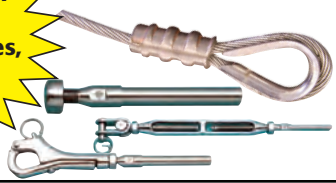
LEWMAR Winches

Marelon®, Aluminum and Chrome.

Lewmar's full line is available.

Stainless Steel Wire, Hand Swaging Sleeves, Terminals & Turnbuckles.

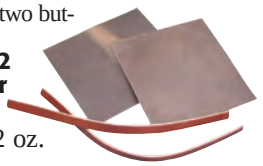
Stainless Steel Wire by the foot or reel. 1 x 19, 7 x 7, 7 x 19. Sleeves. 316 Stainless hand-swage fittings.



Oar Leathers and Buttons

PERKO

7" x 6-1/2". Buttons are 1/2" x 13". Each pair consists of two leathers and two buttons. Sold by the pair.
PKO-233001 **Order# 126962**
LIST 38.18 **SELL 23.75/pair**



Copper Tack Kit

Includes 1 oz. of 3/4" and 2 oz. of 1/2" tacks. HMK-TACKS
Order# 173066 List 19.33 **SELL 12.99**

PVC Toe and Rub Rails

Dozens of Styles in Stock!

PORTLAND ROCKLAND SEARSPORT SOUTHWEST HARBOR JONESPORT

GOOD OLD BOAT
THE SAILING MAGAZINE FOR THE *REST* OF US!

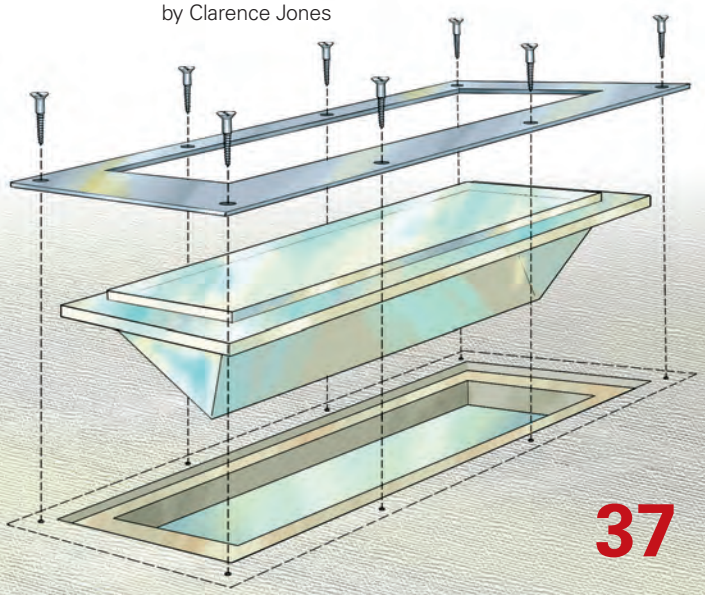
CONTENTS

MAY/JUNE 2012

29

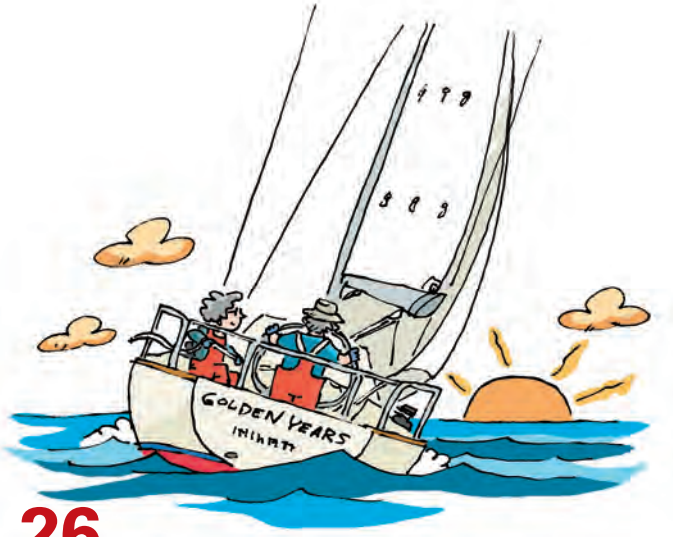
Speaking seriously

Spotlight on . . .



37

CONTENTS

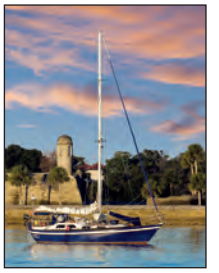


26

64

66

What's more

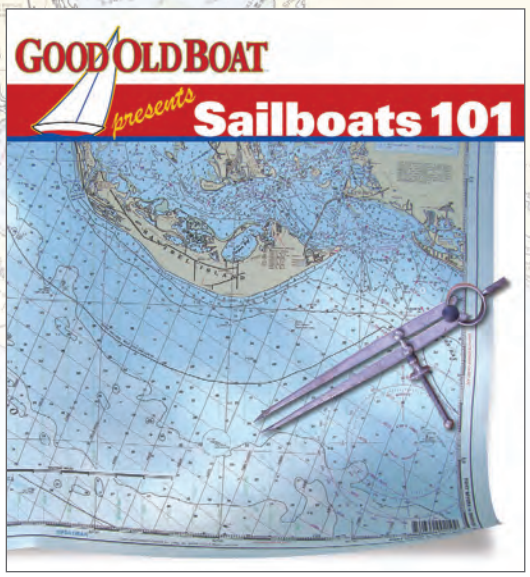


About the cover . . .
Solo sailor, photographer, and adventurer Charles Scott sends us cover photos from his travels all over the world. This one, of *Eclipse*, was taken somewhat closer to home one morning in St. Augustine, Florida.

Archive eXtractions

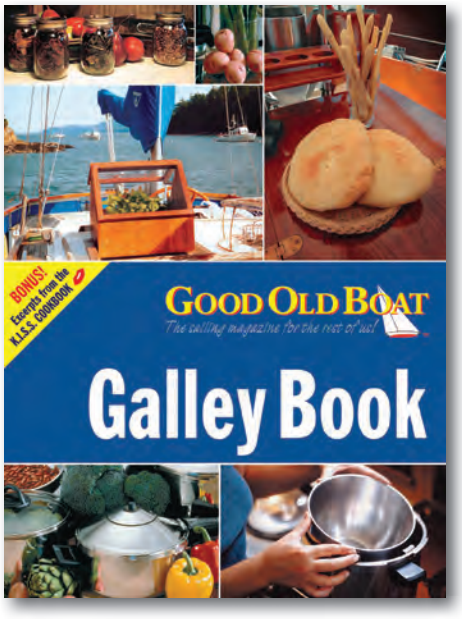
Articles compiled for you from *Good Old Boat* archives

Sailboats 101



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

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



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

Galley Book

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

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

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

Delivered to you in a jiffy!

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

www.AudioSeaStories.com

GOOD OLD BOAT

FOUNDER/EDITOR
Karen Larson
karen@goodoldboat.com

FOUNDER/TECHNICAL EDITOR
Jerry Powlas
jerry@goodoldboat.com

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

SENIOR EDITOR
Jeremy McGeary

MANAGING EDITOR
Tim Bauernfeind

ASSOCIATE EDITOR
Pat Morris

RESEARCH EDITOR
Dan Spurr

CONTRIBUTING EDITORS
Ted Brewer • Donald Launer
Dave Martin • Gregg Nestor • Allen Penticoff
Robert Perry • Paul Ring • Bill Sandifer
Richard Smith • Tom Wells

CREATIVE DIRECTOR
Mary Endres

AD PRODUCTION
Nancy Koucky

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

DIRECTOR OF CIRCULATION/RETAIL
Mark Busta
mark@goodoldboat.com • 701-952-9433

WEBMASTER
Jerry Stearns
www.goodoldboat.com

TROUBADOUR
Tom Wells

84 – VOLUME 15, NUMBER 3
GOOD OLD BOAT (ISSN 1099-6354; USPS 019327)

PUBLISHED BIMONTHLY BY
Partnership for Excellence, Inc.

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

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

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

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

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

FOLLOW US ON FACEBOOK
www.facebook.com/goodoldboat

MMPA
Minnesota Magazine & Publications Association

www.goodoldboat.com
Our most popular page

Over the years, one page on the entire Good Old Boat website has consistently been the most popular page: our classified ads page. You may have it bookmarked in your browser too. You probably also know that each subscriber is able to post the text for one free classified ad each year. (Others pay $40 for this.) Did you know, however, that you can post your own classified ad? It's simple. Just go to **www.goodoldboat.com/reader_services/classified_ad_submission.php**.

Photographers' guidelines

For all skilled and would-be photographers, we've just revised our photo guidelines with a focus on shooting for *Good Old Boat*. There's a lot of good and useful information here — good and bad examples too — about shooting technical subjects inside and outside the boat. **www.goodoldboat.com/writers_guidelines/photography.php**.

Pointers for shooters on our website include examples of bad (left) and good (right) shots.

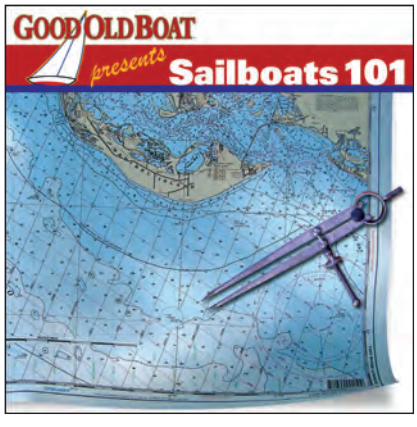
Writers' guidelines

We also publish guidelines for writers. Take a look if you're thinking of writing an article for us. **www.goodoldboat.com/writers_guidelines**.

www.audioseastories.com

Over at Good Old Boat's download site, we're putting together the 101 series of articles by Don Launer and Ted Tollefson. The Sailboats 101 articles by this author/illustrator team will be available for download in PDF format by the time you read this issue.

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



Beginning with "Depth Sounders 101," Don came up with the subjects for each 101 article. Subject matter has varied widely and includes binoculars, bilge pumps, bronze, and brass.

Over the months to come, we'll be working on more article collections for downloading. You'll find them at **www.audioseastories.com** under the Archive eXtractions heading.

Collecting stories

We are the yarns we spin

by Karen Larson

My husband is a masterful storyteller. One of his best collections of tales records years of racing Flying Scots in a fleet in which the 19-foot Scots were the wee little boats outweighed massively by the MORC and PHRF fleets that included such hulking brutes as Ranger 26s and Etchells 30s. Another grand collection of tales recounts his years in the U.S. Navy, primarily on the USS *Newport News*, a heavy cruiser, during the Vietnam era.

Another collection recalls the adventures of Kiki, the most wonderful dog in the world. Ever. And another tells of raising daughters. Many of his tales now include stories of our travels together by land and sea. In addition, there are the college-era tales and a few good stories from his career as an engineer.

In 20 years of marriage, I have heard all these tales more than once. I've become his best stooge in social situations by encouraging him: "That reminds me of a story. Jerry, please tell them about the time . . ." And off he goes with another wonderful well-remembered and well-told tale. I envy that talent: the ability to remember names and details from events 40 and 50 years ago and the ability to recount them well.

I was reminded of the power of stories recently by one of our subscribers. This concept probably isn't original with Steve Quint, but I heard it first from him. He proclaimed that it isn't who dies with the most toys that matters. What's important, he noted, is who dies with the best sea stories. That struck me like a thunderbolt. After all, that's what's truly important in life: collecting experiences, enjoying each moment, and sharing the tales.

Whether you race or cruise, sailing is a terrific way to collect wonderful experiences — whether humorous, calamitous, or stunning in their beauty. There may come a time when we no longer sail, but we will always have our memories of the times we spent on the water.

This spring, as you prepare your boat for another season, the excitement you feel may very well be based in part on the potential: the unknowns that lie ahead and the opportunity to add to your portfolio of great sea stories. Have a wonderful season.

Seasons of choice

The surface of the sea where our boats float is a mysterious interface between air and water. The time zone populated by magazine professionals occupies a similar bizarre perimeter between today and sometime well into the future. We operate on "magazine time," while many of the sailors for whom we produce this magazine operate on something more like "island time."

As I write this in late January, I'm focused not on the March issue, as you might think. No, we're just dotting the i's and crossing the t's on that one. It will be at the printer yet this month. As I am the one who must start this process for each issue, my brain has moved on to the May issue. May! For some of us at *Good Old Boat*, it's not really January (with sub-freezing temperatures outside today). It can't be, not if we can see May from here. Functioning on magazine time is one very good way to escape winter.

Magazine time is not quite as high-tech as time travel, I realize, but for those of us who face a continuous string of deadlines, it's a comfort knowing where we're headed and that we're likely to get there on time.

But here's the magic trick: our delusional logic about the seasons does not apply in reverse. When we're working on the January issue sometime in September, January is most definitely *not* in our mental picture. At that point, we're in denial about the end of the sailing season and we're able to focus on the here and now while producing a magazine meant for some unidentified and indeterminate future month.

I like having it both ways. Some live in the moment. Magazine editors live in a future of their own choosing . . . and only when it's beneficial to delude ourselves.

LED lessons, fridge disaster,

Speedseal Life

You printed my letter announcing the new high-slip bearing in the Speedseal Life impeller cover in the November 2009 issue of *Good Old Boat*. Since then, the cover has repeatedly passed the stringent tests required under the SOLAS safety regulations in the USA, U.K., and Europe. To meet the regulations, a raw-water pump must be capable of operating 10 consecutive dry-running periods of five minutes each without impeller failure, a standard demanded for many military and commercial small craft.

Speedseal Life covers achieved 10 dry-running periods of 10 minutes each, thereby confirming the important safety benefit they convey. The same simple conversion (available for most pumps) also provides about three-times-normal impeller life, quick impeller access, greater pump efficiency, and extended pump life.

–Alex Parker, Speedseal, Surrey, United Kingdom

Polarity and LED light bulbs

Clarence Jones's article in the May 2010 issue on swapping out incandescent bulbs for LED bulbs in his navigation lights got me going. I just completed that project on our 1985 Islander 28 and learned a few things along the way.

One thing I learned the hard way was that some festoon LEDs have a positive and a negative end. My Perko masthead fixture requires two of the smallest festoons, which I purchased online from Superbrite. I put them in when the mast was down for the season and I never realized there was a polarity issue with the bulbs. Last spring, we stepped the mast with the crane at the club and waited for that first night to try out all of my new LED navigation lights.

The bi-color bow light, which I made using a red and a green festoon after reading the article (we nicknamed it Frankenbulb) works like a champ. I fabricated aluminum top and bottom plates rather than wiring the bulbs to a dowel, but the idea was the same. The transom light was a straight-up swap, no problem there. However, the two masthead lights didn't go on. I replaced the plug at the mast base, no luck. After I had checked everything there was to check, a friend offered to go up the mast for me. He checked the lights with a meter for power: all seemed to be well.

Long story short, we never did get those lights to work all summer, so no nighttime sailing. Last fall, we dropped the mast for storage and my first project was to pull the entire fixture and take it home. Only then did I notice a small red mark on one end of the bulb, made with a marker pen. I reversed the light and one came on. The other light never did work; I assume reversing the polarity fried its little innards. I ended up buying a brand-new fixture and new LED bulbs, non-polarized, from Superbrite. I tested the fixture. It works perfectly and is installed on the mast waiting for spring commissioning.

–Craig Cook, Erie, Pa.

Warmth of LED lighting

Clarence Jones, in his interesting article about LED lights (January 2012), mentioned in passing the different warmths of LED lights without further elaborating on the effects of cold and warm LEDs. Beware: if you choose cool LEDs, you will make your once cozy cabin locker-room bright. Some manufacturers and marine stores (like West Marine) do not mention the Kelvin value of their on-the-shelf LEDs, but the web store you mentioned at the end of the story, SuperbrightLEDs, has a page that explains the properties of warm and cool LEDs. Here is the link: <www.superbrightleds.com/compcool_warm.htm>.

–Thomas Ruest, Jacksonville, Fla.

Eurisko's Panama adventure

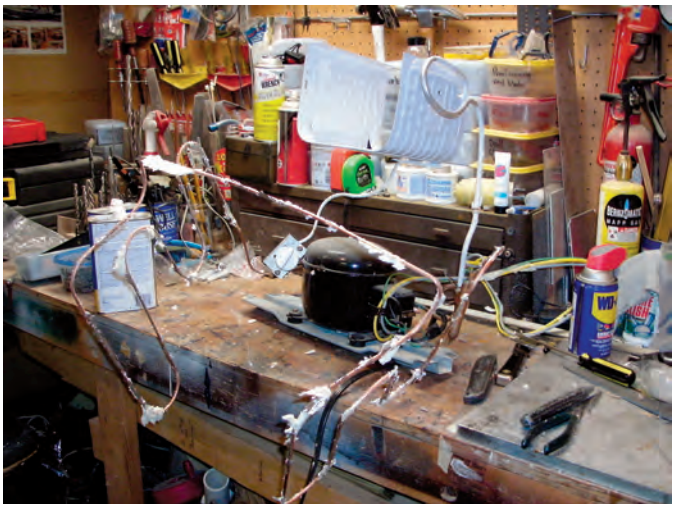
Armchair adventurers, sailors looking for their next destination, or dreamers who hope to set off someday may be interested to know that I have recently released a new book, *Eurisko Sails West: A Year in Panama*, which is now available through Amazon as a Kindle book. No Kindle or other reading device is necessary, however, since you can read Kindle books on any computer.

–Connie McBride, Chester, Md.

Readers of Good Old Boat *will know Connie from the many articles of hers we have published in the magazine. Through those articles, we have all been allowed glimpses into the McBrides' big adventure . . . setting off in their sailboat with their three sons and supporting themselves while they cruised the Caribbean. This book is a more intimate view of their travels aboard* Eurisko *after they sailed west to Panama. It's not a "logbook" story but a personal tale about coping with the ups and downs of life amidst a different culture with an unfamiliar language.* Eurisko Sails West *is available from Amazon: <www.amazon.com/Eurisko-Sails-West-Panama-ebook/dp/B0076ON58W>.*

–Editors

and a sewing solution



Dorm fridge disaster

Don Launer's article on boat refrigeration (January 2012) brought back not-so-great memories of my winter project of last season.

The Internet is full of stories of DIY boaters adding refrigeration to their onboard iceboxes using a converted dorm or mini-fridge. That would be perfect, I thought! I had one in my workshop left over from the kid's college days. One of the members at our club had the job done by another member who is a refrigeration technician. It looked very nice and worked perfectly. The words of guidance from his installer were "Don't get a new dorm fridge, use an old one." Looking back on this, I could have used more details.

Not fully understanding how such things work, but having a general idea, I know there is a cold plate, compressor, and cooling fins for the refrigerant. My fridge only had two of the three, no cooling fins. I assumed this was a case of new technology that would be to my advantage. I attacked the lightly used fridge, cutting away plastic and foam to get the cooling plate out of the inside and the compressor out of the back (see photo at top). In the process, I laid open my thumb down to the bone, severing the nerves. It was an ugly scene at the house.

Several weeks went by, my thumb stopped bleeding, and I got up the nerve to complete the gutting, wearing work gloves this time. Only then did the true meaning of those words of guidance become evident. Older dorm fridges have a cooling grid on the back. This setup is much more easily transferred into a boat. A small fan can be used to circulate air around the grid. The newer models use a different method; a copper tube is snaked around and attached to the inside of the metal skin of the fridge, then foam insulation is added and the entire metal skin acts as a heat sink. Once the foam is removed, the plastic box cut away, and the many feet of copper tubing exposed, it looks like what you see in the photo. I can tell you for a fact that this design is not easily transferred into a boat. This one went to the metal recyclers. A new dorm fridge purchased at a garage sale now resides in my dock box to keep things cool.

–Craig Cook, Erie, Pa.

Remembering a "family" friend

Once again, *Good Old Boat* is keeping the "sailing family" together. I was saddened to learn of Brian Cleverly's passing (March 2012). I virtually met Brian years ago on Yacht-L. I remember Brian, a regular contributor, not just for his boat tips, advice, etc., but for the "Round the World Race" he devised as part of the Yacht-L community. We all had a great time and I doubt it would have happened without his work. He and I had some online communication and, though we never met face to face, I considered Brian a friend.

I think it's an affirmation that I "met" him online and learned the rest of his story in print.

Thanks for keeping us together.

–Rick Voss, Iowa City, Iowa

Long arm or walking foot?

I have decided to replace the sails on my Paceship PY23. After getting some quotes, and after reading your articles on sailmaking (January 2011, January 2010), I have decided to obtain kits from Sailrite and sew the sails myself. That decision came fairly easily as I have a lot of sewing experience on projects very big and very small.

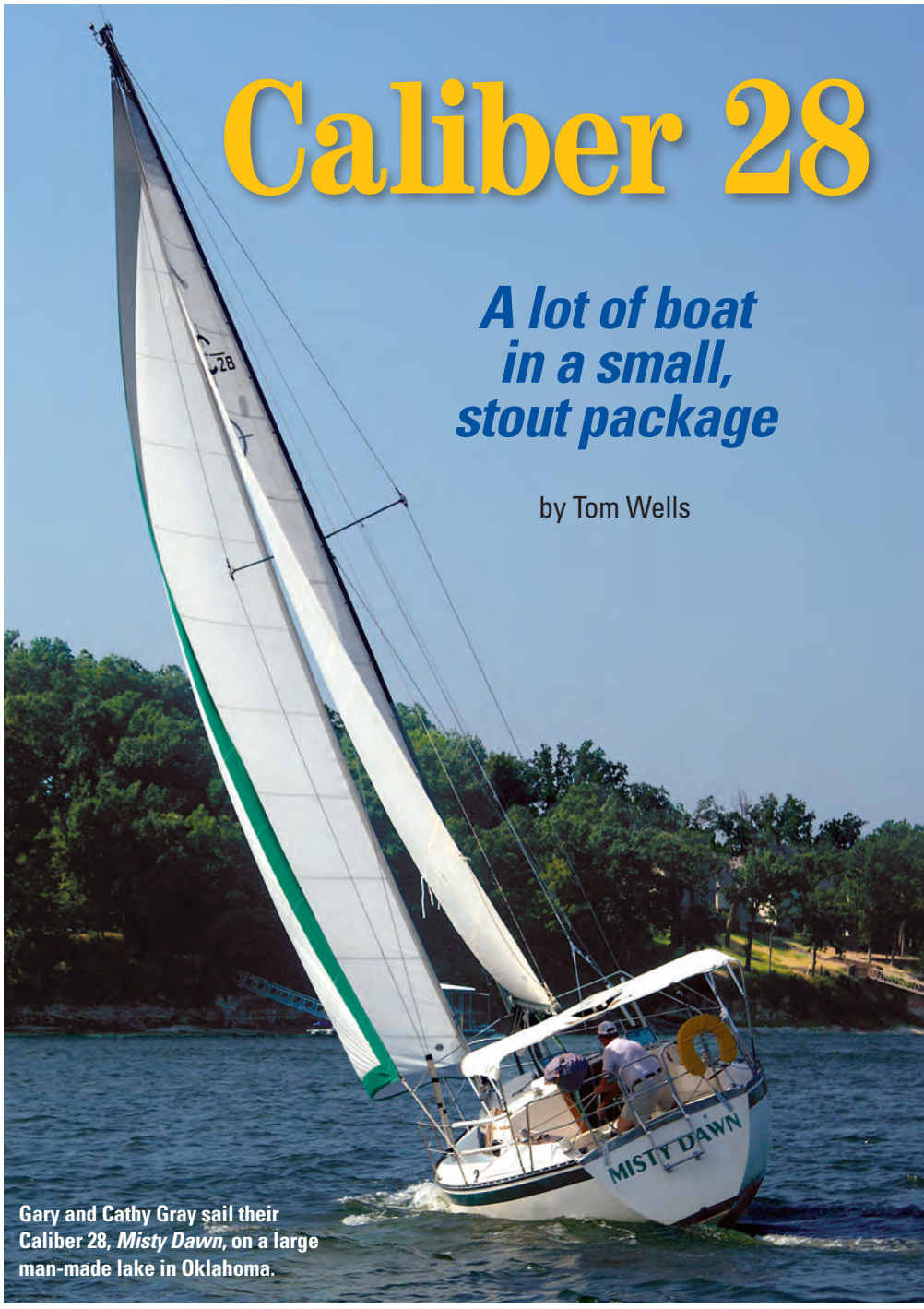
continued on page 67

The #1 buoy marking the entrance to Liberty Landing Marina in Jersey City (just off the Hudson River) offers a great view of the construction of the new Freedom Tower on the site of the former World Trade Center. Tim Canary sent this one. Send karen@goodoldboat a high-res photo of your favorite aid to navigation. If we publish it, we'll send you a Good Old Boat cap or T-shirt.

Caliber 28

A lot of boat in a small, stout package

by Tom Wells



Gary and Cathy Gray sail their Caliber 28, *Misty Dawn*, on a large man-made lake in Oklahoma.

Starting a business venture requires nerve and dedication, and the first product must be good if the company is to succeed. George and Michael McCreary proved this when they introduced their first production sailboat, the Caliber 28.

In July 2011 my wife, Sandy, and I traveled to Oklahoma's Grand Lake O' the Cherokees to sail and photograph Gary and Cathy Gray's Caliber 28, *Misty Dawn*. They found *Misty Dawn* in 2009 and brought her to the Grand Lake Sailing Club's marina near the city of Grove. Gary and Cathy live across the border in Arkansas, but after sailing on Grand Lake with friends in 2006 they knew it was where they'd like to keep their own boat.

We met Gary and Commodore Tom White at the GLSC clubhouse and, following a marvelous breakfast courtesy of the commodore, we began our review activities. The GLSC made its race-committee boat available for the photo session.

History

The McCreary brothers founded Caliber Yachts in 1980. Michael — Westlawn trained and with an engineering degree from the University of Michigan — assumed design responsibilities and George used his business degree and skills in marketing to successfully promote the new company. They built their first boat, a Caliber 28, in their garage, but they soon moved into their own manufacturing facility in Clearwater, Florida.

In 1985, the company began producing the Caliber 33. The boat was a success, even in the midst of an economic downturn. The Caliber 38 followed in 1987, and was modified in 1989 by extending the stern to become the Caliber 40. The company introduced its respected LRC (Long Range Cruising) series in 1993 with the 35LRC. This was followed by the 40LRC in 1995 and the substantial 47LRC in 1999. These models are built as passagemakers and are renowned for their solid construction and good sea manners.

As the larger models became more prevalent, Caliber 28 production ended after approximately 48 hulls had been built. The company continues to build the three LRC models.

Resources

No website is dedicated strictly to the Caliber 28. Resources include a Caliber discussion list on sailnet.com, another on yahoo.com, and the Caliber Yachts website: www.caliberyacht.com.

Construction

In the Caliber 28, the company introduced many of the strong construction methods and techniques it would use in its later models. The hull is a very solid fiberglass hand layup and the deck is cored with plywood, rather than the end-grain balsa used by many other builders. Deck penetrations are all in solid fiberglass. The shallow fin keel is bolted to the hull, but this is the only Caliber model with that type of keel construction. In newer Caliber models, the ballast is encapsulated in an integral keel. The rudder, which is rectangular in shape, is of fiberglass laid up over a

stainless-steel armature and shaft. It has a small skeg at its leading edge.

Unlike most builders, Caliber chose not to use interior liners or pans for economy or as a way to stiffen the hull. Instead, it uses its "Multi-Bulkhead Bonding System," in which all bulkheads are taped and tabbed securely to the hull and deck.

To form the "Quad-Seal" hull-to-deck joint, an overlapping deck flange is mated to an inward-turning hull flange with a copolymer tape between them. The system is secured by through-bolting a substantial aluminum toerail, bedded on 3M 5200, to backing plates on 6-inch centers. The joint is then finished on the exterior with a full-length rubrail, also bedded on 3M 5200, that completely covers the joint, and more 3M 5200 is applied on the inside of the joint. Owners have not reported issues with this joint.

Chainplates are solidly connected with through-bolts to a very substantial bulkhead and also to the deck. Shroud forces are transmitted to the deck, bulkhead, and hull as a unit.

Misty Dawn was extremely solid with no sign of movement or deterioration in the tabbing or around the hull-to-deck joint. The overall feel of the boat is very substantial, especially for a 28-footer.

Rig

The Caliber 28 was offered with a masthead rig, and a fractional rig was reportedly available as an option. The aluminum mast and boom are beefy extrusions with a linear-polyurethane paint finish.

> **"The cockpit is surrounded by generous molded coamings with attractive teak caps."**

The upper and lower shrouds supporting the single-spreader mast attach to the chainplates in the middle of a fairly wide sidedeck, but they don't impede passage forward for crew. The split backstay frees center space at the helm and allows for easy installation of a tensioner. For additional support and finer tuning, a baby stay is set up between the mast at the spreaders and the forward end of the cabin trunk.

Mainsail control is achieved with mid-boom sheeting and a traveler that is only the width of the companionway sea hood. That may be too short for some conditions. However, the boom is nicely set up for slab reefing with reefing hooks at the gooseneck. Reefing lines and the outhaul line are run inside the boom.

Standard Barient #12 primary winches were provided for trimming the genoa sheets. A Barient #10 winch is mounted to port on the aft end of the cabin to handle the halyards.

Deck

The deck layout is quite accommodating, with the wide sidedecks and straight cabin trunk allowing crew free movement forward and aft. The full-length aluminum toerails and the heavy grabrails along the cabin-trunk sides provide good security, and the grabrails double as slip protection for anyone working at the mast.

The cabin-trunk sides have a teak eyebrow above the ports. *Misty Dawn* has two opening ports on each side, one forward and one aft, with a large trapezoidal smoked-Lexan port between them to provide light for the saloon. On later models, the trapezoidal fixed ports were eliminated and four opening ports were fitted on each side.

Deck hatches provide good light and ventilation. A small hatch is located over the starboard aft end of the cabin and a larger hatch is on centerline just behind the mast. A smoked-Lexan companionway hatch slides into a sea hood.

The foredeck is spacious and uncluttered. The 19-inch-square hatch over the V-berth lies just forward of the cabin trunk. At the bow, there is a substantial anchor locker with integral drain. Its cover is secured with a stainless-steel barrel bolt. The bow has aluminum chocks mounted just beyond the forward ends of the toerails, and reasonably sized cleats on each side provide solid attachment for docklines and anchor rodes. *Misty Dawn* did not have an anchor roller fitted. Later models were equipped with an anchor roller platform.

The stainless-steel bow and stern pulpits and stanchions support double lifelines for security. There are no lifeline gates; aft sections secure with pelican hooks and can be dropped for boarding. The stern pulpit incorporates a hinged swim ladder that raises and secures to become a part of the rail.

The cockpit is surrounded by generous molded coamings with

The cockpit of the Caliber 28, at left, feels very secure with its stern rail, high coamings, and bridge deck. The foredeck, at right, is unobstructed, and the hatch to the very large anchor locker takes up most of it.

The galley in the Caliber 28 is quite small, at left, but provides an icebox and reasonable storage space. Gary and Cathy have a portable stove that they stow away when they are not using it. The saloon table, at right, folds up against the bulkhead.

attractive teak caps. Two storage lockers and a small cockpit icebox are accessible from the cockpit. The Edson pedestal and its 28-inch wheel are mounted well aft but there is ample space at the helm and the wheel does not hinder side access. The bridge deck is a rare feature in a boat of this size and it shows design consideration for rough conditions. The side seats allow a person of average size to stretch out for a nap, but someone taller may find them a bit short.

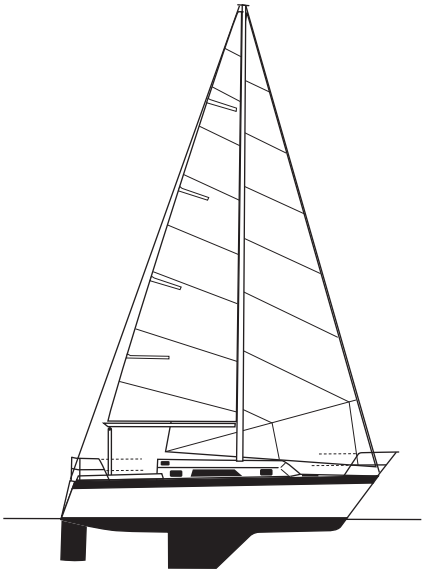
Belowdecks

When you step down into the cabin, you immediately notice the high steps. These are necessary to accommodate the bridge deck, but they're well designed and built for ease of use. You also notice the 6-foot 1-inch standing headroom and the expansive use of rich teak throughout.

The Caliber 28 was available with two interior layouts. The two-cabin layout reserves all space beneath the cockpit seats for storage. The galley in this version is to port of the companionway. A large U-shaped counter houses a sink forward, a two-burner stove along the port side, and the icebox and a storage compartment beneath the aft countertop. The electrical panel is located along the aft bulkhead above the galley counter.

A hanging locker and a large head compartment are located to starboard of the companionway. The head has a marine toilet, a vanity, and an integral shower pan and sump. Pressurized water serves the galley and head from a 25-gallon storage tank.

The saloon has long settees along both sides and a centered table with fold-down leaves. The compression post beneath the mast is at the forward end of the table. The starboard settee converts into a double berth and generous shelves and storage space are outboard above both settees.



Caliber 28

Designer: Michael McCreary
LOA: 27 feet 6 inches
LWL: 24 feet 4 inches
Beam: 10 feet 10 inches
Draft: 4 feet 0 inches
Displacement: 7,200 pounds
Ballast: 3,100 pounds
Sail area: 428 square feet
Disp./LWL ratio: 223
SA/disp. ratio: 18.4
Fuel: 22 gallons
Water: 25 gallons
Holding: 10 gallons (varies)

The V-berth serves as the second cabin and has a solid teak door for privacy. The berth is 6 feet 6 inches long and more than 6 feet wide at the aft end. With the filler panel in place, it can serve as a fairly comfortable double.

A three-cabin option also was offered, and that is how *Misty Dawn* is configured. The galley is still to port but it's reduced in size with an L-shaped counter and the sink is moved aft. There is still space for a two-burner stove and a large icebox compartment with countertop access. The electrical panel is still mounted on the bulkhead aft of the galley.

The real differences begin to starboard of the companionway. An angled partition and door provide privacy for an aft quarter berth that extends beneath the cockpit seats. A seat behind the door provides dressing space. Caliber literature touted the berth as a double, but it would be cramped for two.

The saloon retains settees along both sides, but they are moved aft, filling the space made by the smaller galley and elimination of the aft head compartment. The starboard settee will convert to a double berth, as in the two-cabin model. The table is no longer mounted on centerline but is hinged off the main bulkhead.

The head is forward of the saloon in the space created by moving the settees aft. There's a marine toilet to port, a vanity sink to starboard, and a shower pan and sump amidships. The door to the head is offset to clear the mast compression post, and a door in the bulkhead forward provides privacy for the V-berth, which is basically the same as in the two-cabin model.

The engine is an 18-hp Yanmar 2GM 20F, and the 22-gallon fuel tank gives the boat a fair range under power. Engine access is fair and most service points can be reached from the front when the companionway stairs are removed.

While the Caliber 28 is not a racing boat, some owners have apparently competed in local fleets. PHRF New England shows a rating of 186 for this boat, and in the same fleet the Catalina 28 and Hunter 28.5 both carry a 183 rating. Comfort and solid construction don't usually translate into great success around the marks, but the Caliber 28 can be competitive and look good doing it.

Under way

Gary welcomed us aboard *Misty Dawn* for our test sail on a clear Oklahoma summer morning. The temperature was already in the mid-80s and forecast to rise well above 100, so we were glad to sail while conditions were more tolerable. The 10-knot breeze made it quite comfortable, and off we went to put *Misty Dawn* through her paces.

The boat tracks well and handles easily under power alone, with just a slight amount of helm correction required to hold a straight course. The engine and standard two-blade prop drive the boat easily to near hull speed.

Some prop walk to port is evident when backing under power, which is not unusual. However, with judicious use of the throttle, it's possible to achieve good control in reverse once the boat has gathered enough sternway to make the fairly large rudder effective. It's important not to release the wheel while backing as that could cause the rudder to slam over against the quadrant stops.

The first thing I noticed when under sail is that the Caliber 28 doesn't feel like a 28-foot boat. It has the solid feel and firm tracking of a much larger craft. This may be partly due to the solid construction and fairly long fin keel.

Feedback through the wheel steering was a bit muted, as expected, but after a bit of time at the helm, it was easy to feel the boat respond to changes in the wind. We started off on a reach and she accelerated nicely to around 5 knots. We made some minor trim adjustments and gained speed. The genoa tracks could be somewhat longer, but for most sailing conditions they'll be fine.

The nice breeze gave us a chance to test windward performance. This is not a particularly weatherly boat but it does well enough, pointing up to around 40 degrees apparent wind. Trying to point any higher than that resulted in loss of speed and the need to foot off.

The boat tracks very nicely with the keel and rudder configuration and showed no tendency to round up even in occasional puffs. There was just a bit of vibration in the helm at times, and Gary told us he'd lost the fiberglass fairing strip that mounts at the leading edge of the small skeg.

We encountered some large powerboat wakes that simulated higher sea conditions. The boat took them in stride and it appeared that she would not pound much if sailed in a seaway.

Conclusions

The Caliber 28 offers solid construction, good seakeeping qualities, and comfort in a fairly small package. You may not win many races with this boat, but you're going to arrive in comfort and have fun on the way.

Although the production numbers for this boat are fairly low, two were on the market in Florida late in 2011. Both were listed at asking prices of $19,500 and, given the quality and seaworthiness of the Caliber 28, this is likely a reasonable figure.

Tom Wells is a contributing editor with Good Old Boat *(and his musical contributions have also earned him the title of Troubadour). He and his wife, Sandy, own and sail a 1979 Tartan 37,* Higher Porpoise. *They have been sailing together since the 1970s and look forward to cruising upon retirement.*

The spacious V-berth, above, is common to both layout alternatives. Light enters through a hatch in the foredeck and an anchor locker is recessed above the foot of the berth. In *Misty Dawn*'s three-cabin layout, the marine toilet is to port, at left, and the vanity is to starboard, at right. Under the cabin sole between them is a shower tray.

Boom Vangs 101

The lowdown on your boom's hold-down

by Don Launer

What we today call the boom vang was once called a martingale. It is also referred to as a kicking-strap, kicker, or boom-jack. The principal purpose of the boom vang is to control mainsail twist by preventing the boom from rising, an otherwise natural result of the force of the wind on the sail (see "Doing the twist," January 2010). Two basic methods are used to create this downward force: block-and-tackle vangs and rigid vangs.

Controlling twist

When the boom is centered or near amidships, the mainsheet can exert all the needed downward force. When the boom is eased out, however, the pull from the sheet becomes more horizontal and less vertical and the boom is able to rise. This results in twist in the sail, where the top of the sail may be under-trimmed, even to the point of luffing, while the bottom of the sail may be pulling properly. If the boom is over-trimmed to prevent the top of the sail from luffing, the result will be increased weather helm and reduced speed.

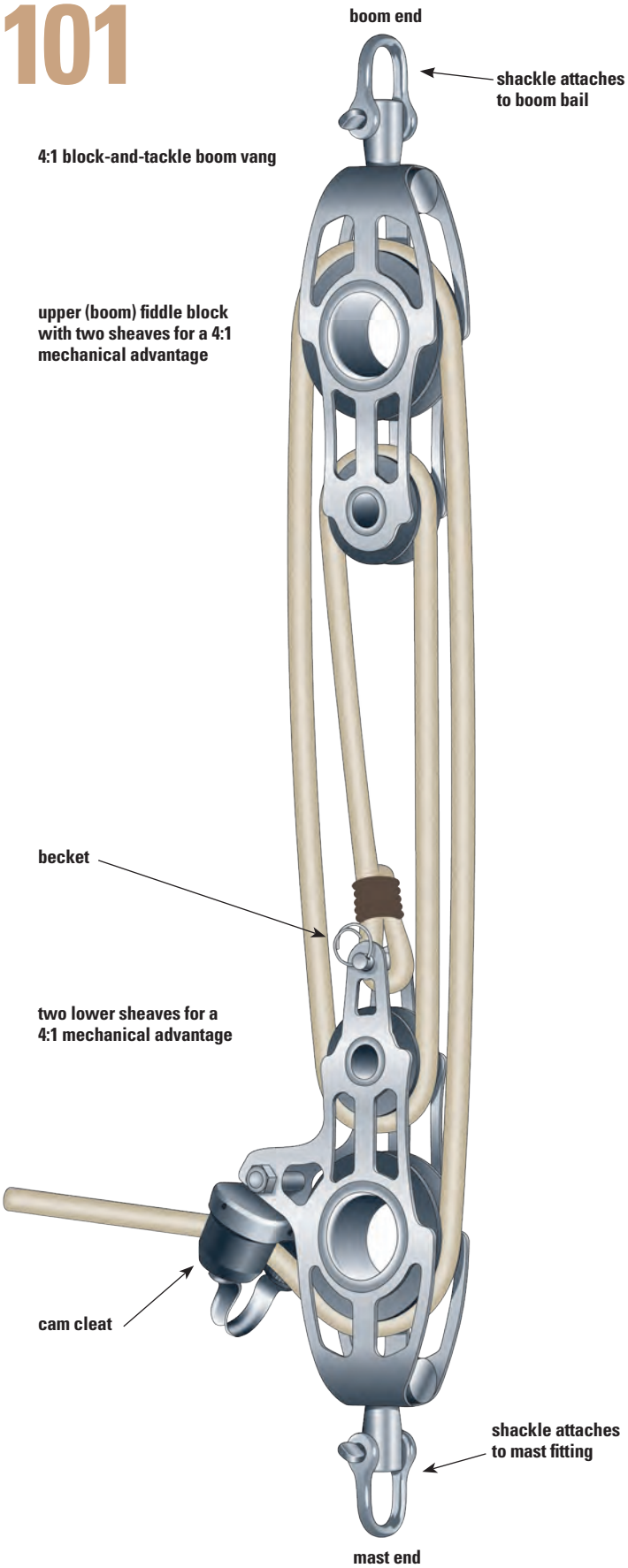
The boom vang alleviates this problem. No matter the boom's position, the boom vang can be used to apply the downward force needed to flatten the sail and reduce twist. A flatter sail allows the boat to sail more efficiently and closer to the wind, and it helps reduce that annoying roll in a short chop.

On a sailboat on which the gooseneck is not attached to a fixed point on the mast but slides in the sail track, tensioning the vang will also tension the luff of the sail somewhat by pulling the gooseneck downward. Of course, if the boom is attached to a fixed point on the mast, luff tension will be controlled by the halyard's upward pull and the Cunningham's downward pull.

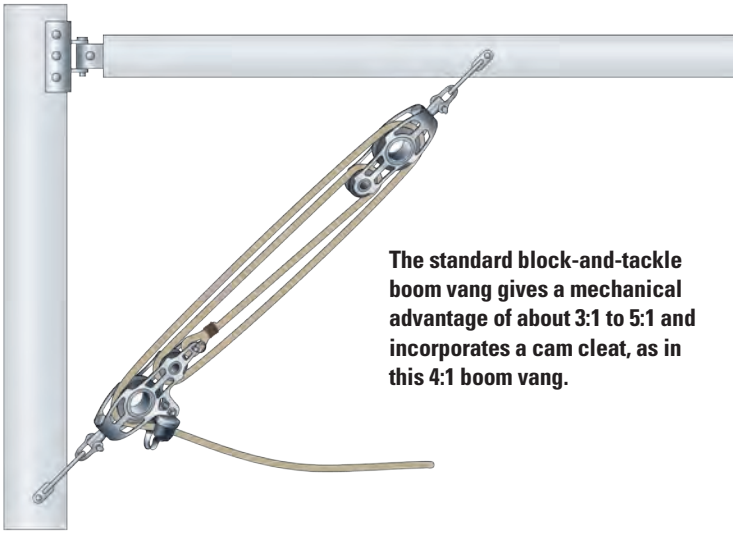
Block-and-tackle vangs

In a typical multiple-part block-and-tackle vang arrangement, one end of the tackle is a fiddle block that's attached to the boom, usually on a boom bail. The other end is usually a fiddle block with a becket and cam cleat and is attached to a special fitting on the mast that allows it to rotate when the boom is swung out.

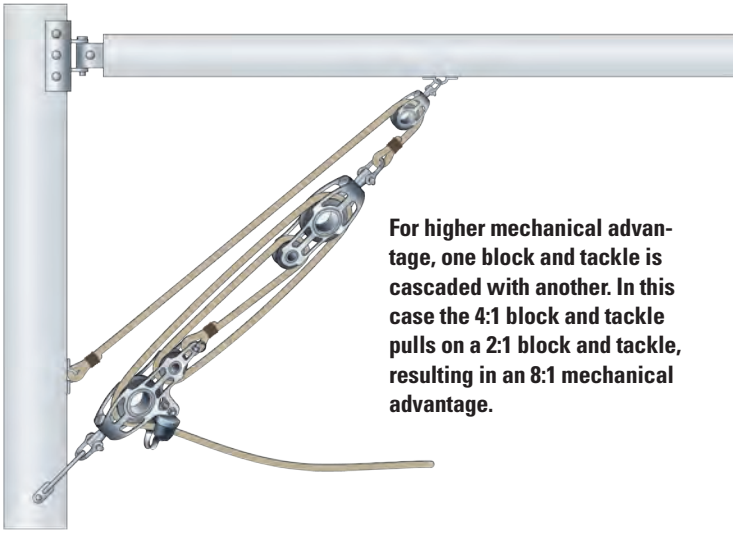
The mechanical advantage of a block-and-tackle boom vang can range from about 3:1 on small boats to as much as 15:1 or higher. Cascading block-and-tackle configurations are used to achieve a mechanical advantage of more than 5:1. An example would be a 4:1 block and tackle cascaded with a 2:1 block and tackle to produce a mechanical advantage of 8:1.



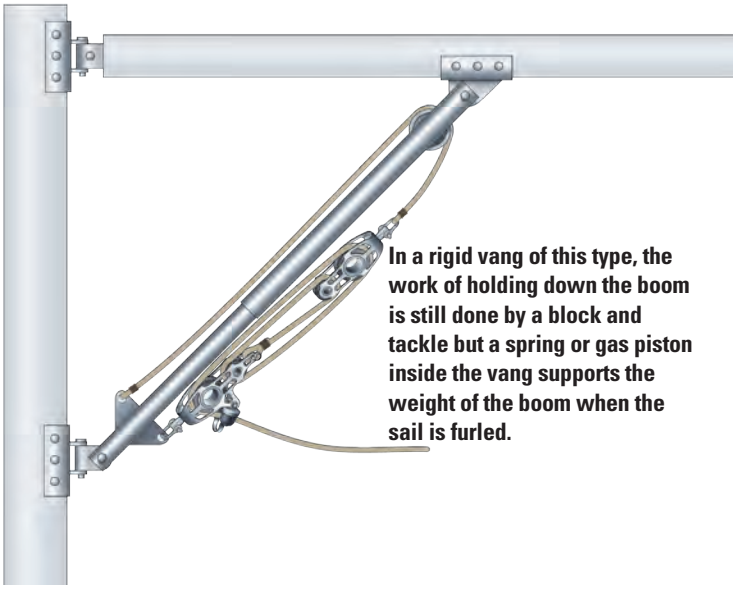
LAYOUT AND ILLUSTRATIONS BY TED TOLLEFSON



The standard block-and-tackle boom vang gives a mechanical advantage of about 3:1 to 5:1 and incorporates a cam cleat, as in this 4:1 boom vang.



For higher mechanical advantage, one block and tackle is cascaded with another. In this case the 4:1 block and tackle pulls on a 2:1 block and tackle, resulting in an 8:1 mechanical advantage.



In a rigid vang of this type, the work of holding down the boom is still done by a block and tackle but a spring or gas piston inside the vang supports the weight of the boom when the sail is furled.

"A rigid vang . . . must be properly matched to the weight of the boom and sail."

Rigid vangs

A rigid vang usually consists of inner and outer tubes, like a telescope, with an internal mechanism that resists their being pushed together. This resistance supports the boom and eliminates the need for a topping lift, which has the added bonus of eliminating the wear a topping lift causes on the leech of the sail.

The mechanism inside the vang can be a coil spring or a gas piston. The vang adjustment is made with a ratchet mechanism or an external block and tackle that, when tensioned, compresses the spring or piston to shorten the vang and pull down on the boom. A block-and-tackle adjuster can be controlled either by leading the tackle line to a cam cleat on the vang itself or by leading it back to the cockpit. When led to the cockpit, the line can be pulled directly or with the aid of a winch.

Some rigid vangs have an internal hydraulic piston instead of an external tackle. A hydraulic pump creates the pressure when needed and a bypass valve is used to relieve it.

A rigid vang with a spring has the advantage that its performance can't be impaired by the loss of gas or fluid. For maximum efficiency, the boom vang should make a 45-degree angle with the mast and boom.

A rigid vang is considerably more expensive than a simple block-and-tackle vang and must be properly matched to the weight of the boom and sail. If it's not quite up to the job, it can be damaged or bent if someone over-sheets the sail or even leans heavily on the end of the boom. Manufacturers advise that, when the boat is not in use, the main halyard should be fastened to the end of the boom to take up weight and reduce the pressure on the vang.

A furling boom, in which the mainsail is rolled up inside the boom, can weigh much more than a standard boom. If a rigid vang is specified solely by boat size, the spring, gas, or hydraulics might not support this extra weight. In this case, a much larger and more expensive rigid vang should be employed. For these reasons, it's important to get professional advice before purchasing a rigid boom vang.

Don Launer, a Good Old Boat *contributing editor, built his two-masted schooner,* Delphinus, *from a bare hull and has held a USCG captain's license for more than 37 years. He has written five books, including* The Galley: How Things Work *and* Navigation Through the Ages, *and frequently gives talks on the history of navigation.*

Alberg 35: Love requited

A life's love of sailboats summed up in Finesse

by Karen Larson

Over the years, Texan Richard Beard has owned nearly two dozen boats, but his heart has always gone out to Alberg designs. It's not surprising, therefore, that for the last 17 years he's been true to just one boat. *Finesse*, his Alberg 35, is the one that captured his heart and soul.

Richard grew up in Texas ranch country and was comfortable roping cattle and engaging in other daredevil activities from the backs of fast horses. But his education at the University of Houston and his degree in drafting technology led him to a career near the shores of Galveston Bay. Blame it on his supervisor in a chemical-manufacturing plant, a fellow who was obsessed with sailing … as a concept.

"He talked about sailing all the time," Richard recalls. "He researched boat design and made drawings for a hull design. He later made two or three scale models and we did some crude research on towing them to see which was the best. This got me all fired up. But while he *talked* about boats constantly, I wanted *action*."

Richard took matters into his own hands. A newspaper classified ad led him to a neglected Sailfish for just $50. Richard says, "All I knew about sailing was what I had read in a small booklet. The sail was in tatters, but the guy told me I could sew a new one from a WWII surplus parachute. So I bought it — story and all — and went to Sears to buy a car-top carrier to get it home."

It should be noted that during his career as a boat owner, although he bought and sold *many* boats, Richard says he lost money on only one of them. The Sailfish was the first of a couple of dozen boats he purchased, fixed up, and sold for more than he'd paid for them. His learning curve at this point was steep, but Richard is technically inclined and was not afraid of a little bit of hard work. Over the summer, he painted the hull and fixed up the rudder, tiller, and centerboard. Soon after buying the boat, Richard and his wife

***Finesse*, Richard Beard's Alberg 35, and the photo boat, Paul West's Valiant 32, *Bluebonnet*, both took their lumps on breezy Galveston Bay.**

spent one long night sewing a sail from a parachute, as the previous owner suggested, and he headed off for a test sail first thing the next morning.

Sailing made not so easy

Once the boat floated, Richard began work on a sailing diploma from the School of Hard Knocks. "Lesson number one," he says, "is do *not* stand up on a plywood Sailfish when you don't know what you're doing!" Each time he stepped on the boat to raise the sail, he wound up swimming. Richard finally figured out a better plan, the wind caught the sail, someone gave the boat a shove, and, as he puts it, "I was on my way to being a sailor."

His first lesson in tacking occurred when the centerboard grounded on an oyster reef. Once the boat was stopped, Richard climbed off, turned the boat around, and headed back to the launching ramp. But by the end of the day, he'd learned a few subtler skills and was grinning from ear to ear. "The way I was beaming when it was time to go home," Richard says, "you would think I could cross an ocean."

The euphoria with the Sailfish lasted all summer. Once it cooled off outside, a wet boat became less appealing and Richard began drooling over a Chinese junk in a nearby boat dealership. That boat lured him through the door, but a 17-foot Thistle hooked him.

"The dealer was a representative for W. D. Schock sailboats," Richard says, "and several Schock boats were on display, but I liked the look of the Thistle. I had no idea what I was doing, I just wanted one of those boats."

The salesman, knowing Richard couldn't afford the boat, set the hook anyway. He suggested a demo sail with a friend who had a Thistle in the racing fleet at the Houston Yacht Club on Galveston Bay.

After the day's race, this sailor and his son took Richard out for a joy ride. The Thistle was designed for lake sailing in light wind, but it was blowing 20 knots out of the north with gusts to 25. "When we cleared the harbor, we got the full force of the wind and the boat jumped up on a plane. I think we were going about 15 knots, but it felt like 50. It was the most exciting thing I had ever imagined. I was hooked but good," Richard says, grinning as though it had happened the day before.

Since money was an issue, Richard was pointed toward Thistle kit boats and, although he'd had just one shop class in his life, he built a Thistle in his living room that winter with plenty of help and advice from others. He launched the boat in March and began racing it in May. He admits to being slow in the first race. "By the time I came dragging in, the other sailors had loaded their boats on trailers, washed them down, and were in the clubhouse drinking beer. I was one whipped dog. I had been working awfully hard at doing something I didn't know how to do."

Richard began as a self-taught sailor, then figured he would learn a whole lot faster if he sailed with others.

To learn more about this thing called sailboat racing, Richard crewed for others in the Seabrook Sailing Club races and sailed his own boat as often as he could. "By the end of the season, I was finishing the races in the top half and occasionally in the top five out of 15 boats," he says. "I was determined. I learned more that first racing season than most people learn in their first five years spent daysailing. It was very intense."

An Alberg infatuation

During this time, Richard also crewed on 22-foot Ensigns racing out of the Houston Yacht Club. This was his introduction to Carl Alberg designs. So when his wife and three growing children pointed out that the Thistle was a wet and uncomfortable boat for family sailing, Richard found a fairly new Ensign and moved into that racing fleet. Her name was *Stormy*.

Darryl Eberly, at left, the son of Richard's girlfriend, Lenora Dimone, has been helping Richard with the work on *Finesse*. Richard has replaced or restored the woodwork on deck and in the cockpit, at right, and upgraded the winches so he can sail singlehanded.

When Richard acquired *Finesse* she had been neglected, and one of his projects was to restore the yellowed overhead to its original gleaming white, at left. In the galley, at right, he replaced the countertops and installed a new cookstove and refrigeration.

"This boat had a petrel-green hull, white deck, lots of varnished wood, and I thought she was the most beautiful thing I had ever seen," Richard recalls.

His love affair with Carl Alberg designs blossomed on the spot.

"Carl Alberg once said that he drew the lines on a balloon and when someone wanted a bigger boat he just blew the balloon up a little bigger," Richard says with a laugh. There may be something to this, since Alberg designs generally have a full keel with an attached rudder and cutaway forefoot and other distinctive design elements like wooden cockpit coamings with pedestal winch mounts. Among the 20-something boats Richard has owned were three Ensigns, a Bristol 27, a Pearson Commander, and the current Alberg 35 . . . all Alberg designs.

Richard spent as much of his time as he could sailing. His frustrated wife, claiming he spent more time sailing than with her, left him at some point and he poured himself into sailing, buying, fixing, and sailing. He crewed for lots of other sailors on larger boats and had many chances to sail offshore in big-boat races.

"I was hooked harder," he says. "I bought a home three blocks from the Houston Yacht Club and sailed constantly."

In addition to all the rest of his sailing and racing activities, Richard also earned his USCG 50-ton Master's license.

Scuba diving captured his imagination in a big way for a few years, but sailing won in the end. The boat that lured him back to sailing was *Finesse*. Richard had seen this beautiful Alberg 35 when — as a brand-new boat — she was delivered to a member of the Houston Yacht Club in 1965. So, while their paths had crossed, Richard had to wait until *Finesse* was nearly 30 years old and in need of a dedicated fixer-upper-type owner before this boat fit his budget.

The year was 1994, and Richard noticed an Alberg 35 advertised in the local paper.

"I remembered the boat as soon as I saw her," Richard says. "She's an Alberg design and looked a lot like my old Ensigns, except she was in terrible condition. I felt so sorry for her I just had to buy and restore her."

A litany of liabilities

Her Atomic 4 engine was the most glaring problem in the beginning, but there were other cosmetic and safety issues as well. The teak on *Finesse* had never been varnished; the previous owners had used a pressure washer on the fragile grain until the handrails — originally 1½ inches in diameter — were just ⅞-inch thick. They were so thin they flexed, he notes. The running rigging was old and frayed. Down in the cabin, the cushions were gone and the plastic overhead liner was yellowed and peeling.

The engine's problems were evident on the trial sail. "It barely ran, with the emphasis on *barely*," Richard says. I took $3,000 off my earlier offer because of the engine and other complaints. In the end, I paid $15,000 and put another $15,000 into it."

On Richard's first sail on *Finesse*, the engine quit and he had to call for a tow.

"This was just unacceptable," he says. First things first. Richard pulled the engine out and took it home. "I stripped the engine to a bare block, ordered parts from Moyer Marine, and rebuilt it from scratch. I had steel seats installed in the block for the exhaust valves, had other work done by the machine shop, and soon I had

a good engine again. The rebuilt engine has 17 years on it now. I'm happy with it." The prop and shaft were very loose, so he also replaced the Cutless bearing.

Once the drive train was functional, it was time to address safety issues such as handholds, electrical wiring, and rigging. Richard built new handrails. These had to be custom-fitted, of course, as they had to match the spacing of counterpart rails inside in the cabin.

Over the years, the previous owner had added more electrical complexity to what had started out in 1965 as a very simple boat with not much more than the minimum requirement for running lights and a few cabin lights running off 12 volts. The add-ons had been wired using basic lamp cord. Richard was also faced with a 110-volt system that had been added to the boat.

"The only things that worked were the water heater and one cabin outlet," he says. "The previous owner had bought a battery charger and run lamp cord to it. The farther I went, the more lamp cord I found. I stripped a piece at a time and added breaker boxes. I should have added larger boxes." But nearly 20 years ago he could not foresee the increasing number of electrical gizmos that would be available to sailors today.

Richard replaced the running rigging right away, then turned his attention to the purchase of a new mainsail and eventually to the addition of roller furling for the jib. The previous owner had purchased 150 and 180 percent jibs to be used only for racing while wearing out the original jibs on daysails. As a result, Richard was able to have both racing jibs, which were still in pretty good condition, re-cut so he could use them on the roller furler.

Endless upgrades

When the mast had to be pulled, Richard replaced the standing rigging and rewired the mast, adding new lights. He also varnished all the exterior woodwork, repainted the deck, added new non-skid, and re-sealed the hull-to-deck joint. He stripped the hardware (primarily the winches and portlight trim pieces) and had it re-chromed. Much later, he replaced the original South Coast winches with Harken 2-speed self-tailing winches. "I had to do that in self-defense when I started singlehanding," he says.

Over the years, he revised the controls on the steering pedestal, had cockpit cushions made, redid the non-skid once again, and had the hull Awlgripped.

Inside, he replaced all the cushions with new foam and covers, replaced the tattered curtains, redid the overhead, added ceiling strips in the aft bunks, and built very useful storage compartments in the V-berth where most boats, including the Alberg 35, have nothing more than small fiddled trays. He replaced the alcohol stove with a three-burner propane unit, added refrigeration, and replaced corroded overhead lights.

Next, Richard removed the Formica tops. He started with the table and built a new one of teak. "That worked so well," he says, "I asked myself, what else can I do?" That little question led to a rash of new additions: a medicine cabinet, a teak pencil/navigation-tool holder, a spice rack, a magazine rack, an instrument panel, a dish rack . . .

"I have modified, replaced, or repaired virtually every part on this boat," Richard says with pride. While all these lists of modifications and additions are easy enough to read, all good old boaters know the truth: each job breaks down into many individual tasks and each takes a lot of time . . . always about twice as much time as we think it will.

As he looks around his boat, Richard says, "Lots of agony, work, and money made her what you see today. There were lots of funny stories of lessons learned along the way, but it was well worth it. People walking the docks stop and talk to me about her and admire her. The classic design and lots of varnish really get their attention. That makes me feel good and makes all the hard work worthwhile.

"This boat fits me. I can singlehand and dock it. One person can make everything work. The Alberg 35 is easily sailed. One person can move it and push it around at the dock."

Richard gives a lot of credit regarding who he is to his great-grandfather back on that ranch in Texas. "I think the underlying theme through all this," Richard says, "is that I always had a lot of curiosity and no fear. If you've got the courage to try it, you can make it work. I learned that from my great-grandfather."

Karen Larsen co-founded Good Old Boat *with her husband, Jerry Powlas, and is the magazine's editor. When she has time out of the office, she enjoys meeting fellow good old boaters and reporting on their accomplishments.*

The Alberg 35 was offered with a choice between two arrangements. *Finesse* has the "California" galley and dinette, at left. Another of Richard's projects was to install real storage lockers in the V-berth cabin, at right . . . not to mention renew the upholstery.

The Alberg 35 . . .

. . . with a contemporary and a successor

by Ted Brewer and Dan Spurr

Note: *Ted Brewer selected the boats and tabulated the data but, due to unforeseen circumstances, was unable to write for this issue his three-boat comparison that follows each feature-boat article. We turned to Dan Spurr to fill in.* ***–Eds.***

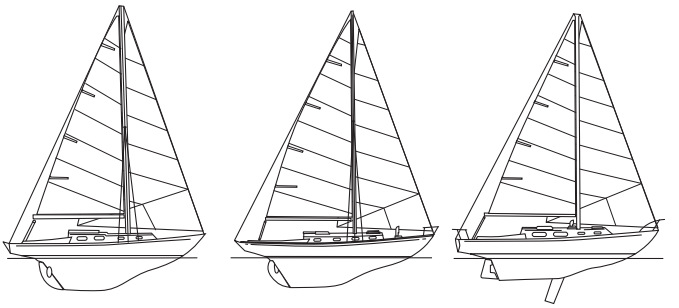
Comparing two boats of the same length from the same builder but from different eras is useful and informative. Throw in an early Hinckley and the mix gets really intriguing. In automotive terms, it may seem we're comparing two Chevys to a Rolls-Royce. Let's look deeper.

The Alberg 35, the second auxiliary sailboat built by Clint and Everett Pearson, appeared in 1961, two years after the Triton. Along with the 32-foot 6-inch Vanguard and 43-foot Countess, the entire model line of early Pearsons had full keels with attached rudders, short waterlines, low freeboard, and other features that typified boats designed to the CCA (Cruising Club of America) racing rule. Their uncored fiberglass hulls were thought to be an inch thick, even more in the turn of the bilge. The myth was that Pearson didn't know how strong fiberglass was so they laid up a laminate to the same thickness of a wooden boat of that length.

Years ago, Everett told me that was baloney. "Of course we knew how strong the laminate had to be," he said, offended that anyone would think him that dumb. Lab tests were performed. As a previous owner of a Triton and a Vanguard, I can tell you that neither of these hulls was an inch thick even at the turn of the bilge, and certainly not in the topsides. But they are strong enough to take offshore. And that's where the Alberg differs from the later Pearson 35.

Designer Bill Shaw came to Pearson Yachts in 1964 and four years later designed a new 35 to replace the Alberg 35. The new 35 was conceived as a fun, family coastal cruiser, albeit with a decent turn of speed. The cockpit is more than 9 feet long — hardly suited to bluewater sailing but great for a sunset sail with a lot of friends. Unlike the Alberg designs, the Pearson 35 is a keel/centerboarder, offering shoal draft for gunkholing. Again, this is not a feature that appeals to many offshore skippers, but it's necessary for sailing in places like Florida Bay and the rivers that feed Chesapeake Bay.

Under Bill Shaw, construction methods began to change too. Whereas the Alberg 35 had no fiberglass interior parts, and the bulkheads were tabbed to the hull and deck, the



Alberg 35 | Hinckley Pilot 35 | Pearson 35

	Alberg 35	Hinckley Pilot 35	Pearson 35
LOA	34' 9"	35' 9"	35' 0"
LWL	24' 0"	25' 0"	25' 0"
Beam	9' 8"	9' 6"	10' 0"
Draft	5' 2"	5' 1"	3' 9"/7' 6"
Displacement	12,500 lb	13,500 lb	13,000 lb
Ballast	5,300 lb	4,600 lb	5,400 lb
LOA/LWL	1.45	1.43	1.40
Beam/LWL	.403	.380	.400
Disp./LWL	404	386	371
Bal/Disp.	.42	.34	.42
Sail area	544 sq ft	554 sq ft	550 sq ft
SA/Disp.	16.2	15.6	15.9
Capsize number	1.66	1.60	1.70
Comfort ratio	34.16	36.6	33.18
Year introduced	1961	1963	1968
Designer	Carl Alberg	S&S	Bill Shaw

Pearson 35 has an overhead liner, which precludes tabbing to the deck — a nicer finish, perhaps, but with a tradeoff. And the Pearson 35 has a fiberglass rudder, unlike the Alberg's, which is wooden.

The Hinckley Company made the switch from wood to fiberglass with the Bermuda 40, introduced in 1959. Glass was obviously the future of recreational boatbuilding, so the company's next project was to convert the 32-foot 11-inch Pilot to the new material. Sparkman & Stephens, the designer of the original wooden Pilot, was commissioned to update it for composite construction; the result was a longer hull with more freeboard. It was very well built — probably no stronger than the Alberg but better finished. Much of the higher cost of a boat from a company like Hinckley is in the man-hours spent on the interior, not in the hull and deck layups. The company liked to say it built a wooden boat inside a fiberglass shell. That's what you pay the Rolls-Royce dollars for — the chassis is essentially Chevy.

Dan Spurr is Good Old Boat*'s research editor. He is also editor-at-large with* Professional Boatbuilder*, former senior editor at* Cruising World*, former editor at* Practical Sailor*, and the author of seven books.*

Sincere thanks to Ted

by Karen Larson

In 1998, as Jerry and I were starting *Good Old Boat*, John Vigor suggested that we contact Ted Brewer. I left a phone message for Ted introducing myself and our new magazine. When he got back to me, Ted believed he was talking to an old friend from his boating days in Ontario. Her name was Karin Larson and she had founded a regional sailing magazine called *Gam on Yachting*. I explained the misunderstanding and apologized for the confusion.

"No problem," he said. "I'd still like to work with *Good Old Boat*." And so it began.

Ted's first article, in January 1999, was on flag etiquette. His series of boat comparisons began in the next issue, March 1999, with the Baba 30. The first of his many technical articles appeared soon afterward. They ranged from stability in boats to rating rules to galley design. Ted also wrote some wonderful memory pieces about his early days in the yachting business and a fond farewell to his mentor, Bill Luders, at his death.

Over time, Ted cut back his technical writing but continued with his comparison articles that accompany our feature-boat articles. Now he has told us that his authorship of even those articles must end because working at the drafting table causes too much pain.

Ted will become one of few who have retired as a member of our good old crew and moves now into a new status as Contributing Editor Emeritus.

We can't begin to express how much we have valued his many contributions over the years and feel certain that Ted Brewer will not disappear from the pages of *Good Old Boat*. We expect to hear from him regularly in our Mail Buoy. In fact, we're counting on it.

Cockpit mats for dogs

They protect brightwork and give paws a grip

by Stephen Thompson

Custom cockpit mats made everybody happy aboard *Amelie*, above. Kelly Townsend (left) and Nancy Ballard don't have to worry about scratches in the varnish, and Mattie (left), Sasha (center), and Winston are more comfortable walking (and lying) on the mats than on the hard slick surfaces they protect, at left.

Getting to know the neighbors on my pier was certainly easier than getting to know the neighbors at my new home. For one thing, we already had a significant part of our lives in common: good old boats, sailing, weekends on the water, and boat maintenance.

For more than a year, I've been slip neighbors with Kelly Townsend and Nancy Ballard. They take great pride in keeping their 27-foot Island Packet, *Amelie*, looking ship-shape, even though they have three dogs on board constantly. Kelly keeps the interior and canvaswork looking good while Nancy has been maintaining the rigging, motor, hardware, and brightwork.

After Nancy had spent the previous month sanding the toerails, bowsprit, handrails, and cabintop trim, but before she began applying 10 coats of varnish, I noticed the two of them staring at the wooden cap on their cockpit coaming. Nancy had yet to refinish the cockpit area, but they were concerned about the dogs scratching it once they got it finished. They were thinking about adding a carpet or mat to protect the woodwork.

I proposed a deal: if they would help me choose the new fabric for my boat's interior, I would go to work with my Sailrite Ultrafeed sewing machine and custom fit some form of rubber-backed mat for them. I'd not done anything quite like this before, but I really did need the help selecting fabric.

When I got to my boat the following Friday, the two of them were sitting in their cockpit smiling from ear to ear. They had been busy. They had more than 20 fabric samples for my interior as well as a large piece of heavy brown fabric they had chosen for their cockpit boarding mat. Kelly had also picked up a yoga mat she thought might work as a rubber non-skid backing. During that weekend "the ladies" (Nancy, Kelly, and almost every other woman on our pier they could find) came to a consensus on my interior fabric. The pumpkin material with green lines had just the right "pop" they said. Now it was my turn to get to work.

Making the mats

I laid the yoga mat down and marked how it should be cut to fit on the sidedeck between the toerail and the cockpit coaming and around the hardware. I then cut it with scissors and tested the fit. I took the remaining piece of yoga mat and fit it on the top of the coaming.

At this point, I wasn't sure how I was going to bond the mat to the fabric. Once I got home, I tested some 3M Super Trim Adhesive on a scrap of the rubber yoga mat for chemical compatibility by gluing a sample of the fabric to it. It held very well. I figured that the glue, along with sewing the edges with 1-inch Sunbrella binding, would hold the yoga-mat material in place on the fabric.

Test over, I cut a piece of the fabric large enough to cover the upper and lower areas and laid it out on my kitchen table.

> **“One of the nice things about this project is that the dogs seem to enjoy what we did.”**

I applied the glue to the coaming-top yoga mat and carefully pressed it down on the fabric. After the required 20-minute curing time, I trimmed the excess material around the mat and began sewing the Sunbrella binding around the edges and the cutouts I’d made for the cockpit winch, cleat, and support mounts for the Bimini. The Ultrafeed sewing machine stitched through the rubber yoga mat without a problem.

On-site decisions

The next weekend, I took my initial work to the boat to see how it fit. I had not yet determined how I was going to fit the fabric over the drop between the two levels while keeping the lines in the fabric lined up. Nancy and Kelly suggested that the mat might work nicely as two separate pieces to better show off the brightwork trim of the coaming. This was a great idea. I could even use the existing Bimini-cover snaps to hold the upper-level mat in position and Velcro straps to hold the lower-level mat in place. Nancy and Kelly were not too concerned about matching up the lines in the fabric but I still marked them so the lines would be close.

The following week, I glued and sewed the lower mat and added the Velcro straps. The final job was to use my handy Pres-N-Snap tool to install female snaps in the upper mat to mate up with their existing male snaps on the side of the cockpit coaming. Kelly finished off the job by spraying the fabric with Scotchgard to protect it.

Starboard side too?

With that, we were done . . . well not quite. The following weekend, we took a trip together down to Freeport, Texas, for the Texas Mariners Cruising Association Spring Fling, and *Amelie* was assigned a starboard-to slip! I had made mats for *Amelie*’s port side to suit her home berth! By then, I knew a little more about what I was doing and, in another week, we had both sides covered . . . literally.

One of the nice things about this project is that the dogs seem to enjoy what we did. Sasha will now lie down on the deck area, while he seemed to avoid the gelcoat non-skid surface before. Winston now has more confidence jumping between the boat and the dock. Mattie seems to say simply, “It was about time they laid out the carpet for us!”

Our work’s not done though. I still have to re-cover the interior of my boat in a pumpkin material that “pops” while Nancy has the cockpit brightwork yet to do. But it is great teaming up with my slip neighbors while we “spruce up” our good old boats together.

Stephen Thompson is a professional mechanical engineer. He sailed on inland lakes as a boy, and, at 50 years of age, he successfully built a small sailing vessel from scratch and caught the bug once again. Over the past few years, he has undertaken the complete restoration of a 1970 Hallberg Mistral 33 in Houston Texas. See “My journey with the Vera May,” *page 50.*

One mat protects the varnished cap rail and gives the dogs traction on the sidedeck. Velcro straps secure it to the stanchion bases.

The upper mat protects the cockpit coaming cap. Stephen made cutouts to go around the winch and other hardware.

Stephen used the existing Bimini-strap snaps to attach the upper mat to the coaming. The binding tape is a tidy finishing touch.

Stick vs. seal

by Jerry Powlas

Although it may seem like a luxury, the testing Ferman Wardell did might be critical to a project. The results of his tests are specific to the materials he used. If you use other materials, your results will probably vary considerably.

Sealants are designed to seal. The adhesion properties are secondary. How much adhesion do you want? You don't need any adhesion if you have good mechanical fastening, and you need a lot of adhesion if you don't have any mechanical fasteners holding the parts together.

The silicones have very little adhesion. The urethanes have much more, and the King of Adhesive Sealants where adhesion is concerned is 3M 5200. In my opinion, there is almost never any reason to use 5200 for anything. Most people who use 5200 will come to regret it because it has too much adhesion . . . so the assemblies they use it on cannot be disassembled later. Very few things are forever, but 5200 is forever.

All materials change dimension with temperature. Almost all expand as they get hotter and contract as they get colder. The problem is that the rates of expansion vary with the material type. Plastics expand and contract a lot with temperature and, oddly, fiberglass — while it is a type of reinforced plastic — expands and contracts much less. Fiberglass has an expansion rate much closer to metals. Since many applications of sealants involve sealing plastics like acrylic or polycarbonate to fiberglass, there is a problem as the ambient temperature varies. In these applications, what is needed is a sealant with good elongation characteristics, or the ability to stretch without tearing or breaking. Thick beads of sealant have a better ability to stretch without failing as the two materials try to move relative to each other with temperature change.

The opening ports on our (perpetual) project boat are made from marine plywood and polycarbonate. The sealant I chose for this was BoatLIFE LifeSeal, which was not among those Ferman tested. I applied this sealant about .050-inch thick in a bead about 1-inch wide. I thermocycled the test panel for a whole winter before building the actual parts. There are no fasteners in the assembly. The ports are several years old and there have been no failures.

Finally, as I said, silicone sealants have very little adhesion. They are much maligned for this characteristic, as though due to having limited adhesion they will not seal. The previous owner of our beloved C&C 30 used silicones almost exclusively. None of the fittings he sealed that way ever leaked even though I did not get around to resealing them for many years in some cases. I thank him for that.

How sticky

Marine adhesive caulks

After experiencing poor adhesion results when replacing an acrylic port on my 1985 Hunter 28.5 sailboat, I decided to test a number of available marine adhesive caulks on this plastic. The plastic is Chemcast GP Cell-Cast Acrylic Sheet. The original caulk was BoatLIFE Black Marine Silicone Sealant (retested here with the others). The caulk adhered nicely to the fiberglass but not to the acrylic.

is your sealant?

are put to the test

by Ferman Wardell

I had read about 3M VHB (very high bond) adhesive foam tape in *Good Old Boat* and included it in the test. It was 45-mil-thick, 0.75-inch-wide black VHB double-stick tape. I cut a 1-inch piece, applied it to the acrylic, and let it set for three days. The manufacturer says the bond gets stronger with time.

I removed the protective paper from the new acrylic plastic sheet and cleaned the plastic with both Windex and isopropyl alcohol. In a preliminary test, I found that cleaning was absolutely necessary for a decent bond. I applied a 2-inch, double-width bead of each caulk to the plastic at a temperature of about 70 F inside my air-conditioned home with relatively low humidity. I let the caulks cure for 10 days, exceeding the longest manufacturer-specified cure time. Then, with the expert assistance of my 11-year-old grandson and 7-year-old granddaughter, I attempted to remove each caulk bead. I applied both shear (parallel to the surface) and tension (perpendicular to the surface) forces by hand. The combined shear/tension results are presented in the table.

To perform his test, Ferman lined up several caulks and sealants and applied two beads of each, one for a tension test and one for a shear test, to a sample of his acrylic glazing material.

The clear winners were 3M 4000 and GOOP. Both were extremely tenacious. The 3M VHB tape also had a very good showing. My plan is to run the tape around the perimeter of the window about 0.5 inch in from the edge and push it onto the boat's fiberglass port cutout. I will then inject the white 3M 4000 into the 0.5-inch gap all the way around as well as run a beveled sealing bead around the window's edge. With this approach I'll have the holding power of the tape and caulk plus the sealing of the caulk.

Ferman Wardell began sailing an 11-foot Styrofoam Snark on a 30-acre lake in North Carolina. He later owned a 12-foot Scorpion, a San Juan 21, and now Wind-Borne, *a 1985 Hunter 28.5, which he cruises and races on Lake Norman near Charlotte, N.C. He has sailed extensively in the Caribbean. Ferman enjoys doing boat maintenance, repairs, and "improvements."*

Product	Adhesion
3M Fast Cure 4000 UV Adhesive Sealant – white	Excellent
3M Fast Cure 5200 Adhesive Sealant – white	Good
BoatLIFE Life Calk – white	Poor
BoatLIFE Marine Silicone Rubber – black	Fair
GE Silicone II – white	Poor
(Amazing) GOOP UV-Resistant Contact Adhesive and Sealant – clear (Amazing!)	Excellent
Green Solutions EcoGlue Extreme Premium Adhesive & Sealant – white	Fair
Sikaflex 291 Lot Multi-purpose Polyurethane Marine Sealant – white	Good
West Marine Silicone Sealant – clear	Poor
West Marine Multi Caulk Sealant – white	Very Good
White Lightning 3006 All-Purpose Adhesive Caulk (non-marine) – white	Poor
3M VHB Adhesive Foam Double-stick Tape	Very Good

Cruising in the golden years

Age and patience make up for fading youth and verve

by John Vigor

ILLUSTRATIONS BY TOM PAYNE

There comes a tide in the affairs of men that, taken at the flood, sucks them swiftly away from the sea and boats and strands them for the best part of two decades on the reefs of Marriage, Career, Home, and Bringing Up Children.

William Shakespeare said it a little differently, but it's probably what he meant. In other words, if you want to go cruising or voyaging, your realistic choices are either to do it while you're young, before you start a family, or else afterward, when you're older and your family has grown up and fled the nest.

There are, admittedly, some brave souls who choose the middle course. They go cruising with small kids and crates of books for home-schooling, but they're a small minority and deserve medals for bravery. I admire their spirit, but it's not a practical scenario for most couples.

For those who set out early in life, cruising never seems to present many problems. The young and penniless who set forth in overblown dinghies or leaky old wooden tubs can put up with any amount of discomfort and deprivation. Young men, especially, seem OK with not being able to shower and shave every day, and some even wear their underwear for two days in a row.

But for those more cautious individuals who wait — those who try to keep the dream alive while they're stranded on the reefs mentioned above — things become more difficult. By the time such sailors and their partners are free once more to fulfill their adventurous dreams, they are 50-plus and faint-hearted. They no longer have the zeal or the devil-may-care attitude that carries the youngsters over all obstacles. Many of them retire and buy motor homes. They search disconsolately in RV parks all over the country for the freedom and satisfaction that eludes them. And, sadly, they never find it.

What they don't realize is that it is indeed possible to start cruising in the golden years of life. It's never too late to pack it all in and sail away — either from port to port along the coast or clear across oceans to fascinating foreign anchorages — provided you're fairly sane and reasonably healthy.

Age is its own asset

Contrary to what many people believe, age itself is not a major barrier to cruising under sail. If you can climb the companionway steps, you're probably fit enough to sail the boat. And there's nothing like living aboard a small yacht to make you fit and keep you fit.

In any case, those whose tread upon the foredeck is no longer cat-like, or whose capacity for grinding winches no longer rivals a gorilla's, can make up for it with experience, simple cunning, and large doses of patience.

Tom Andersen, a New England cruiser I once met in the British Virgin Islands, tells of a 40-foot yacht that arrived one day from Venezuela with an elderly couple on board, both in their middle 70s.

Tom watched with fascination while the man wrestled to free the pin of an old and very rusty shackle on his anchor.

"I would have taken a hacksaw to it and replaced it in five minutes with a brand-new $2 shackle," said Tom. "But not him. He was obviously prepared to fight."

Eventually, Tom started to make polite conversation, as cruisers do, and remarked that there always seemed to be something to do on a boat.

"Yes, it's true," said the old-timer. "If this old bitch didn't keep me so busy, I would have died peacefully years ago."

There are many sailors in their 60s and 70s cruising the oceans of the world these days, aided by modern materials, modern technology, and designs that make handling easier. In fact, there are people over 60 years old who race around the world singlehanded, bless their hearts.

Many years ago, in Durban, South Africa, I met a French-American sailor named Jean Gau, then in his 60s, who also was racing singlehanded. He, however, was racing the clock.

> **“There is the fact that gales are rare if you plan wisely and aim to be in the right places at the right times.”**

He had to get back to his job in New York as chef at the Waldorf-Astoria.

During his circumnavigation in his Tahiti ketch, *Atom*, he had been drastically delayed in the South Sea Islands. “The girls — in grass skirts, you understand — the girls, they swim out to your boat and ask . . . um . . . if there is *anything* they can do for you,” he told me. “*Anything*.”

Well, naturally, Jean got a little distracted and delayed. To make up time, he sailed an 80-day non-stop passage westward across the Indian Ocean to South Africa.

That beats hunting for a spot in an RV park, doesn’t it?

Fear not the tempest

One particular hurdle that stops many late starters in their tracks is simple fear of the sea. “Will I be able to handle the boat in heavy weather?” they ask. Well, gales are a normal part of life at sea and should be no cause for undue worry in a well-found modern yacht. Eric Hiscock, the famous British author and circumnavigator, was cruising well into his 70s with his wife, Susan. He was a natural worrier in his younger years. He suffered from anxiety that bad weather might overtake his 30-foot sloop and he might not know how to deal with it. “Fortunate indeed is the man who early in his sailing career encounters and successfully weathers a hard blow,” he wrote. It took him far too many years of unnecessary worry to realize that even in old age he would be fully able to handle his boat with confidence in gale-force winds.

Then, of course, there is the fact that gales are rare if you plan wisely and aim to be in the right places at the right times. Voyagers taking the trade-wind routes around the globe report having to cope with winds over 28 knots only 2 percent of the time. So cruising is not mostly about being at sea and facing storms. World cruisers spend at least five to six times as long in port as they do at sea, in which case cruising becomes mostly about new faces, new places, beautiful landfalls, the thrill of exploration, self-sufficiency, independence, and the indescribable satisfaction of achieving your cherished dreams.

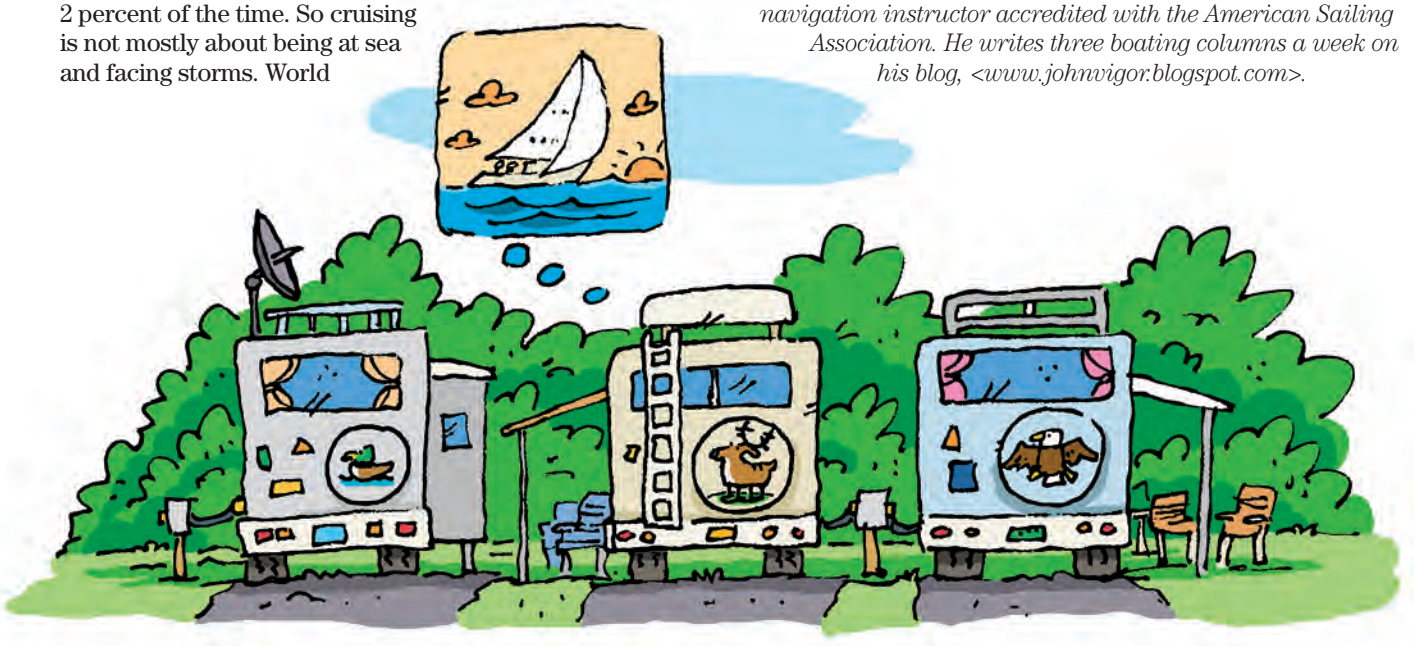
There are no age barriers among cruisers, either. They all belong to a select group whose roots go back to the earliest days of civilization. They are a close-knit brotherhood of the sea. They form part of a noble tradition with its own literature, language, insignia, customs, rituals, rewards, and penalties.

Their team spirit is understandable when you think how many people — all experts in their own fields — are required to navigate a large ship across an ocean. Yet one or two perfectly ordinary people, aged from their teens to their 70s, can, and do, sail small yachts through those same seas, facing exactly the same hazards of wave and weather, and doing all the work themselves, from engine maintenance, through navigation, to cooking breakfast.

Finally, the cherry on top is that most late starters have saved up a bit of money by the time they’re ready to go cruising. They can afford some of the luxuries they couldn’t have aspired to in their impecunious youth. We’re talking newer boats, better sails, electric winches, colder beers, and more interesting trips ashore.

They always say you can’t take it with you; but they’re wrong. You can, if you go cruising in your golden years.

John Vigor, a former newspaper columnist and editorial writer, is the author of 12 sailing books. He is a sailing and navigation instructor accredited with the American Sailing Association. He writes three boating columns a week on his blog, <www.johnvigor.blogspot.com>.



Boats are teachers

And we carry their lessons far from the water

by Richard Smith

RICHARD SMITH

A boat — especially an old boat — is a good teacher. It teaches us how to fix things. We read manuals, magazine articles, and books. I learned to paint by reading the label on the can. Ditto for varnishing. We learn by watching others, asking for help at times when we're overwhelmed with not knowing, and we improvise a lot when solving the current problem *du jour*. Eventually, the time comes when we're able to lend a friend a hand in solving some nautical mystery or other. We practice and we usually get better the longer we do it . . . or we don't do it very long.

Some sailors spend more time tinkering with their boats than they do sailing, and they love every minute of it. They drive down to the marina on a cold winter morning and fire up the Webasto or build a fire in the Dickinson to get it all warm and cozy below. Changing the oil and filters from time to time or replacing a frayed V-belt or an impeller, cup of coffee and jellyroll at hand, helps acquaint us with our engines, making them a little less enigmatic. Over time, we become somewhat less dependent on a $70-an-hour marine mechanic.

We save a little money and keep the old girl shipshape and in Bristol fashion by learning to take care of the frayed ends of jib sheets, wrapping them with plastic tape, dipping them in gunk, or whipping them with waxed twine so they'll run smoothly through the blocks next time. It's the exceptional sailor who doesn't discover a leak now and again and have to select from a myriad of sealing compounds the right one to keep the water out. Sooner or later, we'll have to unclog the head or strum box. Or a piece of electrical equipment will fail and we'll either fix it or do without.

Spending time alone with your boat, making mistakes without anybody watching, doing something wrong, and doing it again and maybe again until you get it right, listening to favorite music or the cries of seabirds . . . for many, this is a morning well spent.

Reaching higher

Most of us come to small boats with an incomplete knowledge of what's involved in sailing and maintaining them. The range of challenges the sailor takes on is vast. It was while spending days lying at anchor that I learned to bake bread in a pressure cooker and to make jars of tangy kelp pickles. Still others have learned the rudiments of ship's carpentry by building a bookshelf, a wine rack, or a nifty cubbyhole for charts. This can lead to replacing the crazed acrylic in a deck hatch or converting a quarter berth into storage space.

Some of us find that pleasure in sailing has a lot to do with rowing a small boat around a quiet anchorage as well as making less predictable offshore passages. Armed with my motley experience in carpentry projects, I decided one day to build the perfect dinghy. Then another. And another.

I cut side, bottom, and transom panels out of plywood, stitching and gluing them together as Dynamite Payson taught me. I read labels on epoxy cans as I'd done when lining the icebox of the big boat with foam insulation. A little plywood pram led to a more complicated dinghy. A friend helped me cut cedar boards into thin strips that I glued together to make a round-bottomed, strip-planked tender. I haul that little boat strapped to the deck or tow it wherever I sail now. It's a pretty little thing and I still can't quite believe I built it.

Keeping our boats in the best possible condition educates us in unimagined ways and we learn to do things well beyond the world of sailing. The confidence gained in replacing the engine oil filter by yourself for the first time, in laying on coats of bottom paint, or cleaning out a blocked strum box can lead almost imperceptibly into areas of unexpected pleasure. In time, fear and loathing of difficult work can be replaced by the good feeling that comes from seeing a difficult job through to the end.

Richard Smith, a contributing editor with Good Old Boat, *is an architect. He has built, restored, and maintained a variety of boats. He and his wife, Beth, sail their Ericson Cruising 31,* Kuma, *on the reaches of Puget Sound. The little dinghy he built is never far behind.*

From her sweeping sheer to her cutter rig, Mike and Linda Nixon's Cabo Rico 38, *Voyager*, looks eager to live up to her name.

Cabo Rico 38

A Latin beauty for bluewater cruising

by Paul Ring

I first saw a Cabo Rico at a sailboat show in the early 1980s and was smitten. However, as I was retired from the Marine Corps on half-pay, she was far beyond my means. It wasn't until last fall, some 25 or so years later, that I was again able to get up close and personal with a Cabo Rico.

I was holed up in Barber Marina, just across the ICW from Orange Beach, Alabama, waiting for strong northerlies to abate. As has often happened when cruising alone, I was seen as an orphan and invited to a potluck on the dock. There I met Linda and Mike Nixon, owners of *Voyager*, a Cabo Rico 38, who invited me aboard for a look. She was gorgeous and, in spite of being 15 years old, looked like new.

Design

When I checked the Internet for information, I found a muddied history regarding the design heritage of the Cabo Rico 38. Generally, W. I. B. "Bill" Crealock is credited with the design, and company literature lists him as the designer. However, other sources say the builder, Fibro Technica, created the 38 by having general manager Dennis Garrett stretch and modify its unpopular Tiburon, a 36-foot ketch that did come from Crealock's board. Adding to this mystery is an early Cabo Rico 38 spec sheet (ca 1981) that lists Garrett as the designer with no mention of Crealock. This conflicts with a reported quote by Bill Crealock: "The Cabo Rico 38 hull shape is the one in which everything came together best. Designed with a low profile to eliminate excessive freeboard, the 38 can make excellent headway in high wind conditions where reduced leeway is so critical."

Regardless of this cloudy heritage, the profile of the Cabo Rico 38, from the clipper bow to the moderately full stern, does indeed reveal her purpose: safe, comfortable passagemaking, whether island-hopping the Caribbean or sailing around the world. The long full keel eases the steering burden on both the helmsman or wind vane/autopilot, and the low freeboard and cabin trunk minimize windage and ease the going when a slog to windward is necessary.

The cutter rig and bowsprit distribute the sail area fore and aft, keeping the

With one anchor roller at the end of the 3-foot bowsprit, at left, and the other about a foot behind, the anchors' flukes do not interfere with each other. The clipper bow, just-right sheer, and low coachroof combine perfectly to make the Cabo Rico 38 a sailboat of exceptional beauty, at right.

center of effort of the sailplan low, which has the beneficial effect of reducing heeling. The side benefit of lower mast height will be especially important to Gulf Coast sailors who are cursed with several 50-foot bridges along the Intracoastal Waterway. Nevertheless, looking up from the helm while your 48-foot 5-inch mast approaches a 50-foot bridge can be heartstopping. The bowsprit also provides an excellent place to stow anchors and an ample platform from which to deploy and retrieve them. The relatively high bow on the Cabo Rico 38 may, however, give the boat a tendency to sail at anchor.

Construction

Built in Costa Rica, these Latin beauties are much more than pretty faces. Hull construction is unconventional. As with most fiberglass boats, there is a core, in this case ½-inch balsa. Fraser Smith, who with his wife, Edi, bought the company in 1987, says that the core is for insulation, not structural strength. A solid fiberglass hull is laid up, then the balsa insulation is added and covered by layers of mat and roving.

Cabo Rico publishes its laminate schedule, a rare practice in the boat-building business. Over the years, the company has used improved fiberglass fabric products in the laminate as they became available. Where older boats had hulls of alternating layers of mat and woven roving, more recent models incorporate a skin coat of proprietary mat that has no starch binder — starch is hygroscopic and promotes blistering. Next is the laminate, a mix of unidirectional and biaxial S-glass or E-glass roving stitched to mat. Vinylester resin is used in the first three layers next to the isophthalic gelcoat to reduce the likelihood of osmotic blistering.

The keel is molded with the hull. Seven separate castings are placed in the keel cavity and surrounded with resin. The ballast is then glassed over to encapsulate it. Cast iron was used in the earlier boats; in later models it was lead, to lower the center of gravity and increase the righting moment (and because lead won't rust should water find its way into the cavity).

The decks and cabintop are cored with end-grain balsa. Where hardware is to be installed, the core is removed. More recently, stainless-steel plates

The cockpit, at left, is smallish as is appropriate for an offshore yacht. Seating is nonetheless comfortable for as many as seven. High bulwarks, wide sidedecks, a moderately crowned cabintop, and well-placed handrails make it easy and safe to move around the deck, at right.

were glassed in and drilled and tapped to accept hardware fasteners.

The hull-to-deck joint flanges are bedded in 3M 5200 and through-bolted on 6-inch centers, creating the U-shaped bulwark that adds strength and rigidity to the sheer. A beautifully fashioned teak cap tops the bulwark and covers the joint.

Fiberglass moldings are used for the engine beds, shower, and icebox. Otherwise, the interior is built, piece by piece, entirely of wood (teak, mahogany, ash, cherry, maple, and other hardwoods to suit the buyer). Plywood is used as appropriate and solid lumber is used lavishly for doors and frames, ceilings, fiddles, and drawer faces. Bulkheads and furniture are tabbed to the hull.

Throughout, the high quality of the construction is obvious. Fraser Smith credits his Costa Rican work force for this. He is quoted in *The World's Best Sailboats, Volume II*, as saying, "I have one of the best construction crews in the world. The beauty of building in Costa Rica is that we can afford to put in more time. And we can afford such luxuries as three engineers on staff."

The deck

Many of the early Cabo Rico 38s had teak decks laid over fiberglass. Teak decks are beautiful and have excellent non-skid properties but they also add weight and raise interior temperatures. Worse, as the teak ages and becomes worn, plugs covering the fasteners are likely to pop out. This allows moisture to migrate down the fastener into the core, resulting in rot and delamination. Repairs are enormously expensive. A prospective buyer should approach the purchase of a teak-decked boat with great care and have it thoroughly inspected by a knowledgeable surveyor.

The sidedecks on the Cabo Rico 38 are wide and uncluttered and benefit from having well-placed teak handrails nearby. Ample bulwarks help crew to move forward and aft in safety. A moderate crown to the cabintop allows easier movement to the mast. The staysail boom, however, makes the journey from one side of the boat to the other a little long. Interior ventilation is provided by three overhead hatches, three Dorade vents, 10 opening ports, and the companionway hatch.

The cockpit is smallish, which is appropriate for an offshore boat, yet still comfortable. A bridge deck keeps water from the interior should a boarding sea enter the cockpit. The seats are long enough to recline on and the coamings are high enough to provide adequate back support. I especially liked the raised and crowned helm seat; however, on *Voyager* the oversized chart plotter mounted on the binnacle pedestal raises the instrument pod so that it interferes with forward visibility. Stowage space is provided in a large locker under the port seat and another beneath the aft deck. A handheld shower recessed in the coaming is handy for rinsing off after a swim.

Interior

Voyager's interior is stunning. Honey-colored teak harvested from plantations in Costa Rica is all around and, when the doors to the head and shower are closed, no fiberglass at all is visible.

The interior layout is traditional. Immediately to port as you enter is the U-shaped galley. This is well-equipped with a double sink (supplied with hot and cold pressure water), a two-burner propane stove with oven, an 8-cubic-foot refrigerator, and a microwave oven. A rail is fitted to protect the cook from the hot stove and fittings are provided for attaching a safety belt. The many lockers and bins provide good storage.

Opposite the galley is the navigation station. It can be closed off with a sliding louvered panel and a bi-fold door to provide a private dressing space adjacent to the quarter berth immediately aft. This berth is 88 by 39 inches, which is a little snug for two but adequate. Outboard of the fold-down navigation table is a hanging locker.

Farther forward on the starboard side is an L-shaped settee that converts to a double berth. Only 71 inches long by 42 inches wide, it would be best used for children. However, since it's in the middle of the main cabin, it would most likely be used for sleeping only when more than four are aboard.

On the main bulkhead is a clever cabinet to which the fold-down dining table is attached. Lowering the table reveals double louvered doors and, behind them, compartmented shelving

A cabinet that provides handy storage for tableware, at left, is hidden when the dining table is folded up against the bulkhead. The table itself is hinged lengthwise along the middle. The head, at right, is small, but adequate. Storage spaces are provided in the molded fiberglass lavatory and in a locker on the hull side of the compartment.

The compact U-shaped galley is on the port side, at left. It has a double sink, a two-burner propane stove with oven, a microwave, and an 8-cubic-foot refrigerator, at left. The L-shaped settee on the starboard side, at right, converts to a double berth that is a little on the short and narrow side.

for dinnerware. The dining table is hinged down the middle. When opened, it extends to the settee on the port side to accommodate up to six diners, although it restricts access to the head.

Next on the starboard side is the head with adjoining shower. Both are a little cramped. The passageway to the forward cabin is offset to port to gain as much space as possible.

Opposite the shower is a generous hanging locker and just forward of the shower is the head of the offset double berth in the forward cabin. In addition to the hanging locker, a smaller locker, a couple of drawers, and shelving are arranged on both sides of the cabin.

Shelves, cabinets, or drawers in every conceivable space provide a place for everything. When everything is in its place, living is pleasant and gear stays put when the going gets rough.

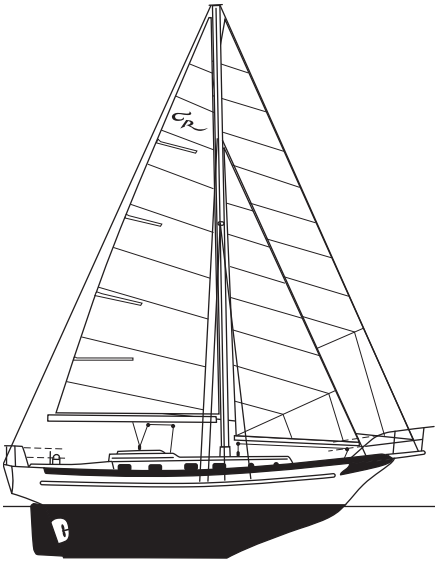
Fiberglass tanks for water, fuel, and holding are located in the keel, just above the glassed-in ballast where the weight will do the most good. On *Voyager*, water and fuel capacity are 100 and 110 gallons respectively.

Over the years, Cabo Rico offered several interiors, including a pilothouse version. Because Cabo Rico offered the buyer much control over the arrangement, few 38 interiors are exactly alike.

The rig

The sail plan is a conventional cutter rig with a single-spreader keel-stepped mast supported by a forestay, staysail stay, backstay, single uppers, double lowers, and a pair of shrouds led aft to take up the loads from the inner forestay. The chainplates are attached to the outside of the hull, which makes the sheeting angle for the jib a little wide. The jib is set on a roller furler and the club-footed staysail is hanked on.

On *Voyager*, the mainsail is full-battened and, when dropped,



Cabo Rico 38

LOD: 38 feet 0 inches
LOA with bowsprit: 42 feet 0 inches
LWL: 29 feet 3 inches
Beam: 11 feet 6 inches
Draft: 5 feet 0 inches
Displacement: 21,000 pounds
Ballast: 7,000 pounds
Sail area: 724 square feet
Sail area/disp. ratio: 15.2
Disp./LWL ratio: 375
Bridge clearance: 48 feet, 5 inches

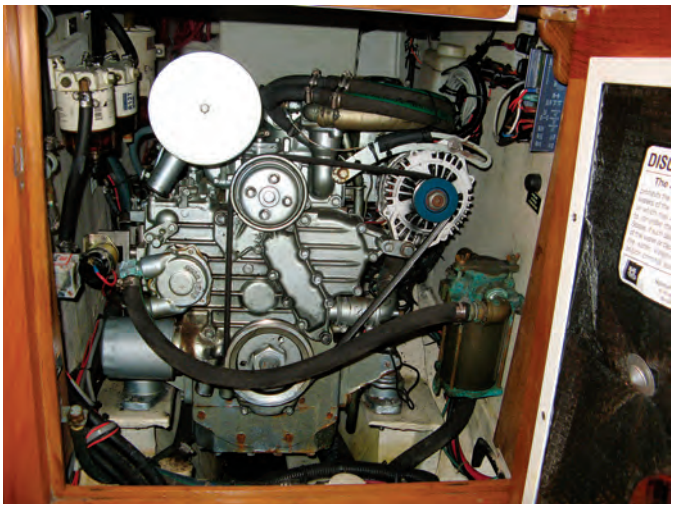
is captured by a Doyle StackPack. Sheeting is mid-boom and led to a traveler mounted on a molded-in base that spans almost the width of the cabintop just forward of the companionway. Jibsheets are controlled by two Barient #27-48 two-speed self-tailing winches. Two Barient #34 self-tailing winches control the main halyard and sheet. At the mast are two Lewmar #16 self-tailing winches, one for the jib halyard and one for the staysail halyard. A three-part vang limits boom lift.

Performance

The engine in *Voyager* is a four-cylinder 44-hp Universal diesel that Mike says he has found more than adequate. Various engines were installed over the long production run; the most recent ones are Yanmars. As we backed out of the slip, the fresh breeze against the high bow kept us from turning into the wind. Undaunted, Mike used the wind on the bow, together with finesse, to help him back between the rows of slips to the marina exit.

Once out of the marina, we raised sail. Getting the main up proved difficult. Mike and Linda's previous sail had been in a fresh breeze and they had put a reef in the main. Shaking it out was encumbered by the friction inherent in the single-line reefing system. Mike tugged and fussed with the reefing line while I hauled on the halyard and we eventually got it hoisted.

We got under way flying the 120 percent genoa, staysail, and main. Conditions were not ideal for a test sail:



The forward cabin has an offset double berth, at left, which probably limits its use to one person or a couple who don't mind close quarters. Note the Cabo Rico signature vertical staving below the berth and the horizontal ceiling outboard. Access to the Universal diesel, at right, is behind the companionway ladder and through a removable panel in the port cockpit locker.

the breeze ranged from 4 to 6 knots. Numbers don't lie: with a displacement/length ratio of 375 and a sail area/displacement ratio of 15.2, the Cabo Rico 38 is not a sprinter.

Tacking was a stately maneuver, as one would expect from a full-keel, heavy-displacement boat, but there was never a doubt about her coming across the wind, even in the light air. One inconvenience of sailing a cutter rig, as this test sail reminded me, and more so with a genoa rather than a Yankee on the forestay, is the frequent need for someone to go forward to help the sail pass between the forestay and the inner forestay. Of course, when cruising offshore, tacking is infrequent.

While the Cabo Rico 38 was designed and built for safe, comfortable passage-making offshore, apparently enough owners race their boats between passages to Bora Bora that a few boats have been issued Performance Handicap Racing Fleet (PHRF) ratings, the average being 186 seconds per mile. For comparison, the Cape Dory 36 rates 171 and the Island Packet 35 rates 186.

Conclusions

All sailboats are purpose-built, although some try to broaden their appeal by being racer/cruisers or cruiser/racers. The purpose of the Cabo Rico 38 is specific: cruising under sail, whether coastwise, through the islands, or crossing oceans. And it will do these things as well as or better than other sailboats of similar size and design while being the prettiest in its fleet.

Construction quality is top-notch in materials and fit and finish. My close-up acquaintance with high-end sailboats is mostly with Hinckleys, specifically the Bermuda 40 and Southwester 42, which are widely regarded in the U.S. as setting the high-water mark for quality. I won't say the Cabo Ricos surpass the Hinckleys in this regard, but if the people in the front offices of the Hinckley company glance aft, they might see a Cabo Rico close behind.

Quality, of course, doesn't come cheaply. My Internet survey of used Cabo Rico 38s for sale reveals asking prices of $69,900 for a 1979 and a high of $279,900 for a 2005. The fairly wide difference in price between the older boats and the newer reflects not just aging but also Cabo Rico's policy of incorporating technical advances in materials, such as vinylester resins to combat osmotic blistering and the latest in fiberglass fabrics.

The major caution for prospective buyers is to have a competent surveyor examine the decks of any boat with teak overlays. Repairs can be dauntingly expensive. This would mostly be an issue with older boats, as the builder says that it has been several years since a buyer has ordered teak decks. As with all pre-vinylester resin fiberglass boats, check for osmotic blisters, another expensive repair item.

Paul Ring is a contributing editor with Good Old Boat. *He has sailed, repaired, modified, restored, and built boats for the past 44 years and currently sails his Nonsuch 260 with first mate, Barbara Brown, out of Fairhope Yacht Club on the Eastern Shore of Mobile Bay. Paul also enjoys carving wood and sculpting clay.*

Affordable housing

An autopilot gets an inexpensive pod

by Al Lorman

My recently acquired Pacific Seacraft 31, *Ann West*, has a very long "to do" list, which is probably why I could afford her. (She'd been a liveaboard boat in Key West, Florida, for 13 years.) One of the top items on the list is a new wheel pilot, since I'm singlehanding more now that my son has graduated from college. While I would love to have a belowdecks unit, I couldn't justify the cost. I bought a new Raymarine X5 SmartPilot. This unit has a belowdecks computer, but I still needed a place in the cockpit to mount the control pad.

An autopilot remote needs to be accessible, convenient, and relatively easy to wire. Most folks mount it on the side of the cockpit coaming or on some sort of pod on their pedestal guard. I've owned a boat with the control mounted on the side of the cockpit coaming. That option has the virtue of being easy to wire, since the electrical cables can run through the cockpit lockers. But I'm not too keen on doing something relatively irreversible like drilling a 3½-inch hole in my boat. That left some sort of helm-mounted pod.

My boat is a 1990 model built at the end of 1989, which was the last year Pacific Seacraft used Yacht Specialties steering gear and pedestals. Yacht Specialties made fine equipment, but that didn't stop the company from going out of business soon thereafter. That left those of us who own a Yacht Specialties pedestal with a guard whose tubes are spaced 12½ inches apart, compared with today's industry standard of 9½ or 12 inches. You can't buy a new instrument pod that fits a 12½-inch pedestal guard. Besides, I really didn't want to. My pedestal guard is not the conventional U-shaped tube of stainless steel. It consists of two vertical stainless-steel tubes that terminate in a cast-aluminum instrument pod designed for the round Datamarine instruments of the day.

If I were to remove the pod, I'd no longer have a pedestal guard . . . just two relatively short pieces of stainless-steel tubing sticking up from the deck. I've postponed until Year 2 of my renovation any major decision concerning the pedestal and the guard, but I needed somewhere to mount the X5 control head in the meantime.

The off-the-shelf option

Both Edson and NavPod make nice single-unit instrument holders that attach to pedestal guards. The Edson unit, without attachment hardware, lists for $185; the NavPod unit, with a nice swivel arm, lists for $350. The NavPod unit is not only pricey, but you have to remove the pedestal guard to install it from the bottom of one of the tubes. The odds of my removing something that doesn't presently leak to install a new piece of hardware are pretty slim. In addition to the cost of these units, there's the issue of spending money now for something that may be useless next year when I take a more global view of the pedestal situation.

An industrial junction box, at left, had the features Al wanted for a housing for his autopilot: the right size, a cover with a waterproof seal, and a clean interior. All it needed was the tabs removed and a coat of white paint.

And besides, I just have this *thing* about the high price of plastic instrument pods. Most of us, I suspect, have a pet peeve about the price of marine products; mine is plastic instrument pods. Thus, I'm a big fan of alternative ways to mount instruments. One of my heroes is a British fellow who bought a new chart plotter and then faced the same cost issue for mounting it at the helm. Rather than spend who knows how much on a pod purchased in a store, he found a clear plastic cake-storage container, painted the inside white, and mounted it at the helm. Then he wrote about it for a British sailing magazine (*Practical Boat Owner*, September 2006). Rule, Britannia!

The hardware-store option

Thus inspired, I wondered what I could use to mount my instrument head. I approached this problem as I do any similar issue: I wandered the aisles at Home Depot looking for a likely candidate. Lots of electrical products have to deal with adverse weather conditions, and I found a number of likely candidates in the electrical department. Unfortunately, a standard 2-gang outdoor box is a shade too small for the Raymarine control head. Most of them also come with too many holes, or indentations for holes, already in place.

Then I found a gray plastic junction box that fit the bill, except for its size. It was a waterproof junction box (a NEMA 4, for the techies out there) with no holes and a gasketed cover priced at about $11. This box was 6 x 6 x 4 inches. That struck me as a bit too big visually. I found a cardboard box of similar size at home and placed it at the helm for a test fit. I decided it was, in fact, too big.

Since Home Depot carried these boxes in a variety of sizes, just no sizes that I wanted, I thought someone else might have what I needed. I checked the manufacturer's website (Carlon) and found that they make a box that measures 5 x 5 x 2 inches, exactly what I wanted (model E989PPJ). After a little more searching on the Internet, I found this unit for $17.25 plus $8.75 shipping. This was in a price range I could handle, even if I decide next year to revamp the whole system.

Resources

Carlon
www.carlon.com
This is a tough site to navigate. Type "Carlon E989PPJ" into a search engine to find a retailer *–Eds.*

McMaster-Carr
www.mcmaster.com

Al cut a 3½-inch diameter hole in the junction box cover to accept the back of the control head.

“Like most boat owners, I rarely take the easy way out, so I decided to paint the box white.”

From box to pod

When the junction box arrived, I first cut off the four small plastic mounting tabs as they were of no use to me. I used a file to remove the rough spots and to match the radius around the rest of the box. I mounted the cover in my bench vise and drilled the required 3½-inch hole for the recessed part of the control head. At this point, I could have declared the unit ready for installation, since the box was a shade of gray similar to the Raymarine control head. Like most boat owners, I rarely take the easy way out, so I decided to paint the box white to match the high-priced spread.

I don't have a spray gun and have little interest in learning how to use one. But there have been tremendous advances in the kinds of paints and primers you can get in spray cans. I had previously used Rust-Oleum plastic primer and paint to return a yellowed compass housing back to its original white, so I used that brand again. Fusion is another good brand.

First, I washed the box with Simple Green and water to remove any residual oil or dirt. I then dried it and applied one coat of plastic primer following the directions on the can. After waiting an hour, I applied the first of several coats of Rust-Oleum white plastic spray paint.

When I was satisfied with the paint job, I moved on to installing the control head. Since I had already run the Raymarine SeaTalk cable for the control head from the helm to the belowdecks computer, I had to figure out how to get the proprietary plug into the box. (Had I waited until I had the box, I could have run the bare wire end through a very small hole in the box first and avoided this issue.) After thinking about alternatives, I decided to make a very small cut in the edge of the box, just deep enough and wide enough to run the cable through.

With the cover in place, it would be pretty much invisible and watertight.

Now all that remained was to attach the pod to the pedestal guard. Here again, I had the choice of marine or non-marine products. Edson makes very nice stainless-steel mounting hardware; the least expensive is $35. A number of companies sell plastic mounts at various prices and many of these would have worked just fine. In the past, I've successfully used inexpensive stainless-steel electrical conduit straps to attach things to pedestal guards and pushpit tubing. Many of these are available from McMaster-Carr.

Ultimately, I decided to use an aluminum fitting I had removed from another boat five years ago; it and its identical partner had held a Signet Marine instrument pod in place on my former Freedom 30. By simply changing the length of one bolt, I was able to use this part to mount my new X5 control-head pod. It also had the benefit of making it possible to tilt the pod to the appropriate viewing angle.

Since I had the paint on hand and recycled the mounting hardware, the total cost for this project was $26. Even if I had bought the paint and mounting hardware, it would have run about $45, well below the cost of a store-bought unit. I'll concede that it is not quite as elegant-looking as the purchased kind, but it meets my needs and my aesthetic standards for now. Now, where did I put that cake pan?

Al Lorman practices law in Washington, D.C., to pay for his habit of fixing up boats and then selling them. He is now working on, and occasionally sailing, a 1990 Pacific Seacraft 31 docked in Annapolis, Maryland. This is his fourth article for Good Old Boat.

The only hint that Al's autopilot installation is a temporary measure is the exposed cable.

Homemade deck prisms

Cast resin is a clear alternative to glass

by David Lynn

We have a love/hate relationship with deck prisms. We love the warm, diffused light they provide but they are downright annoying when they start to leak. On *Nine of Cups*, our 1986 Liberty cutter, not only were most of the prisms leaking, they were also chipped or cracked. What's more, when we began the process of removing the teak from the decks, the prisms now stood proud of the deck. We had to either remove the prisms, and fill, fair, and paint the laminated deck openings and repair the headers below, or replace them with prisms that had a lower profile. It was an easy decision.

We were in Ecuador at the time and soon after I began my search for replacement prisms I determined I would not find them locally. I looked through our catalogs, contacted all the consignment shops I knew of, and spent hours on the Internet. I found a number of prisms, but none were the size we needed.

A fellow cruiser told me a craftsman in Trinidad had fabricated new prisms for him using a clear resin. I researched the subject online and compiled an amazing amount of information on resins, mold making, and casting techniques. The process looked straightforward and simple enough that I could probably manage it myself.

Resources

Puma Polymers
www.pumapolymers.com
Por-A-Kast *Clear polyurethane casting resin*
Sil-Mold SI 25 *Silicone mold-making compound*
Por-A-Mold (PAM S555 and PAM S333) *Urethane mold-making compound*
Synlube 531 *Mold-release spray*

U.S. Composites
www.uscomposites.com
SILMAR 41 *Clear polyester casting resin*

Aboard *Nine of Cups*, prisms direct daylight into places, like this corner of the galley, that might otherwise be in shadow.

The first step is to make a mold, then mix a casting resin and pour it in the mold. Once it has cured, pop the new prism out, polish it a bit, and it's ready to install. This is an oversimplification, but the project was not too difficult and, after a few attempts and refinements in the process, I turned out prisms that are quite satisfactory. My replacements have been in our decks for more than five years and have been exposed to everything from equatorial tropical heat and sun to the cold and wet of Tierra del Fuego. So far, none has leaked and we're quite pleased with them.

Mold-making material

Two ways for making the mold seemed practicable. One was to form the mold around the master using polyester cloth and resin. The other was to pour a low-durometer molding compound around the master. In both cases, the male master for the mold would be one of the existing glass prisms. I chose to use the molding compound because I thought the overall process would be easier and would produce a smoother surface.

From my research, I determined that either of two types of liquid molding compound would work well for our application. Silicone mold material yields optically perfect parts and does not require a mold-release agent but is expensive and requires three to seven days to fully cure. Urethane-rubber mold material is less

expensive and cures in 24 hours, but its optical clarity is not as high. Because we were on a tight schedule (and budget!), I chose urethane mold compounds made by Synair. The cost was about $23 for two quarts (the smallest size available), plenty for four to five molds of this size (approximately 9 x 3 inches).

Making the mold

First, I assembled a wooden enclosure in which to make the mold. Because of the odd shape of the prism, I constructed the enclosure in several layers to reduce the amount of mold compound I would have to use.

On my first attempt, I learned that the liquid mold material contained trapped air that became bubbles and rose to the surface as the material cured, resulting in an imperfect surface. I determined it was best to build the mold upside down so any bubbles would flow away from the prism surface.

Casting resins shrink as they cure: 3 to 5 percent for the polyester resin I tried and slightly less for polyurethane resins. It's advisable, therefore, to make the mold slightly oversize to compensate for the shrinkage. The cured resin can be trimmed if necessary.

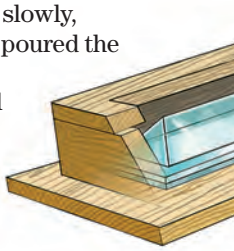
We also had to compensate for some irregularities. Our prisms had an undercut that would have been difficult to mold. I laminated tongue depressors together and attached these to the ends and sides of the master with hot-melt glue to compensate for shrinkage and to eliminate the undercut. I shaped the tongue depressors with sandpaper.

The surface of the master prism had several chips and cracks that we did not want to replicate. I filled these and other imperfections with modeling clay.

I sprayed the master prism with a mold-release compound and placed it on the mold base. If the mold base is a smooth and non-porous material, such as countertop laminate, spraying it with mold release will allow the mold cavity and mold base to separate easily after curing. If the base is not smooth and non-porous, a layer of wax paper placed on the surface of the mold base will produce the same result.

I carefully stacked and nailed together the layers of the mold cavity and was then ready to pour the mold compound.

The directions for mixing the two-part mold material were straightforward (1:1) and the material was easy to work with. The pot life is about 20 minutes, which allows time to mix it thoroughly without rushing. I "folded" the two parts together slowly, creating as few bubbles as possible, then poured the liquid, which has about the same consistency as honey, slowly into the mold until it was full.



The mold material cures in 24 hours. The recommended temperature range is 65 to 105 F and, if desired, you can hasten the process by putting it in an oven preheated to 100 F. We were going to make multiple parts from this mold, and I found that curing the mold an extra couple of days made it more durable.

After the material had cured, I lifted the cavity off the base. When I flipped the mold over and ran a tongue depressor between the edge of the prism master and the mold cavity, the master popped out with a little coaxing. I inspected the mold carefully, as I wanted the optical surfaces to be blemish-free.

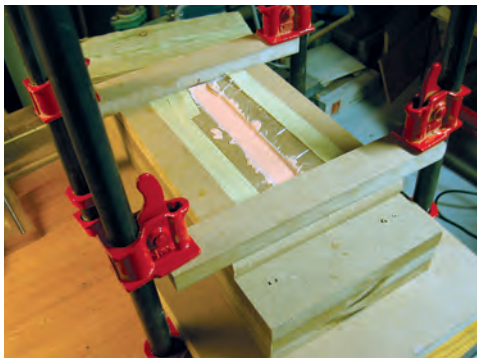
FRITZ SEEGERS

Casting the prisms

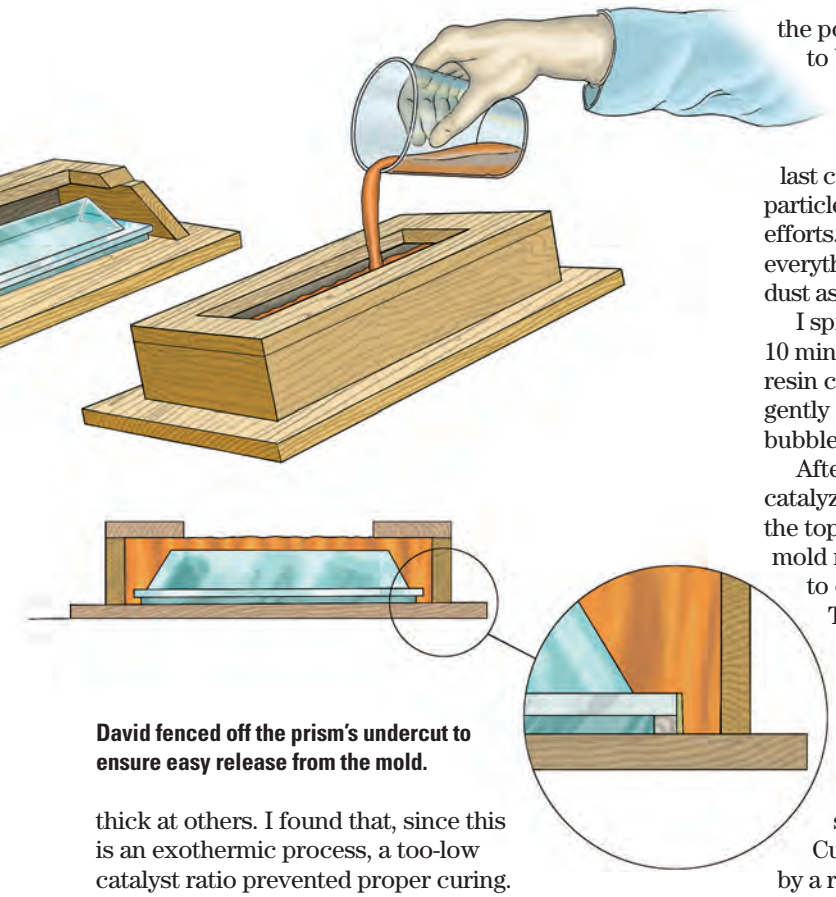
My web search produced the names of manufacturers of resins and their dealers. Several companies offered clear resins, but I narrowed down the field by choosing two that touted high UV resistance and non-yellowing characteristics. One was a clear-polyester casting resin; the other was a clear-polyurethane casting resin. I ordered resin materials from both.

The polyurethane was a two-part resin made by Puma Polymers. This product has a 1:1 mixing ratio, is easy to mix and work with, and produces only a slightly unpleasant odor.

The polyester resin, from U.S. Composites, needed to be mixed with a catalyst (MEK peroxide) at a nominal ratio of 0.015:1 by weight (not volume!). Since I didn't have access to a precision scale, this required lots of experimentation and, in addition, I found that the optimum ratio varied depending upon the thickness of the molded parts. The prisms were, of course, thin at some points and relatively



The illustration, at top, shows the principle of the master mold. To reduce the amount of compound needed to surround the master prism, David built the box in layers, at left. He set the prism on the base, clamped the mold box down, and poured the compound, above. Prism and mold separated easily, above right.



David fenced off the prism's undercut to ensure easy release from the mold.

thick at others. I found that, since this is an exothermic process, a too-low catalyst ratio prevented proper curing. A too-high ratio generated too much heat, which distorted the final product.

I resorted to counting drops of catalyst per 100 ml of resin. After several rounds of experimentation with different ratios, I found 50 to 60 drops of MEK peroxide per 100 ml of resin to be the optimum ratio for our application.

The manufacturer's directions clearly state that the product should be used only with adequate ventilation and recommend the use of a respirator. Good advice. This stuff is toxic! If using it indoors, it would probably be necessary to vent the fumes outdoors.

We did trial runs with both resins and, while either resin seemed to produce acceptable parts, I thought the polyester-resin prisms were superior enough to be worth the extra trouble. They were more scratch-resistant and had better clarity than those made with polyurethane resin.

Casting the parts was similar to laying that last coat of glossy varnish on brightwork. Any dust particles or bubbles in the resin spoil the best of efforts. I vacuumed the area thoroughly and wiped everything down with a damp rag to remove as much dust as possible.

I sprayed the mold with mold release about 10 minutes before I was ready to start pouring the resin compound. The resin and catalyst should be gently mixed together in the proper ratio, avoiding bubbles as much as possible.

After ensuring the mold was level, I poured the catalyzed resin into the mold until it was level with the top. Spraying the top surface of the resin with mold release breaks the surface tension enough to dissipate any small air bubbles that rise. The curing process required about 8 hours.

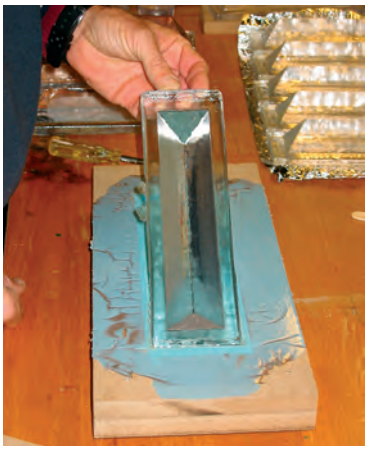
When it had cured, I used a wooden tongue depressor to break the bond between the mold and the molded part. I had to pry and tap the upside-down mold until the part came free.

I needed to cut a rabbet into the prism's top surface to fit the stainless-steel mounting bezel. Cutting and drilling were easy, but the heat caused by a router melted the prism. After some experimentation, I cut the rabbet on a table saw, making several passes. To remove any traces of sprayed-on mold release, I washed the finished product well using warm water and dishwashing soap, then rinsed and dried it.

Installing the prisms

Our decks are cored and, prior to installing the prisms, I wanted to protect the core from delamination if the prisms leaked. I made a thick paste with two-part epoxy and filler to fill any voids in the core and coated the exposed core with two coats of epoxy.

Installing the new prisms was straightforward. Before applying the sealant, I checked the fit by placing each prism in place with its bezel and



After experimenting with resin/catalyst ratios, David mixed the resin carefully to avoid introducing bubbles, above left. He leveled the mold, then gently filled it with resin, above right. The cured prism released easily from the mold, at right, and is remarkably clear.

David used a table saw to cut the rabbet for the bezel.

partially tightening each screw. Ideally, there should be at least a ¼-inch gap between the top of the prism and the bottom of the bezel to leave adequate space for the sealant. After checking the alignment, both on deck and below, I carefully masked each bezel and prism and the surrounding deck. Below deck, I masked the bottom of each bezel as well as the surrounding header. I also placed newspapers under the prism area in case the sealant oozed out and dripped. After one more alignment check top and bottom, I removed each bezel and prism.

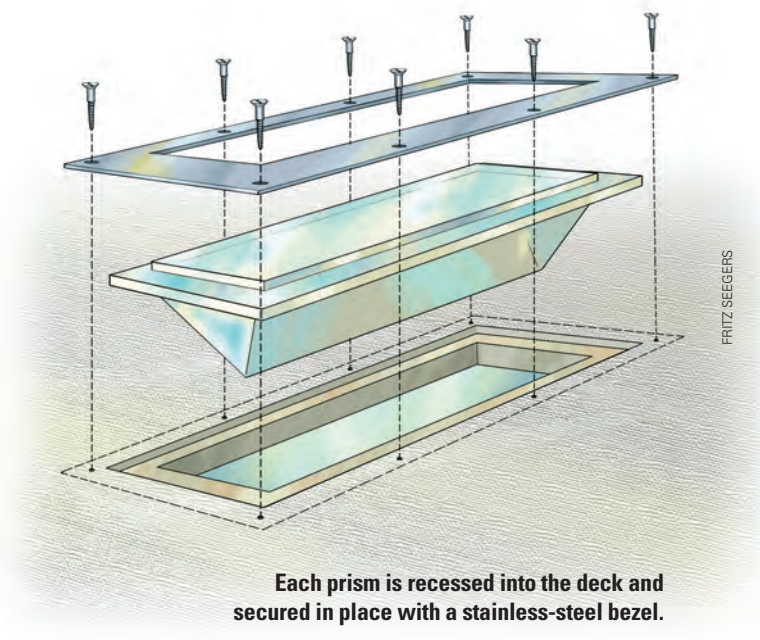
I bedded the prisms in a polyurethane-based sealant. I rarely complete a bedding project without getting sealant on my forehead, elbows, and half a dozen places on the deck, so I kept a small container of alcohol, a few paper towels, and a couple of plastic grocery bags at hand for cleanup.

When everything was ready, I put on latex gloves and laid a ¼-inch bead of sealant on the underside of the first prism. I set the prism in place and checked below to adjust the alignment if that was necessary. I then filled the gaps between the sides of the prism and the deck core. I applied another ¼-inch bead of sealant to the top of the prism and positioned the bezel. I started, but did not tighten, the screws. I made one more check of the alignment, top and bottom, then tightened the screws evenly. Sealant oozed out all around the bezel and I wiped it off with a paper towel and alcohol. I removed the masking tape at this point before the surface of the sealant dried.

Finally, I went below, removed the excess sealant and the tape, and cleaned everything as necessary.

Time well invested

The entire project took about a month to complete, but this included quite a bit of time incurred due to my learning curve and the "trial and error" aspects of the project. For example, I lost several days experimenting with different resins and determining the proper catalyst ratio for the polyester resin. If I were to do the project again, I think it would take two to three days to make the mold, then one day for each prism. Add to this a day to prep the deck openings with epoxy and one to two days to rebed the prisms. Since *Cups* has five prisms, the entire project would take about 12 to 14 days to complete, once all the materials were at hand. Of course, no boat project ever goes as planned, so I would budget another week or two just to be safe.

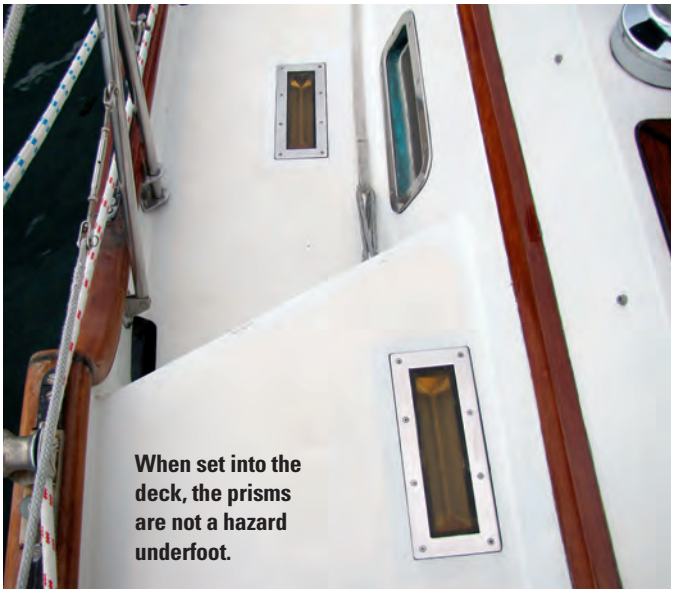


FRITZ SEEGERS

Each prism is recessed into the deck and secured in place with a stainless-steel bezel.

In the five years they have been in place, our prisms have never leaked, but we have seen a slight yellowing on the top surface. Once a year or so, I give them an aggressive polishing, consisting of a light sanding with 320-grit sandpaper, progressing to 400- and 600-grit paper, and finishing with a polish. This takes about 30 to 45 minutes per prism, removes the slight yellowing, and leaves them looking like new. Overall, I have been quite pleased with them.

*David and Marcie **Lynn** have lived aboard* Nine of Cups, *their 1986 Liberty 458, since purchasing her in Kemah, Texas, in 2000, and have sailed over 65,000 nautical miles. As this issue was going to press, they were cruising Tasmania. Follow their adventures at <www.nineofcups.com>.*



When set into the deck, the prisms are not a hazard underfoot.

An inexpensive whisker pole

Raid the hardware store, not your wallet

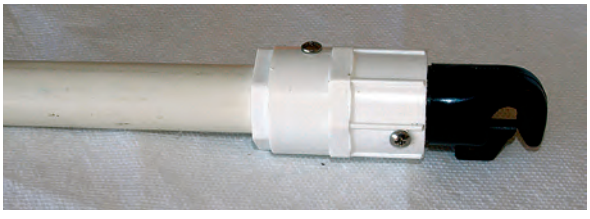
by Clarence Jones

When I went shopping for a telescoping whisker pole, I came away with sticker shock. Like a lot of other small cruising sailboats, my 28-foot Catalina doesn't really need a monster pole . . . just a pole to hold the genoa out there when the wind behind us needs a little help. The least-expensive ready-made pole I could find online was about $100. Really *serious* whisker poles, however, can top $4,000. Instead, I made a light-duty whisker pole for about $50 by modifying both ends of a telescoping pole made for a paint roller.

For the outboard end, I fashioned a spike that fits into the genoa's clew cringle to keep the sail extended. On the inboard end, I used a small spinnaker-pole end fitting that snaps onto a mast ring.

The major parts

First, I had to decide how long I wanted the pole to be. It doesn't need to be any longer than the foot of the headsail. Shorter — depending on the boat and the sail — will probably work well. A telescoping pole is always better because it takes half the storage space and can be adjusted to sailing conditions.



A spike on the outboard end of the pole, at left top, fits into the clew cringle where the jibsheets are attached. At the inboard end, at left bottom, a standard whisker pole snap-on hook clips onto a ring fitting on the forward side of the mast.

Clarence's light-duty, low-cost whisker pole is just the ticket for holding out the genoa when running in light winds.

Choosing a non-telescoping alternative will *really* cut the cost of this project.

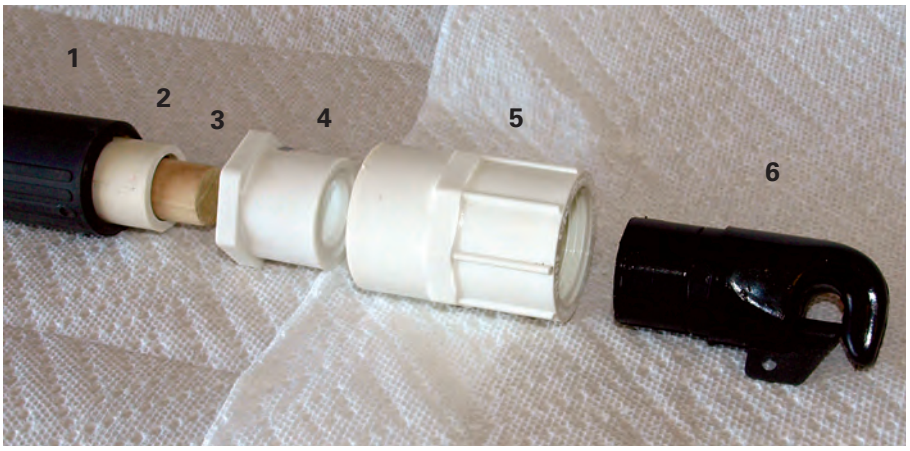
If you haven't painted a house lately, you'll be surprised at how much telescoping poles for paint rollers have improved. For this project, most sailors will probably settle on either a 4- to 8-foot or a 6- to 12-foot model.

I chose a 4- to 8-foot pole with the larger, handle end of the tubing made of fiberglass. It seemed stronger and lighter than comparable all-aluminum poles. The locking mechanism was easy to twist and appeared to have the muscle it would need to hold the pole at any length it was set to. The pole cost $23 at Home Depot. There were other models for less.

The best selection of hardware I found for fittings for the inboard end of the pole was at Annapolis Performance Sailing. You'll find parts from a number of manufacturers under "hardware/spinnaker poles" and "accessories/spinnaker-pole end fittings" (many fittings for spinnaker and whisker poles are identical). Forespar's Lexan snap-on hook cost $18.

The hook attaches to a ring mounted on the forward side of the mast. The ring set me back $22. You'll need one of these, no matter what the whisker

Many boats already have this ring on the mast. If not, the fitting costs about $22.



Some assembly is required for the inboard module of Clarence's whisker pole, above. Once the pieces are assembled, the inboard end begins to look like a functional whisker pole, below.

pole costs. I tapped threads for screws to hold the ring in place. Pop rivets would have been easier but I thought the screws might be a little stronger.

To adapt my painter's pole, I had to assemble two modules, one that would fit to the inboard end and the other to the outboard end.

Inboard module

If you use a different pole-end fitting from the Forespar model I used, you might need a different collection of parts with which to join it to the pole. I used five components to make the inboard module, which then fit into the fiberglass end of the pole. Refer to the numbers on the photo above.

1 Paint-roller extension-pole handle
2 4-inch length of ¾-inch PVC pipe
3 4-inch length of ¾-inch hardwood dowel
4 ¾-inch to 1-inch PVC adapter
5 1-inch PVC barrel connector, slip at one end, threaded at the other
6 Forespar Lexan snap-on fitting, model FP404002 (.9-inch OD)
(***Note:*** *Forespar apparently now sells this fitting only in a kit with a spike for the outboard end. The part number is 300026.* ***–Eds.***)

The dimensions of all of these parts are determined by the inside diameter (ID) of the handle for the pole you select. When I cut away the end of my painting pole's rubber handle, I found the ID of the fiberglass tube was 1 inch. That meant I needed a length of ¾-inch PVC pipe, which has an outside diameter (OD) of about ⅞ inch and would slip into that portion of the pole. Since the fit was not as snug as I'd like, I wrapped the PVC pipe with electrician's tape.

Keep in mind that PVC pipe sizes are designated by ID. This means that 1-inch pipe has an OD of about 1¼ inches, so 1-inch pipe fits very nicely inside 1¼-inch pipe. These are the only two sizes that slip together like this. Fittings for these two pipe sizes can be adapted for most whisker-pole fittings.

The ID of a threaded female PVC fitting is slightly smaller than the ID of a "slip fitting" designed to be installed with glue. As it turned out, my Lexan snap-on fitting was so snug inside the PVC threads it threaded itself into the fitting. I could screw it very tightly into the threaded adapter.

The 4-inch length of ¾-inch hardwood dowel strengthens the assembly and holds it tightly together once all the screws are in place. To make it fit inside the ¾-inch PVC a little more snugly, I wrapped the dowel with electrician's tape.

I used a hammer to drive the PVC pipe into the PVC adapter and then drove that adapter into the barrel connector. You don't need to glue them.

With all the parts assembled, I used ¾-inch #8 stainless-steel screws to hold everything in place. All the screws except those that pierce the Lexan fitting reached the hardwood dowel. I made sure when I drilled into the Lexan fitting that the screws would not interfere with the spring-loaded clip mechanism.

Outboard module

I designed the outboard module to screw onto the male, threaded end of the extension pole. One end of the module contains a female threaded socket that I took from a wooden paint-roller extension I purchased for $4. (This 3-foot wooden extension is in three parts that screw together using two plastic threaded couplers that are female at both ends. If I messed up, I had a spare.)

Resources

Annapolis Performance Sailing
www.apsltd.com

The other end of the module is a spike that slides into the clew grommet of the headsail. Most of the parts are PVC fittings.

The dimensions for the elements of your outboard module will depend on how the male threaded fitting is mounted on your telescoping pole. The male threads on the pole end are designed to fit the female socket on a paint-roller handle. The same size threads are used on poles for brooms and mops.

First, I screwed one of the threaded wooden dowels into one of the female plastic connectors, then screwed that tightly onto my pole. With that in place, I slid a short length of 1-inch PVC pipe about 2 inches down the wooden dowel until it was seated on the end of the telescoping pole.

The next step was to measure the distance from where the PVC pipe seated on the pole to the outer end of the plastic coupler plus ¼ inch. I marked the wooden extension and cut the wood at that point.

The distance from the PVC contact point to the outer end of the plastic coupler, plus ¼-inch, was 2¾ inches, so I cut a piece of 1-inch pipe that length. I tapped the pipe onto the plastic coupler and threaded wooden stub. To make it fit better against my telescoping pole, I used a Dremel tool to taper the inside of the PVC pipe.

If you're doing something similar, you may need to adjust the length of the PVC pipe so it's flush with the wooden stub or so the wooden stub is slightly inside the pipe. You'll find the plastic coupler fits very nicely inside the PVC pipe.

With the wooden stub and coupler screwed tightly onto the pole, the PVC pipe should be firmly seated against the end of your extension pole. If not, tap the pipe or the coupler until it is. Or cut another piece of PVC pipe that's a better fit.

In use, the force should be on the extension pole itself with the PVC pipe pushing against it. The threaded wood and plastic coupler maintain the connection but are not strong enough to handle the compression force when the whisker pole is deployed.

To finish the outboard module, I drilled a ¼-inch hole in the center of a 1-inch PVC pipe cap. I then inserted a 3½-inch, stainless-steel, ¼-inch hex-head machine screw into the cap from the inside. The screw needs to be threaded its entire length. I put a nut on the screw on the outside of the cap and tightened it.

When I tapped the cap onto the PVC pipe, I made sure that the head of the screw was against the wood

Clarence measured from where the PVC pipe seated on the pole to the end of the coupler and added ¼ inch.

Parts list for a telescoping whisker pole

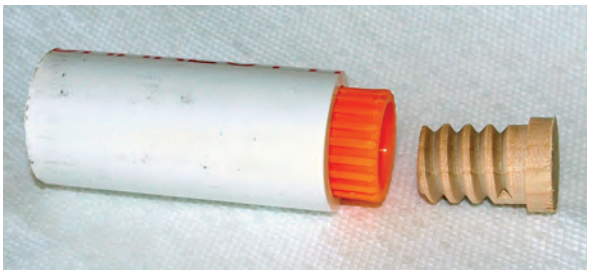
- Telescoping aluminum or fiberglass paint-roller extension pole
- Mast ring (if not already fitted)

Inboard module

- Snap-on inboard spinnaker/whisker pole fitting
- 4-inch length of ¾-inch PVC Schedule 40 pipe
- 4-inch length of ¾-inch hardwood dowel
- ¾- to 1-inch PVC adapter
- 1-inch PVC coupler, slip to threaded
- (4) ¾-inch, #8 stainless-steel sheet-metal screws

Outboard Module

- Wooden paint-roller extension with plastic coupler
- Approx. 3-inch length of 1-inch PVC pipe
- End cap for 1-inch PVC pipe
- (1) ¼-inch threaded hex-head stainless-steel machine screw 3½ inches long
- (1) ¼-inch stainless-steel nut
- 4-inch length of plastic tubing, ¼-inch ID
- (6) ¾-inch, #8 stainless-steel sheet-metal screws



He cut the pipe to that length (2¾ inches) and cut the dowel at the same mark.

The coupler and dowel fit neatly inside the PVC pipe.

The spike is a stainless-steel machine screw, which Clarence covered with plastic tubing to protect the sail.

in the plastic coupler and that the cap was properly seated on the pipe. If you don't get a firm fit, it may be necessary to slightly adjust the length of the PVC pipe.

Next, I put two sheet-metal screws through opposite sides of the cap. These screws must be long enough to go through the PVC pipe and into the wood inside the plastic coupler. I covered the threads of the machine screw with a length of ¼-inch-ID plastic tubing so they wouldn't chafe the sail.

The pole in use

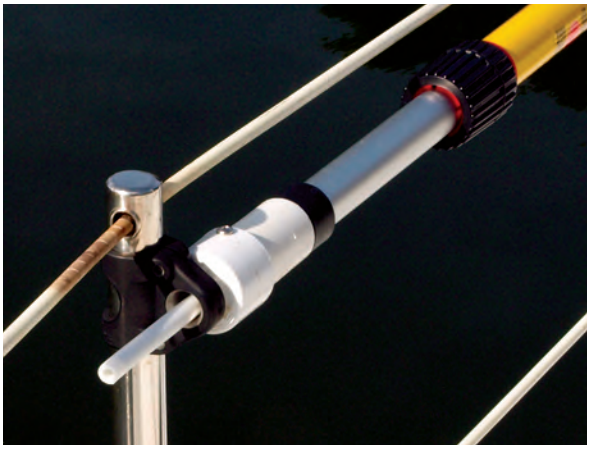
To use the pole, I put the spike through the sail's clew cringle where the jibsheets are attached. With the pole's telescoping friction loose, I clip the inboard end to the mast ring. I extend the pole to the desired length, tighten the telescoping lock, then adjust the jibsheet.

The outboard end of the pole could be designed with another snap hook, but I've found the spike to be easier to connect and disconnect.

I stow my pole on deck between two stanchions. It's easy to get to when needed. The outboard spike end goes into a line eye made to attach to a stanchion. The inboard fitting snaps onto a stainless-steel anchor shackle attached to the stanchion with a stainless-steel hose clamp.

Clarence Jones is a writer, news-media consultant, photographer, sailor, tinkerer, and inventor. He and his wife, Ellen, live and work on and sail their Catalina 28 from Anna Maria Island at the entrance to Tampa Bay. Part of the joy of sailing for Clarence is creating and building inexpensive enhancements for his boat.

Clarence stows the whisker pole between two stanchions. The spike fits in an eye on one and the snap clips into a shackle strapped to the other.



Voyages in Desperate Times

by Jule Miller

February 1942 (U.S. Coast Guard Base, New London, Conn.)

"Lieutenant, what's going on here? Just what is the Coast Guard Picket Line and why is it interested in a 54-foot Alden schooner?"

The officer replied, "... In January we lost 31 ships to U-boats right off our coast: nearly 200,000 tons. This month is going to be worse. We just lost a tanker off Block Island about an hour ago. The Krauts either had a bunch of subs waiting right off the coast for the Japs to hit Pearl Harbor, or they sure got over here quick. You need small, handy vessels to hunt subs, but if it doesn't have at least 8-inch guns or a flight deck the Navy doesn't want to have anything to do with it. Last year, the president gave the Brits 50 old destroyers and 10 of our cutters, and that didn't help either... Nothing the Navy is doing seems to help, so they have come up with the perfect solution from their point of view. Since most of the sinkings are happening right off our coast, it must be the Coast Guard's problem... We've been commandeering every boat that might be even halfway suitable. You saw *Nightingale* down at the dock? The *Number Twelve Boat*?"

"The commuter yacht?"

"Yeah. Fast and seaworthy in reasonable conditions, except she'll roll your guts out in a seaway and those Packard engines give her a range of not much over 100 miles. By the time she gets to a patrol area, she has to come back. We need patrol craft that can go out there, stay on station, and handle rough weather."

"Are you telling me that you're going to send sailboats like *Morning Glory* out into the Atlantic to fight U-boats? Sir, if you don't mind my saying so, that's nuts."

"Not to fight them. To spot them, radio their position, and rescue any survivors they can find. Mainly rescue survivors. How would you like to be on a Carley float on a night like this? The hope is that the U-boats won't think some dinky sailing yacht pulling people out of the water is worth bothering with. If the picket boat spots a U-boat, we have aircraft, blimps, and our few cutters and Navy destroyers ready to come running, but they're stretched way too thin."

"Lieutenant, tell me honestly what you think of this idea."

"Other than having them out there to rescue survivors, it may very well be nuts, but these are desperate times that demand desperate measures, and no one has come up with anything better. Besides, I understand that the president is behind it. The rumor at the Treasury Department — we were part of the Treasury until the first of last December when they transferred us to the Navy — is that Churchill suggested it to him because of the great job the British yachts did helping get the army off the beaches at Dunkirk. Ignore the fact that the English Channel in summer is not the North Atlantic in winter.

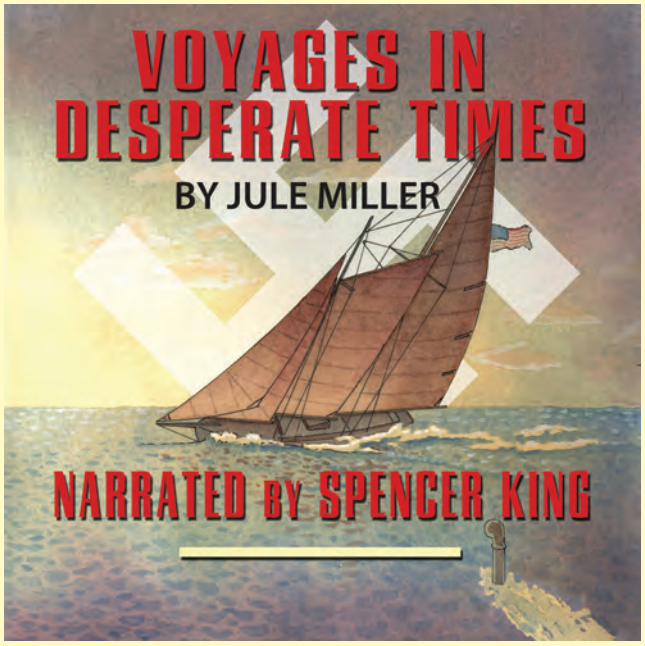
"Anyway, when we started this effort we were only supposed to look at boats over 80 feet, but the 1930s were not a good time for the maintenance of big yachts. Most of them spent years hauled out in boatyards wearing For Sale signs while rainwater leaked through their decks to feed mildew and rot spores."

"Like *Morning Glory*."

"Like *Morning Glory*, but we've found a sister ship that's sound."

"She's only 54 feet on deck, sir."

"Sixty-four feet with the boomkin and bowsprit. Look, the captain, my boss, is down at a boatyard in Nyack on the Hudson River right now. They built wooden sub chasers in the last war, but after the war the government stuck them with the last three boats they had under construction and refused to pay them. He's trying to get them to build some patrol craft for us. But until something like that comes along, a picket line of commandeered



Editor's Note: *We hope you enjoy these excerpts from Jule Miller's* Voyages in Desperate Times. *It is a historically based novel about the Coast Guard Picket Fleet, aka the Hooligan Navy, that patrolled the U.S. East Coast during the early days of World War II. In it, Nick Worth, who had been the skipper of one of the sailboats commandeered for wartime service, relates his long-repressed recollections of those times to his granddaughter as she drives him to the funeral of an old friend. In the first excerpt, Nick reminisces about how he joined the Hooligan Navy. In the second, he talks about the first war patrol of* Fourteen Boat *(formerly the* Tiger Lillie*). In the third excerpt, he and his six-man crew encounter a force 10 gale and a U-boat.*

ILLUSTRATIONS BY TED TOLLEFSON

yachts is the best we've got. Worth, the Japs are running riot in the Pacific and we're well on the way to losing the Battle of the Atlantic. We could lose this war. We have to get that through our heads. And if we do lose, God only knows what the world will be like then."

"I know what it will be like, sir. I had a glimpse of it in Germany in 1936."

February 1942 (South-southwest of Montauk Point)

That evening the wind veered into the southeast so they were on a close reach by midnight when Nick, after again plotting their DR position, climbed into his bunk, hoping to get a couple of hours of sleep. He had just nodded off, still thinking about what to do with his seasick cook, when Borg shook him. "Skipper, I just got an *Operational Immediate* with our call sign."

Nick dragged himself to consciousness. "Huh? What? Operational immediate? Us?"

"Skipper, are you awake? Should I read it to you?"

"Yeah, yeah. What's it say?" He swung his legs out of the bunk and sat up.

"'Operational immediate. Aircraft reported oil slick at 1820 hrs. EWT, 22 February 42. Bearing 115 True, distance 72 miles from Ambrose Buoy. Investigate.'" It's signed with Commander Newton's code group for the present date and time."

By then Nick was bending over the chart table. "115 True?"

"115 True, 72 miles from the Ambrose Buoy."

"That's 22 miles south-east of us." He moved his parallel rule to the compass rose, then wrote *143 Mag* on a piece of white adhesive tape, stepped into his sea boots, and went up the ladder into the cockpit. Over his shoulder he said, "Send: Will comply."

Langdon and Snow were on watch. "Bring her up onto the wind, Snow. Try for 143 degrees magnetic, but I don't think she'll sail nearly that high." Nick started to haul in the mainsheet and Langdon did the same with the foresail as Jenks appeared in the hatch and went forward to tighten the staysail.

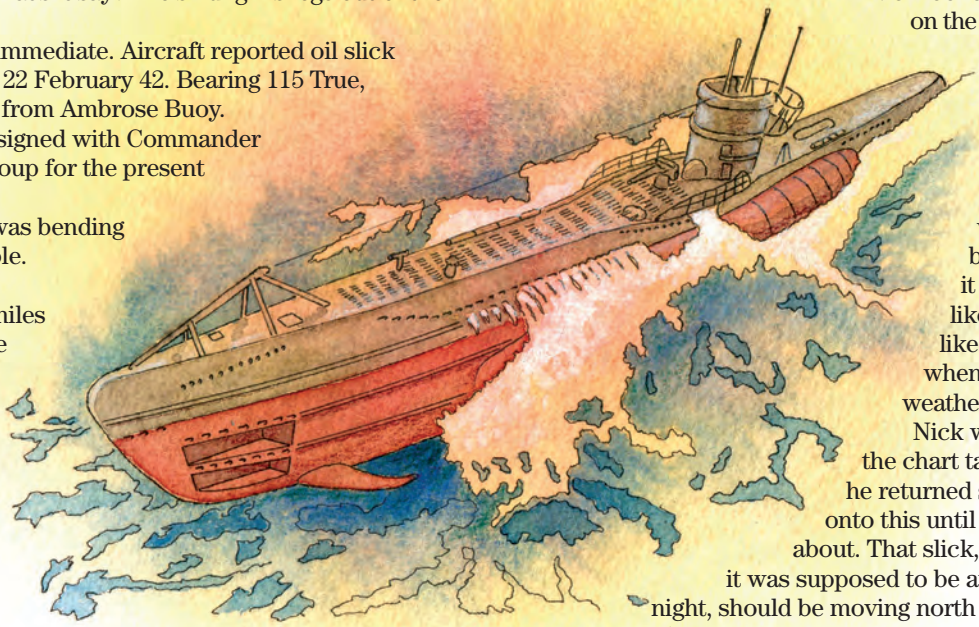
The boat's motion changed radically. Instead of lazily working her way up and over the ground swell and the waves that were running with it, she now heeled down and began to fight her way up each swell and through the wind-driven waves on top of them. Nick checked the compass. She was sailing a little bit better than due south, but not much.

Jenks came into the cockpit. He was wearing his oilskins and Nick wished he had taken the time to put on his own. Spray was now being blown aft in sheets. "If she has to fight her way through this stuff, Skipper, she's gonna need more sail to do it."

"Yup. Set the jib."

Longo had also come on deck without being called. He, too, was wearing oilskins. Jenks said to him, "Come on, Joe. You can help me fall off the widow-maker." The jib was hoisted from the end of the bowsprit that was periodically plowing through the head of a breaking wave.

Other than the white of the bow wave and the occasional breaking sea, it was as black as if they were sailing inside a cloud of oil. When the jib was set, Longo and Jenks came aft. Nick sent the other two below and then ducked below himself to get dressed for battle. When he came back on deck in his oilskins, Jenks, who was steering, said. "She'll go about 175. If I pinch her any higher than that, she can't get through the slop and slows right down."



Nick looked at the log on the stern rail. "I wouldn't trust that. The impeller keeps coming out of the water. I'd guess we're doing better than 6, but it always seems like you're going like a bat out of hell when you're going to weather in the dark."

Nick went below to the chart table and when he returned said, "We'll hold onto this until 0400, then go about. That slick, if it was where it was supposed to be at 1800 last night, should be moving north in this wind and I don't want to overshoot it. We ought to be about where it should be around dawn."

August 2008

"Were you right, Grandpa? Did you find the oil slick?"

"That and a lot more. The wind kept rising and it started to rain. At two o'clock we had the jib off her again and a little while after that we put a reef in the main. It was a wet, wild, wonderful ride. We tacked on schedule and an hour or so later smelled oil. That's when the fun — and with it my youth — ended."

She decided not to question that last statement. If he wanted to clarify it he would.

He sat in silence with his eyes closed for a while and then kept them closed when he said, "You know, Toots, like you said before, everybody thinks of World War II in black and white because of those old movies. But most of my part of it, as I remember it now, really was in black and white. Dirty

gray ships and boats. Gray sky, gray sea, canvas sails weathered gray, and everything else either the white of breaking seas or the black of oil."

> **"The only good news was that the top of the mainmast was still intact."**

July 1942

They ran on before those awful seas for the next two and a half days without broaching while everyone, even those who stayed below, became more and more exhausted. Even lying in a bunk was grueling and if a sort of sleep that was more like a stupor finally came, there was no rest in it with the constant cold dampness, fear, and violent motion. Just lying still was hard physical labor.

By the time the wind began to moderate as the storm moved off to the east, they were somewhere southeast of the Gulf Stream between Bermuda and Cape Hatteras. The seas were still running high but they were less steep and broke less often all along their crests as they had done 12 hours earlier. The rain hadn't stopped, but the torrential downpours were coming less and less frequently. Jenks was in the cockpit watching Hank Snow steer and Nick was standing at the chart table trying to remember how fast and in what direction they had run for how long. He had made only a half dozen sketchy log entries in the last four days. Most of them said only, "Still running about 180° True at about 8 to 11 knots." They had lost the impeller of the taffrail log the first night and he could only make the crudest estimate of their wildly varying speed.

The only good news was that the top of the mainmast was still intact.

The backstay had been loosened a couple of inches by the loss of the radio insulator, but the two interlocking spliced loops had held so it hadn't made any difference to the rig. It made a great deal of difference to the radio, though. With the antenna section of the backstay shorted out, the radio was dead and there was no way they could fix it. Even if they could invent some sort of replacement insulator, it would be impossible for someone hoisted up the wildly swinging backstay to do anything but hang on and throw up.

Operation Drumbeat

by Jule Miller

It has been said that when anything important happens anywhere on earth, the German General Staff already has a plan prepared. Such was the case on December 7, 1941, when Japan launched a surprise attack on the United States without warning its ally, Adolph Hitler. No matter. When Hitler declared war on the U.S. on December 8, Operation Drumbeat (Fall Paukenschlag) was ready to go. On December 16, the initial wave of five U-boats sailed for America from Lorient on the French coast. In the next few weeks 16 more followed. The attacks were coordinated and began on January 14.

Before returning to port for supplies and more torpedoes, the initial five submarines had sunk 23 ships totaling 152,000 tons. And that was only the beginning. Soon, oil and bodies were commonly washing up on beaches from Cape Cod to Cape Hatteras. In January, U-boats sank 31 ships totaling almost 200,000 tons. In February they sank 69 ships. By the end of June, they had sunk more than 400 ships totaling two million tons.

To counter this carnage, the U.S. Coast Guard had seven seagoing cutters, three 1919-vintage patrol boats, four wooden sub chasers left over from World War I, two gunboats dating from 1905, and its fleet of inshore patrol boats, most of which had seen duty chasing rumrunners. It also had about 85 aircraft, 51 of which were obsolete trainers.

The Navy was preoccupied with its horrendous losses in the Pacific and could spare only a few destroyers to help. They had none of the small, handy vessels needed for anti-submarine work. The Army Air Corps (predecessor of the USAF) could provide only six aircraft sorties a day. Most of the Air Corps and Coastguard aircraft available were unequipped for anti-submarine duty and were manned by crews who had not been trained for it.

To augment this ragtag force, with which it was confronting the most deadly submarine navy in history up to that time, the Coast Guard commandeered yachts of all sizes and descriptions and sent them out into the Atlantic with orders to rescue survivors and report the location of any U-boats they encountered. Some of these yachts were manned by Coast Guard personnel and some by civilian volunteers.

It was one of the most desperate times in American history.

The Japanese had crippled the U.S. Pacific fleet at Pearl Harbor, utterly destroyed the U.S., Dutch, and British Asiatic fleets, and were running wild in the western Pacific. They appeared to be about to invade Australia. France had fallen and the Germans were at the gates of Leningrad (St. Petersburg) and Moscow. If the Battle of the Atlantic were lost, Britain and Russia would be cut off from American supplies and the war would be lost. If that happened, as Winston Churchill put it, "The world would sink into a new Dark Age made more protracted and more sinister by the light of perverted science."

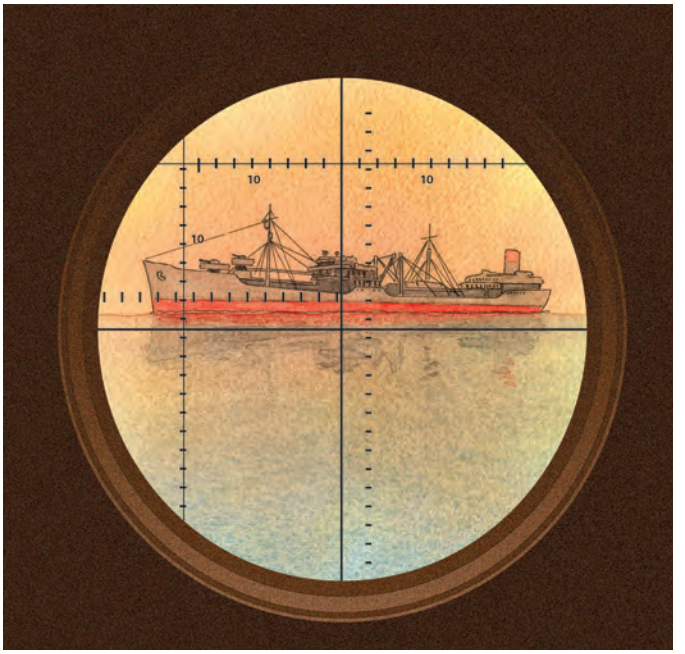
America had to do everything possible, not to *win* (that would come later), but just to keep from *losing*. The Coast Guard's picket line of commandeered yachts, officially named the Corsair Fleet by Congress, but called the Hooligan Navy by everyone else, was one of those things.

Jenks called down the hatch, "Skipper, I think we can get some sail on her. It's lightened up a lot and she's starting to wallow in the valleys."

"Better tighten the backstay turnbuckle first."

"Yeah. Hand me up a pair of pliers and a screwdriver out of Longo's toolbox."

They got the small jib on her to keep steerageway and ran on. It was late afternoon before the seas had moderated enough so they dared to turn the schooner toward them and put her on a reach that let her quarter the seas while heading west. Until it cleared enough so Nick could get a fix, that was his best guess of how to find their way home, although home would not be Greenport or New London. It would probably be somewhere on the Carolina coast.



They got the foresail on her to help her fight through the high, leftover seas as the wind backed around into the northwest and kept backing as it moderated, even though it still rained intermittently. The storm was definitely moving off to the east where it would probably raise hell with the Atlantic convoys. At 2 in the morning they tacked and set the main. By then the wind had backed enough so they could still sail northwest on a close reach. The motion was not pleasant as the schooner fought her way through the seas, but the press of sail steadied her so it was not nearly as violent as it had been while scudding before the wind under bare poles. Nick hoped that by morning twilight it would have cleared enough for him to get a fix.

It was still full dark when, as he taped a fresh plotting sheet to the chart table, Langdon and Snow went past him to relieve Jenks and Longo on watch. He put his sextant on his bunk, set the hack watch to the chronometer and hung it around his neck. He put a pad and pencil in his shirt pocket under his oilskins and the thick turtleneck sweater he wore beneath them and climbed into the cockpit to see if it had cleared enough to be able to see the horizon and a few stars just before the sun came up.

As if to answer his question, the clearing ended and it started to rain hard again. He said, "Nuts!" pulled the hatch closed, and sat down on a cockpit seat to see which would come first, the end of the rain squall or the end of the twilight just before dawn that he needed to determine their position.

The squall won. They broke out of it just after the sun had climbed over the horizon blotting out the stars, and a watery sunlight raised their visibility from a couple of hundred yards to several miles.

And there, stopped on the surface, perhaps a half mile away, was U-271, its black painted number clearly visible against the gray of the conning tower.

To read further . . . *Voyages in Desperate Times* by Jule Miller is available from Amazon.com and on Kindle. Or let us read it to you. Good Old Boat has produced this book in unabridged audio format. It is available as an audiobook from www.AudioSeaStories.com, Good Old Boat's download site.

My journey with the *Vera May*

A plan for the future and a project for today

by Stephen Thompson

When I was in high school, a friend of mine and his father were working to restore a Jaguar Roadster. Anytime I asked when they were going to get it finished, he would simply say, "Someday." Only when I undertook my own restoration project did I finally understand what he meant. Sometimes the journey can be as rewarding as the destination. This certainly was my experience in rebuilding the *Vera May*. The best part is that the journey continues right on through to new destinations as well!

My journey actually started during a long drive to Calgary, Alberta. I was thinking about my plan for retirement. Although it was 10 years away at the time, I've always been one to think ahead. Yes, I was saving for it, but to what end? All my life I've had business objectives to accomplish and I realized that, without a goal or mission, retirement might not be that enjoyable. I wanted something that would be challenging and fulfilling at the same time.

The idea of cruising around the world came to mind and a dream was born. To do that, I was going to need a boat. As I didn't want to go into debt, I initially thought I was going to have to build one myself. Then one lazy Saturday morning, I was searching the used-boat listings on the Internet and found what I was looking for within my limited price range (dirt cheap).

When the Hallberg Mistral 33 that was to become the *Vera May* arrived in Edmonton, above, she was showing signs of neglect. The rotten cockpit coaming, below, was only a beginning.

She was a 1970 Hallberg Mistral 33. She had a good pedigree but suffered from the neglect that comes with having been left on the hard for at least three years. She was obviously going to need work, but I had some experience with building a small wood and fiberglass sailing dinghy so I took the plunge. (***Note:*** *The* Vera May, *in "mostly finished" condition, was the feature boat in* Good Old Boat*'s September 2011 issue.* ***–Eds.***)

She was in Halifax, Nova Scotia, and I had her trucked to Edmonton, Alberta, where I was fortunate to have a heated warehouse. She arrived on a November morning frozen solid with 2 inches of ice above the interior floorboards. She had to thaw out before I could even drain the bilge. Most of the wood above deck had rot damage, but she was mine! When I looked at her, I saw my retirement dream. Others saw her a little differently. I was told that my friend's son had asked, "Does Uncle Stephen know he bought a rotten boat?" I didn't mind. I had a dream, a plan, and time. This is perhaps the first of a number of lessons I learned during my journey: restoring a good old boat is a real joy as long as there are no deadlines. I believe impossible deadlines cause many rebuilds to be abandoned.

After assessing the boat's overall condition, Stephen decided there was nothing to do but remove everything from inside the hull, at left. By the time his father came to visit, at right, Stephen had begun reassembling the interior. The yellow color is the Kevlar laminate he added.

Not restore but rebuild

What I thought would be a touch-up-and-refinish project was going to be a complete disassembly and reconstruction. A previous owner had practiced the out-of-sight-out-of-mind mahogany-maintenance program. Any time he discovered wood damage, he covered it up with stainless-steel sheeting and sealed the moisture in with silicone. But no matter, I was originally thinking of building my own boat anyway. This way I had a good fiberglass hull and a quality design. Besides, I would know everything about the boat when I was finished.

The first thing I did was to measure everything I could. I also took plenty of pictures to record my progress and for later reference. As you work you learn, and as you learn you begin to notice more. It's amazing the things you see in a picture you never noticed previously. The answers to questions are often right before your eyes.

I soon settled into a pattern of researching, reading about other people's rebuilding experiences on the Internet, and planning the work during weekday evenings. Then I spent weekends working on the boat.

I wanted to keep as much of the original design as possible but still incorporate some of the better innovations that have occurred since 1970. A lot of things needed doing that I knew very little about, and that led me to another lesson I learned on my journey: the actual process of restoring the boat will lead you to develop the skills you need then and in the future. I knew very little about boat construction, DC wiring, marine heads, or seacocks, for example, but I learned as things went along.

The solid wood construction of the interior that had been glued and screwed together had all become loose over time. It was easy to tell the difference between the original Hallberg workmanship and that of items added by previous owners. I gained a good appreciation of the boat's heritage. I completely disassembled the interior so I could restore the components and reassemble them like a giant jigsaw puzzle. Remember those pictures? I stripped her down to the bare hull and tore out all the old wiring and plumbing. I cut the rotting cabintop into pieces and removed them but I was careful to keep the overhead beams as templates.

From a bare hull

Once the destructive phase was completed — with everything removed, cleaned, identified, and set aside — I began the reconstructive phase of the journey.

Since I had taken everything down to the bare fiberglass hull, it was easy to epoxy Kevlar cloth to the inside of the hull from the companionway bulkhead forward. I like to think she's now bulletproof.

I changed the original anchor locker design to drain externally, rather than into the bilge. I refinished most of the original bulkheads and re-installed them to the fiberglass tabs on the hull using stainless-steel bolts and 3M 5200 adhesive. A couple of the bulkheads had suffered significant rot and had to be replaced with new plywood. It took some doing, but by sanding with a Scotch-Brite pad between applications of two different colored stains, I was able to stain the new okoume marine plywood to match the original Honduras mahogany bulkheads. (See the article in *Good Old Boat*, March 2008.)

Soon the interior was taking shape again. However, there was a little spongy spot on the foredeck. I thought that it might be separation between the Divinycell foam core and the upper layer of fiberglass. I was originally going to inject thickened epoxy into the deck but thought better of it. Instead, I cut out a piece of the upper layer to inspect it. The core was sopping wet! I wound up cutting away the entire upper deck surface to expose wet core. A previous owner had removed the original teak decking without sealing the screw holes. He just painted over them with a thick paint with a non-skid additive. I ordered core material from the local boat store and learned about re-decking a sailboat.

I reconstructed the new cabintop by measuring the pieces of the original and using the existing fiberglass mounting flange on the deck. I laminated the beams out of ¾-inch plywood and encased them in fiberglass. I covered the top with two layers of ⅜-inch plywood and four layers of fiberglass cloth.

Now it was time for painting. Boy, do those small imperfections ever stand out when you put glossy paint on them. Sand and paint, putty, sand and paint. Repeat. However, this is what really makes or breaks your rebuild. Nothing says "I did

The Mistral was built with a wooden trunk cabin, and Stephen rebuilt it, at left. He kept the original beams to use as patterns for the new ones. Stephen also refinished the joiner work, at right, and made new parts as needed. His mother was his inspiration, so he named the boat for her, below.

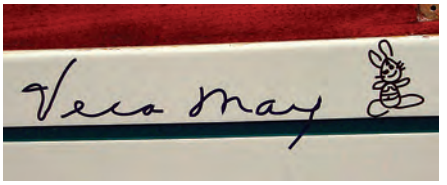
it myself" like a poor paint job! Take your time, do the preparation work, and use a number of thin coats. The modern paints help a lot too. Get the good stuff!

Lessons for life

The woodwork continued as I rebuilt the cockpit coamings and added new toerails. (See the article in *Good Old Boat*, March 2011.) It seems like a lot of work and maybe it was, but I found it very enjoyable. I was fulfilling a dream, it was what I wanted to do, and it was a creative release. I began to see this project as a culmination of skills I had gathered previously in life. Thoughts of my father showing me how to fix things and many of my mother's life lessons came to mind. I remembered her saying, "Stephen, we can accomplish almost anything in life if we just put our minds to it." At that moment, I decided to name the boat after her. She would be the *Vera May*.

I told myself (and talking to yourself will become a habit if you restore a good old boat) that, if the cabintop came out looking halfway decent, I would spend the extra money and apply a teak or synthetic teak deck, rather than painting it with a non-skid coating. I chose Tek-Dek and was glad I did. It was easy to work with, simple to apply (kind of like arts and crafts meets boat restoration), feels good underfoot, and looks great.

I tried to keep the monthly budget down to about $500 for the first two years. However, in the third year it was closer to $750 and even in the range of



$1,000 as I was finishing things up in the fourth year. Throughout this process, however, I had a great time researching the products or systems I would use in the restoration. I even enjoyed having the local chandlers order special things for me. That way I got the pleasure of buying them several times (first, when I selected them from the catalog or Internet; second, when I ordered them at the store; and third, when they came in and I paid for them. Nor can I overlook the pleasure when they were installed and when I got to use them). Another lesson I learned was to purchase the higher-quality products. I tried used parts from eBay, but soon realized you get what you pay for.

I rewired the whole boat with modern LED lighting, circuit breakers, and localized fuse boxes. I changed all the through-hulls to bronze seacocks. (See the article in *Good Old Boat*,

November 2009). I redid the plumbing and scuppers system and installed a new Volvo Penta diesel engine.

I finished off the underside of the cabintop by insulating it with two layers of Styrofoam. The first layer added thickness and helped hide the electrical wires. I bonded the second layer with Sunbrella to create an attractive surface.

Looking back on this whole journey, I am struck by the fact that after 54 years of messing things up, I seem to have finally mastered the fine art of leaving well enough alone. Oh yes, there were many times early in the process that I just couldn't resist adding a little more paint so that it would run, used too much sealant, or worked a little too late and then sat on the cabintop I had just fiberglassed. But lately, I've been able to walk away after hearing that little voice say, "that's well enough," and enjoy coming back to it later.

Rewards

Finally, though, after four years of restoration, that "someday" came, and the *Vera May* was ready to be launched. Part of me didn't want the journey to end, but another part of me couldn't wait to sail her. Restoring a good old boat is a rewarding experience. You will discover many things about yourself and your boat that can only be learned by doing. I thoroughly enjoyed the journey as much as I am enjoying the initial destination. Retirement is still a few years away, but I'm well on my way to realizing a dream. Thanks, Mom.

Stephen Thompson has been helping his dock neighbors with projects; see page 22.

By the time he was done, Stephen had pretty much rebuilt the entire deck and cockpit, at left. He rewarded himself by cladding the deck with Tek-Dek, at right, so it looks much like it did when the boat left the builder's yard. Of course, the real reward was to be able to sail the *Vera May*, top.

GOOD OLD BOAT GEAR

3 New Designs

NEW!
Sailing is Life . . .
T-shirt by Tom Payne
100% cotton, high-quality fabric in Deep Jade.
Sizes: S, M, L, XL, XXL **$20.00**

NEW!
We Ain't Leanin'
T-shirt by Tom Payne
100% cotton, high-quality fabric in Ruby Red.
Sizes: S, M, L, XL, XXL **$20.00**

NEW!
Work Shirt
with Good Old Boat logo
100% cotton, high-quality fabric in Heather Gray.
Sizes: S, M, L, XL, XXL **$20.00**

Boat Parts
T-shirt by Dave Chase
100% cotton, high-quality fabric in Off-white.
Sizes: S, M, L, XL, XXL **$20.00**

Are We There Yet?
T-shirt by Tom Payne
100% cotton, high-quality fabric in Iris Blue.
Sizes: S, M, L, XL, XXL **$20.00**

Gone Sailing
T-shirt by Tom Payne
100% cotton, high-quality fabric in Honey Gold.
Sizes: S, M, L, XL, XXL **$20.00**

Wear Our Name Proudly

To order call 701-952-9433 or visit www.goodoldboat.com

Sail or Not
T-shirt by Tom Payne
100% cotton, high-quality fabric in a color we call Prairie Dust.
Sizes: S, M, L, XL, XXL **$20.00**

Wind
T-shirt by Tom Payne
100% cotton, high-quality fabric in Serene Green.
Sizes: S, M, L, XL, XXL **$20.00**

Denim Shirt
Medium-weight, long-sleeved.
Sizes: S, M, L, XL, XXL
$32.50

Good Old Boat ball cap
Sturdy and durable blue denim ball cap. **$16.75**

NEW!
Good Old Boat Tote
Heavy cotton canvas boat tote in natural with navy handles. **$15.00**

ORDER FORM

for Clothing

The Good Old Boat Store
8810 27th Street Ct N
Lake Elmo, MN 55042-9473
Ph: 701-952-9433
Fax: 701-952-9434

NAME _____
ADDRESS _____
CITY/STATE/ZIP _____
SHIP TO *(if different than above)* _____
ADDRESS _____
CITY/STATE/ZIP _____
DAYTIME TELEPHONE _____

QTY	PRODUCT DESCRIPTION	SIZE	COLOR	PRICE	TOTAL

SUBTOTAL
Shipping * 6.00
TOTAL

Prepayment is required. Payment must be in U.S. funds payable on a U.S. bank, VISA, MASTERCARD, CHECKS or MONEY ORDERS.

CARD NUMBER ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐ EXPIRES ___ / ___ MONTH YEAR

Card Verification Code Number (last three digits on the back of your card): _ _ _

* Our standard shipping is $6.00 whether you order 1 or 100 items!

Vendor profile

Finger Lakes

A family business makes old boats good again

by Susan Peterson Gateley

Cayuga Lake, located in upstate New York's Finger Lakes Region, is home to a large and active fleet of good old boats based in the small university city of Ithaca. Also in Ithaca, a stone's throw from Cayuga Lake, stands Finger Lakes Sailing Services, a father-son business gaining a national reputation for high-quality boat restorations and repairs. Bob Haney and his son John will tackle anything related to fiberglass sailboat construction. Bob and John will re-do your decks, replace your good old Atomic 4, install a keel, or apply an Awlgrip paint job. If you need a new tiller, a set of dropboards, or a bit of teak trim, they'll supply that too. "If it's on a sailboat, we can fix it," says John with a smile.

On a burning hot midsummer day, I found the two men hard at work in their shop. Bob left his butterfly hatch construction and John set his holding tank project aside for an interview. They told me the business began in 2003 and soon found a niche market for fully restored small classic daysailers and pocket cruisers.

There is considerable interest in, and demand for, boats like the graceful 19-foot Cape Dory Typhoon, the mannerly Rhodes 19, and the Pearson Ensign design of the 1960s. Boats dating from the '60s and '70s with solid fiberglass hulls that are capable, seaworthy, and easy to sail are proving worth the time and labor for major makeovers. "We want the classic boats by the masters — Phil Rhodes, Carl Alberg, and the Herreshoffs — boats like that just aren't being built new in fiberglass anymore," Bob explained.

Family ties

Bob was a building contractor. He had been doing commercial and industrial work for 30 years when John graduated from college and was ready to "retire" and start a new business to indulge his lifelong interests of sailing and woodworking. During a long summer cruise along the New England coast, he and John talked of future dreams and plans. Eventually, they decided to start a business working together on boats.

Having sailed the coast of Maine for years, Bob admires its living tradition of craftsmanship in small independent shops and the father-to-son transfer of skills that still prevails here. At first, he considered buying an existing boatyard on the coast. He and John looked at businesses in Maine and down on the Delmarva Peninsula. But family roots in Ithaca and John's recent marriage to a local girl resisted the appeal of salt water. Bob recalled, "One day, I was checking on my boat (at its dock in Ithaca) when I noticed this property and building were for sale. Three months later, we were moved in and at work."

A few months after that, John's father-in-law, Paul Pytel, an electrical engineer recently retired from IBM, joined them. With his American Boat and Yacht Council (ABYC) certification, Paul does all the shop's electrical work.

Boats that make their way into the shop at Finger Lakes Sailing Services are usually of the style popular in the late 1960s and early '70s. Their hulls are sound and they are simple boats, so restoring them, while labor intensive, is not technically complicated.

Sailing Services

By starting Finger Lakes Sailing Services, John Haney and his father, Bob, at right, found a way to combine a career beginning for John and a retirement occupation for Bob in a business that fed their shared love of sailing and working on sailboats.

Finger Lakes Sailing Services includes a brokerage business, a small but well-stocked marine store, and is a dealer for new Hunter sailboats, but classic-boat restorations continue to be their main interest. A stroll around the grounds revealed a considerable inventory of "spec boats" waiting a turn in the shop. Several Cape Dory Typhoons and Rhodes daysailers, a Corinthian, and a sweet-lined little Herreshoff were among them. John pointed out an Ensign with a 6-foot sapling growing out of the rotting leaves and muck in her cockpit. With her solid glass layup, the long-neglected boatyard waif was eminently salvageable . . . grime and mildew notwithstanding. Bob showed me Pearson Triton hull #1, John's personal boat, *Joy*, awaiting a makeover. The bottom and hull of this 50-something full-keel classic are still solid with nary a blister to be seen. Before joining the Haneys, she had been on Cayuga Lake since the 1980s.

Candidates for restoration

The Triton was typical of the boats the Haneys seek out on speculation for "recycling" — a strong hull, freshwater origins, drawn by a well-known designer, and small enough to be readily daysailed and also transported on a trailer without special permits. These diamonds in the rough can be transformed into refurbished daysailers and weekenders that appeal to experienced sailors who understand the value of well-made full-keel classics. Bob, though he sells new Hunters, makes clear his preference for "old-school boats." The modern big-beam, high-freeboard, and wide-sterned cruiser holds little appeal for him. "I've taken my Cape Dory Typhoon 10 miles offshore on the coast of Maine in an 8-foot swell and never gave it a thought. But I wouldn't do that with many modern 18-footers," he says. John, who worked summers as a lobster fisherman in Maine during high school and college, echoes his father's feelings about classic plastic: "Our goal is to work into more restorations."

He and Bob explain that, in their region in upstate New York, few shops will tackle major structural repairs to sailboats. However, the Haneys enjoy the

Bob, who is the woodworking specialist at the shop, attaches a toerail to a Cape Dory Typhoon, at left, as a finishing touch to a full restoration. A restored Typhoon Weekender sits on her trailer, at right, awaiting transportation to new cruising grounds in her new life.

Finger Lakes restorations are not limited to fiberglass boats. A wooden Rhodes Penguin, at left, gets the treatment worthy of a veteran of a 60-year-old class. Another veteran awaiting her turn is John's personal boat, *Joy,* at right. She is Pearson Triton hull #1.

restoration and rebuild projects and aren't afraid to do whatever it takes to complete them. "We have a unique product here," Bob says, referring to the restored spec boats. There's no doubt about that. Last year, the Haneys went to the United States Sailboat Show in Annapolis, Maryland, with two rejuvenated Cape Dory Typhoons. Both sold within hours of the show's opening.

At a cost of roughly half that of a comparable new boat, these tough, easy-to-sail little boats appeal to well-heeled knowledgeable yachtsmen who have little time or inclination to make long voyages in a 40-footer. In the less-than-lively economic climate that prevails in much of upstate New York, the weed-grown corners of boatyards are a good hunting ground for little boats that quickly find new homes after a session in the shop.

Filling a growing void

Bob says their business exists in part because the quality of craftsmanship has gone generally downhill over the past 20 years. "Skill sets have declined . . . and few repair shops around here will even deal with sailboats." The problem-solving, improvisation, creativity, and variety of manual skills needed to rejuvenate a boat long out of production that needs custom-fabricated parts simply are not being taught in today's education system.

Not every boat owner has the time or inclination to fix up an old classic with rotten bulkheads, mushy decks, and holes in the bottom. But finding a competent professional to do such work isn't easy in many parts of the country. The Haneys cheerfully serve customers with smaller bank accounts too. "We'll work with the customer," says Bob. He and John will do partial restorations or major repairs that the owner can then complete or spruce up on his own. Bob pointed out a small daysailer with a newly Awlgripped deck nearing completion: "We'll do the hull for him next winter."

John does the painting, plumbing, much of the engine work, and other repairs. He also has a small, but comprehensive, rigging shop. Bob presides over the well-equipped woodshop. Here he creates a variety of aftermarket wood products. "If you have a funky piece of wood on the boat, send it or a drawing to us, and we'll make an exact copy," he says. "We send wood parts all over the country."

One of their recent projects was re-powering a boat with an Elco electric motor. John noted the task included placing 200 pounds of batteries, fitting custom-made engine beds, and finding space for everything. Another recent job was a bulkhead replacement on a Sabre 28. After a chainplate ripped out, the Haneys did some quick temporary repairs to get the boat through the sailing season. The following winter, the owner had them install new bulkheads, a new compression post, a new cabin sole, and — while all that was ripped out — "Why not redo the holding tank and head plumbing while you're at it?" No problem.

John and Bob are genial and easy to talk to. They are generous with their considerable store of boating knowledge and share it freely with customers. Often, their small ship's store serves as an entry point for someone who comes in looking for a #10 stainless-steel wood screw and ends up getting some help and direction with the project. That boat owner

“…weed-grown corners of boatyards are a good hunting ground for little boats.”

may come back the next winter for more help with another repair that’s beyond his ability.

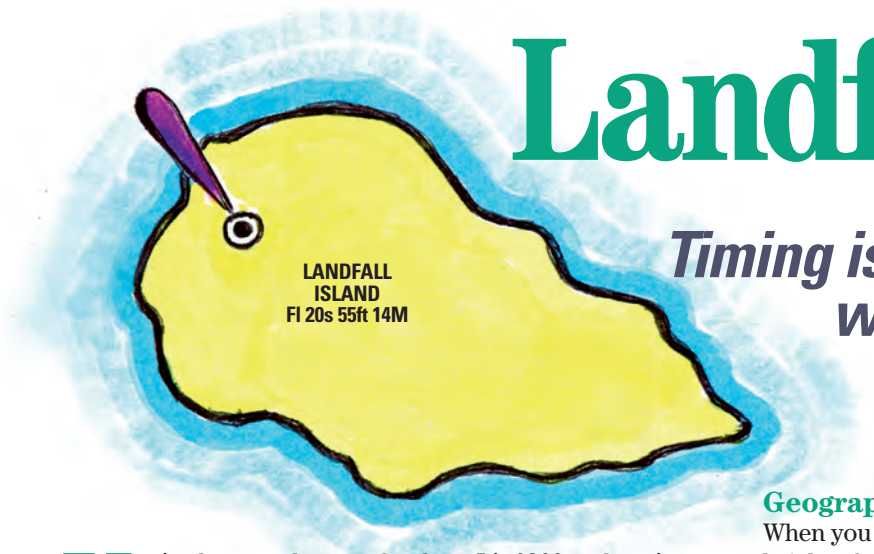
In a throwaway age of planned obsolescence in which the practice of land-filling unwanted fiberglass boats is increasing, it’s heartening to see the thrift and craftsmanship of Finger Lakes Sailing Services recycling good little classics for appreciative buyers. Thanks to John and Bob Haney, some fortunate little yachts will be serving new owners for many years to come.

Susan Peterson Gateley has sailed and written about sweet waters with occasional saltwater forays for 30 years. She raced, daysailed, and camp-cruised a Lightning on the Chesapeake and traveled Lake Ontario with a Crosby Osprey for 25 years before acquiring a fiberglass boat and a husband in 1997. In 2004, she agreed to add “one last woodie” to the family: the schooner Sara B, *which is now the main character in her latest book,* Living on the Edge with Sara B. *Her blog is <www.silverwaters.com>.*

A rejuvenated Pearson Vanguard takes to the lake, above. The Yngling, below, is an example of a former women’s Olympic class. A Pearson Ensign’s days as a tree nursery will soon be over, at bottom of page. The Haneys take examples of their work, at left below, to the Annapolis sailboat show, where they quickly sell.

Landfalls with

Timing is everything when picking out a light



by John Jamieson

You've been under way for days. It's 0200 and you're on watch on the blackest of nights, straining through binoculars to pick up the blink of the light that marks the channel entrance. It must be directly ahead. Your nautical GPS chart plotter says you should be in range. *What* went wrong with your navigation?

Probably nothing is wrong with your navigation — you might not be close enough to the light for it to be visible to you.

When using a lighted aid to navigation as a landfall, you need to be able to calculate the time at which it should become visible. Then, when you see a light, to positively identify it you need an easy way to time it.

Horizon distance and height of eye

Have you ever stood on the beach on a crystal-clear day and looked out at the horizon? It seems like you can see for a million miles. In reality, the average human sees the horizon at a distance of only 2.8 miles. This is due to the curvature of the earth. Of course, you can increase your horizon distance if you elevate yourself. This is why lifeguard towers are elevated.

The earth's curvature has the same effect on lighted aids to navigation like buoys, small light structures, or towering lighthouses. The distance from which light can be seen depends on the height of the light beam above the water's surface.

In chart navigation, your height or the height of a light is called "height of eye," or HE.

You can calculate the distance to the horizon (which we'll call HD) from your HE with this simple formula:

HD = (square root of the height of the object) x 1.144 nautical miles

Say you are 6 feet tall. The square root of 6 = 2.45

HD = 2.45 x 1.144 = 2.8 miles

If you want to see farther, you could walk over to the lifeguard tower and climb to the top. Let's say the tower stands 10 feet off the beach and you stand on top of it. Now you have elevated your HE to 16 feet (tower height of 10 feet plus your height of 6 feet). The square root of 16 is 4.

HD = 4 x 1.144 = 4.58 miles (4.6 miles)

You have increased your horizon distance to 4.6 miles.

Geographic range of a light

When you combine the horizon distance from your own height of eye with that of another object of known height, you can determine when you can expect to see the object.

On your nautical chart you see a lighthouse on an island with, next to it, the notation "Fl 20s 55ft 14M." This means the light beam is 55 feet above the water and is visible for 14 miles. However, the 14 miles is a theoretical distance based on the candlepower of the light. It does *not* take into account the curvature of the earth.

To calculate the distance from which you can expect to see the light, first calculate the HD of the light. The square root of 55 is 7.42.

HD of light = 7.42 x 1.144 = 8.48 miles. (8.5 miles)

Then add your HD to that of the light. Assuming you are 6 feet tall, your HD will be 2.8 miles.

Sighting distance = 2.8 + 8.5 = 11.3 miles

On your nautical chart or chart plotter, measure 11.3 nautical miles back along your sailing trackline from the charted light symbol. When you arrive at this position, use binoculars to scan the horizon ahead. You should see the friendly wink of your light just where you expected it to be.

Keep in mind that this calculation does not take into account haze, fog, or rough weather. Any of these could reduce the distance from which the light is visible.

Increase horizon distance

As seen above, horizon distance increases as you elevate your height of eye. When you stand up in the cockpit of your sailboat, your eye will be about 6 feet above the water. By climbing up onto your coachroof, you will raise your eye to about 10 feet above the water. Hoist yourself partway up your mast, and you can raise your eye 20 feet or more above the water.

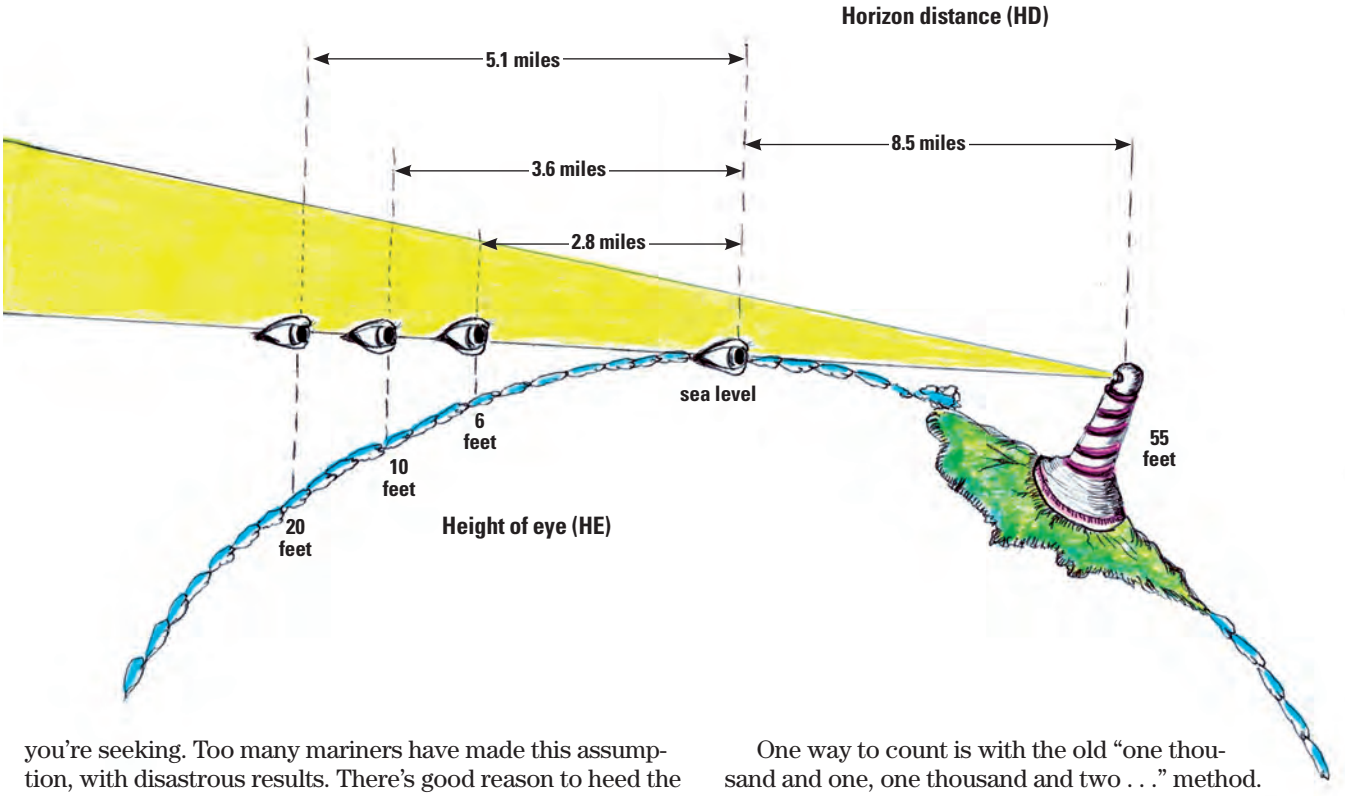
The higher you elevate your eye, the greater your horizon distance. Add the new HD to the HD of the lighthouse to determine from how far away you can expect to sight the light from your new elevation.

Time the light three times

Never assume that a blink over the horizon or closer to you is coming from the lighted buoy, light structure, or lighthouse

ILLUSTRATIONS BY JOHN JAMIESON

bull's-eye precision



you're seeking. Too many mariners have made this assumption, with disastrous results. There's good reason to heed the old saying, "Time any light three times at night!"

All aids to navigation (ATON) that are lighted — buoys, lights, lighthouses — show the light period next to the chart symbol of the light. A light period defines a light's total time, in seconds, of light and dark. For example, 2.5s, 3s, 4s, 6s, 20s. Quick-flashing ATON don't show their periods because they flash at a constant rate of at least once per second.

Some lights show groups of flashes. On the chart, look for the group in parentheses. For example, "Fl (2 + 1)." This means that you will see two flashes, a short period of darkness, one flash, and then a longer period of darkness.

The total time of flashes and darkness adds up to the period. "Fl (2 + 1) 20s" means the entire sequence of flashes and darkness adds up to 20 seconds. Fl 6s means a single flash repeated every 6 seconds.

Iso stands for isophase, or equal intervals of light and dark. For example, "Iso 6s" means the light stays on for three seconds and off for three seconds.

An occulting light is on for longer than it is off. "Oc W 10s" indicates a white light that is steady but goes out for a brief period, with the pattern repeating every 10 seconds.

Always time a light period from the start of the sequence to the start of the next sequence. You don't need a stopwatch or watch for this. In fact, if you're alone on deck at nighttime, this would be tough to do while you look through binoculars. Instead, count off the seconds — you can do this without having to glance away from the light.

One way to count is with the old "one thousand and one, one thousand and two . . ." method. But for more accuracy, use "one-hippopotamus, two-hippopotamus." As silly as it sounds, this has proved itself time and again to be super accurate. With a bit of practice, you can time any light to within ⅒ of a second with this method.

Captain John's navigation tip

Follow the light through three consecutive periods to verify that it's the right one. Remember the mantra of the pros: "Time any light three times at night!" Make this a standard practice aboard your cruising sailboat and pass it along to your sailing crew.

Confidence builder

By using the horizon-distance calculation to predict when a lighted ATON will become visible from the deck of your boat, you will make landfalls confidently and with bull's-eye accuracy. And by carefully timing the light sequence, you can verify that you've found the correct light to lead you safely into harbor.

John Jamieson served in the U.S. Coast Guard for more than 20 years and is the author of Seamanship Secrets, *from International Marine. He teaches cruising sailors the top sailing-seamanship skills they need to know for safer sailing anywhere in the world. Visit his membership website at <www.skippertips.com>.*

No longer a non-starter

New wires bring a Yanmar diesel back to life

by Harry Hungate

For the last few years of its 14-year life, our normally faithful Yanmar diesel engine occasionally refused to obey the turn of the starter key. Sometimes it would take two, three, or four twists of the key before the starter would begin to turn over the engine. I talked to other Yanmar owners who had experienced this problem, and their solutions included replacing the key switch on the instrument panel and replacing the starter and/or the starter solenoid. Surprisingly, most owners reported that, in spite of these modifications, the problem was not entirely solved.

I spent some time reading online cruisers' forums concerning the problem. Some claimed the problem was due to square-cut teeth on the starter pinion gear "dead-heading" against the ring gear on the flywheel. Others claimed a fix by installing a solenoid between the key switch and the starter solenoid.

I removed my starter and confirmed that the starter pinion gear teeth were properly wedge-shaped to ensure ease of engagement. I found no indication of dead-heading on the ring gear.

The interposing solenoid is recommended by Yanmar for use with the 6-meter wiring-harness extension to overcome excessive voltage drop inherent in the longer wiring. As I had only the 3-meter harness extension on my vessel, I felt that the relay was an unnecessary complication and therefore not an appropriate solution.

I considered cutting the starter-circuit wires away from the wiring-harness plugs and splicing them directly, as I suspected that the problem might be in the harness connectors. I decided instead to install new wires between the key switch and the starter solenoid. I believe simple continuous wires are always more reliable than solenoid switches and spliced wires. This fix is much less expensive than replacing the key switch, solenoid, or starter.

Materials needed

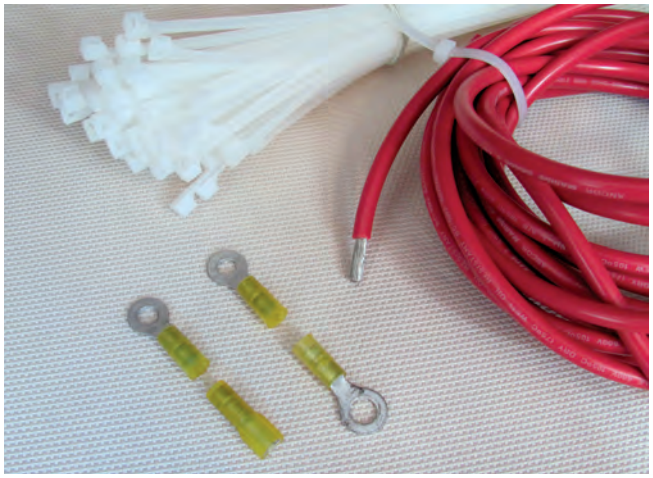
Purchase a roll of marine-grade tinned multi-strand wire long enough to connect the instrument-panel key switch to the starter solenoid in one continuous run. It is recommended to observe the new BIA marine-wiring-code colors, so this wire should be yellow with a red stripe. A plain red wire is used to bring power from the starter to the other terminal on the key switch. Be sure to purchase a known brand of wire: you cannot go wrong with Ancor.

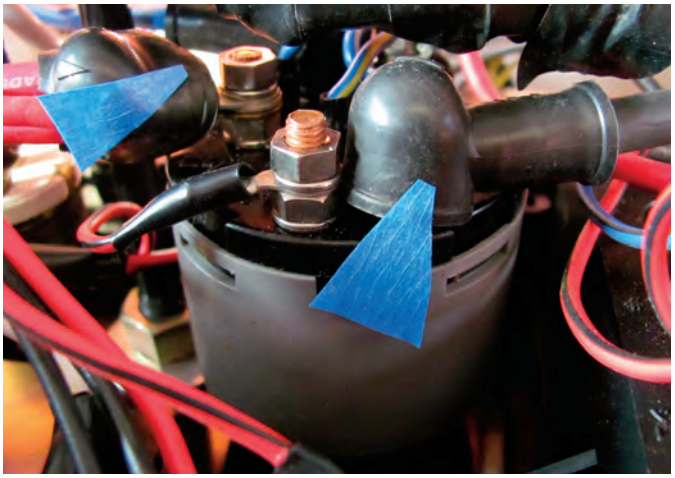
If you don't have rosin-core solder and heat-shrink insulation aboard, lay in a supply, as you cannot complete a proper marine electrical installation without these necessities. I used a roll of 8 AWG wire that I had aboard, but 12 AWG would have been sufficient for the 30-ampere load of the starter solenoid. You'll also need two ring terminals of 3/16-inch diameter for the key-switch terminals, as well as one ring terminal of 5/16-inch diameter and one female socket terminal for the starter and solenoid terminals, all appropriately sized for your wire. Be sure to crimp and solder the terminals onto the wires and then cover the terminals with heat-shrink insulation.

Installation

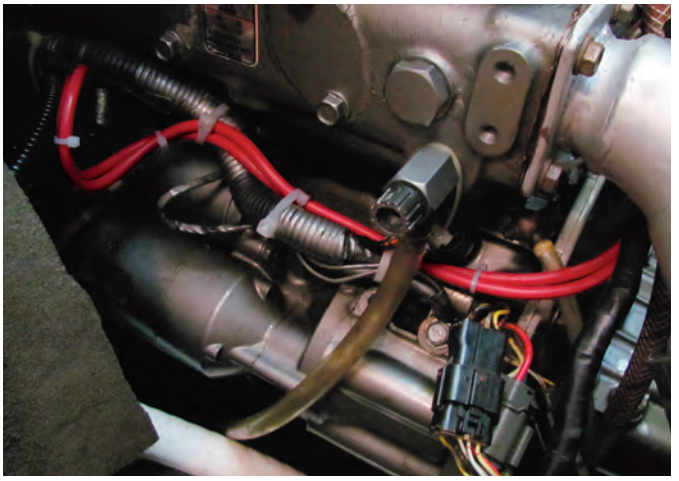
I found that, after ensuring the battery switch was in the off position, it was a simple matter to remove the existing wires from the key switch and install the new wires in their places. I then routed the two new conductors along the existing wiring harness and secured them to it with wire ties. I made sure that the new wires and the existing wires could not contact any fuel hoses. As both of my wires were red, I remembered to mark one of the wires on both ends so I could tell one from the other.

At the engine, all I had to do was unplug the existing wire from the starter solenoid, plug in the new wire, remove the existing wire from the starter post on the solenoid, and





For repair parts, all Harry needed was an appropriate length of electrical cable, terminals, and cable ties, at left. On the back of the Yanmar engine panel, at right, the key-switch terminals for the starter are the ones marked with blue tape.



Harry ran the new wires from the key switch to the starter solenoid alongside the wiring harness and secured them to it with cable ties, at left. The starter solenoid sits atop the starter, above right. The new wires are the solid red pair at the upper right.

replace it with the new wire. I wrapped the terminals on the old wires with electrical tape and tied the wires back.

I accomplished this project in less than a half-day at a material cost of less than $30. In the five months since I completed this modification, my engine has cranked with each and every twist of the key. I am very confident that I have now solved this problem.

Harry Hungate and his wife, Jane Lothrop, have lived aboard and cruised on their Corbin 39 cutter, Cormorant, *since departing Annapolis, Maryland, in 1997. They crossed the Indian Ocean and the Red Sea in 2009 and are now in their third year of cruising in the Mediterranean. They are looking forward to completing their circumnavigation of the world in 2012.*

Amazing transparent bags

They let you see what you seek

by Benjy Benjamin

Sailors waste a lot of time looking for things. Here's something that, once you make it, you'll wonder how you ever managed without.

Let's say you want an aspirin. The bottle is somewhere in the medicine bag . . . but where? You'd have to open up a normal bag and rummage around in it. If that didn't work, you'd have to empty it out, find the aspirin bottle, and then rearrange the boxes and tubes so they all fit inside once more. With an amazing transparent bag, getting to the aspirin bottle won't give you a headache — you can see it.

We have two transparent bags, one for pharmacy items, such as aspirin and sun cream, and the other for the clothespins, although this one doesn't really have to be transparent as we would recognize it from its color, shape, and location on the boat. In principle, however, if someone wanted a clothespin, I could tell him to look in the cupboard under the sink and he would immediately see which bag had the clothespins.

Instead of groping blindly, see, target, and extract from a see-through bag.

Our medicine bag has a zippered top with a built-in handle, but this is a bit more difficult to make as you have to sew the zipper in a circle. You could even make your bag so it opens at both ends. It might be easier to place the zipper along the longest side so the bag opens like a pencil case. Rather than a zipper, our clothespin bag closes with a strip of Velcro.

You can make transparent bags in most shapes and sizes to suit your needs or the location where you'll stow them. They don't have to be round. We chose round because it's an easy shape to make and fairly easy to stow in a boat.

The transparent material we chose is the same clear vinyl used for dodger windows and restaurant enclosures. You might be able to get scraps for free from your local sailmaker because a roll often has imperfect sections that can't be used. Those scraps are of little interest to sailmakers but are ideal for bags.

We covered the edges of our bags with a binding. Although it adds nothing to the structure of the bag, the binding makes a bag look nicer than it would with a rough raw edge.

The material is tough. Our bags are three years old and show no signs of deterioration. They're not completely waterproof because of the zipper and the seams, but they're not bad in that regard. Because the material is fairly stiff, the bags tend to hold their shape well and do not collapse.

See-through bags are not just ideal on a boat; they must surely work well anywhere. Perhaps you'll soon wonder how you ever managed without a clear-plastic storage bag both aboard *and* at home.

Benjy Benjamin loves sailing, making things in wood, and photography, and he sells dinghy plans at <woodenwidget.com>. He lives aboard Doolittle, *a Pacific Seacraft Dana 24, with his partner, Celia, near St. Tropez, in the south of France. He works on classic yachts to fill the time when not exploring the Mediterranean.*

A stand-up bag with visible contents is a winning combination.

Refinishing rack

Varnishing grabrails the easy way

by Ferman Wardell

It was time to give the four teak grabrails on the coach-roof of my 1985 Hunter 28.5 the full treatment. I must confess that, for several years, I had let them go and had not recoated them with Sikkens Cetol as I had planned. (I'm sure no one else has ever done this.) As you might imagine, they had become spotty, with some nice graying but also with streaks of clinging Cetol.

I don't like to redo these babies on the boat because of the pain of taping around the bases and the inevitable hard-to-clean Cetol splatters that end up on the deck. So home they went for the full treatment, with the promise to myself that I would recoat them every six months — I really mean it this time!

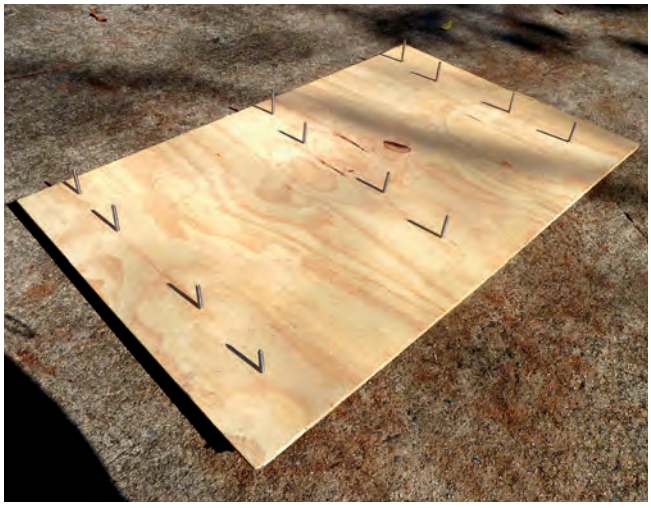
Once I had removed the remaining Cetol and cleaned the teak, the grabrails were ready for the new treatment, this time with Cetol Light.

I didn't relish the prospect of having to painstakingly coat one side of each grabrail, let it dry, flip it, coat the other side, and repeat — several times. As I contemplated how I might avoid that ordeal, I came up with an idea: why not simply re-use the screws that held the handrails to the cabintop?

Voilà! I ran the screws though a piece of plywood and into the grabrails, supporting them a couple of inches above the surface so I could coat them on top, left, and right all at once. Brilliant!

The job went as planned and is now completed. I'll do it again in six months. Really.

Ferman Wardell's bio appears on page 25.



It looks like a low-thread-count bed of nails . . .

. . . but it's a support system for grabrails in need of refinishing.

With this technique, Ferman was able to refinish his grabrails using no masking tape and without having to clean the deck afterward.

Get a grip . . .

. . . and take a dent out of your bottom cleaning

by Kevin Alles

I sail a 1969 Columbia 28 out of Cedar Island Yacht Club in Kingsville, Ontario. Without something firm to hold on to, thoroughly cleaning the bottom of *Kick'n it Old School* can be a tiring task — algae grows quickly in the warm waters of Lake Erie. I considered purchasing a product I'd seen advertised in several marine stores that's a handle with suction cups. It was always a little pricey and I wasn't sure how it would perform.

Then I came across a dent puller. These can be found in automotive stores or hardware stores. It was amazing! The dent puller held solid, giving me a firm hold and allowing me to reach well below the waterline. It marked my progress, so I could keep track of how much I had completed. It released easily, allowing me to reposition it.

These products can be purchased for around $6. It is certainly an idea worth holding on to!

A dent puller grips the curved surface of a boat's hull firmly and releases easily.

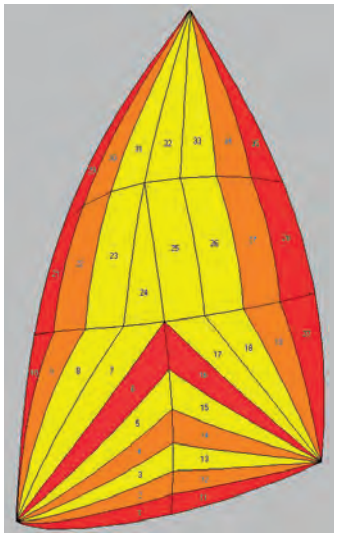
Kevin Alles, an elementary school teacher, enjoys spending his summers on the waters of Lake Erie with his wife, Janan, and his two children, Madison and Spencer. His family enjoys cruising and even gets in the occasional club race and regatta.

continued from page 9

The decision about a sewing machine is more difficult. Although the Sailrite folks tell me that a straight stitch is OK, I have decided to go with a zigzag machine and I am asking for your thoughts on a zigzag machine versus a zigzag machine with a walking foot. The cost difference is significant.

I have found an industrial zigzag machine (Pfaff 9020) locally for $250. It is in great shape, having never been in commercial use. It does not have a walking foot, but it does have a lot of space under the arm. I am comparing this to the Sailrite Ultrafeed (that you used), which has a walking foot, but the space under the arm is listed at 7 inches. This seems small to me, especially if I get into projects bigger than the sails, such as boat tarps. I am also comparing both machines to the Singer 20U-109, which is offered new for $1,300.

–Richard Huint, Montreal



Karen answers

The extra space at the arm is a real advantage, but so is the walking foot. I suppose you could give up the walking foot as long as you use that double-sided sticky tape everywhere you stitch (to keep the top layer of fabric from crawling away from the bottom layer).

I have done huge tarps with our Sailrite Ultrafeed. To work with the smaller space at the arm, you have to plan your large panels so the smaller part goes through the opening and so you add each new panel as late into the project as possible. Even then, you have to roll the fabric carefully to pass it through the arm, and it's nice to have a helper to help the fabric move from one end to the other while you're stitching. Based on the size of the opening, I agree that the Pfaff might be a good choice. No matter what, you'll still run into issues when working with huge bundles of cloth.

I also agree that the zigzag stitch is worth having. There are many times you'll want that, believe me.

So go with the $250 Pfaff. What's the worst that could happen? If you're not happy with it, you can always sell it.

–Karen Larson, Editor, *Good Old Boat*

Richard's sail kits

I have ordered kits to make a mainsail, a jib, and an asymmetrical spinnaker.

When I spoke with Jeff Frank at Sailrite, I told him how your articles in *Good Old Boat* inspired me to sew my own sails. When he referred to various details, including the SKR asymmetrical spinnaker cut, I was able to tell him, "Karen Larson also mentioned that in her article." Jeff and all of the Sailrite folks were very helpful. I have ordered from them before and am sure that I will again. I "met" them via *Good Old Boat* magazine.

Thanks also for the suggestion about the sewing machine. I have made arrangements to buy it. I am also planning to change the clutch motor to a servo-motor as I prefer the speed control it offers.

I will send pictures of the sailmaking process and of the sails when I get them done.

–Richard Huint, Montreal

Karen's spinnaker envy

That's the same spinnaker design we have and I'm jealous of your color choices. I chose blues and white because our boat is blue. But later, when I saw a *really* colorful one at a Good Old Boat Regatta (St. Petersburg a couple of years ago), I asked Jerry if we could make another spinnaker . . . but in yellow and red and orange, etc. Of course I was just bluffing. But I wish I'd gone with a bright one like yours.

–Karen Larson, Editor, *Good Old Boat*

Send questions and comments to *Good Old Boat*, 7340 Niagara Lane North, Maple Grove, MN 55311-2655, or by email to jerry@goodoldboat.com.

Scott Erickson told us he always wanted to send us a photo or two. So he did; this early-morning scene in Mackaye Harbor at the south end of Lopez Island, Washington. Send your sailboat photos to jstearns@goodoldboat.com and we'll post them on our website. If we publish yours here, we'll send you a Good Old Boat T-shirt or cap.

Boats

Columbia 36
1969 sloop. William Crealock design. *Allegro* has always been a family boat on the Great Lakes. Sails very well and handles heavy weather. Comfortable motion and nice layout for onboard living. Ready to take you and yours out on the water. Silver Bay, MN. $20,000.
Kari Edwards
612-799-4411
haugeconstruction@msn.com

Cape Dory 22D
1983 w/trailer. Cape Dory yachts are identified with legendary craftsmanship, seaworthiness, and beauty. Rich teak and bronze are not often found on boats of her size and make Alberg's full-keel "pocket cruiser" one of the most sought-after yachts from coast to coast. She never fails to turn heads w/her graceful lines and proper demeanor. Photos and details available. Corpus Christi, TX. $16,500.
Charles Gibbs
361-850-3544
compdawg@sbcglobal.net

Columbia 34
1979. Documented. Solid fiberglass hull, 12,000-lb disp., 4,700-lb ballast. Albin diesel V-drive. W/S w/instrument pods, anchor windlass, 6' headroom. Much teak w/teak-and-holly sole. Complete cushions, propane stove w/oven, diesel fireplace, icebox w/ freezer, Raritan LectraSan head, deluxe mast, internal halyards, North furling, cockpit canopy w/ windshield. Owner is a former Columbia West Coast dealer. Too much to list. Photos available. Dry stored in Amherst, VA. $23,000.
Terry Todd
434-946-9196

Cape Dory 330
1986. Carl Alberg design assures good looks, safety, and ease of handling. Great old boat with all-new diesel, cockpit enclosure, davits, batteries, inverter, auto-pilot, upholstery, transmission, and dinghy. Email for many great photos and long list of enhance-ments. In clean fresh water at east end of Lake Ontario in Chaumont, NY. $62,000.
Gerald Senecal
315-562-4387
gdsenecal@tds.net

Mercury Inflatable Boat 10.2
2005 Mercury "Quicksilver" PVC inflatable with air deck. Oars, gas tank, pump, and storage bag. Only used 6 times, never stored outside. Selling it with 9.9 Johnson rebuilt last season because of lack of use (only 50 hrs). Bethany Beach, DE. $1,225.
Tom Lucas
mlucas@mriphiladelphia.net

Mull/McClelland 26
1986. *Northern Traveller* is a cold-molded sloop designed by Gary Mull and professionally built by McClelland Yachts (www.genoabay.net). WEST system hull, deck, and coachhouse, cabinet-grade teak-and-mahogany interior. Construction cost in 1986 was $70,000. BMW inboard diesel, head, galley, holding tank, 4 berths, state-of-the-art sails, hardware, and electronics. Meticulously maintained and tastefully upgraded by her owners, who are looking for a larger cruising yacht. Hecla, Manitoba. $27,500.
Bruce Bolster
204-738-4729
rbbolster@gmail.com

Sparkman & Stephens 36
1982 custom-built offshore sail-boat. 6' draft. Solid fiberglass hull. New mast w/mainsail furling, new rigging, new sails. Yanmar diesel in exc cond, low hours. Teak interior. Needs some cosmetic work. Solid offshore sailboat. Stamford, CT. $39,500.
David Thompson
917-623-6274
dbthom123@yahoo.com

Ranger 28
1977. *Gilded Lily.* Fully restored. Feature boat Sept. '06 issue. Many upgrades. Beautiful, fast, comfort-able sailer. Enhanced A4. New bottom paint. Dinghy, davits. On the hard, Atlanta. $12,500.
Walt Hodge
770-498-1678
walt@wingnwing.com
www.wingnwing.com

Blackwatch 23
1981 shoal-draft, cutter-rigged, trailerable pocket cruiser. *Moor Patience* draws 24". 22'7" LOA. Exhaustive restoration in '08/'09 from mast top to keel. Original gelcoat is magnificent. New RF jib and staysail, extensive canvas. Airy cabin sleeps 2. All new teak. Extensive restoration list avail-able. Colorado. $17,500.
Mark Nash-Ford
720-933-3222
Allaboutfun@comcast.net
www.youtube.com/
watch?v=a8VbahlCtj

Catalina 30
1987 tall rig. New since 2007: Mylar main, Hood furler, Cutless bearing, dripless packing, sailcover, teak rail cover. Blue interior, non-smoking, no musty odors, well-kept. 21-hp Universal diesel, AC/DC fridge, shorepower AC, perch seats. My third Catalina. Moving up! Pepin, WI. $33,000.
Peter Gutierrez
608-797-9920
gtzpeterjan@gmail.com
www.sailboatlistings.com/
view/25162

Mystic River Sloop 18
1978. Good cond. 18' LOA, 16' LOD, 7' beam. Classic daysailer by Peter Legnos w/registered trailer. Fiberglass hull, wooden mast, gaff, boom, and bowsprit. She draws so little with the C/B up that she will sail in wet grass. Very stable boat. Electric trolling motor w/new battery as auxiliary. Red Creek, NY. $6,500 OBO.
Will and Kathy MacArthur
315-754-8885
rcmac4@localnet.com

Pearson 28-2
1986 sloop. Bill Shaw design. Great cond. Great sails w/multiple reef points. New RF, new holding tank and plumbing, new running rigging. Refurbished steering system w/suede-wrapped wheel. New windex, masthead nav lights and wiring. New portlights and screens. New VHF and remote unit. Sun awning. Shorepower. Water heater. Reliable Yanmar 18-hp diesel. Well cared for. Magma BBQ Grill! Portsmouth, NH. $22,500.

Christina Persson
splendidboat@gmail.com
www.ecpersson.com/sailboat

Southern Cross 31
1978 full-keel sloop. Second owners. Solid bluewater cruiser in very good cond. Fresh water since '91. Yanmar diesel, professionally maintained. Transmission rebuilt '07. Profurl RF, 130 genoa, main, and staysail. Gennaker w/ sock. Dodger and Bimini. Bronze winches and ports. Shorepower. Many upgrades. Abundant storage below. Offshore equipped w/ SSB, storm sails, life raft, and 406 EPIRB. Beautiful interior in walnut and white, bright and spacious. Winters under cover. Milwaukee, WI. $39,000.

Barbara Constans
608-244-5354
baconstans@att.net

Cape Dory 28
1977 in very good cond. Yanmar 2GM20F diesel, RF genoa, rigged for singlehanding. In water near Annapolis, MD, and ready to sail. I now own two boats and must sell ASAP. More detailed spec sheet and photos upon request. $14,500.

Dixon Hemphill
703-250-9277
dixonh1925@cox.net

Tartan 33
1980 sloop. Third owner, fresh water. Sparkman & Stephens design, Scheel keel, 4.5' draft. 24-hp Universal diesel rebuilt '02. Transmission rebuilt '09. Exc cond both aesthetically and mechanically. Teak interior, teak/holly sole, cushions redone. New canvas. Brand-new Garmin GPS, wind speed/direction indicator, AP, VHF, Sony CD/radio, rigid boom vang. Green Bay, WI. $37,000.

Cyndi Bruehl
920-606-2569
cyndidave@gmail.com

Cape Dory 30C
1981. Exceptional example of this well-loved Alberg classic. Continuously upgraded and refurbished over the last 12 years. Teak interior near new cond. Beautiful exterior varnish. Thoughtfully equipped for distance cruising. True yacht quality at a reasonable price. Menominee, MI. $37,500 OBO.

Kevin LeMans
608-443-6811
Full.Keel@gmail.com

Mirage 27
1981 Robert Perry-designed sloop. Standing headroom. Registered vessel w/new instruments, new stove, 5 sails (3 headsails, main, and spinnaker). Spare engine, Fortress anchor, marine head and holding tank. Freshwater boat on trailer. A solid boat sailed often. Goderich, Ontario. $9,750.

Peter Herring
519-524-7810
joyceh@hurontel.on.ca

Pearson 33
1972 CB sloop in exc cond. Yanmar 3GM30F 27-hp diesel. Awlgrip, VHF, GPS, AP, refrigeration, H/C pressure water, propane stove and oven, 3 water tanks, dodger, Bimini, 4 sails, 4 deep-cycle batteries, 2 anchors. Beautiful custom teak and black walnut interior. In water near Annapolis, MD, ready to sail. Detailed spec sheet and photos available via email. $17,500.

Dixon Hemphill
703-250-9277
dixonh1925@cox.net

Soverel 28
1962 classic yawl. Comfortable sailing boat. Everything new or updated. 20-hp Westerbeke diesel, new mainsail, sailcovers, and cockpit cushions. Sleeps 4, head, galley, good headroom in cabin. Lots of sails. Marine radio, AM/FM radio w/CD player. New carpeting and toilet. In the yard at Point Bay Marina, Charlotte, VT. Moving, must sell. Make an offer. $6,000.

Bill and Nancy Brogden
802-436-2785
nancybrogden@vermontel.net

Alberg 30
1972. Well-equipped. Furling, Dickinson cabin heater, anchor roller, main w/2 reef points, 2-cyl. Yanmar diesel, S/S BBQ, 4 opening ports, fridge/freezer. New Jabsco head '11, new marine smart charger. Horizon chart plotter, tri-axle highway trailer, VC Offshore bottom paint. Newer interior/ cockpit cushions, WS, VHF radio, and more. Too much to list. Sarnia, ON. $23,900.

Jordan Stewart
519-719-2748
jennakoning@gmail.com

Bayfield 25
1976. Sloop-rigged, clipper bow. Furling genoa, Yanmar YSE 8-hp diesel, fresh and black water tanks, 2-burner alcohol stove, sink, icebox, head. Danforth anchor. Compass, D/S, VHF. Transom swim ladder and 2 dry-chemical fire extinguishers. Trailer available for delivery. Okanagan, BC. $8,900 CDN.

Peter Van Wissen
250-826-4132
wissen@shaw.ca

Boats Cont

North Island Marine 21
2001. Sloop rigged with furling genoa. Extra jib. Yanmar 1GM10 diesel. Alcohol stove, sink, icebox, head, 2 anchors, VHF, compass, depth. Very comfortable cockpit, sleeping possible. 2 berths below. Draft 3.5'. Trailer included. Martha's Vineyard, MA. $9,500.
Simon Day Larsen
774-310-0339
simondaylarsen@gmail.com
www.engl.niu.edu/mday/rosy.html

Pearson Triton 29
1961. Hull #196. Fresh water. Re-cored deck. Re-powered 2007 w/Mercury 9.9 4-stroke w/remote. FB main, 3 jibs, 2 spinnakers. Cockpit cushions, new VHF, and many extras. Great cond. Cleveland, OH. $8,900.
Ginius Macys
Sailcat42@gmail.com

Misc.

Anchor alarm iPhone app
Monitor your boat while on shore using your iPhone with Boat Monitor, the remote anchor-alarm app. Can be set to alert you when she swings on her anchor when tide/current changes. Customizable "safe zone" shape and size. SMS/email alerts. Voice alarm feature reads your position aloud — can be used with a radio in VOX mode. Search "Boat Monitor" in the App Store. $5.
Kevin Suggitt
kschaos@gmail.com
http://boatmonitor.com

Products-General

Products Gen- Cont.

SONS CREATIVE

- 2D Drawings, Graphics and Rendering
- 3D Modeling and Rendering
- Vinyl Boat Lettering and Graphics up to 48" high
- Large Format Printing
- Website Design

sons-creative.sail2live.com

CAPE DORY 27 — CAPE DORY YACHTS — EAST TAUNTON, MASS.

Dress up your boat for Spring. Replace your deteriorated plastic Builder's Plate with one in Bronze from **Bristol Bronze**.

For a complete catalog send $6 to:

BRISTOL BRONZE
Box 101, Tiverton, RI 02878
401-625-5224
www.bristolbronze.com

NATURE'S HEAD
Self-Contained Composting Marine Toilets

- Compact
- No Odor
- All Stainless Steel Hardware
- USCG Approved
- Exceptional Holding Capacity
- Waterless

Order Today -- Ships Tomorrow!
251-295-3043
www.NaturesHead.net

Traditional Marine Stoves

Solid Fuel
Cast Iron & Porcelain
Heating
Cooking

marinestove.com 360 376 5161

Change your ad to color!
See our media kit online for submission guidelines www.GoodOldBoat.com

---

Mastlift & Accessories

Safest way to the top of a mast, you are in total control of your ascent and descent, work with both hands free, use as hoist for the dinghy motor, safely transfer mobility-challenged persons aboard, use in MOB rescues.

SWI-TEC America
INNOVATIVE MARINE PRODUCTS
www.swi-tec.us

Want Truly Quiet sailing?

Clean • Green Quiet
Electric Yacht™

Electric propulsion eliminates noise, fumes and smell in your sailboat. Exit your slip at the flip of a switch. Virtually maintenance-free. 3 new ***Quietorque***™ systems to fit mono- and multi-hulls up to 40 feet LOA. Use your existing prop and shaft. Costs less than a gas or diesel replacement. Substantial range without fossil fuels. Easy DIY without guesswork.

Electric Yacht • electricyacht.com
763-370-2610 • Scott@ElectricYacht.com

superwind.com
(716) 213-0771

Products-Electrical

GET dazzLED!

Bebi meets LEDs!

Genuinely Marine LED Lights
~ made by ~
Bebi Electronics
www.bebi-electronics.com
sales@bebi-electronics.com
US Agent-R. Ford 727-289-4992
rogersf@bebi-electronics.com

Solar
for boats only...

Superior power
Good looking
Lightweight
Ultrathin
Walk-on

www.aurinco.com

Cruising Solutions

*No more shouting!
*Full-time, Full Duplex!
*Hands Free!
*Great for docking, locking, and anchoring!

Mariner 500 Headsets
ONLY **$69.95** + S&H

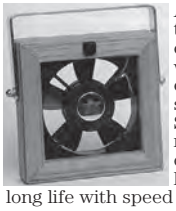
1-800-460-7456
www.cruisingsolutions.com

LED INDICATORS
illuminated sectors depict specific navigation lights:
CURRENT SENSORS
provide flashing indication of burned-out navigation light bulbs
PANELS
intuitive switching of navigation lights, 10 configurations available

www.navlightindicators.com

Quickly detects loss of raw cooling water,
www.borelmfg.com
800 824 4449

12/24V CABIN FANS



Available in teak, cherry, or mahogany with brass or stainless steel bracket. Superb crafts-manship & design. Very low draw and long life with speed control.

250-888-9077
www.marinecabinfans.com

Restoration

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

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

Paint Stripper That Works!

Restoration made easy

Star 10 Inc
www.starten.com
800-726-4319

Boats

FATTY KNEES

For those who yearn for a classic, solidly built dinghy that performs well. The Fatty Knees is truly a distinctive little yacht.

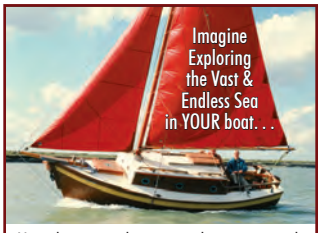
781-307-2466
www.fattyknees.com
dfoynes@fattyknees.com

Boatbuilding

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

Diamond Teak
www.diamondteak.com
TRUE TEAK WOOD
PLANING, SANDING AVAILABLE.
QUARTERSAWN TEAK FOR DECKING.
T & G • VENEER • CUSTOM WORK
ALSO MAHOGANY & SPANISH CEDAR.
HIGHEST QUALITY • WORLDWIDE SHIPPING
INFO@DIAMONDTEAK.COM • 215-453-2196

FIBERGLASS SUPPLIES
Epoxy, Gelcoat, Polyester, Vinylester,
Cloth, Mat, Biaxial, Roving
LBI Fairing and Bonding Compounds
NIDACORE
Technical Assistance
UPS Shipping Daily
Call for Free Catalog
800-231-6537
www.lbifiberglass.com
LBI
973 North Road Rt 117
Groton, Connecticut 06340



Your boat stands out, it draws a crowd, people ask where you got it. She sails like a dream; each trip in her - the experience of a lifetime. The credit doesn't go to a manufacturer. It goes to you. Her creator. Call and leave a voicemail 877-913-2105, 24/7 for your FREE "Consumer Guide to Building Your Dream Boat" and experience the pride for yourself. www.Glen-L.com

"The finished boat and response I get are more rewarding than I ever imagined. She sails beautifully and was such a pleasure to build."
– Rick Dufresne, Portland, OR

Glen-L Marine

Visit our website for a site to see!
www.GoodOldBoat.com

noahs
The Build it/Fix it Warehouse
Marine Plywood, Epoxy, Fiberglass, Varnish, Core, Caulking
Canoe, Kayak & Dinghy Kits
Order online @ *www.noahsmarine.com*
Free Catalog!
(800) 524-7517
noahs@noahsmarine.com

Boat Deliveries

CROSS COUNTRY BOAT TRANSPORT
Specialized boat handling to 55 feet
Licensed • Insured • Storage
651-437-2454

Sailors Moving Sailors
Leslie Transport and Services
best service • best price
de-masting
over-land transport
fully licensed
fully insured
contact us for a quote
www.SailorsMovingSailors.com
SailorsMovingSailors@yahoo.com
615-456-9069

Sails/Canvas

Your online source for quality pre-owned sails!
North Sail Outlet
Certified Pre-Owned Sails
www.northsailoutlet.com
1-800-SAIL-123. ext.948

Watching Your Budget?
Second Wind Sails
Buy Sell Trade
New and used sails
secondwindsails.com
800-273-8398
Turn unwanted sails into cash

Sail Care
20 Years Of Service To Sailors
Over 100,000 Sails Cleaned
Call For Catalog (800) 433-7245
www.SailCare.com

New & Used Surplus Sails
Buy • Sell • Trade
Furling Packages
New Custom Sails
Made in America
Porpoise Sailing Services
800-507-0119
www.porpoisesailing.com
Sarasota, FL 34243

NATIONAL SAIL SUPPLY
Best sails for the money
New sails, used sails, furling gear, off the shelf or custom - But always at the lowest price - Try us!
Sailing doesn't have to be expensive
Phone 800 611-3823
Fax 813 200-1385
E-mail:NewSails@nationalsail.com
www.nationalsail.com

Visit
www.AudioSeaStories.com
Good Old Boat's Download Site

ShoreLine Sailmakers
Best Custom Sails at the most Affordable Prices
•New Sails
•Sail Repair
•Sail Covers
•Boom Supports
info@shorelinesailmakers.com
www.shorelinesailmakers.com
314.828.6863

Minney's Yacht Surplus
www.minneysyachtsurplus.com
949-548-4192
1000's of good used sails, 100's propellers & sheet winches
NOAA authorized chart agent
"We keep boating affordable"©

Consignment

Boaters' Resale Shop of Texas
We Buy, Sell, Consign and eBay
Used Boat Equipment and Small Boats
Vintage Electronics
Bench Testing & Repairs
Worldwide Shipping
713-614-8884
www.boatersresaleshopoftexas.com

Want to sell your boat? Place your ad here in the *Good Old Boat* 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

For full details on how to submit your information, go to:
www.goodoldboat.com/resources_for_sailors/sailing_classifieds/
or call 701-952-9433.

Services

Cushions/Bedding

Websites

Clothing

SoliCharger-SP

If you have an iPod, iPad, cell phone, mp3 player, or any device that needs to be charged occasionally, the SoliCharger-SP should be in your daypack in case you find yourself without alternating current.

This versatile device has a 1,500mAh lithium-ion internal battery that can be charged by the sun with the included solar panel or by a 12V battery, 110VAC, or the USB port on your computer. With the internal battery, you can then charge your phone or any other device with one of the included 32-pin Apple®, USB, USB-mini, or USB-micro adapters.

The SoliCharger is also a pack (with a zipper closure) in which you can store your phone, iPod, or other device, and it has a built-in amplifier and speakers that produce very good sound. Plug in your mp3 or iPod to fill a room with stereo sound. The SoliCharger-SP retails for $59.95. For more information go to <www.sollight.com>.

TitanStraps

Although this is not a "marine" product, you'll very likely find a tie-down task on your boat for which TitanStraps will make a handy solution. In a place where you might use a bungee cord, you will find this strap more useful, adaptable, and durable. Its belt-like buckle is easy to use and makes a very positive attachment, plus it allows you to join several together to hold a larger item. The UV-stabilized polymer material is stretchy enough to hold whatever you are strapping down nice and tight and stays flexible in extreme heat or cold. You can get a firm grip on the strap's molded tip even when wearing gloves. TitanStraps are $7.99 each (plus S&H) from <http://lawson-usa.com>.

Vonu light

The Vonu is the latest offering from Bebi Electronics in Fiji. It's named Vonu, which translates to sea turtle, because this uniquely Bebi light fixture looks a bit like a sea turtle.

The Vonu has 24 LEDs set in a body made from wood indigenous to Fiji. There are 24 LEDs in the fixture, which Bebi offers with either warm-white or pure-white LEDs. In one version they are in two circuits and a switch selects between a bright display, with all 24 LEDs lighted, and a dimmer one, with only 12 of the LEDs lighted ($59.00 plus shipping). A non-switched version is also available ($52.50 pus S&H).

Bebi Electronics makes 16 varieties of LED lights, both 12 volt and 24 volt, with applications all over your boat.

The Vonu is both an excellent cabin light and a wonderful conversation piece, especially after you learn about what this very interesting company is doing in addition to making LED light fixtures. For more information about the Vonu and other Bebi lighting products, go to <www.bebi-electronics.com>.

To be featured on this page, items must be new products. If you would like to have your product featured here, please send an email to Michael Facius, michael@goodoldboat.com, or call him at 612-605-8319. By the way, readers, if you contact a marine supplier mentioned here or elsewhere in our magazine, please remember to tell the folks there that *Good Old Boat* sent you.

Going nowhere

An enjoyable voyage needs no destination

by George Bollenbacher

For some people, the term "going nowhere" is an oxymoron, impossible to fathom. You've seen them, walking along staring at their BlackBerrys or sitting in a lovely restaurant chattering away on their cell phones. Or they hurry down the street, full of intensity, never seeing what's happening right next to them. I think these folks almost always get where they're going; I just wonder if they know where they've been or how they got there. For them, it's all about the destination, not about the trip. As a sailor, I can't understand that at all.

For those of us who own a sailboat and don't use it to travel great distances, our avocation is all about going nowhere. Anyone in a hurry to get somewhere by water would own a powerboat, perhaps even a cigarette boat for those in a real hurry. Then, except for the time spent at the fuel dock, these boaters could get on with it . . . whatever "it" is.

But sailors purposely choose a method of locomotion outmoded by Robert Fulton in the early 19th century. We weigh anchor or slip our moorings and head into the wind while we haul on halyards, fiddle with sheets, and settle back at the tiller to watch the world slide by. We keep an eye on the windvane and telltales, trim the jib, adjust for the weather helm, and scan the horizon for squall lines just like Joshua Slocum did a hundred years ago. Except he was sailing alone around the world while I, at least, am only circumnavigating the Tappan Zee.

So when I return to the dock, why am I so exhilarated? Why have the stresses of the day slipped away and the mental pictures of crisp (or sloppy) tacks replaced them? I haven't really done anything very difficult or demanding. I haven't dealt with the open ocean. I haven't made a passage. I just noodled around for a while.

Still, I was out on the water. That's more than I can say for some of the sailors at our marina. It seems that the inclination to take a sailboat out is inversely proportional to its size. When I take people out to my boat, we walk past some really regal and nautical-looking yachts. The thing is, I've never seen those big ones out of their slips during the three summers I've been there. The owners wave to me from the afterdeck when I walk by, but I never pass them at the harbor mouth as I sail in or out. I guess that's the real definition of going nowhere.

It's not like my version of going nowhere is all that easy. I still have to check, fix, and upgrade as if I were setting out on a long voyage. The running rigging, the standing rigging, the battery, the motor . . . it's like having a family of demanding children and I take care of them all, especially since my own children are grown with children of their own. I guess I always have to have something or someone to take care of.

Even now, as the season draws to a close and the evening sails get shorter or come to a halt entirely, I have a few projects that beckon. I need to replace my fender lines before they chafe through and send my fenders floating down the marina. I think the battery connection is loose, so I've taken to running the VHF on dry cells, which is a stopgap. And all the teak needs to be sanded and finished; I think I'll try Bristol Finish this time. Lots to do.

But for the moment, the breeze has picked up, something that doesn't always happen here. The flags on the marina wall are tugging at their staffs. The surface of the Hudson has that gray-blue patina that speaks of a brisk run up the river toward the forbidding brick hulk of Sing Sing prison. Or maybe I'll scoot under the Tappan Zee Bridge — always a strange feeling after driving over it so many times — and head down to Washington Irving's farmhouse by the river. On the way I'll pass by Jay Gould's Art Deco mansion, Lyndhurst.

If the wind holds, I can be out and back, button the boat up, have a beer, and still get home in time to help fix dinner. You might say I didn't go anywhere and you'd be right, but I think it's always a trip worth taking.

George Bollenbacher lives on the Hudson River north of New York City, and sails on the Tappan Zee. After owning an Alacrity 19 for five years, George "stepped up" to a Ranger 26, which he singlehands. He came to sailing late in life, which makes him, if anything, even more enthusiastic.

YOUR SOURCE FOR OUTDOOR FABRICS

Find the best in outdoor and marine fabrics at **www.sailrite.com** with trusted brands like Sunbrella®, Weblon, Phifertex, and Naugahyde as well as a large selection of solution-dyed acrylics, vinyls, sailcloth, and mesh. Whether you need fabric for your boat, your patio, or your home, Sailrite has just the right fabric for the job!

First quality fabrics. Always in stock.

www.sailrite.com | 800.348.2769 | Free Catalog