

# GOOD OLD BOAT™



THE SAILING MAGAZINE FOR THE *REST* OF US!

[www.goodoldboat.com](http://www.goodoldboat.com)

Issue 88 January/February 2013

BRAMARE  
WYE RIVER, MD



# 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.

©2013 by Partnership for Excellence, Inc. All Rights Reserved.  
Reproducing in whole or part is forbidden except by permission of the publisher.





## Custom Splicing

Our team of splicers will make you any sort of mooring pendant, dockline, rope-to-chain anchor rode, halyard or sheet you require, large or small, industrial or pleasure.



A snap shackle spliced into New England's New Sta-Set Vintage.



## You Have Projects. We Have Product.

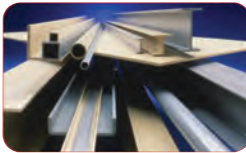
Hatches, hose, electrical, lighting, hardware, and much more.



## Extren® Fiberglass Structural Shapes & Plates

- Corrosion Resistant
- Low Conductivity
- Non-Magnetic
- Lightweight
- High Strength
- Dimensional Stability
- Low Maintenance

*Get The Wood Out!*



## Coosa Composite Building Panels

*Use in place of plywood!*

Made of high-density polyurethane foam, reinforced with layers of fiberglass. Lightweight, non-rotting, an excellent replacement for wood.



## Boatbuilding Supplies



## PVC Toe and Rub Rails

(Not Shown Actual Size)

*Dozens of Styles in Stock!*



## Epoxy Resin & Hardener

**WEST SYSTEM SYSTEM THREE**



## Fasteners

*By the each or by the box*

- Stainless Steel
- Galvanized
- Bronze
- Brass



## Pumps



## Strainers & Seacocks



## Sail Hardware



# GOOD OLD BOAT

THE SAILING MAGAZINE FOR THE *REST* OF US!

## Contents

January/February 2013

### For the love of sailboats

#### Review boat

##### 10 O'Day 37

*A low-profile high-value center-cockpit cruiser*

by Gregg Nestor

##### 24 Capri 25

*A fast club racer that accommodates four adults*

by Fred Bagley

#### Refit boat

##### 50 Classic in blue

*New sailors freshen up an Irwin 32*

by E-J Ohler



### Speaking seriously

#### Sailboats 101

##### 16 Spreaders 101

*They hold up the shrouds that hold up the mast*

by Don Launer

#### Maintenance tasks

##### 18 Rebedding chainplates

*Damp skivvies provoke an impromptu pit stop*

by Fred Bagley

#### Making your own

##### 21 Dorade box covers

*Varnished teak goes under wraps*

by Judy Odenheimer

#### Wider horizons

##### 41 Go cheap and go in comfort

*The case for good old offshore-cruising boats*

by Todd Duff

#### Voice of experience

##### 44 Dolphins' demise

*A boat — but not the dream — goes down in flames*

by Mathias Dubilier



### Spotlight on ...

#### Safe Sailing

##### 30 Galvanic isolator

*It prevents stray currents and preserves precious metals*

by David Lynn

##### 36 Compass errors

*Getting a magnetic compass to tell the truth about North*

by Don Launer







LOVE SAILING? PURSUE YOUR PASSION AT THE  
MIDWEST'S ONLY ALL-SAIL BOAT SHOW!

Sailboats | Sailing gear & accessories | Sailing seminars

PROGRESSIVE® INSURANCE

## STRICTLY SAIL® CHICAGO

January 24–27, 2013 • Navy Pier, Chicago, Illinois

[StrictlySailChicago.com](http://StrictlySailChicago.com)





## What's more

### Web sightings

- 5** *Consignment stores, newsletter podcasts, and more ...*

### The view from here

- 7** **A question of upholstery**

*The fabric is not worn, but it has long faded from fashion*  
by Karen Larson

### Mail buoy

- 8** **Sailing the world, cruising locally, and lake sailing**

### Sailing life

- 28** **Havasu Pocket Cruisers Convention**

*A few sailors got together — and took over the town*  
by Karen Larson

### Cruising memories

- 53** **Hurricane on the Hudson**

*High winds and high water wreak havoc upriver*  
by Glenn Reed

### Simple solutions

- 58** **Water by gravity**

*Simplifying the water supply led to galley efficiencies*  
by David Strong

- 60** **Multitasking companionway step**

*A fold-away extension is a seat and a workspace*  
by Henk Grasmeyer

### Quick and easy

- 62** **Hose wrench**

*A nifty way to persuade hose onto a barb*  
by Clarence Jones

- 63** **Green stain be gone**

*A little elevation keeps the toilet base dry*  
by Glyn Judson

- 67** **Good old classifieds**

### Reflections

- 73** **A passion for the Cal 25**

*To Charlie Husar, the Annapolis fleet is his flock*  
by Carrie Gentile



### About the cover ...

*Bramare, a lbert and Mickey boersma's Hinckley bermuda 40, was caught looking lovely one foggy morning while anchored in Langford Creek off Maryland's Chester river. Photographer Chad Doherty captured the moment while appreciating a quiet cup of coffee on his own boat nearby.*





LOVE SAILING? PURSUE YOUR PASSION  
AT THE SAILING SHOW OF THE SEASON!

Sailboats | Sailing gear & accessories | Sailing seminars

PROGRESSIVE® INSURANCE

# STRICTLY SAIL® MIAMI

February 14–18, 2013 • Miamarina at Bayside

[StrictlySailMiami.com](http://StrictlySailMiami.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 McGearry

MANAGING EDITOR

Tim Bauernfeind

ASSOCIATE EDITOR

Pat Morris

RESEARCH EDITOR

Dan Spurr

CONTRIBUTING EDITORS

Ted Brewer • Donald Launer • Rob Mazza

Gregg Nestor • Allen Penticoff • 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

88 – VOLUME 16, NUMBER 1

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

PUBLISHED BIMONTHLY BY

Partnership for Excellence, Inc.

EDITORIAL OFFICE:

7340 Niagara Ln. N. • Maple Grove, MN 55311-2655

Phone: 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

© 2013 BY PARTNERSHIP FOR EXCELLENCE, INC.

All rights reserved. Reprinting in whole or part  
forbidden except by permission of the publisher.

Printed in the USA.

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

SUBSCRIPTION RATES (1, 2, 3 YEARS):

U.S. AND CANADA – \$39.95/\$74.95/\$110.00

OVERSEAS – \$49.95/\$95.95/us

FOLLOW US ON FACEBOOK

www.facebook.com/goodoldboat



## News from our two sites: GoodOldBoat.com and AudioSeaStories.com, our downloads site

### Amazon portal

If you're still shopping for the holidays when this issue reaches you (*and who's not?*), why not try Good Old Boat's portal to Amazon.com? They deliver books, movies, and many more cool presents in a hurry. Our "secret pathway" to Amazon is found on the left side of our homepage at [www.goodoldboat.com](http://www.goodoldboat.com). If you get to Amazon by clicking on this icon on our page, Good Old Boat receives a small percentage of what you spend (we thank you for that!) and it doesn't cost you an extra penny. Amazon is so grateful for the "referral" they charge you nothing and give us a small bonus.



### Consignment stores

A famous saying states that "One sailor's trash is another sailor's treasure." The Good Old Boat website has dedicated itself for 15 years to helping sailors find used gear for their good old boats. From the beginning, our list of consignment stores in the U.S. and Canada has continued to grow. Check it out when you're looking for a replacement part for your boat. [www.goodoldboat.com/resources\\_for\\_sailors/consignment\\_stores.php](http://www.goodoldboat.com/resources_for_sailors/consignment_stores.php)



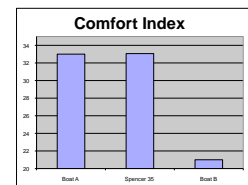
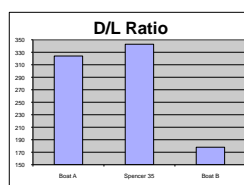
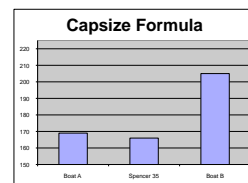
### AudioSeaStories.net

You already know that we publish a bi-monthly newsletter so you won't miss us too much between magazine issues. But did you know we podcast our newsletter? Yes, we'll read that newsletter to you so you can listen to it while you drive to work or to the boat. The podcast has been getting better and better with each issue. Now producers Michael and Patty Facius have begun interviewing sailors as part of the podcast. No, you won't get that in the online version of the newsletter. These live interviews are *only* available on the podcasts as a special bonus for listeners! [www.audioseastories.net](http://www.audioseastories.net)



### Free stuff

We've posted a couple of free boat-search tools on our downloads site. One's called "Boat Audit" and the other, called "The Right Boat Formula," is an Excel spreadsheet created for comparing the features important to you when you're boat shopping. They're free, so if you're in the market for a boat, take a look at these handy resources. [www.audioseastories.com/catalog/index.php?cPath=25](http://www.audioseastories.com/catalog/index.php?cPath=25)







1998 • 1999 • 2000 • 2001 • 2002 • 2003 • 2004 • 2005 • 2006 • 2007 • 2008 • 2009 • 2010 • 2011

*For back issues & more*

# Now Available 2011

Download  
a Full-Year - \$29.95  
Single Issues - \$8 each



### JANUARY/FEBRUARY

Rawson Pilothouse 30 review  
Lancer 25 review  
Tartan 34C feature  
Phil Rhodes' classic designs  
Non-skid from a can  
Maintenance for liveaboards  
Displacement Hull Speed 101  
Sewing your first sail  
Hard dink becomes rigid inflatable  
Atomic 4 rejuvenation



### MARCH/APRIL

Bristol 29.9 review  
Mariner 36 feature boat  
Watermakers 101  
Build a new classic toerail  
A synthetic teak deck  
Making adjustable solar frames  
Consignment stores  
Companionway step storage



### MAY/JUNE

S2 9.2 review  
Ranger 33 review  
Corbin 39 feature boat  
Making old hulls sail better  
Water Tanks 101  
Man overboard  
Electric auxiliary conversion  
Gimbaling a radar dome  
Building a classy LPG container

### JULY/AUGUST

Dufour Safari 27 review  
San Juan 24 review  
Fuji 32 feature boat  
Managing seasickness  
Do-it-yourself rigging  
Mechanical Advantage 101  
Non-pressurized alcohol stove  
Creative stowage solutions



### SEPTEMBER/OCTOBER

Aloha 8.5 review  
Ranger 26 review  
Mistral 33 feature boat  
Refinishing the cabin sole  
Refloating a boat  
Laundry aboard  
Measuring Boat Speed 101  
Anchor kelleets  
Galley improvements



### NOVEMBER/DECEMBER

Santana 2023C review  
Luders 36 feature boat  
Alberg 30 refit  
All about sharpies  
Legacy of Bill Tripp  
Icebox Insulation 101  
Five lessons in boat handling  
Inexpensive burglar alarms  
To varnish or not



**A handy resource in PDF format  
perfect for onboard reference.  
Save space and complete your collection!  
The full-year downloads include  
6 full issues and an index.**

*Download now by visiting [www.AudioSeaStories.com](http://www.AudioSeaStories.com)  
Good Old Boat's digital download site*

# A question of upholstery

*The fabric is not worn, but it has long faded from fashion*

by Karen Larson

**N**ear as we can figure, *Mystic* began her life in 1975 in a Cuthbertson and Cassian boatyard in Niagara on the Lake, Ontario. We believe she was launched in 1976, which leaves us with somewhat mixed opinions regarding her year of manufacture.

Whether she is 37 years old (or is it 38?) is not terribly important. We've upgraded or replaced nearly everything aboard. Some things, such as sails and ropes, have been replaced many times.

This leads me to occasionally cast a discerning eye to the very dated upholstery in her cabin. Could it really be nearly 40 years old? Everyone who sees it is quick to point out that it's "so '70s." The fabric colors do take one right back to the days of avocado and harvest gold kitchen appliances. The plaid is an olive and gold and brown and white tweed. There's a nod to *Mystic's* Pacific blue hull with the inclusion of navy and a blue similar to the color of the hull.

I can sew. We've considered an interior update several times, but — as with many boat projects — one thing will clearly lead to another and we retreat from the prospect in horror. Tear the cabin apart or sail? Sail or tear the cabin apart? The correct response is obvious.

Let's see. The port dinette arrangement has six cushions when it's made up as a bunk. Since two of those cushions spend their time in the V-berth, the two giant V-berth cushions will need to match too. Did I mention the little filler cushion that fills up the V in the V-berth? We haven't used it in years, but shouldn't we just cover it while we're at it in case we do need it someday?

Another drawback on the port side is that the two upright cushions are screwed to bulkheads. We'd have to unscrew them to re-cover them. That project would probably go rather easily, although those "probably easy" tasks are the sneaky ones that play "gotcha" in the end. It appears to be a simple matter of stretching the fabric and stapling it in place. But I have no idea how C&C got those intricate vertical grooves in the back cushions. Even my monster Sailrite machine won't sew through a combination of fabric and 2-inch cushion. That unknown gives the project an intimidating overtone.

Then there's the settee on the starboard side. That has a pull-out arrangement that makes a bench seat into a narrow berth and a drop-down back that hides storage cubbies.



Two things here . . . The first question is how to take that drop-down panel off the boat in order to disassemble it and replace the fabric attached to it. Secondly, that narrow bunk really needs a thicker cushion to make it comfortable for sleeping. But the 3-inch cushion that's there cannot be replaced by a 4-inch cushion. Or a 3½-inch cushion. Or even a 3¼-inch cushion. Since the bunk shelf (or would you call that a drawer?) must be able to slide underneath those storage cubbies behind the seat, it is already as thick as it can be. Period. Unless we get creative in the cabin. With the Sawzall. The chief carpenter recoils at that thought.

**“... the fabric has never been stained, ripped, mildewed, or damaged in any way.”**

Once again, I turn away from what could be a time-consuming and very expensive, but clearly very gratifying, cabin update for our baby. In its 38 years, the fabric has never been stained, ripped, mildewed, or damaged in any way. It looks as good as it did in 1976 (or should I say 1975?). Could I come up with a fabric even half as robust to replace it?

Meanwhile, Jerry — in the hope of delaying the inevitable — keeps reminding me that he *likes* the color of our cushion fabric. Since he's partially colorblind, I find his reassurances and motivations highly suspect. I figure the best solution is to wait a few more decades until this fabric comes back into vogue. Besides, I'm beginning to convince myself that the combination of avocado, harvest gold, and blue is really very attractive. *Δ*



# Sailing the world, cruising



## Sailing the world

Your November issue caught me just before we leave for Turkey and my 70th birthday. Among our activities in Turkey we are chartering a boat. As many sailors have, in my younger days I dreamed of sailing around the world. It didn't work out. Neither my wife nor the children had the slightest interest. As somewhat of a compromise, I am sailing the world. By chartering and sailing on OPBs (other people's boats), I hope to be able to sail in many parts of the world. It's not the same as sailing around the world, but it has made for a happier family.

I also have attached some pictures (shown above) of our recent visit to Princess Louisa Inlet in British Columbia. It is one of the more spectacular places to sail. If you ever have an opportunity to go there, it's well worth the trip.

—Carl Hunt, Boulder, Colo.

## Forever Black restores finish on winches

I wanted to restore the black matte finish to our 1989 winches that had faded badly in the sun. (*Note: Marilyn's boat, Adena, a Bristol 35.5, was featured in Good Old Boat in January 2012. —Eds.*) They have never been protected with winch covers. A year ago, when I took the winches apart to clean and grease them for the season, I brought home the faded tops and "jaws." I cleaned them thoroughly with a soft toothbrush and detergent, followed by TSP (trisodium phosphate). They were already very porous in the faded areas but underneath they were a nice matte black, the original color.

I tried using several "auto" treatments and



even painted them with a matte two-part Perfection. None of these gave satisfactory results. I recalled that years ago I used a product called Forever Black Bumper and Trim, a two-step cleaner and reconditioner, on the black rubrail on a prior boat. I found a source using an Internet search and used the cleaner and then the black pigment — a permanent dye. Once the winch pieces had thoroughly dried, they looked like new and stayed looking new all season. I was a little concerned that the dye might rub off on the lines this summer but it didn't rub off on anything. In a few years, the winches might need cleaning and re-conditioning again, but I think other boat owners will also be happy with the results.

I have no financial interest in the company that makes the product. I'm just a very satisfied customer.

—Marilyn Kinsey, Escanaba, Mich.

## How about *your* boatyard's crew?

For a variety of reasons, I might have my 1961 boat's topsides painted (again). The first time was about 25 years ago, in Imron, and now the primer is failing. But I wonder about the marina's paint shop. Since I don't hire this out but once

per quarter century, it's hard to rely on personal experience. It would be nice to know what others think of them. Others might be wondering about the marina's yard crew, the ones who just hauled out my boat. I'd be happy to share my views of them (highly effective, efficient and friendly). Then there's the guy who



# locally, and lake sailing

hauls my other boat, the Cal 20 — a bit of a character but highly accommodating and inexpensive.

My boat has been hauled out at that yard under my supervision (using the term loosely) since 1968. What a world of difference today in ease and safety! In 1968, a genial, but tipling, character ran the mast crane, an old cables-and-clutches device that worked sometimes. It was always interesting to see if it would start that day or if the clutches would stick. Once the frail travel hoist had the boat in its cradle, they used a variety of hydraulic jacks and dollies to slide the cradle into the building. Now it's all done by modern hydraulic equipment. The new crane, and its experienced (and sober) operator, always places the mast right where it belongs when stepping and gets it just right when unstepping. The travel hoist is modern and functional. A hydraulic trailer hauls the boat into the barn on its cradle, lowers it onto blocks in the right place, and leaves it there. It's astonishing. The yard guys are all genial and helpful. They like my boat. One year, the foreman had to chase a bunch away because everybody decided to help with *Baker's Dozen*.

By the way, temper your enthusiasm for e-publishing. I was sitting at my desk eating lunch today while reading the local tabloid. The editor had a little mention of online versions. It's great to be in the vanguard and all that, but I couldn't read the e-version while eating my takeout pasty, at least not very conveniently. The paper version can just sit there on the desk next to the Styrofoam takeout tray as I work my way through the food. Same goes for magazines.

—Chris Campbell, Traverse City, Mich.

## Cruising can be local

We still spend time sailing (mini-cruising, really).

We recently returned from an 11-day cruise in the ICW from Galveston to Freeport. Our destination was the San Bernard River, a small river west of our better-known Brazos River. When the San Bernard is open to the Gulf, the large blue crabs are in abundance. The opening was minimal at the time we anchored there and the crabbing was difficult. We caught enough for some crabcakes and Steak Oscar. *Phantom* is 36 feet and so complex sauces are not that difficult in her full galley. Knorr makes some great packet mixes. The wine that accompanied it is a special Bogel fall old-vine red named Phantom. It seems we cruise to eat well.

In our area, many cruisers don't seem to consider a trek locally down the coast as a worthy cruise — only something far away or “out there” is worthy in their minds. If I remember correctly, the Pardeys cruised locally before they finally went “out there.” Eric Hiscock cruised locally for years before he and Susan did long-distance cruises.

Anyway, we love local cruising and are preparing a cruise to Decambre, Louisiana, to visit with liveaboard friends there. Decambre is in the middle of Cajun Louisiana and we are ready to *laissez les bons tons roule* (let the good times roll)! Total distance from home port: 232 miles.

—Jim Shell, The Woodlands, Texas

## Good paint, good people

In the spring of 2012 I saw an ad for Eco-Clad bottom paint. I called and they sent me information on it, even though it was not available in the New England area. The salesman wanted to sell paint in this area, however, so I sent him a copy of the local MPC boaters' directory that listed all the area boatyards and marinas.

A month later he called, thanked me, and said he would send me bottom paint for my boat. Since my boat was already painted, we used it on other boats at our yacht club (a wooden boat and a fiberglass boat). It did a nice job. There was no growth of any kind on either boat.

I just wanted to let other boaters know what a nice company Eco-Clad is to do business with and what a great product their bottom paint is. The company's website is <[www.ecoclad.com](http://www.ecoclad.com)> and Bob Graham's number is 484-905-6900, ext. 107.

—Del Grindle, Dighton, Mass.  
*continued on page 64*



“Simple, clear, and definitely hard to miss” is how Leslie Songer Terry describes this, um, aid to navigation on the Small Boat Channel in the Georgian Bay area of Lake Huron. You can't miss it if you're heading north out of Britt toward the Bustards. Send [karen@goodoldboat.com](mailto:karen@goodoldboat.com) 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.



**F**ounded by George O'Day, an Olympic gold medalist and crew on two successful America's Cup defenders, the O'Day Corporation was at one time America's largest manufacturer of fiberglass sailboats. Over a span of more than three decades, the company's offerings ranged from 12-foot daysailers to 40-foot bluewater cruisers.

The company started out building small boats from 12 to 22 feet and by 1966, when Bangor Punta purchased the company, had sold more than 70,000 of these smaller craft. The new owners redirected emphasis toward larger boats, such as the O'Day 23 and 25 pocket cruisers, the 27 and 30 keelboats, and the company's first center-cockpit design, the O'Day 32.

While the O'Day 32 enjoyed reasonable success and a production run of about eight years, it was the introduction of the O'Day 37 that captured the attention of center-cockpit aficionados. Its good looks, sailing ability, and well-designed accommodations quickly made it popular with charter companies, sailing schools, and liveaboards.

*Windermere* is a 1984 O'Day 37, 25th Anniversary Edition, owned by David Ruckman and Tina Hart. During a trip to Canada on their O'Day 28, Dave and Tina met a couple sailing an O'Day 37 and were very taken with it. They thought it would be the ideal cruising boat for them. Two or three years later, they accidentally found one for sale locally and were impressed all over again. Their offer was accepted and they have enjoyed ownership for the past 17 years.

Since the purchase, Dave and Tina have made both comfort- and system-related upgrades. Three of the most significant include a hard dodger and canvas, a custom mattress for the aft cabin, and Peekaboo window shades. System upgrades include two new heads and hoses, the segregation of port and starboard 120 VAC circuits, and replacement lenses in the saloon portlights.

## Design

O'Day's product line of smaller boats arose from the talents of several naval architects. When the emphasis changed to larger family cruisers, O'Day chose

the firm of C. Raymond Hunt Associates, headed by John Deknatel, to design the entire line, including the O'Day 37. Introduced in 1978, the O'Day 37 was still in production at the company's 25th Anniversary in 1984 but was absent from the line the following year.

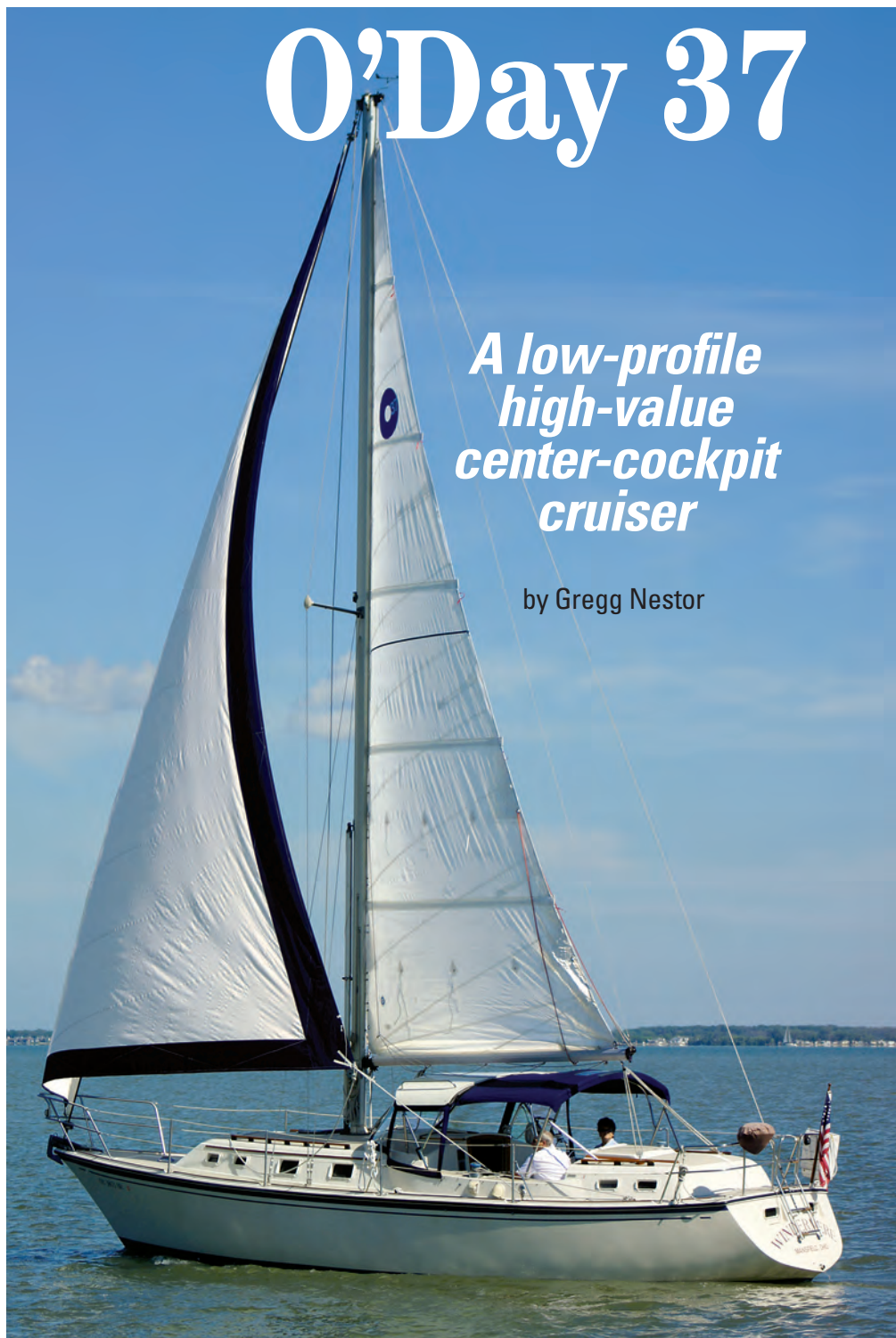
The O'Day 37 does not suffer from the chunky lines often associated with

commodious center-cockpit boats. A wide cove stripe highlights the boat's subtle sheer from the raked stem to the reverse transom and the cockpit coaming makes a smooth connection between the main cabin trunk and aft cabin. This sleekness in design creates a good visual first impression. Under the water, the O'Day 37 has a swept-back

# O'Day 37

*A low-profile  
high-value  
center-cockpit  
cruiser*

by Gregg Nestor



Introduced in 1978, the O'Day 37, facing page, still looks attractive today with its nicely proportioned cabins and gentle sheer. Owners David Ruckman and Tina Hart added a hard-top dodger to *Windermere* for added cockpit protection.

fin keel and a rudder supported by a full-length skeg.

### Construction

The O'Day 37's hull is solid hand-laminated fiberglass and its deck is cored with balsa except in structural areas, where plywood is used. The hull-to-deck joint is a flange that's chemically bonded, mechanically fastened, glassed over, and covered with a two-piece gunwale guard.

Interior structural and cosmetic components include a molded fiberglass headliner and a textured fiberglass floor pan. All bulkheads are teak-veneered plywood and are tabbed to the hull. Any exposed portions of the hull are covered with a foam-backed fabric hull liner that has some insulation and noise-absorption properties. Where the sole is not textured fiberglass, it is teak and holly. All teak surfaces, veneer and solid trim, are treated with a hand-rubbed oil finish. Over the years, Tina's judicious oiling has yielded a warm, reddish patina.

The boat has 6,000 pounds of lead ballast bonded into the keel cavity and glassed over. The skeg-hung rudder is a sandwich of high-density foam within a fiberglass shell. All of the through-hulls are bronze with Zytel seacocks and a lightning protection system bonds all the metal components. Backing plates are used under all the deck hardware.

The engineering, execution, and components used in the O'Day 37 are above average for a boat built to the production standards of the day.

### Deck features

On the bow, the welded stainless-steel stemhead fitting has an integral anchor roller, which is a bit undersized. Just aft

**“The engineering, execution, and components used in the O'Day 37 are above average ...”**

of it, a pair of chocks lead to a single 10-inch open-throat cleat mounted amidships and just forward of the anchor locker.

A pair of flush-mounted deck prisms fitted in the foredeck just forward of the

cabin trunk direct light into the forward cabin. On *Windermere*, one of these prisms was replaced with a low-profile solar vent. On the forward end of the cabintop, the flush fiberglass forward hatch with a translucent polycarbonate



The center cockpit is reasonably comfortable with properly angled seatbacks, but without a bridge deck aft there is no place for the helmsman to sit directly behind the wheel.



The wide and uncluttered aft deck allows easy access to the stern-mounted swim ladder.

### Resources

[www.ihearttoday.com](http://www.ihearttoday.com)  
<http://oday.sailboatowners.com>





Despite the use of a molded fiberglass pan for the cabin sole and berth flats, there's a generous amount of teak trim in the saloon, at left. A somewhat unusual feature of the U-shaped galley, at right, is the two sinks, one shallow and one deep.

panel lets in more light. Between the forward hatch and the mast is the main-cabin hatch, and the forward companionway with its molded-in sea hood is aft of the mast. On each side of the cabin trunk, a pair of small opening portlights admit light and air into the forward accommodations and a pair of much larger opening portlights help ventilate the main cabin. Full-length teak handrails flank the cabintop.

In the cockpit, which is 6 feet long, the bridge deck forward forms part of a U-shaped seating arrangement. This configuration allows neither a dedicated seat for the helmsman nor a bridge deck to protect the aft companionway. However, the seating is properly sloped and, along with the 14-inch-high coamings, gives good support. Beneath the port and starboard cockpit seats are large (but not overly deep) lockers and, beneath them, the fiberglass potable water tanks. The aluminum fuel tank is inboard of the starboard water tank.

Water that enters the cockpit drains via a pair of 1½-inch scuppers.

The cockpit is deep and reasonably comfortable, and visibility from the helm is excellent. From the pedestal steering, with its 28-inch wheel, the helmsman can easily reach all the sheets. Fitting a fully enclosed Bimini over the entire cockpit could significantly increase the amount and versatility of the living space.

The forward companionway is offset to starboard and fitted with smoked-acrylic hatchboards. The aft companionway, which is offset to port, has a pair of solid-teak doors.

The aft cabintop is a bit cluttered with the sliding hatch and its guides, a pair of teak handrails, the mainsheet and winch, and an optional hatch over the aft head compartment. Two opening portlights are fitted on each side of the cabin trunk.

Aft of the cabin is a nicely sized and obstruction-free fantail or aft deck that

allows easy access to the centerline boarding/swim ladder. A pair of 10-inch open-throat mooring cleats are mounted outboard.

Double lifelines (single was standard equipment) connect the stainless-steel bow and stern pulpits. Deck surfaces have molded-in non-skid and a teak-capped toerail is a valuable safety feature.

## Belowdecks

The accommodation plan is straight-forward. In the forward cabin there's a V-berth with a removable insert, lockers, a vanity with a mirror and drawers, a little floor space for a changing area, and a surprising 6-foot 1-inch of headroom. More stowage is located beneath the berth and outboard and above it. A solid-teak folding privacy door closes off the cabin from the rest of the boat.

Aft and to port of this cabin is a rather small head compartment.



The navigation station, at left, is essentially a small hinged countertop with storage underneath. The defining feature of the O'Day 37 is its aft cabin, at right. It has its own entrance from the cockpit and contains an athwartships double berth and a private head compartment.

The vanity, sink, and a couple of handy storage lockers are all part of a fiberglass unit, but there is still a significant amount of teak trim. To protect this from water damage when showering, Dave and Tina installed a shower curtain on a track. Pressurized hot-and-cold water is a standard feature. To starboard of the compartment is a large hanging locker.

Another solid-teak folding door opens onto the saloon, which is quite conventional with its port and starboard opposing settee berths and centerline drop-leaf table. It has 6 feet 4 inches of headroom. With the seatbacks down, the settees measure

Aft of the port settee is the U-shaped galley, which houses a gimbaled two-burner alcohol stove with oven, a pair of individual stainless-steel sinks (one deep, one shallow) with pressurized hot-and-cold water, and a collection of bins, shelves, and a series of drawers for galleyware and dry-food storage. Not wanting to rely solely on the alcohol stove, Dave built in a microwave.

The galley counter spans the entire aft bulkhead and ends on the starboard side with a small aft-facing chart table. A portion of the counter is one of the companionway steps. Beneath the starboard end of the counter is the 6.3-cubic-foot icebox. Like most

the overall atmosphere by admitting light and air. Just as they did in the forward head, Dave and Tina added a curtain track and shower curtain. Dave also replaced the plastic-backed mirror that had warped and produced a "fun house" effect. The head's 15-gallon holding tank is on the starboard side, sandwiched between the hull and the liner.

### The rig

The O'Day 37 is a masthead sloop with a single set of airfoil spreaders. The keel-stepped mast is supported by three sets of shrouds (uppers and double lowers) and a single backstay. All halyards are sheaved internally and are made fast

## “Just two steps down from the cockpit is the aft cabin ...”

76 x 30 inches. Raising the seatbacks increases the settee width considerably and gives access to a novel storage area that's great for soft gear such as bedding and bulky clothing. Above both settees are shelves behind deep fiddles that incorporate handholds. More handholds are fitted to the overhead. The holding tank for the forward head is beneath the port settee along with a small storage area. Storage bins under the starboard settee lift out to reveal additional stowage beneath.

The centerline drop-leaf table surrounds the keel-stepped mast. It is supported forward and aft by stainless-steel handholds and has a pair of spirits lockers built in. Four large opening portlights plus an overhead hatch contribute light and fresh air.

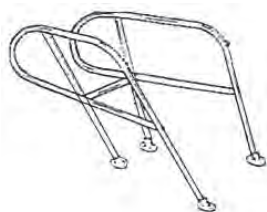
iceboxes of the era, this one could benefit from additional insulation, especially for cruising in warmer climates or if refrigeration is to be installed.

Just two steps down from the cockpit is the aft cabin and the defining feature of the O'Day 37. Under 6 feet of headroom it contains an athwart-ships double berth, stowage galore in the form of a hanging locker, shelves, bins, and drawers, and its own head. Six opening portlights, four in the cabin trunk and a pair in the transom, add light and cross-ventilation. The steering gear and some additional stowage are beneath the bunk.

While a little on the small side, the head provides all the necessary amenities in a self-contained fiberglass unit. An optional overhead hatch improves



The aft cabin has its own head with shower.



## White Water Marine Inc.

Bow Pulpits • Stern Rails • Ladders • Stanchions

**WE SPECIALIZE IN:**

*Replacement stanchions & bases that match your existing components*

*Bow Pulpits & Stern Rails . . . Most specs on file*

*Custom Amidship Boarding Ladders*

*Waterjet on site for custom stainless cutting*

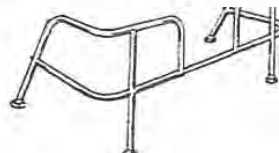
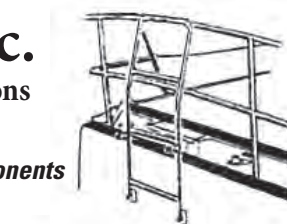
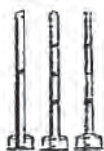
*Please check our website for measuring guides, etc.*

**White Water Marine Inc.**

3755 West Water Street, - Port Huron, MI 48060

Phone 810-987-4837 • Fax 810-966-0597 • [www.whitewatermarineinc.com](http://www.whitewatermarineinc.com)

**TOP QUALITY AT A REASONABLE PRICE**  
**O.E.M. Work Also Available**





at the base of the mast adjacent to a pair of Barlow #19 halyard winches. The mainsail, which came standard with two sets of reef points, is sheeted at the end of the boom to a triangular block and tackle (Crosby rig) mounted on the aft cabintop and controlled by another Barlow #19 winch. The headsail

“... the boat is reasonably close-winded and dry when going to weather.”

## O'Day 37 owner comments

One owner shared his experience with the O'Day 37.

“My wife and I have owned an O'Day 37, hull #209, since 1979. We have sailed this vessel as a couple and made several offshore crossings that included two Baja and mainland Mexico trips and two trans-Pacific voyages, the last one in 1991-93 all the way to New Zealand and back. We returned via the Southern Ocean to Tahiti, then to Hawaii, and from Hanalei Bay to Catalina Island in 21 days.”

—Gunther Haehn

sheets are led aft through turning blocks mounted on tracks located directly outboard of the cockpit and from there to Barlow #25 primaries.

The rigging on *Windermere* is near original with just a couple of exceptions. A self-tailing winch and a pair of rope clutches were mounted on the starboard aft edge of the main cabintop. The main halyard and the first reef were then led aft. Also, a boom vang (optional equipment) was installed.

## Under way

According to Dave, the boat's best point of sail is a beam reach. With that said, he added that starboard tack seemed better than port tack. He suspects it has something to do with balance and all the tankage on the starboard side. At about 10 knots of wind, the boat starts strutting her stuff. When the wind approaches

20 knots, Dave is reefing. Both Dave and Tina feel that the boat is reasonably close-winded and dry when going to weather. Neither of them enjoys downwind sailing. With a bit of wind, the boat tends to hobbyhorse some but it tracks well. The sail area/displacement ratio of 16.4 and the displacement/length ratio of 224 places the O'Day 37 in the category for which it was designed, a coastal cruiser, although it has been taken on offshore passages (see “O'Day 37 owner comments”).

For auxiliary power, the O'Day 37 has a 32-horsepower Universal M40 4-cylinder diesel. Dave has yet to encounter sea conditions that this engine couldn't push the boat through. In reverse gear, the boat exhibits severe prop walk to port. Access to the engine for maintenance is poor. Gaining access to the front of the engine requires

BEFORE YOU START NAVIGATING, IT IS BEST TO NAVIGATE OUR WEBSITE FIRST.

WWW.NAUTOS-USA.COM  
NAUTICA WEBSTORE NOW ONLINE

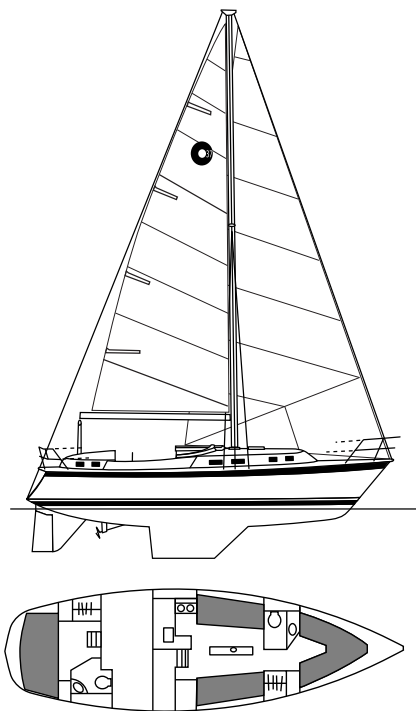


Up to 20% discount when entering NAUTICA WEBSTORE.  
Nautos is a brand of Sailboat hardware products.  
Best value for your money.

Contact us at [info@nautos-usa.com](mailto:info@nautos-usa.com) or go to [www.nautos-usa.com](http://www.nautos-usa.com)



removing the companionway stairs and a panel behind them and crawling over the boat's three batteries. Access to the aft end is better, via the steps and a panel in the aft cabin.



### O'Day 37

**Designer:** C. Raymond Hunt Associates

**LOA:** 37 feet 0 inches

**LWL:** 30 feet 4 inches

**Beam:** 11 feet 2 inches

**Draft:** 4 feet 9 inches

**Displacement:** 14,000 pounds

**Ballast:** 5,370 pounds

**Sail area:** 594 square feet

**Disp./LWL ratio:** 224

**Sail area/disp. ratio:** 16.4

### Things to check out

Not only Dave and Tina but also every O'Day owner I spoke with had one word of criticism: leaks. The flush-mounted forward hatch is the main offender, especially around the polycarbonate window where it's set into the frame. Other culprits are the deck prisms and the portlights. If rebedding them does not cure the problem, replacing them is the only solution.

Deck delamination, especially around the bow area, is a common malady. All areas around deck fittings should be checked for water ingress, either with a moisture meter or by sounding them out, or both.

When he installed the 120 VAC microwave, Dave discovered that the boat's existing AC circuitry was inadequate. He corrected the problem by isolating the port and starboard circuits.

### Conclusion

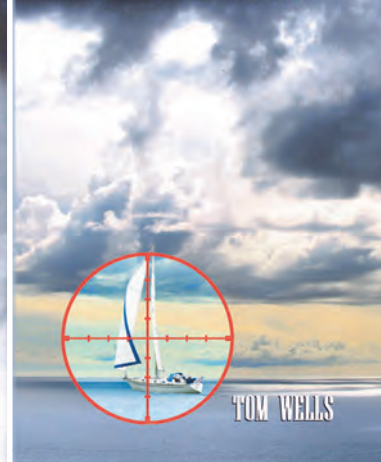
The O'Day 37 is an affordable coastal cruiser. Its center-cockpit configuration and accommodations make it great for living aboard and its design, construction, and basic components are above average for a production boat of its era. If that isn't enough, it sails pretty well too.

Expect to pay in the region of \$30,000 to \$45,000 for a late-model O'Day 37 in decent shape. *▲*

*Gregg Nestor, a contributing editor with Good Old Boat, has had a lifelong interest in all things aquatic. He and his wife, Joyce, are currently refitting, upgrading, and sailing a 1994 Caliber 35.*

## Introducing . . .

### SUPERIOR RUN



### A suspense novel written for sailors by sailor/author, Tom Wells.

*Paul Findlay is living his dream, sailing the Great Lakes aboard his beloved sailboat and writing about his voyages to pay the bills. When Paul receives a cryptic call for help from his old college roommate, Rich Perry, the dream quickly turns into a nightmare. A deadly game of cat-and-mouse across the greatest of the Great Lakes begins . . . and the cat has all the modern advantages.*

### About the Author

Author Tom Wells is an engineer, a long-time sailor, and a Contributing Editor and boat reviewer for *Good Old Boat* magazine.

He has a sequel in the works, featuring Paul Findlay and his sailboat in another nautical setting.

### What readers are saying -

This book is addicting. It practically reads itself . . . [*Superior Run*] could be the offspring of Tom Clancy meeting Sandra Brown on a Great Lakes cruise . . . Tom Wells' knowledge and passion of sailing and the Great Lakes makes this a richer read, enough to whet your interest in one of the most beautiful spots on Earth. I will be awaiting the sequel(s).

— Dave, NY

An imaginative plot and excellent narrative pull the reader in. — John, RI

*Superior Run* is a true sailor's novel.

— Karen, OR

### Available through:

Amazon, Kindle Reader,  
Barnes & Noble, and Tower Books.

## MARINE DIESEL DIRECT

**Universal**  
DIESEL MARINE ENGINES

**WESTERBEKE**  
Engines and Generators

**YANMAR**  
marine

**VOLVO PENTA**

- More than 200,000 parts online
- Easy, secure online shopping
- Online parts manuals
- Now featuring hard to find Atomic 4 parts



Phone: 616-820-0022

[www.marinedieseldirect.com](http://www.marinedieseldirect.com)






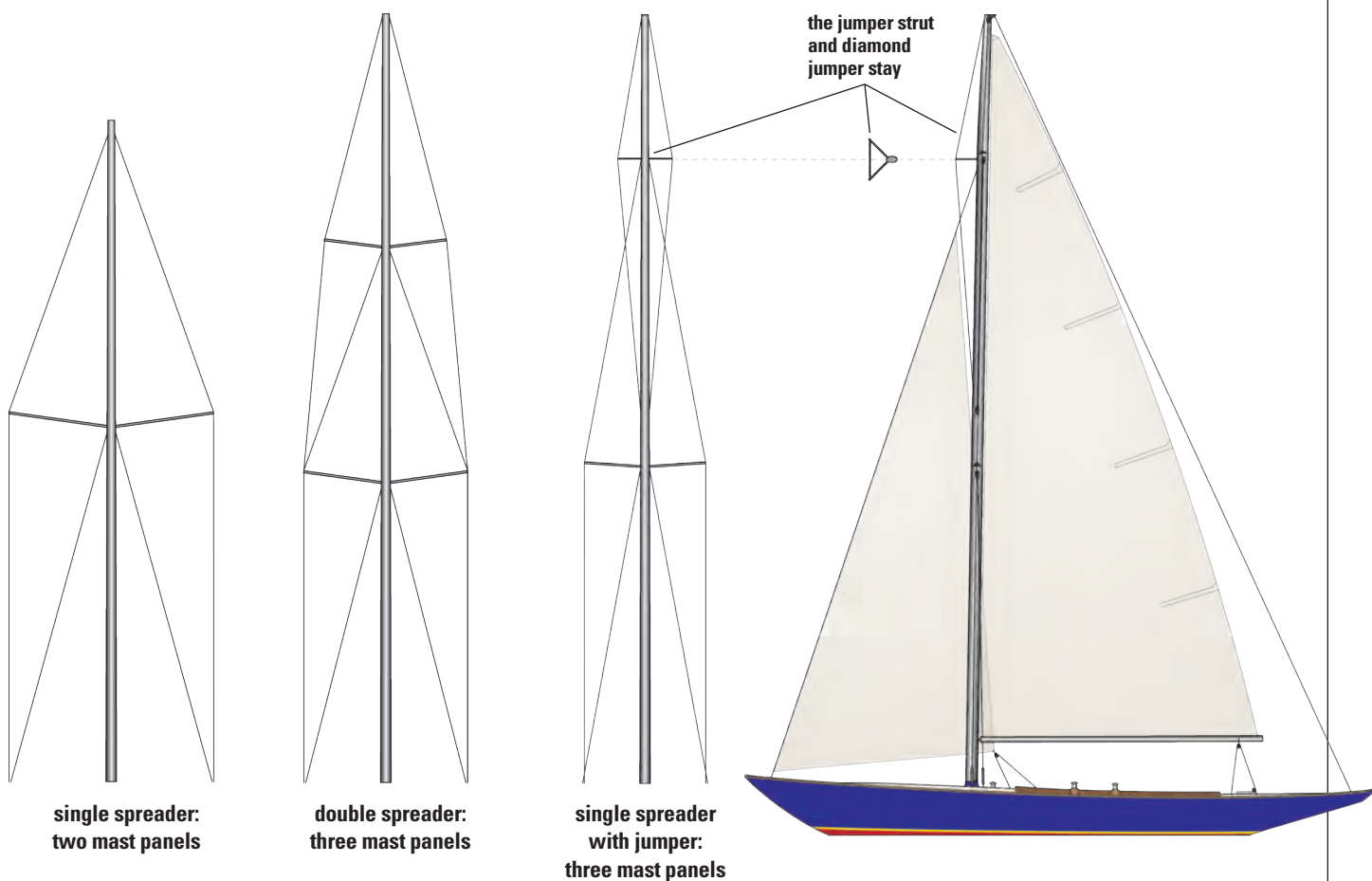
a fractionally rigged mast. Viewed from forward or aft, they form a diamond shape and are held forward and athwartships by a triangular spreader, called a jumper strut, fitted just above the headstay attachment point. The diamond stays lead from just below the masthead, over the jumper strut, and back to the mast just above the upper spreaders.

Diamond stays are sometimes seen supporting the upper panels of the masts on older masthead rigs. In this application they are in line with the shrouds so as not to interfere with the headstay and headsail. Few sailboat rigs are built this way today.

Genoas can brush against the spreaders when trimmed close or when tacking, and the mainsail lies on them when it is eased well out. A smooth plastic (usually vinyl) spreader boot fitted at the outer end of the spreader will protect the sails from chafe damage that would arise from their rubbing against the end of the spreader or the seizing wire that holds the shroud in place. The spreader boot cannot be made completely watertight and water that gets inside it can lead to corrosion. Removing the spreader boot and inspecting the shroud should be part of a regular rigging check.

Determining the location and the size of the spreaders, as well as the size of the mast section and shroud diameter, is not something a do-it-yourselfer should attempt. Leave that to a naval architect. Any replacement shroud should be made of the same material as specified in the boat's original design. If type-316 stainless-steel wire rope is used to replace a type-304 stainless-steel shroud, an upgrade in the diameter of the cable and associated fittings might be required because, although type 316 has better resistance to tropical weather, it does not have as high a breaking strength as type 304. Again, a professional rigger or a naval architect should be consulted as to whether or not that might be necessary. 

*Don Launer, a Good Old Boat contributing editor, built his two-masted schooner, Delphinus, from a bare hull. He has held a USCG captain's license for more than 38 years and has written five books. His 101 articles through November 2011 are now available for downloading as a collection from the Good Old Boat download website, <[www.audioseastories.com](http://www.audioseastories.com)>. Look under Archive eXtractions.*



The spreaders divide the mast into panels and each panel is supported by a set of shrouds.



# Rebedding chainplates

*Damp skivvies provoke an impromptu pit stop*

by Fred Bagley



We put up with many inconveniences when sailing because we like to go where cell phones don't ring. But wet underwear? That forced our hands.

We sail a 21-year-old Caliber and have never had structural issues. Sails got old, engines needed overhauling, things like that . . . but water getting into the boat? Oh sure, there had been clues: the rumpled book that lay against one of the chainplates over the winter (condensation, right?) and the time we found water on a shelf after a hard sail (maybe just a porthole not fully shut?).

Then a surveyor put his moisture meter on the deck while the boat was still in her cradle. The starboard deck between our upper and aft lower chainplates was damp (the underwear lives on a starboard shelf), but he said, "The deck is solid so just rebed 'em. Piece of cake." He gave a final thump of his hammer and clambered down the ladder.

One thing we *are* good at is procrastinating so, assuring ourselves we would get the chainplates tended to soon, we set sail for the summer. Then the underwear got wet. We had stuck our heads in the sand long enough. It was time to go to work.

**Extracting the chainplate revealed an oval hole and little caulking, above. Fred used a Dremel tool to grind the old caulk out of the holes, at right.**

We needed just three things: supplies, a dock, and expertise. We had a tube of caulk on board. There were no docks to be found, but we cruise Lake Huron's North Channel so there were plenty of protected anchorages. Expertise was the biggest problem. We had never tackled a job like this. Ever.

## Extraction and inspection

Our shrouds attach to ½-inch square U-bolts with shoulders that compress a plate to the deck. The U-bolts pass through the deck and then through heavy L-brackets that are bolted to bulkheads.

On a flat-calm day we tackled the starboard upper shroud first. After securing our main and spinnaker halyards to the starboard toerail to support the mast, we lined the toerail with cockpit cushions to keep all dropped items on the boat. We marked

the number of turns on the turnbuckle and then loosened it. After removing the nuts under the deck, we levered out the U-bolt. It came out hard. We decided that was a good sign.

While there was residual caulk in the holes through the deck, there was none under the deck plate, which in fact had a smidge of dirt and rust under it. After digging and grinding out the old caulk (never set sail without a Dremel tool!), we discovered the wood of the deck core was rock solid. (Thank you, Mr. Surveyor.) We also discovered that the original deck holes had been over-drilled by ⅜ inch and the aft hole was significantly oval in shape. We were puzzled about what might have caused that. Sloppy workmanship by the builder? Crummy repair job by a previous owner? The U-bolt working itself back and forth within





A generous application of tape ensured epoxy went only where it was wanted, at left. Using what was on hand, Fred “waxed” ½-inch bolts so the epoxy would not stick to them, at right.



the over-drilled hole? We decided the oval-shaped hole was a bad sign.

So, we wondered, do we just put in some sealant and bolt her back together or go for it?

We went for it.

### A proper repair

Fortunately, we had some hardware-store fast-set epoxy and plenty of painters tape. Our goal was to create an epoxy cylinder from the outer skin of the deck to the inner skin. We were hopeful this would prevent any future leaks from penetrating the deck core and at most only soak underwear inside the boat. In the process, we would convert the oval deck hole to circular. We assumed there were better ideas out there, but we were on our own.

We blocked a piece of wood enclosed in a plastic bag under the L-bracket inside (epoxy won't stick to plastic bags) and taped around the deck holes with the painters tape (another thing we are good at is spilling stuff). We prepped the holes with acetone, mixed the epoxy,

and poured it into the holes, filling each hole about halfway.

To be sure our new holes would align with the L-bracket beneath, we inserted ½-inch-diameter bolts through the epoxy-filled holes, pushing



each one into a hole in the L-bracket.

(We first coated the bolts with lip balm to keep the epoxy from gluing them there forever.) The bolts also served as plungers, pushing the epoxy into all the recesses of the oval holes and the core. We topped up the holes with a tad more epoxy, waited several minutes until the epoxy was firm but not solid, then very slowly rotated the bolts counter-clockwise until they were out. Then we opened a bottle of chardonnay.

The next day, we ground off the excess epoxy, removed the painters tape, and touched up the holes with a drill. We decided to bevel the upper edges of the holes a tad to allow the sealant to form a good barrier around the U-bolts. Then we retaped the deck around the outline of the deck plate and applied the caulk. To our astonishment, the U-bolt went back into place perfectly. We gratefully put on the washers and nuts and tightened everything. Removing the tape removed most of the excess caulking and a little acetone cleaned up the rest. Then we finished the bottle of chardonnay.



A wooden block wrapped in plastic and wedged against the interior chainplate bracket, above, stemmed epoxy drips. After filling the holes with epoxy, Fred threaded the bolts into the chainplate bracket, at left. Bolts withdrawn and epoxy set, Fred “countersunk” the holes, at right.







### Mission accomplished

In turn, we finished the other two starboard and all three port chainplates. Every chainplate had at least one deck hole that was significantly oval; one huge oval hole had been filled with an enormous amount of caulking. There was no evidence the oval holes themselves had been ever been addressed.

Around the starboard aft plate, the one over the underwear, we found some soft wood in the core. (What's with that, Mr. Surveyor?) We cleaned out the soft wood with a variety of tools before letting that area dry overnight and doing the epoxy the next day. We planned to drill holes in the deck from underneath and let it dry completely over the winter. That plan collapsed when the job of repairing the headliner looked too formidable.

We invited the surveyor with the moisture meter to come back in the spring to see where we stood. The highest readings in the area around the chainplates were 18 to 19 percent

and the surveyor said it sounded good when he tapped on it. We did find some slightly higher readings just aft of the chainlates where the pump-out and water fill penetrate the deck but, overall, we were pretty happy.

Our project was strung out over several days, all at anchor, and nary a

single item was lost overboard. Taping the deck minimized any unsightly residue of either epoxy or sealant. The lip-balm-covered bolts inserted into the wet epoxy guaranteed accurate access for the U-bolts to the L-brackets inside. The total cost of the repair was \$19 and a bottle of chardonnay.

And yes, the underwear stayed dry the rest of the summer. 

*Fred Bagley and his wife, Jennifer, live in Vermont but sail the upper Great Lakes out of Penetanguishene, Ontario, in southern Georgian Bay. They primarily cruise Georgian Bay, the North Channel, and Lake Superior on their Caliber 38, Catamount.*



**Fred used the bolts to locate the deck plate while he taped around it prior to caulking, at left above. With the caulk applied under the plate, Fred tapped the U-bolt into the holes, at right above. When everything was finally reassembled, at left, it was time to break out the wine.**



A REVOLUTION  
IN ANCHOR  
TECHNOLOGY

[www.MantusAnchors.com](http://www.MantusAnchors.com)

# Dorade box covers

## Varnished teak goes under wraps

by Judy Odenheimer

Our 1983 Tayana 37 cutter, *Cetacean*, has a profusion of glorious teak brightwork on deck. The gleaming varnish is a pleasure to look at but a major commitment to maintain. Our experience has been that we can mitigate the Sisyphean task of keeping brightwork bright by protecting it with canvas covers. *Cetacean* came with custom Sunbrella canvas covers for her caprails and handrails. The covers — when we use them — have been helpful in shielding the varnish from physical damage and exposure to ultraviolet light.

*Cetacean* has four teak Dorade boxes, each with a metal cowl that screws into into a bronze fitting attached to the box. The cowls pull fresh air into the cabin and the boxes help keep moisture out of the cabin. They are also decorative. After my husband, Ron, laboriously stripped, sanded, and applied two coats of penetrating epoxy and seven coats of Epifanes varnish to them, the boxes looked beautiful. The varnish, though,

would need unending maintenance. I decided his hard work should be protected: those gleaming boxes would get their own custom covers!

### The plan

I figured the new covers would fasten to the teak boxes with Dot snap-fastener sets (the studs would screw into the wood; button and socket pieces would be fixed to the Sunbrella). I would fashion a string-closed collar (similar to a sweatshirt closure) for the cover's cowl opening. The string would be secured with a plastic two-cord spring-lock fastener. I would also make a drain hole and finish it with triple zigzag stitching to seal the edges.

### Making the pattern

Creating the pattern for the covers posed some challenges as the four sides of each box have slightly different dimensions and angles. The shapes of the boxes on the boat's starboard side mirrored those on the port side but the drain holes were shaped and

located differently in each box. To deal with these differences, I made a single, slightly oversized, pattern and corrected for each box as I went along.

I unscrewed the starboard aft box from the boat and removed its metal cowl. Using a marking pen, I traced the four sides and the top of the box onto tissue paper and used these tracings to create my pattern pieces. The resulting pattern pieces had a slightly larger outline on all sides that allowed me to adjust them for the size differences between the boxes. The traced outlines served as the lines for stitching and I added a 5/8-inch seam allowance outside the stitch lines. I waited to trace and cut out the drain and cowl openings until after I sewed together the cover sides and top.

### Fitting the pattern

I pinned the tissue pattern pieces together and fitted them to the starboard aft Dorade box. I then tried the assembled pattern on each of the other three boxes, adjusting the pieces as needed.

## Lessons learned

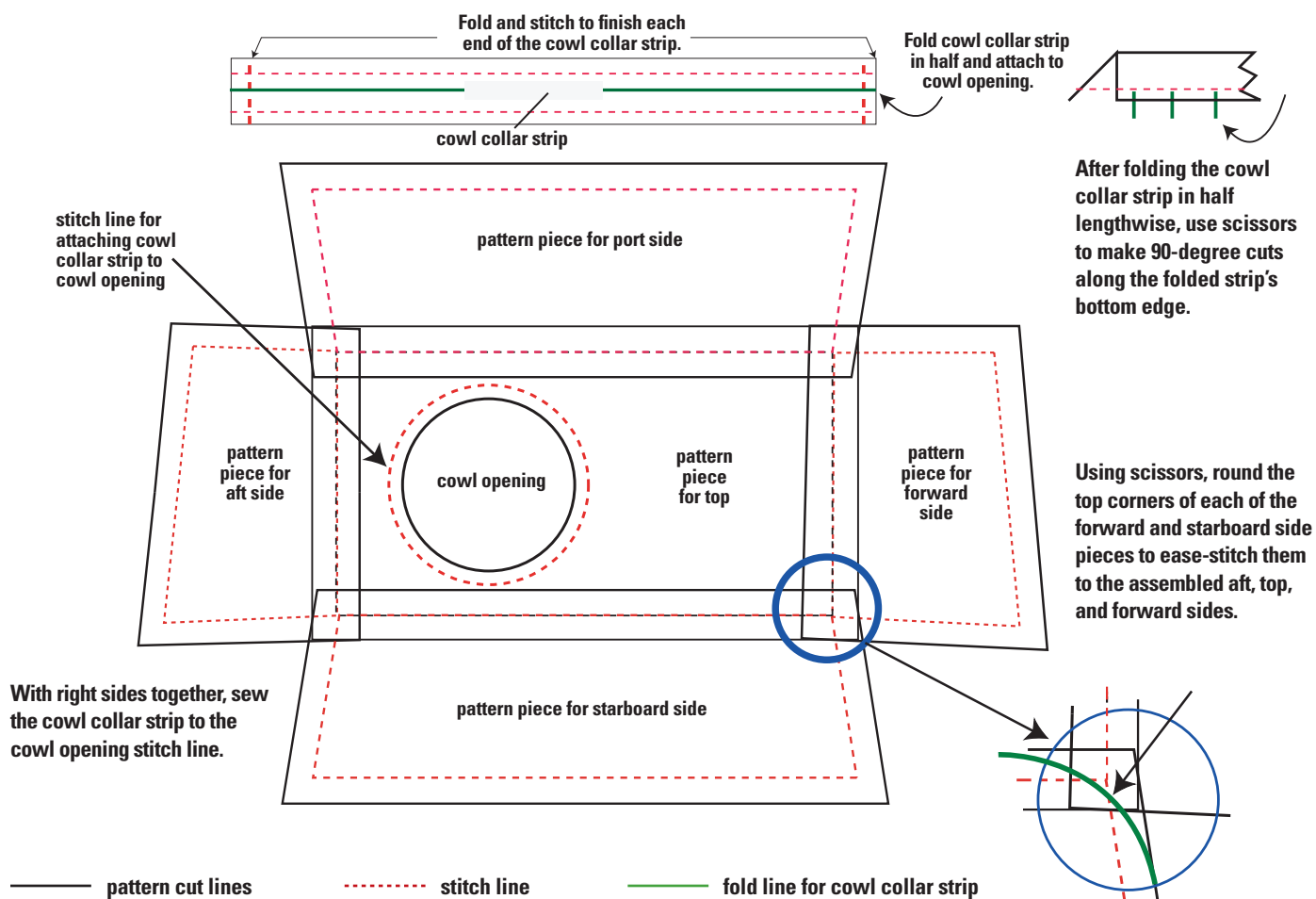
- Keep sewing projects as simple as possible.
- Check and recheck measurements and fit.
- Sunbrella is too expensive to waste. Make a prototype of the project using an inexpensive remnant or old bed-sheet fabric.
- For small projects, tissue paper is an ideal pattern material. It's inexpensive, somewhat transparent, yields easily to pinning, and comes in good-sized sheets. It can be purchased in craft shops, grocery stores, and fabric shops.
- Sunbrella fabric lasts for many years but does require some care. For more information, go to the Sunbrella website (see page 22).



Judy decided to protect *Cetacean*'s Dorade boxes, which Ron had freshly varnished, at left, by making Sunbrella covers for them. She started by unscrewing the starboard aft box and drawing around it for a pattern, at right.



## Making your own



Things got a bit tricky when I moved to the boxes on the port side because the pattern pieces needed to be reversed there. But the reversals fit just as well.

### Prototype cover

Sunbrella is wonderful fabric but it costs a bundle, so I didn't want to use it on something I might throw away. At my local fabric store I bought a remnant of a fabric that mimicked the look and feel of canvas and made a prototype cover out of that. It gave me a template to follow when I sewed the Sunbrella covers but cost less than \$2.

### Making the covers

Starting with the cover for the starboard aft box, I pinned each tissue pattern piece to the Sunbrella fabric

and cut out the top piece and side pieces for each Dorade box. I recommend using pinking shears to cut out Sunbrella to help keep the edges from fraying. (*Note: Cutting with a hot blade will melt the edges and prevent fraying.* —Eds.)

Using tailor's chalk, I drew stitch lines  $\frac{1}{8}$  inch in from the seam allowance cut line on each Sunbrella piece to guide the sewing assembly. I pinned the pieces together and adjusted them, double-checking the fit before beginning to sew.

Sewing the pieces together required some persuasion. I first sewed the forward piece and the aft piece to the top piece. Then, using scissors, I rounded the top corners of the port and starboard side pieces and began sewing everything in place. Rounding the corners eased the bulk of the forward and aft pieces around the

**With its cover in place, the Dorade box is ready to face low-latitude sunshine.**



### Sources

Sunbrella: [www.sunbrella.com](http://www.sunbrella.com)  
 Perfect Fit: [www.perfectfit.com](http://www.perfectfit.com)  
 Sailrite: [www.sailrite.com](http://www.sailrite.com)

corner curve of each side piece as I sewed. This reduced bunching and resulted in a nice fit for all the top corners.

I marked the box hem with tailor's chalk, then rolled and pressed the bottom edge of the cover using a cold iron. Rolling the hem buries the exposed cut edges. On the right side, I topstitched about an inch from the cover's bottom edge and then again  $\frac{1}{8}$  inch above the first stitching. The double topstitching reinforced the bottom edge and gave the cover a more finished appearance.


### Cowl collar and drain hole

After assembling each cover, I unscrewed its Dorade box from the boat and removed the cowl. I placed the cover over the box, then turned the box over and traced the cowl opening and drain hole onto the fabric with tailor's chalk. I cut out the opening with the pinking shears.

The pattern for the cowl collar started as a 4 x 12-inch strip, but I cut the fabric an inch longer to give me material to fold in and finish the collar openings. With the collar strip open and flat on my worktable, I made a  $\frac{1}{2}$ -inch fold on the left and right sides. After folding in the ends, I topstitched each end to make finished openings for the drawstring. I then folded the collar fabric in half lengthwise and used the cold iron to crease the Sunbrella.

The next step was to attach the cowl collar to the cover. To ease the collar strip around the circular cowl opening in the main cover while sewing, I made small ( $\frac{1}{8}$  inch) 90-degree cuts every  $\frac{1}{2}$  inch in the creased collar strip's bottom edge. Putting the right sides of the folded collar and the cowl opening together, I attached everything with my sewing machine.

After the collar was attached to the main box cover, I topstitched  $\frac{1}{8}$  inch away from the top edge and added topstitching to the bottom edge. The top-edge stitching formed a tube for the cowl collar's drawstring. I used a safety pin to guide a length of cord through one collar opening and out the other. I sealed both ends of the drawstring with a flame. I then drew the two line ends through a plastic two-cord spring-lock fastener, knotted them together, and pulled them through the fastener to tighten the cover around the neck of the cowl.

I folded over and then finished the edge of each drain hole with a zigzag stitch. I zigzag topstitched over each edge three times to seal it in place. 



**The cord lock on the drawstring holds the collar snugly around the Dorade vent.**

*A too-short 2005 Sea of Cortez cruising adventure motivated Judy and her husband, photographer Ron Odenheimer, to prepare their Tayana 37 cutter, Cetacean, for a three-to-five-year voyage beginning July 2012. They left Portland, Oregon, crossed the Columbia Bar, and headed toward San Francisco Bay. From there the voyage will continue down the West Coast to Mexico, Central America, and beyond. Keep in touch at [www.sailcetacean.com](http://www.sailcetacean.com).*

## Supplies and tools



**A**nyone who regularly does sewing projects will have the basic items needed. Listed below are some specific to the Dorade box covers.

### Supplies

- Sunbrella
- V-92 polyester UV sewing thread
- 135 x 17 #20 sewing needles
- 16 sets of Dot durable deep studs
- 16 sets of Dot snap-fastener sockets
- 16 sets of Dot durable button covers
- 16 #8 x  $1\frac{1}{2}$ -inch 6hd chrome-plated screws
- 4 plastic two-cord spring-lock fasteners

We purchased most of the above supplies from Perfect Fit or Sailrite (see "Sources," on facing page).

The following materials are available at crafts or fabric stores:

- tissue wrapping paper to make patterns
- remnant fabric for a prototype cover
- $\frac{3}{64}$ -inch-diameter white nylon Venetian blind cord

### Tools

- Heavy-duty sewing machine
- Scissors
- Pinking shears (or hot knife) for cutting Sunbrella
- Snap-fastener tool
- Straight pins (for fastening pattern pieces)
- Measuring tape
- Permanent marking pen
- Tailor's chalk
- Small safety pin
- Screwdriver
- Household iron (used cold) or other flat heavy object to crease Sunbrella



# Capri 25

***A fast club racer  
that accommodates  
four adults***

by Fred Bagley

Vermont's Lake Memphremagog provides a verdant background for *Windshadow*, a Capri 25. Her owners, Rob and Bonnie Geisler, below, restored her (and her color) from a "largely ignored" condition.

**R**ob Geisler needed a new sailboat. Not a new boat as in brand-new, but new as in bigger. He had graduated from a 13-foot Styrofoam tub to a 16-foot fiberglass daysailer and now it was time to move up again. Maybe a 22-footer? There are lots of choices in that range and for where he sails it seemed a good size.

Then a friend told him about a lightly used and largely ignored 1984 Capri 25 in his price range. When Rob first looked at it he wasn't too sure: mold inside, pale pink outside, and mounds of rotten leaves in the cockpit. But Rob is a retired aerospace engineer and private pilot; he is not easily daunted and loves a good project. In the fall of 2009, the deal was made, the boat delivered, and a love affair began.

Rob and his wife, Bonnie, live in northern Vermont and sail on Lake Memphremagog, a stunning 30-mile-long lake bounded by towering hills and straddling the Vermont/Quebec border. There is an active racing scene

in Newport, Vermont, at the southern end of the lake where Rob could hone his sailing skills and get lots of advice. Rob also had a workshop and the skills to carry out the anticipated boat projects.

Rob spent the winter reading Don Casey's *This Old Boat* and was already a subscriber to *Good Old Boat*. *Windshadow* was launched in the spring of 2010, not pretty necessarily, but sound and fast and full of possibilities.

## Design

Catalina Yachts introduced the Capri line of sailboats in 1972. Frank Butler, the company's founder, wanted to build boats geared to racers but still suitable for cruising overnight or for a long weekend. Ultimately, Catalina built Capris from 8 to 30 feet, but the most popular were the 25s. Over 300 were made from 1979 to 1989.

The Capri 25 is a relatively light-displacement racer/cruiser with a displacement/length ratio of 187, which means there is not a lot of volume below the waterline and little wetted surface area to cause drag. Combined with a generous sailplan that gives a



sail area/displacement ratio of 21.5, the boat is fast. There's not a lot of lateral surface area to the keel either. The spade rudder is far aft for control. Generous beam of 9 feet 2 inches decreases rapidly at the bow and stern. The tradeoff for speed is poor tracking — the helm requires constant attention.

## Construction

Throughout the hull and deck, Catalina used a Dutch product called Coremat, a non-woven polyester fabric that contains microspheres and, when impregnated with resin, bulks up and stiffens the laminate. It holds up well, keeps the overall weight down, and eliminates soft spots in the deck and blistering in the hull. In the area of the

## Resources

[www.catalina-capri-25s.org](http://www.catalina-capri-25s.org)  
[www.wyc.org/c25/TheFleet.aspx](http://www.wyc.org/c25/TheFleet.aspx)

cabin sole where the keel is attached, ¾-inch plywood was installed between the hull and hull liner for rigidity. The keel is a molded fiberglass shell containing 900 pounds of lead. It is fitted into a recess in the hull and then bolted in place. The mast is stepped on deck with a compression post beneath.

The deck is secured to the hull every 4 inches with stainless-steel bolts and that junction is protected with a screwed-in rubrail.

After two failed attempts to restore *Windshadow's* hull from its faded pink to its original factory red, Rob sanded it down, removed a few tiny blisters, and painted it Rochelle Red from the Interlux Perfection line, a two-part polyurethane, using the roll-and-tip technique. The result is stunning.

## Rig

The masthead rig has upper shrouds, double lowers, and a split backstay. It carries a lot of canvas; the foretriangle is more than 150 square feet and the

mainsail 125 square feet. Rob worked with Bill Fastiggi at Vermont Sailing Partners to design a new mainsail with a fuller roach (to take advantage of PHRF rules) as well as a new 155 percent roller-furling headsail, totaling more than 300 square feet of power. All halyards (main, two jibs, and spinnaker) lead to the cockpit. Single-line reefing with two sets of reefing lines is simplified by in-boom blocks. The boat also came with a boom vang, outhaul, and adjustable backstay. Every line, halyard, and sheet needed to handle this boat is within easy reach of the helmsman.

## Deck

Catalina built plenty of safety features into the boat. Teak handrails run the length of the coachroof and single life-lines lead from a generous bow pulpit all the way to the solidly built stern



pulpit. The chainplates are well inboard, making access to the forward deck easy. The non-skid on *Windshadow* has held up nicely but it had faded a lot, so Rob painted it with Interlux Brightside. The perforated toerail drains water well and provides attachment points for snatch blocks for the spinnaker sheets. Rob replaced the old cracked boarding plates on the sidedecks with new teak ones from his wood shop.

Lots of evidence on deck points to the Capri 25's racing pedigree,

**The Capri 25 has at least two headsail tracks, and some versions have three, which is problematical for boats with furling genoas, below left. The forward hatch ventilates the V-berth, at right above, and no doubt saw some traffic in headsails before roller furling was fitted.**



# Comments from Capri 25 owners

*Here's what some owners and former owners have to say about the Capri 25.*

"They've held up surprisingly well to the rigors of lake-bound one-design racing. The boat is still relatively fast for a dated design that rates about the same PHRF as a J/24. It leaks like a sieve at the windows (they all do) as there's significant hull flex. Our sails are pretty unforgiving aramids and running rigging is low-stretch also, which puts quite a bit of pressure on a relatively lightly built boat. We lost a mast a few years ago as have about 20 percent of the fleet, mostly spreader failure. Hulls are softening up and some have some keel flex."

—Lew Sacks

"I have owned a Capri 25 for two-plus years now.

"Pros: Nice deck layout, comfortable; performs well (racing) in light-to-medium conditions; masthead spinnaker in light conditions; stable in light conditions; lots of interior volume; deck-stepped mast, fewer leaks; looks nice.

"Cons: Easily overpowered in heavy conditions without crew hiking out; no true bilge or stringer structure, just the hull and interior liner; keel attachment is not as rigid as it should be; keel stalls at high angles and at lower speeds, will not point with a J/24; large foretriangle makes tacking #1

genoa challenging; ports leak; transom needs to be reinforced to hold engine bracket without excessive flexing."

—Pete Meeh

"I have owned three Capri 25s over a period of 20 years. One of the best all-around boats of that size that can also weekend with a couple and two kids. With a #2 up it is an easy boat to singlehand, even in a blow. I have not seen any signs of deck core damage or hull blistering on any I have owned or looked at. The windows tend to leak, but I replaced mine with one piece of Lexan that

**continued on page 27**



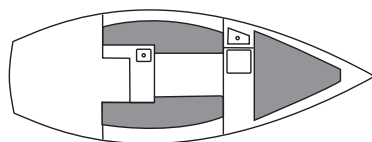
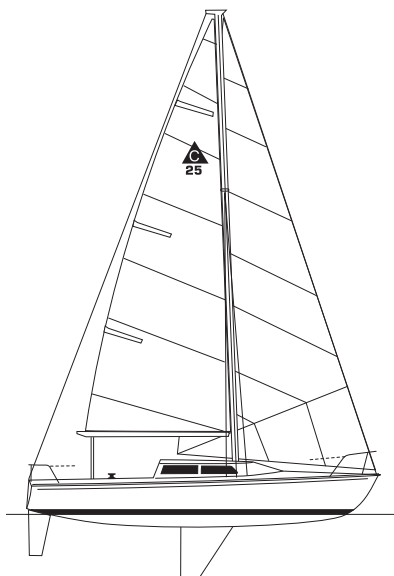


Although the Capri 25 does not have standing headroom, the 9-foot 2-inch beam makes for a spacious saloon, at left. The compression post for the mast provides a sturdy support for a small table in the saloon, at right, and a curtain allows some privacy between the saloon and the V-berth.

the absence of an anchor locker, for instance. As the boat was designed for hanked-on headsails, early models had three separate headsail sheet-lead tracks: a short one well forward near the chainplates, a longer one amidships, and a third molded into the cockpit coaming. Later models like *Windshadow* have just two tracks. This requires the jibsheet car to be moved from track to track when sails are changed, an issue not totally resolved with a roller-furling headsail. Genoa winches are mounted on the cockpit coaming and halyard winches are on the cabintop; the original winches are not self-tailing. Numerous fairleads and blocks adorn the deck, some original and some placed by previous owners to enable them to use performance-enhancing sail trim techniques when the boat was being raced. The whisker pole is stored on the foredeck.

## Cockpit

This boat has one huge cockpit for a 25-footer. The seats are a full 8 feet long and, while the seatbacks are low, an NBA player could easily stretch out for a nap. The traveler runs athwartships mid-cockpit, but doesn't interfere with the seating, especially since Bonnie had thick new cushions made to order. The tiller attaches to the rudder stock through the aft cockpit floor (a tiller pilot has been added), and there are two generous scuppers nearby. The bridge deck is low and unobtrusive. Huge lockers are under both cockpit seats. Rob keeps his outboard gas tank in one and ground tackle in the other. He plans to install shelves and hooks to make the space more efficient.



## Capri 25

**Designer:** Frank Butler  
**LOA:** 24 feet 7 inches  
**LWL:** 19 feet 2 inches  
**Beam:** 9 feet 2 inches  
**Draft:** 4 feet 2 inches  
**Displacement:** 2,950 pounds  
**Ballast:** 900 pounds  
**Sail area:** 276 square feet  
**Disp./LWL ratio:** 187  
**Sail area/Disp. ratio:** 21.5

Catalina specifies a 4-horsepower transom-mounted outboard motor, but Rob has had no trouble using a 9.9-horsepower long-shaft motor.

## Accommodations

Racer/cruisers like the Capri 25 don't offer a lot down below. Nonetheless, Rob and Bonnie have enhanced *Windshadow's* interior considerably with a symphony of color. The teak-and-holly sole has been sanded and sealed with polyurethane varnish. New bright blue cushions are easy on the eyes. The hull and overhead look like they were painted yesterday, though they are the original factory fiberglass liner just scrubbed clean by Bonnie. Through-bolts for all cabintop and deck fittings are easily accessible, so rebedding them is a breeze. Many of the through-deck fittings leaked when Rob bought the boat; he removed them all and, following the advice of *Good Old Boat's* technical editor, Jerry Powlas, used silicone to rebed them.

There is a cubby for a large ice chest under the single companionway step and a sink just to port with a 7-gallon freshwater tank. Two bilge pumps, one electric and one manual, handle water in the shallow bilge, which is under the cockpit. There is also enough space under the cockpit for a 12-volt battery to power house lights and running lights. The previous owner had installed a built-in gas tank for the outboard inside the cabin, right next to the battery. Rob knew that was an unsafe location (as well as an odor problem) so the tank came out and was replaced by a 6-gallon tank in the well-ventilated port cockpit locker.

The compression post is finished in teak, as are the partial bulkheads separating the main and forward cabins. The V-berth is a full 8 feet long. Midships to port is a portable toilet with a privacy curtain. The two settees extend under the cockpit and are also 8 feet in length, so four adults can sleep below. Storage abounds under the forward berth and both settees. A lovely teak table fits on the bulkhead below or it can be installed in the cockpit. A gimbaled one-burner stove clips to the aft bulkhead. Headroom is just 4 feet but a 6-footer can stand in the open companionway under the dodger.

### Under way

There was no missing *Windshadow* as my wife, Jennifer, and I walked down the Newport docks to meet Rob and Bonnie. The glistening red hull may be a disadvantage if they're over the starting line early in a race but is a big help in finding them in a crowded marina. The gleaming topsides and well-finished brightwork were clearly evident.

The winds were moderate and fluky on the day we took her out on Lake Memphremagog but this boat can move. As the puffs caught us, *Windshadow* heeled and accelerated smartly up to her hull speed of nearly 6 knots (Rob's GPS has recorded speed over ground of nearly 9 knots on occasion). The mast-top apparent-wind indicator is set at 60 degrees and Rob could easily tack the boat through 60 degrees of apparent wind. Rarely does a boat turn in its own length but this one does, losing hardly any speed in a tack. Falling off in a puff positively launched *Windshadow* forward, and jibing was easy with all the sheets so readily accessible.

Rob replaced the original traveler with a Harken Windward Sheeting Car, which automatically releases the leeward cleat when the windward cleat is tensioned. This is a neat design that makes the mainsheet much more accessible and eliminates the need to scramble to leeward if the boat rounds up too much in a puff. Bonnie has to move the genoa lead from the track on the coaming to the track farther forward when they furl the headsail, but she makes it look effortless. The extra roach on the main tickles the adjustable backstay a bit, but after a summer of sailing the fabric showed no ill effects.

At two-thirds throttle, the 9.9-horsepower outboard powered us back to the dock in flat water at almost 6 knots.

### Conclusion

The Capri 25 seems like a perfect daysailer or small club racer. Most fleets rate 171 to 174 PHRF, about the same as the J/24. They can be found online for \$6,000 to \$10,000 depending on condition and accessories. The only concerns expressed in online forums are some issues at the leading edge of the keel and water infiltration through the deck-fitting holes. Other negative remarks may be found in the sidebar,

"Comments from Capri 25 Owners," on page 25 and below. As is characteristic with so many boats built by Catalina, an active owners association maintains an extensive website.

The Capri 25 has "opportunity" written all over it. One could easily imagine the lockers filled with groceries, sleeping bags, and other gear for longer cruises.

As Rob and Bonnie have shown with *Windshadow*, this boat can be made not only to perform but also to turn heads in any anchorage. *▲*

*Fred Bagley's bio is on page 20.*



The compact galley is under the bridge deck, at left, and the saloon settees extend under the cockpit. A portable toilet fits under a fold-down lid at the aft end of the V-berth, at right.

### Comments from Capri 25 owners, continued from page 25

covered both holes. Every three years I re-bed it. I have replaced the main bulkheads as they were damaged from chainplate leaks.

"A hard grounding will damage the keel socket. The quick and best fix is to cut out the inner liner with a fine rotary blade (makes it easy to put back) and remove the damaged glass and the foam that Catalina used between the liner and the hull.

"The stainless-steel rudder stock will wear the rudder tube (Mylar

sheet was used as a bushing) and this will cause a sloppy feel." —Alan St. Hill

"I earned my keelboat rating on the Capri; sweet boat." —Bill Waldron

"After 31 years I am still happy with the purchase of a Capri 25. The boat sails well and has been a very competitive racer as well as a comfortable daysailer. A 6-horsepower outboard moves the boat at 5 knots.

"The only complaint I have had is that the cabin windows leaked after I had the boat about a year."

—Charlie Boucher

"It's lively, responding well to the helm and weight placement. We ran it with four (usually) to five guys. The boat could take a puff even though it only weighs about 2,400 pounds. It was easy to jibe, accelerated strongly out of a tack, and was a well-behaved boat."

—Pat Nowak



# Havasu Pocket

*A few sailors got together —  
and took over the town*

by Karen Larson

**W**hat do you call a sailing event at which almost 400 sailors show up with nearly 200 sailboats, delivered the old-fashioned way, on trailers? If it's in Arizona in February, it's the Havasu Pocket Cruisers Convention (HPCC) in Lake Havasu City. By its fifth year in 2012, this event that doubles in size every year was in danger of overwhelming the Lake Havasu City marine facilities.

Lake Havasu is a wide spot in the Colorado River between Arizona and California contained by the Parker Dam. Starting at spring break and continuing during the summer, we're told, the lake is a frenzy of cigarette boats, gold chains, and bikini babes. But during the winter months, sailors willing to wear a jacket can have the place to themselves. Palm trees grow here year round, after all, and

by February that looks pretty good to anyone from the frozen north.

In addition to palm trees, miniature working lighthouses dot the shoreline. (These are true aids to navigation; don't think of them as tourist toys!) The London Bridge brought here and rebuilt brick by brick is Lake Havasu City's main attraction. (Admittedly, this structure was purchased and constructed as a tourist magnet and it plays this role rather well.)

That should set the scene. Now add all those previously mentioned sailors and trailerable sailboats of all descriptions and you have a Very Large Pocket Cruiser Event. Trailersailing is the very essence of the saying "Get there Fast and then Take it Slow." Traveling an average of 607 miles each way, participants traveled from 26 states, four Canadian provinces, and five countries. They came for the sailing experience and they came for the camaraderie. As their boats are generally stored on lots or in their backyards, many of the participants have no other tie

to fellow sailors through marinas or yacht clubs. They have become a tight group of friends, however, through the HPCC website and message board and over the years at previous HPCC events.

If you ever thought you might like to expand your cruising grounds by taking a small boat overland at 70 mph, the HPCC should be a research destination in mid-February. The 2012 version of this event included just about every conceivable small craft, all of them accompanied by passionate owners who are pleased to show you around and tell you why their boat is best. While it started five

**A Montgomery sails past one of the fanciful, though seriously functional, lighthouses that dot the shores of Arizona's Lake Havasu, above. Participants in the Havasu Pocket Cruisers Convention enjoy the camaraderie around the boats assembled for the boat show, at right top; the spectacle of the parade of sail under the London Bridge, at right; and the sailing itself, at far right.**

## Resources

For more information:  
[www.sailhavasu.com](http://www.sailhavasu.com)



# Cruisers Convention

years ago as an informal wintertime get-together for Montgomery and West Wight Potter sailors, the fleet these days includes small (and not so small) Catalinas, MacGregors, Sages, and ComPacs, along with at least one representative Santana, Seward, O'Day, Ensenada, Balboa, Clipper Marine, Ranger, Buccaneer, San Juan, Laguna Windrose, and Tanzer. Toss in a Cape Cutter 19, a Spindrift, a Champion, a Peep Hen, a Goat Island Skiff, a Sea Pearl, a Sherpa, a Scamp, a Klepper sailing kayak, one 30-foot French Alubat equipped for an offshore cruise and, for good measure, a few multihulls including a homebuilt Strike 18 and a Windrider. All visitors, gawkers, and wannabes were welcome. The sailors were happy to spread the gospel of small-boat sailing.

## Small beginnings

It was their party in an amazing venue for small-boat sailors. Montgomery 23 sailor Sean Mulligan started the event in 2008 as a way to introduce a few friends to wintertime sailing on Lake Havasu and wound up swinging a tiger by the tail. Five years later — with a great deal of help from his wife, Jo, and a small group of dedicated volunteers — Sean has turned a three-day sailing social into



10 days of non-stop events for fellow sailors. These activities include keynote speakers, races, cruises, a regatta, a poker run, cocktail hours, seminars, a boatbuilding group, a trade show of vendors, a parade of boats, an awards banquet, a book exchange, authors doing book signings, a boat show for tourists, fundraisers for the local Sea Scouts, and a whole lot of hoopla all day every day.

Sean said his goal was to offer so many activities that no one attending could do everything. If there's a reward for that sort of accomplishment, Sean should win it. This is a high-energy event conceived and founded by a can-do kind of guy.

This year it will be happening all over again, February 9 through 18, and for the first time there will be a registration fee (\$50 per boat). If you have a small boat or would like to buy one, this concentration of trailerable boats is an incredible opportunity. If you can't take in the whole thing, show up for a few days and take in as much as you can. If you can't do it all, don't despair. Sean planned it that way. *▲*

*Karen Larson and her husband, Jerry Powlas, founders of Good Old Boat, are busy with a mega restoration of a trailerable sailboat — a C&C Mega 30 — and will soon be exploring destinations accessible via the interstates.*





# Galvanic isolator

*It prevents stray currents and preserves precious metals*

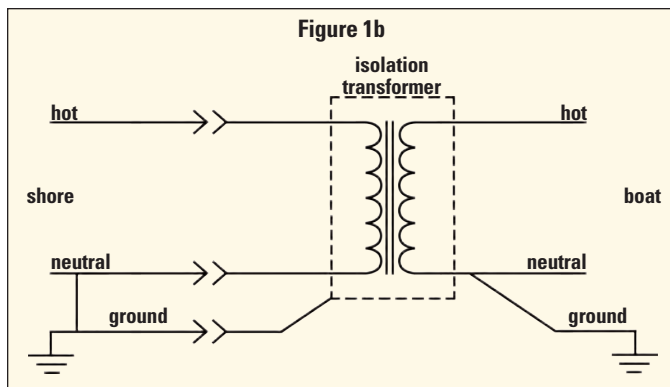
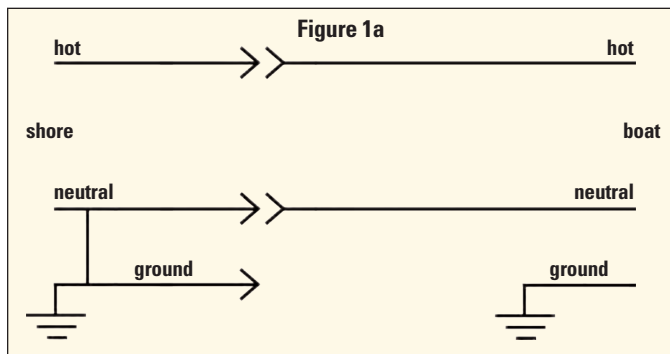
by David Lynn

In Trinidad, a few years ago, we had just finished our annual haulout. Our zincs were shiny and the bottom paint was fresh. Prior to setting off to cruise the Venezuelan out-islands, we pulled into a marina for a week to take care of a host of necessary details. We hooked up to shorepower and enjoyed our time there before heading out.

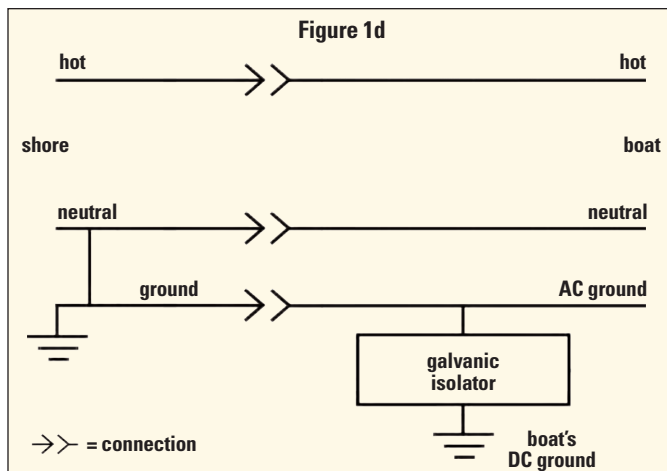
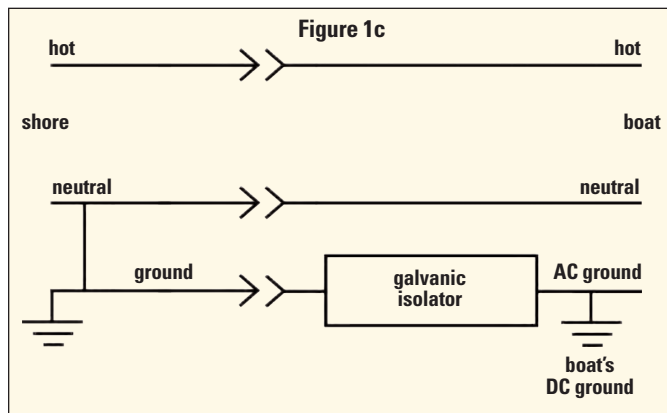
Our first stop was Los Testigos, a small group of islands that are dry, remote, and beautiful. It had been a while since we had last been able to go swimming so, once we were snugly anchored and had checked in with the local Venezuelan Coast Guard detachment, we wasted no time jumping into the water to cool off. While splashing around, I did a lap around the boat with mask and snorkel to check the bottom. To my dismay, those shiny new zincs had been almost entirely eaten away. What had happened?

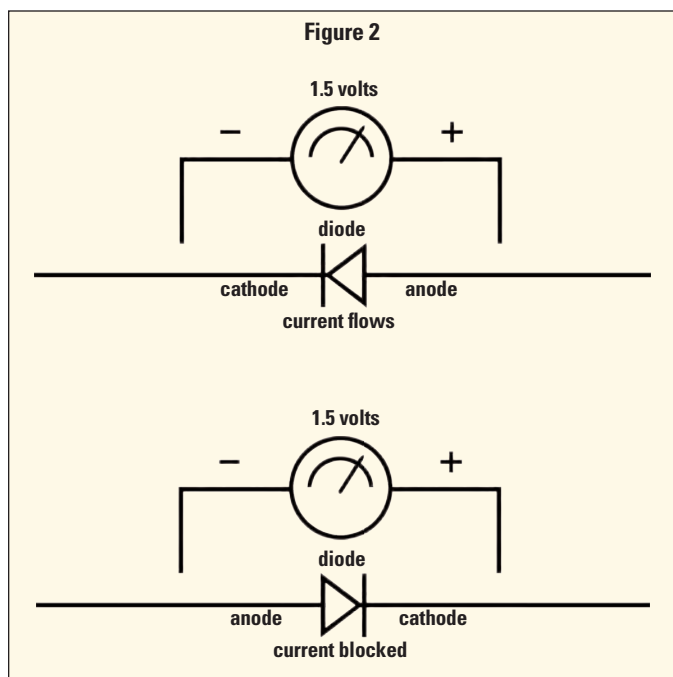
The answer, of course, was galvanic corrosion. Galvanic corrosion usually occurs as a result of stray electrical currents in a boat's grounding system. These currents can be generated in many ways, but one of the primary causes is the ground wire of the electrical shorepower at a marina. Damp connections, long wire runs, and aging wire can all cause small amounts of stray alternating current (AC) in the green ground wire that usually ends up tied to the ground system of your boat when you connect to shorepower. These stray currents can also be generated by faulty connections or defective equipment aboard your boat or other nearby boats.

If your boat is like most American boats, the through-hulls, metal tanks, engine, and prop shaft are all tied together to the ground system. Even boats with electrically isolated, unbonded underwater fittings, however, can suffer corrosion due to external stray currents.



One way to prevent stray currents from shorepower is to not connect the boat's ground to the shore ground (Figure 1a), but this is dangerous. Installing an isolation transformer (Figure 1b) is safest but expensive. Installing a galvanic isolator (Figures 1c or 1d) is effective.



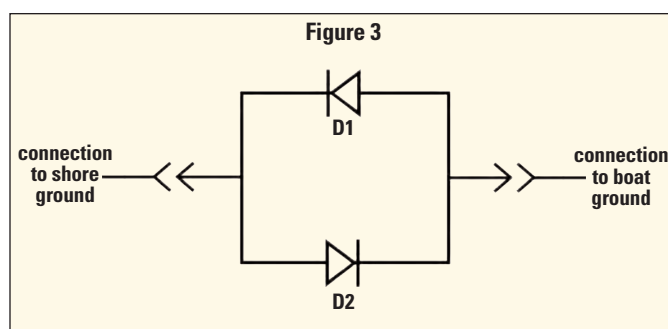


Almost all metals in contact with seawater and exposed to these stray currents will corrode, beginning with the less noble metals. Since zinc is less noble than any marine metal, sacrificial zinc anodes are placed around the hull and close to the prop shaft, rudder stock, and other fittings so the zincs will corrode before the important metal parts. If the stray currents are relatively large, the corrosion process can be quite rapid, as we experienced in Trinidad. Our zinc anodes, bless them, gave their all for the greater good of the boat. Before too much longer, however, they would have been depleted and the next metal would have begun to corrode. Had we had our galvanized chain in the water, it would have been next; otherwise, it would probably have been the bronze through-hulls, stainless-steel prop shaft, and rudder stock.

## Protective measures

External stray currents introduced by the shorepower ground line can be prevented in four ways:

- Eliminate the connection between the shore side of the ground wire and the boat's ground system (Figure 1a). This creates a potential shock hazard and is considered unacceptable by the American Boat & Yacht Council (ABYC).
- Add an isolation transformer between the incoming shore-side AC and the boat's AC mains (Figure 1b). This is the safest method, and a properly installed transformer will prevent all AC-generated currents. The biggest drawbacks are the large size and cost. For example, a 30-amp isolation transformer will cost around \$500, weigh about 75 pounds, and take up almost a cubic foot of space.



Current flows across a diode when the anode is more positive than the cathode (Figure 2 top) and is blocked when the voltage is reversed (Figure 2 bottom). A pair of diodes (Figure 3) will block small voltages in either direction.

- Add a galvanic isolator on the incoming shorepower connection, between the shorepower ground and the boat's AC ground connection (Figure 1c). This will block any stray currents from ashore or other boats and is the most common method of installing a galvanic isolator. It has two drawbacks, however. It will not protect the boat from stray currents generated on your boat and it is subject to large currents in the event of an AC fault. This latter drawback is discussed in more detail later.
- Add a galvanic isolator between the boat's AC ground wire and the boat's DC ground wire (Figure 1d). This does not affect the electrical safety of the existing system and will greatly reduce or eliminate the possibility of external stray currents, both AC and DC. The only drawback to this approach is that there is often more than one connection between the boat's AC and DC grounds. For example, many AC generators and some inverters have an internal connection between AC and DC ground. If you can eliminate any other connections between the two grounds, this approach is preferable to the circuit shown in Figure 1c, but it is not always possible or feasible to accomplish this.

I chose to add a galvanic isolator between the shorepower ground and the boat's ground circuit as in Figure 1c. With only a few differences (described at the end of the article), the same isolator can be used between the boat's AC and DC grounds as in Figure 1d.

## Galvanic isolator theory

A galvanic isolator uses diodes to block small stray currents in the AC ground wire. A diode is a semiconductor that allows current to flow in one direction only. If the voltage across the diode is such that the anode is more positive than the cathode by a certain threshold amount (called the forward voltage), typically between 0.7 and 1.5 volts or so, the diode will conduct and current will flow (Figure 2). If the voltage is reversed or is below the threshold, no current will flow.



By arranging two diodes as shown in Figure 3, currents arising from small AC and DC voltages are blocked. If a fault occurs, such as an appliance shorting the hot wire to ground, the voltage applied across the diode network will be greater than the small forward voltage of the diodes, the diodes will conduct, and the fault current will be passed safely through the green shore-side wire until the breaker trips.

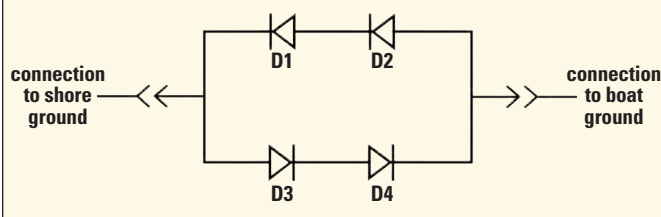
Typically, it takes 10 to 20 milliseconds for the breaker to trip and during that short period the ground wire will conduct a large AC current. This current is limited only by the resistance of the wire between the short and the breaker and can easily be hundreds, if

not thousands, of amps. For example, on *Nine of Cups*, we have a 30-amp 50-foot shorepower cable. Using the calculated resistance of the cable, I determined that a short circuit aboard could result in a current through the ground wire of almost 1,250 amps! It is essential to select diodes that can handle these large currents.

A diode that fit my requirements was the 95PF80 made by Vishay. It can handle a short-duration current surge of over 2,000 amps, giving us more than a 50 percent margin. In addition, it was reasonably priced. The forward voltage is only .7 volts, a bit less than I would like but, by putting two diodes in series in each leg of the circuit as shown in Figure 4, the effective forward voltage would be double, or 1.4 volts, which should be adequate to block any stray AC current.

As an aside, in my research I found that many of the inexpensive galvanic isolators on the market gave no information on how much short-term surge current the diodes could handle or, if they did specify the short-term surge current, the specified amount was far less than the potential fault current. What this meant was that a short between the hot wire and ground would quite likely destroy the diodes in the isolator before the shore breaker opened, leaving the boat unprotected

Figure 4



Placing two diodes in series in each direction doubles the threshold voltage below which stray currents are blocked.

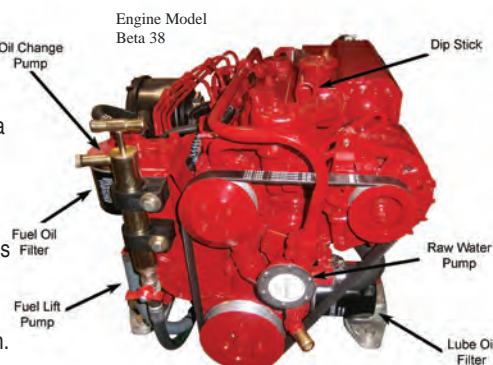
## BETA MARINE

Smoother...Quieter!



Beta 30 in a Morris Justine

Our engines idle smoother and quieter because of our high inertia flywheel. This is one of the many Beta Marine exclusive features that make our diesel engines easier to live with.



## What a concept!

Engineered to be serviced easily

- Beta Marine Superb Propulsion Engines, using Kubota Diesel
- From 13.5 - 150 hp including our famous Atomic 4 replacements
- Also available: Marine generators up to 30Kw

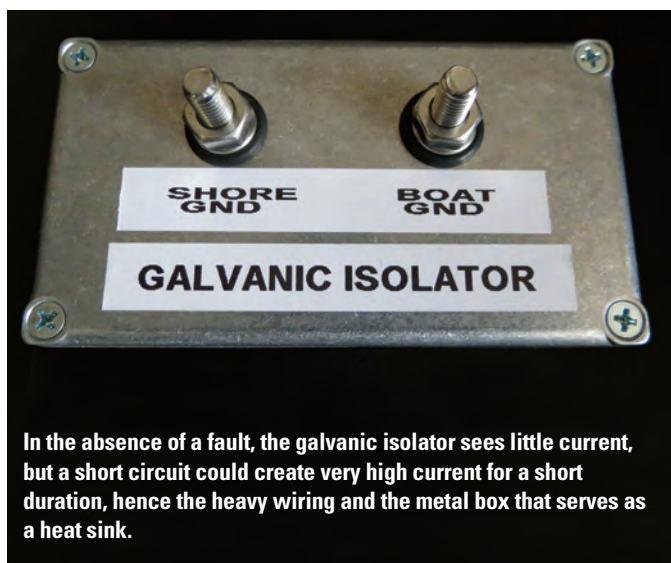
**BETA MARINE US Ltd.**

PO Box 5, Minnesott Beach, NC 28510  
877-227-2473 • 252-249-2473 • fax 252-249-0049  
info@betamarinenc.com

[www.betamarinenc.com](http://www.betamarinenc.com)

### Some of our installations

Engine Model	Vessel	Engine Model	Vessel
Beta 14 (BZ482)	Albin Vega	Beta 38 (BV1505)	Sabre 38Mk1
Beta 16 (BZ602)	Cape Dory 28		Valiant 37
Beta 20 (BD722)	Tartan 30		Westsail 32
	Contessa 32	Beta 43 (BV2003)	Valiant 40
	Island Packet 27	Beta 50 (BV2203)	Bristol 41.1
	Pearson Vanguard		Hinckley B-40
Beta 25 (BD902)	Alberg 35		Morgan 41 OI
	Morgan OI 33		Morgan 45
Beta 28 (BD1005)	Alberg 37	Beta 60 (BV2403)	CSY 44
	Pearson 35		



In the absence of a fault, the galvanic isolator sees little current, but a short circuit could create very high current for a short duration, hence the heavy wiring and the metal box that serves as a heat sink.



from potential shock hazards. If you choose to purchase a galvanic isolator, make sure you know what you're getting. If the manufacturer claims it meets the latest ABYC standards, it should be able to handle these potentially large fault currents.

## Making the isolator

The construction of the isolator was straightforward. Usually, power diodes are mounted on heat sinks to dissipate heat. In this case heat buildup should not be an issue. With a no-fault condition, there will be no current flow through the diodes and, therefore, no heat buildup. With a fault condition, the high current flow would only be for a short period of time before the breaker trips, too short a time to build up any heat. However, it was easy to mount the diodes on aluminum angle and use an aluminum box to enclose it all.

The diodes had a 1/4-inch stud on one side that served as a mounting screw and as one of the electrical connections. I drilled four holes, each 3/8-inch diameter, about 1 1/4 inches apart in the aluminum angle to mount the diodes. I then drilled 1/8-inch holes in the aluminum box and the channel so the angle could later be screwed into the box. I also drilled two 3/8-inch holes for the external connections to shore and boat grounds. I mounted the diodes in the channel and insulated them electrically from the aluminum and from each other using a mica insulating disk on one side and a plastic shoulder washer on the other, as shown in Figure 5 (on page 34).

Using crimp ring terminals and 10 AWG wire, I made the electrical connections to the diodes, as shown in Figure 6 (on page 34). I then screwed the aluminum channel to the aluminum box. I made the connections to the shore ground and the boat ground with 1/4-inch bolts and nuts, insulated from the aluminum box with rubber grommets, as shown in Figure 6.

The photos show the completed galvanic isolator. I used a label maker to mark each terminal. In actuality, it does not matter which terminal is connected to shore

ground and which is connected to the boat's ground, so the labels can be reversed if it makes the installation any easier.

Once the construction was complete, I checked the diodes and connections. I used a multimeter set

**Direct benefits**

It's easy! With your new sail order from **North Sails Direct** you measure, you **SAVE**, you get the best. **Contact us today!**

**FREE!**  
**ONE YEAR SAIL CARE & REPAIR**  
with purchase of a new North sail\*

**NORTH SAILS direct**

**northsailsdirect.com** or call **888-424-7328**

Boat size restrictions may apply. \*Restrictions may apply. Ask your North Sails Direct representative for details.



to the ohms scale. On most multimeters, one or more of the resistance settings has a small diode symbol. If yours doesn't have a diode setting, it might not read the diode resistance correctly. I connected the multimeter probes to the two ground connections. The display showed a few hundred ohms. I reversed the leads and the multimeter read close to the same. I next set the multimeter to a high resistance setting and checked the resistance between each of the terminals and the aluminum box. The display showed an open circuit (i.e., no electrical connection) between each terminal and the case.

## Mounting location

I mounted the completed galvanic isolator assembly behind my circuit-breaker panel in an accessible location so I could periodically check the diode integrity and voltage from any stray current. After making the electrical connections to the shore ground and the boat's ground, I measured the voltage between the two ground terminals using both the AC and DC scales. In a perfect world, the multimeter would read zero volts on both scales. In the real world, there is almost always a small voltage from the shorepower ground in most marinas. A reading of 0 volts could mean the diodes are shorted, in which case the galvanic isolator should be disconnected and the resistance of the diodes measured. A reading of 0.25 volts or so is about the minimum you can expect. A reading of between 0.25 and 1.4 volts indicates the isolator is doing its job and blocking any stray currents. If the reading is 1.4 volts or more, there may be excessive stray currents still present and the source should be tracked down or the shorepower disconnected.

## Alternative arrangement

Note that I installed this isolator between the shorepower ground and the boat's ground as shown in Figure 1c (on page 30). If, instead, I had chosen to install it between the boat's AC ground and DC ground as shown in Figure 1d,

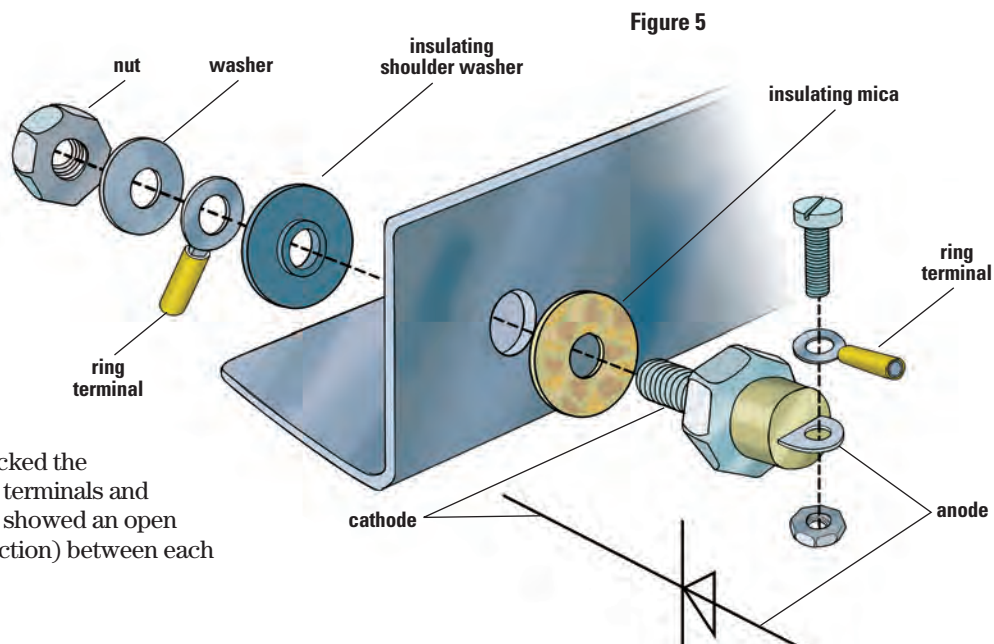


Figure 5

David fitted the four diodes to an aluminum angle, above, insulating them with mica washers and shoulder washers. Each side of the diode circuit terminates on a stud in the front of the enclosure, below, one connected to the shorepower ground and the other to the boat's AC ground, as in Figure 1c (on page 30).

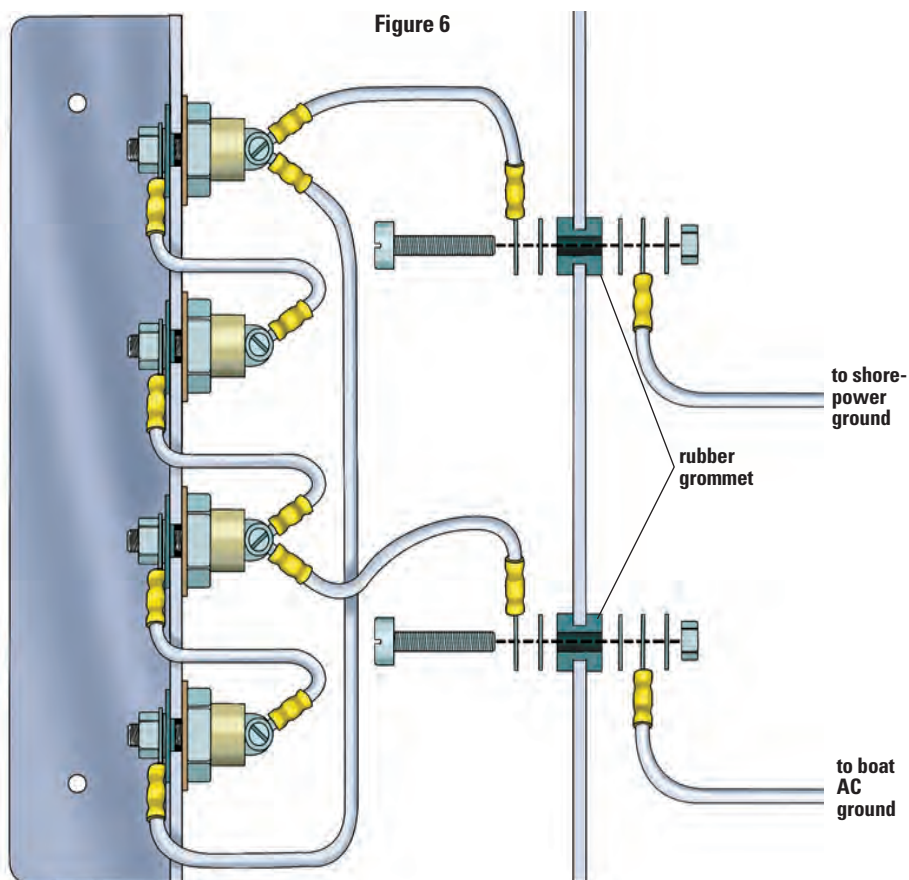



Figure 6

## “The entire project took an afternoon to complete.”

the same galvanic isolator would have worked, but I would have changed the labels on the terminals to “AC Ground” and “DC Ground,” and connected them accordingly. Prior to making the electrical connections, however, I would have disconnected shorepower, turned off all AC power sources aboard the boat (inverters or generators), and used my multimeter to measure the resistance between AC ground and DC ground. A multimeter reading of anything other than an open circuit would mean there was another electrical path between the two ground circuits, which I would need to find and eliminate in order for the isolator to be effective.

### Cheap insurance

The entire project took an afternoon to complete. The cost was about \$60, about the same as a set of replacement anodes for the hull and prop.

As we travel and occasionally visit marinas, I usually check the voltage across the terminals right after connecting to shorepower to make sure the isolator is working and the stray current is within an acceptable range. After more than four years, our galvanic isolator is still doing its job. 

*David and Marcie Lynn have lived aboard Nine of Cups, their 1986 Liberty 458 cutter since purchasing her in Kemah, Texas, in 2000. Since that time, they have sailed her 70,000 nautical miles in their ever-so-slow world circumnavigation and are currently cruising the coast of Tasmania. Follow their adventures at <www.nineofcups.com>.*

### Parts List

Qty.	Description	Source
4	Diodes, Vishay 95PF80	Newark Electronics
4	Insulating/Mounting kits, Keystone 4730	Newark Electronics
8	Ring terminals, 1/4", yellow	*
6	Ring terminals, #6 screw, yellow	*
2	Bolt, 1/4 x 20 x 3/4", hex head	*
2	Nuts, 1/4"	*
4	6 x 32 machine screw, 1/4"	*
4	6 x 32 hex nut	*
4	Washers, 1/4", flat	*
1	Aluminum angle, 3/4 x 3/4 x 4.5"	*
1	Enclosure, alum, 2 x 3.25 x 6", PtNo CU476	Digikey Electronics
2'	Wire, 10AWG, stranded, tinned	*
2	Grommet, hole, .252" ID, PtNo RP454	Digikey Electronics

### Parts Sources

\*Local hardware or marine-supply store

Digikey Electronics: [www.digikey.com](http://www.digikey.com)

Newark Electronics: [www.newark.com](http://www.newark.com)

## Metal soup

by Jerry Powlas

**Y**ou swing around the end of the breakwater, turn smartly into your slip — coming in pretty hot to offset the wind — and stop neatly while your crew take lines to cleats. It's blowing like stink and some of your crew look a little green. You're glad to be off the big water.

Then you do the most dangerous thing you've done all day: you plug into shorepower. Yup. By plugging your electrical cord into the dock tower, you have connected your boat's green ground wire to the green ground wire leading ashore to the nearest breaker panel . . . where it then is connected to every boat taking power from that panel — perhaps hundreds of them.

What happens next varies so much with how the marina and individual boats are wired that it cannot be predicted. Even if we overlook the possibility of really badly miswired boats and marinas, we will still probably get metal soup.

What you and other boaters could do with your boat's wiring is controversial and varies widely. Some authorities say all underwater metal parts must be connected to each other with heavy wire and that network must be connected to both the negative side of your DC system and the green ground wire of your AC system. Experts on protecting a boat from lightning will add other things to that network. The fellow who installs your HF or ham radio may connect a ground plane to it as well.

I'll draw some fire for this, but in my opinion this is overdoing the thing. Fortunately, most good old boats were not built that way and have not been modified to that level over time. However, there is a good chance that many, if not most, boats will have their AC green ground wire attached to something under water and there is an even better chance that almost every boat with an inboard engine will have the DC negative wire connected to underwater metal in some way. If your boat has the AC green ground wire connected to any underwater metal, that metal is connected to several and perhaps many other pieces of metal under the water on other boats.

A storage battery is essentially two dissimilar metals immersed in an electrolyte. If a conductor is connected to the metals, a circuit forms, current flows in the wire, and the less noble metal will dissolve into the electrolyte. Your boat's underwater metals will act the same way. The sacrificial zincs will go first, followed by the aluminum parts, and on up the galvanic series. When you connected to shorepower, your boat joined other boats in the destructive act of dissolving their underwater metals.

Typically, the voltage doing the damage to the underwater metals is not very high. The galvanic isolator — the exact configuration of which is also controversial — can, by inserting a small voltage drop in your connection to shorepower, protect your underwater metals from the suicide pact going on in the marina. The green ground wire in the AC connection to shore, meanwhile, will still carry more than enough current to act as a safety system protecting against short circuits that cause fatal shocks.



# Compass errors

## *Getting a magnetic compass to tell the truth about North*

by Don Launer

**M**ost recreational sailors today navigate their craft using electronic devices. This is all well and good until an electrical failure on board shuts them down or when the GPS fails (see “GPS Vulnerabilities 101,” November 2010). In either of these events, they need an alternative navigation system. Loran is no longer operational, so sailors must go back to the navigation techniques used before electronic navigation systems existed — navigating by compass. Most boats have a non-electronic magnetic compass on board, but how many skippers know how to navigate with a magnetic compass? And do they know whether or not their boats’ compasses are reliable?

A compass uses Earth’s magnetic field to provide directional information, but aboard a boat there are other magnetic fields to lead it astray. Moreover, Earth’s magnetic field does not align conveniently with the lines of longitude we use for navigating.

### The wandering poles

Earth’s magnetic poles have been wandering around the north- and south-polar regions for millions of years independent of each other. Data collected from the 1500s until the present show that, during this relatively brief period in the history of the Earth, the magnetic north pole has made a trip from the Arctic Ocean into northern Canada north of Hudson Bay and back to the Arctic Ocean at an average speed of about 10 to 15 miles per year. It’s impossible to predict where the magnetic poles will go next. Larry Newitt of the Geological Survey of Canada says, “Although it has been moving north or northwest for a hundred years, it is not going to continue in that direction forever. Its speed has increased considerably during the past 25 years and it could just as easily decrease a few years from now.”

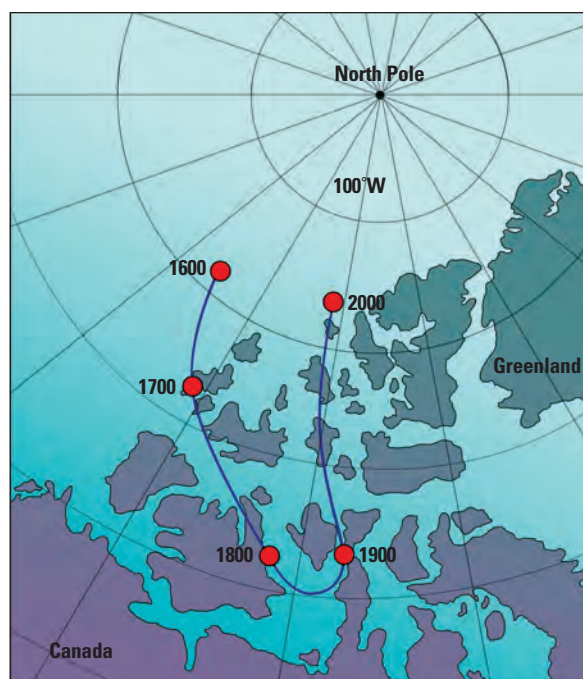
In addition to the long-term movement of the magnetic poles there is also a daily (diurnal) movement of the poles. This daily movement follows a roughly elliptical path around the pole’s average position. The path is sometimes a very small ellipse and sometimes a very large one — more than 100 miles during a 24-hour period. It’s believed that this diurnal movement is caused by the solar wind of charged particles streaming from the sun, and that solar storms on the surface of the sun can influence the size of this elliptical path.

### Variation and isogonic lines

Lines of longitude on a chart are aligned north and south, terminating at the Earth’s axis at 90 degrees north latitude (the North Pole) and 90 degrees south latitude (the South Pole). Magnetic north is not at the North Pole, and the angular difference between the direction toward the North Pole — true north — and the direction toward the magnetic north pole — magnetic north — is called variation. Variation is expressed in degrees east or west of true north.

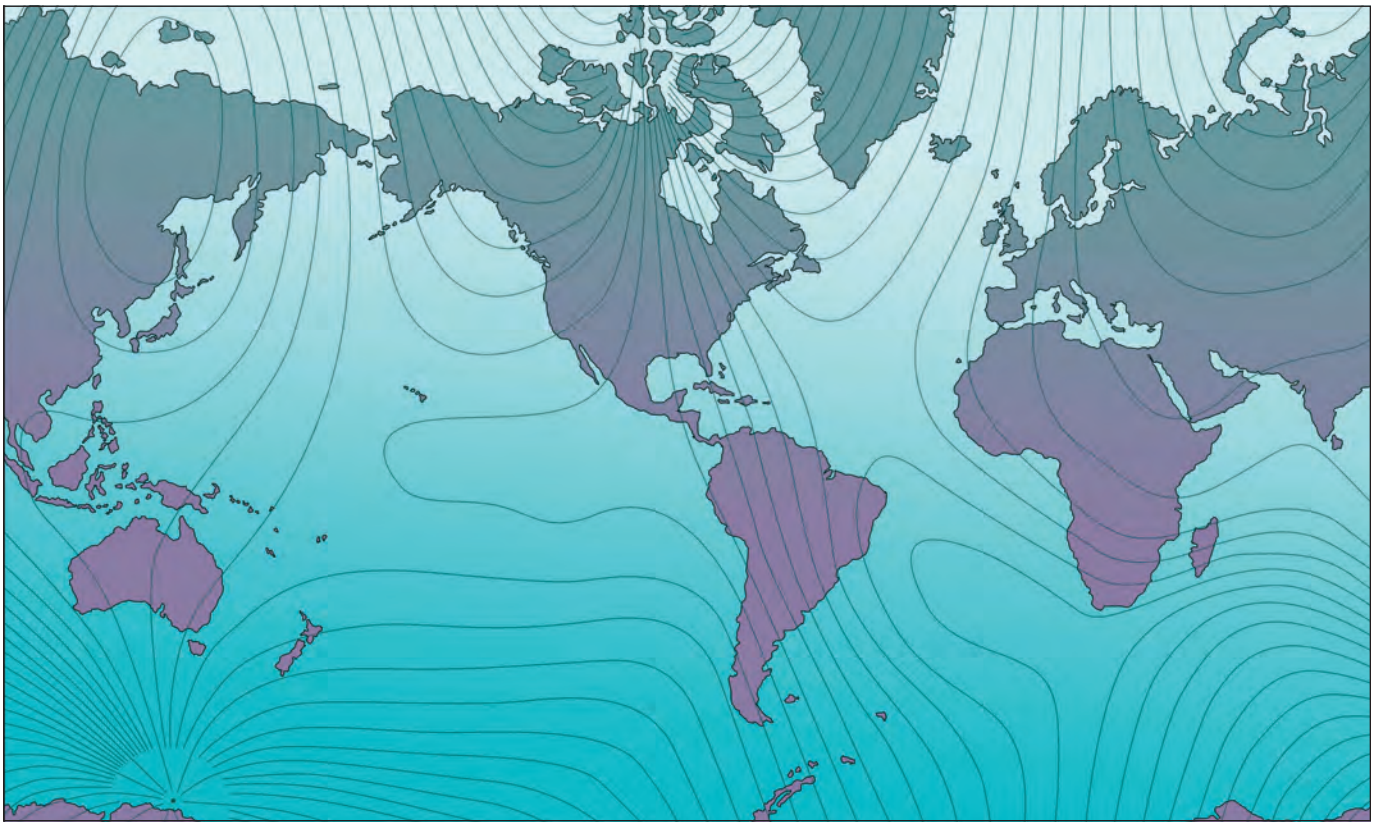
Variation is different from place to place on Earth’s surface and, since the magnetic poles are continuously migrating, it also changes over time. The variation in London, for example, changed more than 34 degrees between 1580 and 1850 due to the movement of the magnetic north pole. Unfortunately, mariners in those days often ignored variation (or were ignorant of it) and ships and lives were lost as a result.

The magnetic lines of force around Earth are extremely irregular, primarily due to the non-uniform distribution of ferrous material inside Earth. Lines that connect points where variation is the same are known as isogonic lines.



Earth’s magnetic north pole has wandered far in 400 years.

ILLUSTRATIONS BY FRITZ SEEGER



In 1700, astronomer and mathematician Edmond Halley (1656-1742) — for whom the comet and space telescope are named — made one of many scientific voyages to measure variation. He returned with a huge amount of data that were used to create what he described as “Magnetic Curve Lines” connecting points of equal variation. This was the first isogonic chart.

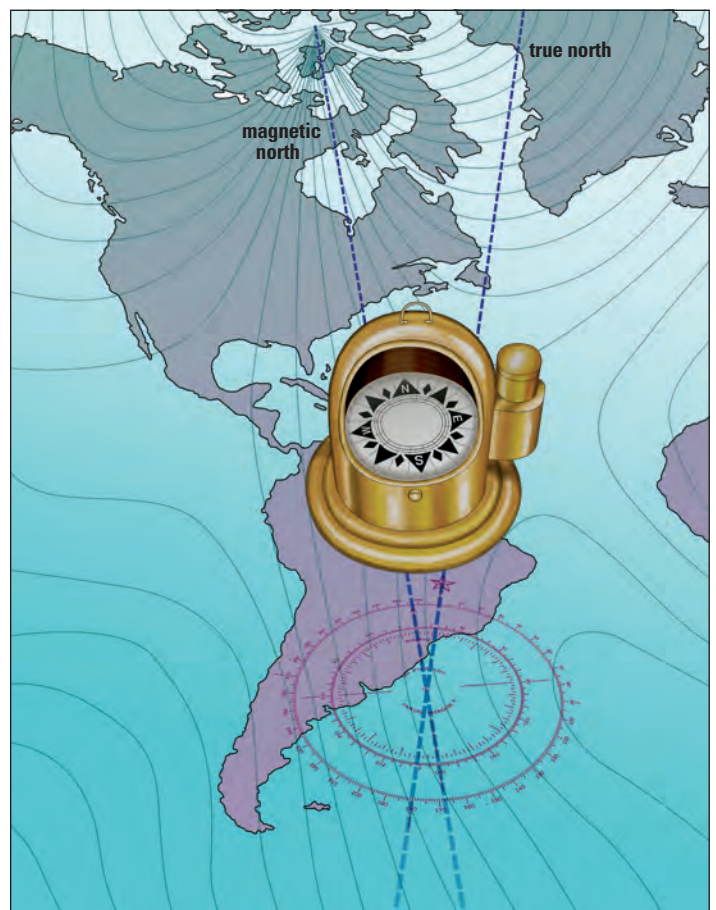
While isogonic charts show the distribution of variation worldwide, they don’t show the many localized irregularities that, in many cases, can be enormous. Off the Australian coast, for example, there is a position where, in the distance of two football fields, the variation changes by 90 degrees!

Many local variations (called magnetic anomalies) are the result of volcanic eruptions that have deposited iron-rich lava on the ocean floor. Changes in compass readings caused by these iron deposits were first recorded by Icelandic sailors in the 1700s.

### The compass rose

It was Robert Norman, of England, who first distilled variation down to a simple diagram, the compass rose, which is still found on all paper charts today.

The nautical chart’s compass rose presents information about variation in a convenient, simple, and usable form. The outer ring of the rose shows



**An isogonic chart displays lines of equal magnetic variation, at top. The outer circle of a compass rose, at right, is marked with bearings relative to true north. The inner circle is offset from it by the magnetic variation at that location.**



bearings to true north or south, which coincide with the lines of longitude. The next inner ring of the rose shows magnetic bearings — directions relative to the magnetic north and south poles. In the center, the current variation for the region covered by the chart is printed in degrees east or west together with the date of this variation and the annual predicted

## Iron ships and deviation

In the early 1800s, the first ships built of iron began to sail the oceans. Huge compass errors resulted from deviation and led to many disasters.

Ferrous metals, such as iron, and to a lesser extent steel, have a unique quality. If they are pounded in the presence of a magnetic field, they take on the direction of that field and become magnets themselves. Iron ships were fastened with rivets, which are headed metal pins or bolts, usually iron or steel, used for uniting metal plates. A rivet is heated red hot and, with the head on the outside, the shank is passed through the holes in the plates. The end of the shank is then hammered down to form another head on the inside. When the rivet cools and contracts, it joins the plates tightly together.

Tens of thousands of rivets were used in the construction of a ship. If the ship was being constructed with its keel aligned in a north-south direction, the hammering of thousands of rivets would cause the ship to take on Earth's magnetic field and, in essence, become a huge magnet . . . so much so that a compass at the bow would often read 180 degrees away from one at the stern. The magnetism in the hulls of those first iron ships caused so much difficulty it was said they could never be successfully navigated and were unsafe.

The principle of deviation was not well understood in the early days of iron vessels, but distancing the compass from the iron hull was found to reduce its effect. One way this was achieved was to mount the compass atop a pole, often so high that a ladder was required to read it. Another method for getting a low-deviation reading was to take a compass up to the crow's nest.

In 1838, the head of the Royal Navy's hydrographic office, Francis Beaufort — who originated the Beaufort Wind Scale — asked scientist and Astronomer Royal, George Airy, to examine the deviation problem aboard iron ships and suggest a solution. Airy was able to reduce the errors to nearly zero by placing several bar magnets and pieces of soft iron in strategic positions near the ship's compass.

Later, when deviation was more fully understood, shipwrights constructed brass binnacles and fitted a large iron ball on each side of the compass and close to it. The athwartships positions of these balls relative to the compass could be adjusted to take out a large amount of the deviation, but magnets and iron bars were still needed inside the binnacle for further compensation.

To this day, recreational boat compasses have tiny magnets inside their cases that can be adjusted to reduce the effects of deviation, just as Airy taught us in the early 1800s.

change. Since the movement of the magnetic poles is erratic and unpredictable in the long term, this predicted annual change in variation is only applicable for a few years from the date shown on the chart. Nevertheless, the yearly change can be extrapolated with reasonable accuracy on charts that are just a few years old.

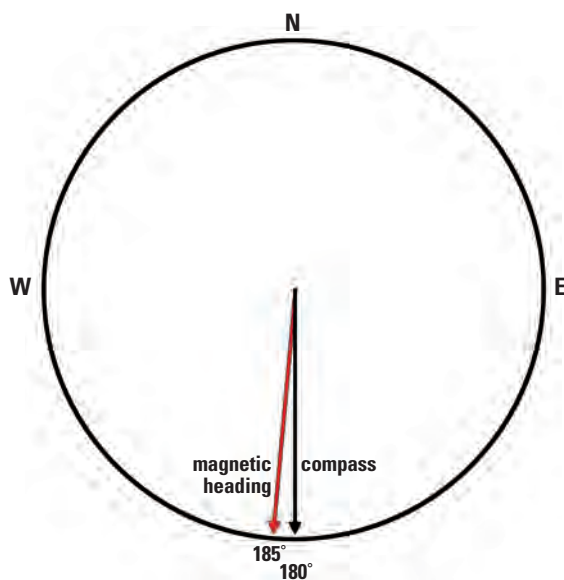
## Deviation

A current flowing through a wire creates a magnetic field around that wire, and the greater the current, the stronger the magnetic field. Most of this magnetism is cancelled out if wires are run in pairs, that is, run close together or twisted together, where one wire carries current to the load and the other carries the return current from the load.

Electrical appliances or navigation instruments can also be sources of unwanted magnetic fields. In particular, loudspeakers that contain strong permanent magnets produce very strong magnetic fields and should never be installed or placed anywhere near the compass.

Alternators, when operating, can also produce a substantial magnetic field. If your compass is within several feet of your engine's alternator, you will probably see that the compass heading changes when the engine is running and driving the alternator.

Large masses containing iron, such as the engine, affect magnetic fields around them (including Earth's) and can even be magnetized themselves.



With all these stray magnetic fields aboard a boat, most magnetic compasses don't actually point to magnetic north at all. The difference between the true magnetic heading and the heading that the compass is showing is termed deviation, and deviation is particular to every individual boat. In fact the deviation aboard a boat can change due to simple things like canned food being stowed too close to the compass.

## “Swinging the compass is a good project for a calm day.”

Deviation was not a big problem aboard wooden sailing ships, since the amount of ferrous metal on board was minimal. However, in 1627, Captain John Smith (1580-1631) suggested that wooden pegs be used as fastenings when a binnacle was constructed to house a compass because the iron nails commonly used could throw the compass heading off.

When iron ships came on the scene, deviation was of real consequence (see “Iron ships and deviation,” page 38) until a method of compensating for the error with the use of soft iron and magnets was proven. Compasses used on sailboats today have small magnets built into their housings. Positioned 90 degrees apart, they can be rotated using a non-magnetic screwdriver through screw slots in the case.

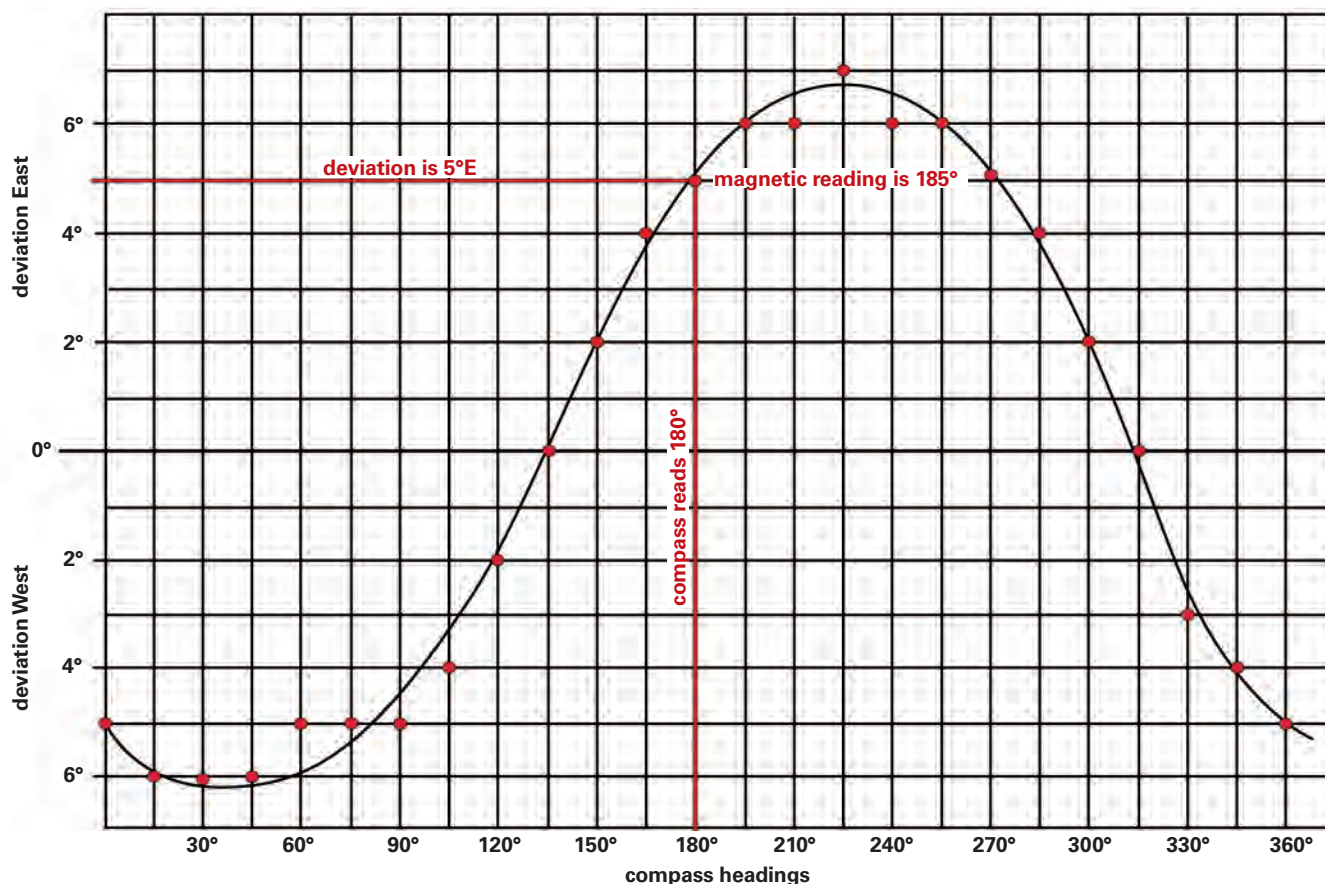
Conquering deviation, though, is not simple, since deviation varies with the boat's heading or angle of heel. Owners of steel boats have to consider another factor: if a steel boat continues on the same course for a long time while being battered by seas, it can become re-magnetized by the Earth's magnetic field, perhaps in a new direction, and the deviation cards will no longer be accurate.

### Deviation card

Correcting the deviation completely is a complicated process and tends to involve a combination of art and science. Thankfully, manufacturers of compasses for recreational boats have given us only two adjustments: the two small bar magnets inside the compass case.

The procedure during which these two magnets are adjusted is known as swinging the compass, or swinging ship, and requires the boat to be steered on the cardinal headings (N, E, S, and W). It is usually outlined in the instruction sheet that comes with the compass and can also be found in *Chapman Piloting and Seamanship* and other books. For those who consider the process daunting, there's always the option of hiring a compass adjuster. It will be money well spent. The adjuster will adjust the compass to take out as much of the deviation as possible and also make up the deviation card.

Swinging the compass is a good project for a calm day when you're waiting for the wind to pick up. The effort may repay you at some unexpected time in the future.



A deviation card (or chart) is made by plotting the difference between the compass heading and known bearings on courses all around the compass and drawing a curve through the points. The card is unique to the boat for which it is made.



The conventional way to make a deviation card is to motor the boat along known bearings (set up by ranges on fixed marks ashore or GPS bearings toward landmarks at known positions) and comparing the compass heading to the known or GPS magnetic bearing. Doing this every 15 or 20 degrees around the compass gives enough readings.


To make the deviation card for your boat, plot these readings as points on a graph and draw a smooth line through them. Some of the points might not lie exactly on the curve but you will find that the curve is very close to a sine wave and that the deviation error is zero on two headings only.

You might want to take the boat out again and check the accuracy of the card with the engine running and when navigation lights and other electronic gear are turned on.

Once you have made and double-checked your deviation card, laminate it and keep it near

the compass or in a handy spot down below in preparation for that time when your compass will be your primary navigational tool. It's possible that, if your compass is close to the engine's alternator, you might need two deviation charts, one for when you're sailing and another for when the engine is running.

### Heeling error

There is one additional concern: heeling error. This error can be introduced when your boat is heeled over and the boat's ferrous metals and magnetic fields change position in relation to the gimbaled compass. Since this might change the deviation error, it's a good idea to double-check your deviation card when you're sailing to windward at a good angle of heel. 

*Don Launer's bio appears on page 17.*

## Dead men and true virgins

**V**ariation and deviation together cause a boat's true heading to differ from its compass heading. Every sailor should know how to treat these phenomena when converting from a true course or bearing to a compass course or bearing and vice versa.

If you've been sailing a compass course or have taken a bearing with the ship's compass and want to convert from compass to true, remember the mnemonic:

**C**an = Compass  
**D**ead = Deviation  
**M**en = Magnetic  
**V**ote = Variation  
**T**wice = True  
**A**t Elections = a reminder to Add East (and subtract West).

If you have been sailing 87° Compass and wish to know the equivalent course in True, given deviation is 6°W and Variation is 15°W, you get:

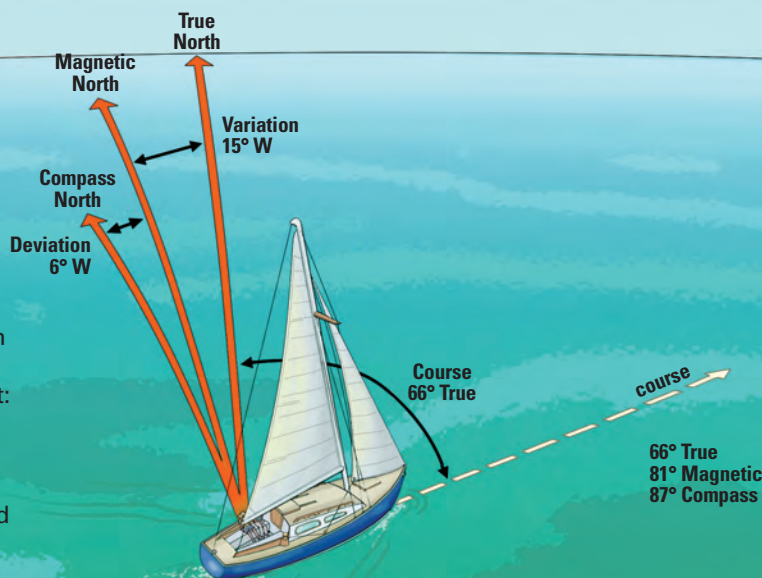
$87C - 6D(\text{west}) = 81M - 15V(\text{west}) = 66T$   
 because you subtract West going from C to T.

If you were going the other way, from a charted course of 66°T to the compass course to steer, you can remember:

**T**ue = True  
**V**irgins = Variation  
**M**ake = Magnetic  
**D**ull = Deviation  
**C**ompany = Compass  
**A**t Weddings = a reminder to Add West (and subtract East).

$66T + 15V(\text{West}) = 81M + 6D(\text{West}) = 87C$   
 because you add West going from T to C.

Many boating organizations offer classes that teach the method, along with other valuable navigation lessons, and the procedure can be found in books such as *Chapman's Piloting and Seamanship*. Here is one way to do it.



# Go cheap and go in comfort

## The case for good old offshore-cruising boats

by Todd Duff

**T**he best used-boat bargains of all time are out there right now. Despite the cutbacks in new-yacht production, more boats are for sale today than ever before, and although the economic slowdown is a factor, the numbers are due mainly to the longevity of fiberglass construction. A good yacht broker or marine surveyor can advise on what to look for and what to avoid, but here are some guidelines and suggestions for anyone on the lookout for a sound cruising sailboat.

If you're going cruising, you're likely to be concerned about value. A good place to start shopping for a boat is with the well-made fiberglass production designs of the mid-1960s to mid-1980s. What I often refer to as the golden age of fiberglass boatbuilding began in the early 1970s. During this decade, along with a general awakening to the need for a clean environment and a popular movement toward simplifying life and getting back to nature, the production of small to medium-sized sailboats exploded all over America and Europe. Many builders turned out racing boats that proved to be excellent offshore cruisers. Swan 40s and 43s and their American counterparts — such as the Tartan series or some of Pearson's designs — have all proven themselves on countless passages and long-term cruises. Boats like the Westsail 32, the Crealock 37, and Cabo Ricos spawned a profusion of clones and copies, many of which are still sailing the world's oceans today.

In the 1980s, boats became lighter and larger belowdecks for their waterline length. Many experienced offshore cruisers think that by the late '80s most of the moderately priced models being mass-produced were no longer as

seaworthy or seakindly as their earlier cousins. Later raceboat designs that exploited the International Offshore Rule (IOR) were not as well suited for cruising as earlier IOR-influenced designs. It appeared to many that boardrooms and committees — concerned more with how a boat would look at a boat-show dock than how it would stand a blow far offshore — began to dictate boatbuilding practices. Today, with a new 35- to 40-foot boat costing in the range of \$250,000 or more, many people are looking into older well-made vessels that can be purchased at a fraction of that cost and refitted to serve their purposes.

### Conflicting design goals

Although there have been many so-called advances in yacht design in recent years, you can't cheat the sea. Our forefathers knew the sea well and, through hundreds of years of refinement, developed specialized hull forms for a variety of purposes. A large number of cruising-boat hulls have been based on these hulls, but many attributes of buoy racers have unfortunately found their way into cruising designs and, more recently, interior layouts built for a life at dockside appear to have dictated the shapes of the hulls that carry them.

Most of the arguments for building lighter-displacement, lower-wetted-surface boats have been based on supposed performance advantages, and yet a Westsail 32, one of the most traditional cruising designs out there, has proven itself in many recent ocean races, challenging the myth that weight prohibits speed. In ideal conditions, a modern lightweight hull form is potentially much faster than a traditional heavy hull, but in a real seaway all bets are off. In many cases, the traditional

heavy boat designed and developed to sail in real ocean conditions is superior to and safer than a modern design and more likely to deliver its crew comfortably to the next port.

In a recent offshore race, a Westsail 32 placed second behind an ultra-light-displacement all-out raceboat. It might have won had a gear failure not occurred. In the 1996 Annapolis-to-Bermuda Race, a friend of mine sailed to a win in his division with a Westsail 32, fully loaded down for cruising with a big dinghy on deck, a wind generator and solar panels out in the breeze, and a windvane dragging off the stern. His boat arrived only hours behind some of the all-out racers whose crews sat on the windward rail the whole way. He out-sailed stripped-out boats with cushions and doors removed to save weight! Veteran cruisers Lin and Larry Pardey have been saying for

### Additional resources

Sorting through the hundreds of boats produced in the golden years has occupied many a sailor with cruising experience or aspirations. James Baldwin, another experienced circumnavigator and sailboat expert, is one. He has created his own list of 71 small voyaging sailboats (between 20 and 32 feet) that will take you to the ends of the earth even if your pocketbook is light.  
<http://atomvoyages.com/planning/good-old-boats-list>

### We also recommend:

*Twenty Small Sailboats to Take You Anywhere* by John Vigor

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

—Editors



decades that if you own a traditional heavy-displacement boat, keep the bottom clean and use big light-air sails when they're called for.

### False comparisons

Entirely too much space in books and magazines is devoted to comparing keel and rudder shapes and over-simplifying the analysis of yacht designs, as if looking at the side view of a hull might tell you how a boat will handle. The hull form is much more important. For example, subtle differences in the hull forms of canoes and kayaks can yield very different handling characteristics. Lake canoes will track straight all day long and yet are difficult to turn quickly, whereas whitewater canoes can spin on a dime but are challenging to paddle in a straight line.

Statements like "Full keels track better but are poor upwind performers" or "Fin keels sail upwind better and are more maneuverable" are overly simplistic. The main factors that make a rudder more or less effective are how large and how far aft it is and what the hull form in front of it is like, not whether it is attached to a keel or a skeg or is a separate spade. In many cases, the increased lateral plane of a full- or long-keeled boat actually makes it easier to back up than a fin-keel boat with a flat bottom that prefers to walk sideways until way is on. A skeg- or keel-hung rudder is also much less likely to stall at high angles of attack. Evidence of this can be found in the photos and descriptions of spade-rudder boats that have broached in big sea conditions when a helmsman overcorrected, causing the rudder to stall, or simply lost control while surfing down a wave. Airplane wings are able to maintain lift at slow speeds because of the laminar flow created by flaps extending off the main wing surface. Imagine this when looking at a rudder attached to a skeg or a full keel. A spade rudder will stall at low speed just like an airplane wing does when its flaps are not deployed.

### Seakindly and seaworthy

When was the last time you saw the term "seakindly" used in a new-boat advertisement? Many traditional types of boats have fairly complex wineglass-type hull forms, very difficult to design and very comfortable at sea as they do

## “How strong is strong enough when you're in storm conditions?”

not present large flat surfaces to the waves in any one orientation. Some so-called traditional designs have simplistically designed round or bowl-shaped hulls that roll and pound just like their lightweight fin-keeled sisters.

The strength issue is rarely argued and even among modern light-displacement proponents you'll hear a consensus that heavy boats are stronger. I've heard many sailors on newer lightweight boats say their boats are "strong enough." How strong is strong enough when you're in storm conditions, or if you hit an unlit steel buoy, a partially submerged container, or a whale while traveling at 8 knots on a pitch-black night? Steel

is generally more robust than even the stoutest of fiberglass boats, but an older heavily built fiberglass hull in good condition can withstand incredible punishment. I have yet to hear a long-distance cruising sailor tell me he wished his boat had a thinner hull and was less sturdy.

We've all heard the urban legend that older fiberglass boats were built heavily because the designers and builders didn't know how strong the material was and so were reluctant to "lighten up" the scantlings. This is not entirely accurate. Most designers and many builders were also engineers who certainly knew the structural

## Bargain boats

**G**rouped below by price are suggestions for some of the best bets where investing time and money could be rewarded with a strong handsome cruising sailboat at a very good value. The price ranges are for boats in good condition that are fully equipped with recent gear and modern electronics. Boats without these significant upgrades should sell for as much as 50 to 75 percent less.



### \$10,000 to \$25,000

Finding a well-equipped cruiser in this price range is tough because investments — such as a watermaker, solar panels, and electronics — can sometimes add up to more money than the boat's purchase price. As long as you don't get too carried away, however, you should be able to sail away on one of these:

post-1976 Bristol 24  
1970s Pacific Seacraft Flicka  
Eastward Ho 24  
Pearson Triton or Vanguard  
Allied Seawind 30 • Contessa 26  
Folkboat • Alberg 30 • Tartan 27  
and dozens of others



### \$25,000 to \$45,000

As long as you don't mind going with a somewhat older model, you should be able to find one of these in ready-to-go condition:

Pearson Alberg 35  
Bristol 32  
Nor'Sea 27  
Westsail 28  
Alberg 37  
Allied Seawind II or Seabreeze  
Shannon 28  
Pacific Seacraft Orion or Mariah  
and similar

characteristics of the materials they were using. However, most of the early designs were simply fiberglass reproductions of popular wooden types and had to weigh as much as their wooden cousins or they would not have floated on their lines. Also, when fiberglass was first introduced to boatbuilding, many sailors mistrusted it but were reassured by the heavy construction. To many experienced sailors it appears that — because of budget constraints and marketing decisions made in boardrooms — modern boats have become lighter and flimsier and advertising departments have sought to convince us that this is to enhance performance and livability. As anyone who owns a classic boat knows, aesthetics are a big part of a sailor's enjoyment. When other sailors photograph your boat, it boosts the pride of ownership that makes

some of the aspects of keeping an older boat in great shape a little easier.

### Good qualities endure

Aesthetics, seakindliness, performance, value, and strength are all great reasons to own an older quality boat. Longevity is in your favor and there is little doubt that some of the purpose-built hefty cruising boats from the 1960s through the '80s will be around well into the end of the 21st century. Our grandchildren's children may well own a 100-year-old 1965 full-keel cruiser on its fourth engine and sixth suit of sails.

Every type of boat, of course, has its shortcomings. Heavy-displacement boats need much bigger hardware, sails, ground tackle, and rigging, all of which cost more for overall length than they would for a lighter boat. The Westsail 32, for example, has a

rig as big as many 38-footers and the ground tackle you might expect to find on a modern 42-foot boat.

When you go looking for an older boat to buy, keep in mind that upgrading or replacing engines, rigs, sails, and electronics, in addition to rebuilding interiors or rewiring, can drive the investment up well beyond the original purchase price. Even then, with careful shopping you might end up with a much better, stronger, and more comfortable boat than you could have purchased new for perhaps multiples of the amount of your investment. Shop carefully and have fun! *▲*

*Todd Duff, a writer/photographer and marine surveyor, has owned 50 sailboats. He and his partner, photographer and professional captain Gayle Suhich, have logged close to 150,000 miles under all types of rigs, including a brigantine. They are full-time cruisers and have recently refitted Westsail 42 hull #1 for more sailing adventures.*



### \$45,000 to \$75,000

In this price range there are a lot of good boats to choose from:

Westsail 32  
Alajuela 38  
Ingrid 38  
Bristol Channel Cutter  
Vancouver 36  
Allied Princess or Mistress  
Cape Dory 36  
and many others



### \$75,000 to \$120,000

Find a totally equipped and world-cruise-ready boat from this list:

Westsail 42 or 43  
Peterson 44  
Whitby 42  
Crealock 34 or 37  
Cabo Rico 38  
and others including:  
Rivals  
Camper & Nicholsons  
and many others

Cruise the Internet, talk to a good broker, and find a surveyor with extensive offshore experience who can give you sound advice. Experts like Robert Perry, John Neal, and others are available on a consultation basis as well, and they will often supply you with a list of their own favorites as you go searching for your own good old boat.

There are many great older boats out there. Begin with how you want your boat to be equipped, then work backward from the price of your complete cruiser and you should be able to make a logical purchase. Get out there cruising sooner! You might be happier, will certainly be wealthier, and could wind up owning a better boat than if you had purchased new.



## Repower Your Atomic 4!

(No, not a diesel!)

**Improved engine performance can best be obtained with the right propeller.**

The **only** prop designed from the ground up for the direct drive Atomic 4. This 10" diameter by 7.4" pitch bronze prop is guaranteed to increase RPM and power as well as reduce "prop walk" astern (as compared to a "standard" 12 x 9 two-blade prop).

## Only \$325

Visit: **www.atomic4.com**

or call: **800-428-8569**  
for more information.

**Plus get information on  
Other Atomic 4 upgrades!  
and  
No More Barnacles!**

**See how to operate barnacle-free all season**

**Indigo Electronics, Inc**

105 Pipe Kiln Ct., Williamsburg, VA 23185



## Lessons learned

**A**ny misfortune from which no lessons are gleaned is a wasted tragedy. Here are the lessons I've taken from our fire.

- I had only insured the boat for \$75,000 since that is what I bought her for seven years earlier. I had invested about \$30,000 in equipment and improvements. Before we departed, my agent asked if I wanted to increase the coverage amount, but I declined.

"The reason I need insurance is for when I scratch some million-dollar yacht," I told her. The only time anyone needs full coverage is when the boat sinks. And when does that ever happen? Never!"

Eating crow as your first meal after such a disaster is tough chewing.

- Those required two 1-pound extinguishers that are a nuisance to stow and ugly to mount? Get more. I will have four on my next boat. And they will be 4-pounders. I emptied both our 2-pounders. It was like having a knife at a gunfight.
- The boat was too far gone to determine the fire's cause. The investigator's best guess is the fire started with wires to the starter or alternator. Not just any old wiring, but something that uses a lot of juice. It has been reported that old starters can get stuck in the open position and heat up the wires. From now on, I'll be replacing my starter motor every five years.
- I kept valuable documents (including our passports) in a waterproof Pelican case. It survived the flames and kept the documents dry after the boat sank. Next time, my backup drives for our computers will go in one too.
- We shipped our drives to a data recovery firm. They said attempts to recover the data failed most likely because we let the drives dry out. If your drive falls in the water — especially salt water — do not let it dry out. Keep it wet. For shipping, wrap it in plastic film. Most damage to disks results from salt crystals forming on them. Once you try to start up the dried disk, the reading head scratches the salt all along the disk.



# Dolphins'

**J**ennifer and I were on the verge of the grandest part of our grand voyage. We were anchored in a peaceful cove in the harbor of Mahon, Minorca. Jennifer was below making dinner. I sat in the cockpit enjoying a beer and thinking about the three-day passage to Sardinia we were to begin the next day.

Four months earlier, my wife and I had sailed our beloved *Dolphins*, a 1986 Hans Christian 33, from her home waters of Lake Champlain across the Atlantic to Portugal. We had since passed through the Pillars of Hercules into the Mediterranean, along the coast of Spain, and onward to the islands of Formentera and Minorca.

We were proud, happy, and almost giddy. When we docked in Portugal, the wave of pride and accomplishment we felt was greater than any of the waves we had encountered at sea. To cross an ocean is to transit a space about six inches wide. That space, the inside of your head, is where you face the greatest danger and the greatest challenge: the danger of overconfidence and the challenge of calming yourself and understanding that your fears are disproportionate to the circumstances you will encounter.

In the weeks sailing along the Iberian Peninsula we had worked together as a smooth team, even mastering the Mediterranean moor. We had accomplished the repairs necessitated by the crossing and had

fine-tuned our boat and our lives to the rhythm of life aboard. I caught fish and Jennifer grilled them to perfection.

With the sun soon to set over the castle walls of Mahon, we were happy because *Dolphins* had become so much our home we were sure there was no other boat like her. It's silly to talk of soulmates when it comes to boats, but that's what we felt. From the moment I saw *Dolphins* six years earlier, I knew she was "the" boat and cruising was what I wanted — truly, deeply wanted. Not clearly knowing your "want" in life is like trying to sail without a compass.

### A compass to follow

In fact, for many years now, I've owned a brass compass given to me by my daughter. Early on, I smashed the glass, removed the needle, and thus made it my magic compass. I would occasionally consult it to find the orientation of my want. Over the years, it always pointed me toward this voyage.

With the help of my professional boat guru, Gordon, I had spent six years prepping *Dolphins* for this voyage. During that time, Jennifer and I met and married. While Gordon and I revamped, replaced, and renovated, Jennifer sewed curtains, decorated, and organized our life on board into pleasantly perfect order.

Up until the birth of the double-ended Hans Christian 33 in 1980, conceived in the mind of Harwood

# demise

## A boat — but not the dream — goes down in flames

PHOTOS COURTESY OF MENORCapa CO StUria

Ives, no boat had a layout to match hers in efficiency and comfort, with its queen pullman berth amidships and a double quarter berth. Even since her introduction, despite many copies, none has matched her arrangement of U-shaped galley, nav desk, standing saloon table, separate shower, and easily accessible, sole-level engine, all in 33 feet. With her weight of 20,000 pounds, a Hans Christian 33 parts the water like a stately ship of yore.

We were giddy because, until now, we had sailed the less-scenic parts of the voyage. Before us lay the intriguing islands of Sardinia, Sicily, and the myriad mythical isles of the Adriatic.

My daydreaming was interrupted by Jennifer, who called out from the galley.

"All the lights in the cabin just flashed on and off."

"What about the breaker panel?"

"That too," she said.

A minute later, it happened again. I poked my head into the companionway and, just as I did, we noticed smoke rising from the cracks in the companionway steps.

### A sailor's worst nightmare

I scrambled below and ordered Jennifer into the cockpit. I dashed her utensils and salad bowl off the steps, sending them clattering to the sole. Upon pulling the companionway steps aside, I saw a steady, wide wall of white smoke rising from behind the engine.

I grabbed a fire extinguisher and swept it back and forth into the



compartment, trying to get it behind the engine. In my mind, I thought, "Jennifer will hate me because it will take days to get this engine clean."

The blast stemmed the smoke a bit. I grabbed my portable VHF and issued a *securité* call saying our boat was smoking and possibly on fire. I climbed into the cockpit and checked the lazarette to see if the batteries were the source. No smoke there.

By now, the smoke was rising thicker and turning black. I hesitated before jumping into a smoky cabin, knowing this is how people die. I issued a mayday call and then monkeyed my way back into the cabin minus companionway steps. I found the second extinguisher and emptied it into the smoke.

It had no effect. My throat was itching as I climbed through the wall of smoke into the cockpit. I made another mayday call on the portable and turned to Jennifer.

"Follow me," I said, "We're getting off." From the foredeck, we heaved our RIB overboard, threw in two oars and clambered down. We were barefoot, minus my glasses, and our pockets were empty. With nothing more than the clothes on our bodies, we paddled toward the only boat reacting to our

*Dolphins* in happier days, on facing page. The firefighting boat arrived late on the scene, above, and by then *Dolphins* was beyond saving, at left.

situation. They were hauling anchor and had their fire extinguisher in hand.

We climbed aboard and watched in shock as our boat — that barely 15 minutes before had been a serene scene of domestic bliss — belched tall

flames from the companionway. For the next 45 minutes our beloved *Dolphins* burned from stern to stem, practically to the waterline. We jerked involuntarily when the propane tanks exploded like cannon fire.

All we had heard from the local authorities, whose fireboats were a mere 10 minutes away, was an inquiry

### Collateral damage

Following the publication in our July 2012 issue of "A Boat Explodes," about the aftermath of a propane explosion, Durkee Richards has responded to requests for more information about the legal and insurance issues that ensued for nearby boats.

"I am writing this report," Durkee says, "to explain the course of events and as a caution to boat owners that the damage from such events may be considerably more extensive than it first appears."

For Durkee's follow-up report, go to [www.goodoldboat.com/readers\\_services/more\\_online/fire\\_ aboard.php](http://www.goodoldboat.com/readers_services/more_online/fire_ aboard.php).



whether all persons were safe. Once confirmed, there was radio silence. We were too shocked to cry. But when we saw *Dolphins'* mast waver and fall, it was too much. We asked our hosts to take us to the nearby port.

### Robbed of everything

Fire is a savage thief. Not content with just valuables, it robs you of all you have that reminds you of who you are. We lost art, homemade jewelry, our journals, some poems and short stories, and, particularly hurtful, 12 years of photographs ... most of my 16-year-old daughter's life in pictures.

In the hours and days that followed, we were overwhelmed by the extraordinary kindness of strangers. People went above and beyond to help us with money, cell phones, clothes, shoes, and food. Friends and family were in tears as they heard our account.

Everyone tried to console us and urged us to look for a new boat. But we didn't know if that was what

we wanted. We were numb. The savage thief, along with all the rest, had stolen my want.

At times, we wanted only to crawl into bed and pull the covers over our heads. But emotional retreat isn't granted to the suddenly homeless. We were forced to face the immediate onslaught of details: temporary shelter, police reports, and regaining access to communication and money. Before I could deal with what I wanted next, we had to, quite literally, establish who we were. We had lost all of our identification.

The next morning we heard that *Dolphins* had been utterly eviscerated by the fire and sank while the fire department, which eventually showed up, extinguished the flames. On the bright side, our passports were found floating in the waterproof suitcase we had kept them in.

Within 24 hours, my brother arrived on the scene with emotional and financial support. We would return with

him to his home in Germany to plan our next steps. But before we could leave, we had to wait for the boat to be floated and inspect it to see if anything was salvageable.

I dreaded that moment. But we were informed a few days later that the wreck of *Dolphins* awaited us at the marina. Arriving at the wharf and seeing her charred remains was like being swamped with a wave of blackness. I was drowning in numbness. No feelings. Not even sadness. Just overwhelming numbness.

The insurance investigator boarded first, took photographs, and poked through the mess.

"Electrical," he concluded. Exactly what, was hard to tell. I suspected an old wire to the starter motor or the alternator that carried a lot of juice.

Then it was our turn. My brother Roland and I donned coveralls, slipped into rubber boots, pulled on industrial work gloves, and stepped into the cold, soggy, black charcoal pit.

## Surviving the first few weeks

by Mathias Dubilier

**F**inding yourself suddenly homeless and destitute, especially in a foreign country far from home, is a shock. Re-establishing who you are is a daunting task unless you take precautions in anticipation of such an event.

**Identity:** Having proof of your identity is crucial. Keep a laminated color photocopy of your passport in your ditch bag and leave another with someone on shore who can fax it and mail it to you.

**Insurance:** You are responsible for your boat, even if it is destroyed. Our sunken wreck was considered a navigational hazard and environmental liability. Check with your insurance company. Some pay for salvage and disposal on top of full coverage of your boat. Others deduct those costs from your final payout.

**Think on your feet:** The police were going to deliver us to a homeless shelter. We told them my brother could be called to pay for a room with a credit card. That satisfied the hotel to which we were taken.

**Residency:** You may have lost all your travel documents. Consider what means you have to prove how

long you are entitled to stay in the country where you are. Marinas you have visited may be able to fax you copies of receipts. In Spain we were subject to the Schengen Agreement visa regulations. By moving to Turkey we would exit the Schengen Area while we searched for a new boat.

**Credit cards:** If you report your cards as destroyed instead of lost, companies will issue replacement cards with the same numbers. This makes life much easier if you have accounts with automatic payments linked to credit cards.

**Mail:** Before you have anything mailed to you, inquire about the most reliable shipping agents for the country you are in. After having issues with FedEx, we were told by several sources that DHL is far superior to FedEx in Europe. In Turkey, we were warned to never ship packages by regular mail. Arrange shipments by carriers like DHL or FedEx through a marina office that receives such packages regularly.

**Share your story:** Telling our story to people we met helped us in more ways than we expected. We were

given minor stuff for free in stores; we received expedited service; our hotel rate was discounted. The day after the fire, I asked my ophthalmologist's office to scan and email me my prescription. I was told it was against company policy to do so. Once I told my story, the scanned prescription appeared in my inbox within an hour.

**What not to do:** Don't start replacing everything you had. Wait to buy things until you have a new boat and a place to put them. In our first week, we bought stuff out of a knee-jerk reaction to feel better. Then we were forced to leave that stuff with friends. For months following, we schlepped heavy, oversized duffels from hotel rooms to friends' places to short-term rentals ... on and off trains, planes, and automobiles. Think: one bag and one carry-on.

**Remember:** People want to help. Oddly, it is harder to accept than you imagine. Accept the money. Accept the pre-paid phone. Accept the meals and clothes. Once we had access to money and tried to pay people back, they refused, commonly saying, "You will help somebody else someday."

We found some items, but very few. Jennifer's soggy wallet inside a melted handbag. A bracelet of mine. We dug deeper. It was like grabbing into coal slurry and pulling up a fistful of soggy char and rubbing it slowly, letting it sift out of your hand to see if anything valuable remained.

### A compass restored

On one scoop, I felt something distinct. I pulled it out. It was my brass compass. With sudden clarity, I felt a bolt of certainty shoot through me. I looked at the blackened compass in my hand and instinctively thought, "I want to continue this journey."

Having my inner self suddenly swing toward such surety buoyed me with relief. For the first time in a week, I knew what I wanted.

Our emotional landscape is not a flat plane. We all have many wants in us. Some are equally strong, yet conflicting. During the ensuing weeks and months, Jennifer and I discussed all kinds of

alternate plans. I had a desire to go back to Vermont and start a sailing program. She might open a shop in Burlington selling Turkish rugs. Maybe we could rent a house in the Mediterranean for a year. I could write and Jennifer would study Turkish cuisine.

But then I would look toward my compass again where it sat in each of the places we stayed. The needle was steady most days. It pointed to a small town on the southwestern corner of Turkey: Marmaris. While the town itself is nothing special, we were told it's home to the Mediterranean's third-largest yacht harbor with thousands of boats . . . many of them for sale by people whose needles of desire point elsewhere.

Perhaps we will sail again from there with a new deck under our feet and an old magic compass in my pocket. *A*

*Mathias and Jennifer Dubilier found their new boat; another*

*Hans Christian 33, named very appropriately, Phoenix. You can follow their adventure at their blog, <[www.dolphinsvoyage.blogspot.com](http://www.dolphinsvoyage.blogspot.com)>.*



One thing Mathias recovered from the ruins of *Dolphins* was his compass, a talisman of sorts.

## Can this be prevented?

by Jerry Powlas

I'm going to assume that *Dolphins* was lost to an electrical fire. The exact cause will never be known. Most good old boats had or have fairly primitive electrical systems. The low amperage circuits were fused, but the high amperage circuits were not. This followed the common practice of the time for cars and trucks.

Eventually, some larger fuses and fuse holders that allowed high amperage circuits to be fused became available, but these provided an imperfect solution at best. The wire from the fuse holder to the load could be fused but the wire from the battery to the fuse holder was unfused, and offered the same risk as before. Still, at least part of the wire was fused.

What was needed was a means of fusing high-amperage circuits from the point of origin. We're almost there. Blue Sea Systems offers a product family that includes a fuse holder that mounts to a 3/8-inch battery post and a variety of fuses capable of protecting high-amperage circuits. They call these products terminal fuse blocks and terminal fuses. To go the final distance, we still need a device that will fuse an

alternator at its output terminal. With these devices, a boat may be fused wherever electrical power originates. That means that some circuits, like wires to (or from) an inverter/charger, must be fused at both ends.

Even with all the wires fused, this kind of accident cannot be prevented. It is a common misconception that a fuse or circuit breaker will prevent a fire. In many cases they will, but not in all cases. Fuses and circuit breakers simply prevent wires from carrying so much current that they overheat and damage their own insulation.

Consider the 12-volt cigarette-lighter circuit. It may be properly fused and wired and yet, when the lighter is energized, its element will become hot enough to light a cigarette or set paper on fire. Hotplates, electric stoves, and space heaters are all purpose-built devices that create dangerously high temperatures without blowing fuses. Sadly, when other devices malfunction, they may create unintended arrangements that get hot enough to cause a fire without blowing a fuse. Electric motors that are locked so they cannot spin are an example. For this

and several other reasons, if you even suspect that your fire is electrical in origin, or will involve anything electrical, turn off the main breaker immediately.

Finally, once a fire has started, you'll wish you'd thought of some issues ahead of time. The idea of having a particular type of fire extinguisher for a particular type of fire is of limited value once the fire is burning. As Mathias points out, the quantities and sizes of fire extinguishers required aboard boats are nearly useless once a fire has caught hold. Time is critical. Don't waste time reading labels or trying to remember the ABCs of fire-extinguisher ratings. If those little extinguishers are to make any difference, seconds matter. In mere seconds they will all be empty. The only thing a sailor has in sufficient quantity to fight a substantial fire is water. When I was a sailor, the Navy used it against everything that burned. It will cause short circuits in electrical systems and it will cause fuel and oil to spread but, when you are in the last seconds of the end game, don't be afraid to use lots of water. I've seen it save the day against oil and grease fires.



**To order call 701-952-9433 or  
visit [www.goodoldboat.com](http://www.goodoldboat.com)**



## Good Old Boat Tote

Heavy cotton canvas  
boat tote in natural with  
navy handles. **\$15.00**

## Denim Shirt

Medium-weight,  
long-sleeved.  
Sizes: S, M, L, XL, XXL  
**\$35.00**



## Boat Parts

### T-shirt by Dave Chase

Sizes: S, M, L, XL, XXL    **\$20.00**



**Work Shirt  
with Good Old Boat logo**

Sizes: S, M, L, XL, XXL    **\$20.00**



### Good Old Boat ball cap

Sturdy and durable blue denim ball cap. **\$16.75**

## 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 \_\_\_\_\_

[illegible]

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

[illegible]

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

**SUBTOTAL**

Shipping \*

**TOTAL**

6.00

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

# NEW!

## BIG LOGO T-SHIRTS



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

Shirt Back

Pocket Detail



Shirt Back

Pocket Detail

**NEW**

**Long-Sleeved Pocket T-shirt in White**

Sizes: S, M, L, XL, XXL \$25.00

**NEW**

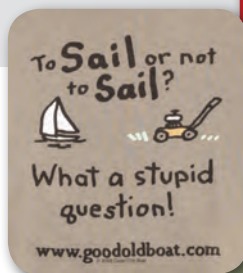
**Pocket T-shirt in Deep Navy Blue**

Sizes: S, M, L, XL, XXL \$20.00

**All of our T-shirts are made  
with 100% cotton, high-quality fabric**

## Shirts by Tom Payne

*Prairie Dust*



*Ruby Red*



*Iris Blue*



*Serene Green*



*Deep Jade*



*Honey Gold*

**Sizes  
S, M, L, XL, XXL  
\$20.00 each**

# GOOD OLD BOAT GEAR



# Classic

I learned to sail when I was 5 or 6 years old on Curaçao in the Caribbean. While I was in my early teens, my family moved to the Netherlands where “everybody” sails. I became an active sailor in racing dinghies, starting with a Cadet I built, and worked my way up through the Vaurien, Flying Junior, Flying Dutchman, and Tornado classes, and finally to cruising boats.

When I came to the States, more than 30 years ago, I didn’t do much sailing at first. I dabbled in small weekend boats with friends on inland lakes and rivers before becoming a classic powerboater. I’ve always been stricken by woodies and wound up restoring several Chris-Crafts.

My friend Tim Hafner envied sailors leaving the channel out of South Haven, Michigan, but he had never been a boater, so he asked me if I would like to buy a sailboat with him. I jumped at the offer. We started looking for used boats but, as Tim and his wife, Mary, had no boating experience and my lovely wife, Doris, had only motorboat experience, I was the only sailor. I determined that we needed a solid good old boat, such as a Morgan, Pearson, C&C, or Chris-Craft, for a reasonable initial investment. I knew it was possible that any of the three other partners might not like the sailing experience and we might therefore have to sell after the first season. For this reason, we did not consider boats costing \$40,000 or more.

After looking at many boats, we settled on a 1972 Irwin 32 Classic, a boat big enough for four of us and one with great motion comfort and capsize ratios. It’s not the fastest boat . . . but

it’s not the slowest either. This would be a good cruiser for Lake Michigan, the “big” lake. I crawled all over the boat checking for possible problems and found none that really concerned me. We made an offer while she was on stands and covered with snow. It was contingent on a sea trial.

Even prior to the final sale, we took the sails home and spread them out on the grass to check them over. The 160 genoa needed a minor repair and we opted to do that at our expense before the sea trial. It poured



**Sailmates** leaves the barn after spending the winter getting a “hull lift.”

rain during the sea trial, but everything worked. We signed the contract that afternoon and planned to sail 84 nautical miles to her home port that weekend.

As well as inspecting and repairing the sails in advance of the sale, we convinced the previous owner that he should let us clean and wax the boat before she was launched. This would be a win-win situation for all, as we would have the boat clean and shining if we accepted her and, even if we did not sign the purchase papers, he would have a clean boat. We scrubbed and cleaned and polished and rubbed for two weekends and she didn’t look bad, except none of us liked the off-white color of the old gelcoat. She wasn’t in bad shape but colorwise we thought she was “blah.”

We began to understand what a great sailing vessel we had when we completed the 84-mile passage in just 13 hours.

## Repairs and cosmetics

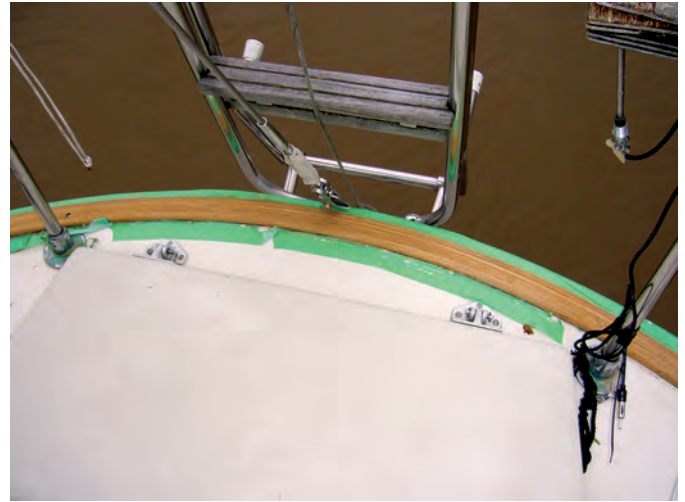
Once she was in her new home port, I made new companion-way dropboards of solid mahogany and varnished them. I also made a mahogany cabin table as the boat came without it and it was necessary as the bottom for the port “double” berth. To support the table I used a pedestal receiver and chrome pipe of the type used for cockpit chairs. I admit that cutting a hole in the cabin sole for the receiver was hair-raising, as I did not know what might lie beneath.

As a group, we agreed to attack the teak toerails and handholds first.

## in blue

### *New sailors freshen up an Irwin 32*

by E-J Ohler



**When E-J and his partners bought the boat, her woodwork had been rather neglected, at left. Restoring it was one of the first tasks they took on, and the taffrail, at right, came back nicely after some heavy sanding.**

We soon realized we'd rather sail when the weather was nice than work on scraping and sanding. For simplicity, I opted for Cetol teak finish, even though I was used to using Interlux Schooner varnish in my mahogany Chris-Craft work.

I rebuilt the forehatch with mahogany and new acrylic as the old one was completely crazed, the teak trim was rotted and leaking, and I didn't trust it to carry our weight. It was interesting getting the trapezoid form with the dado for the seal put together.

I used clear  $\frac{3}{8}$ -inch acrylic and put a limousine-grade film on it to block damaging sunlight and provide some privacy. To this, I added a solar-powered Nicro ventilator.

After a season of great sailing, Tim confirmed that he really liked to sail. We knew then we'd keep the boat and decided she needed a new color. Since she was almost 40 years old, we looked at classic colors — red, burgundy, dark green — and settled on blue. I then needed to determine which system to use. I considered Awlgrip,

Alexseal, and Interlux. I had painted two 30-footers and many smaller ones with Interlux paint and Interlux varnish so I knew these were good products.

Then, at the Strictly Sail Chicago show, I saw a good old boat that had been repainted with Interlux Perfection in flag blue and I was sold. We chose Interlux Perfection two-part polyurethane. The cost was many times less than for Alexseal and Awlgrip. The Interlux representative at the boat show cinched the deal when he said the temperature range and paint application was more



**Nobody liked the "blah" off-white hull color so, over their first winter with the boat, E-J and Tim stripped the bootstripe and spent 80 hours sanding the hull, at left. The deep blue and the red bootstripe certainly banished the blahs, at right.**



amateur-friendly than my other two choices. Since we live in Michigan, application temperature was important.

### Painting by degrees (F)

We were able to store the boat inside an old lumberyard building. We spent approximately 80 man-hours removing the boot and cove stripes and “roughing up” the gelcoat with palm sanders and 60-grit paper in order to assure good paint adhesion. We used heat guns to remove the vinyl name from the boat and I filled a couple of small gouges with epoxy.

We then had to wait for the right temperature for applying the first coat of primer. This was followed by another 20 hours of sanding, this time with 120-grit paper, and another coat of primer. We opted for the roll-and-tip method as spraying required a minimum of 50-degree weather and roller painting could begin in 45-degree weather. These temperatures were hard to find in early spring in Michigan.

After the two primer coats we applied a new red bootstripe and waterline. This required two finish coats. We did all our work on weekends and some evenings. Tim is a hard worker but not a do-it-yourselfer. As he was often away on business, he could only help when I was there, so some evenings and weekends I worked alone.

While we waited for another weather break, Tim worked on the teak toerail and handholds. I put in another bronze through-hull for a raw-water pickup in the head as it had been designed to use potable water. I repaired the urethane prop that had been nicked by flotsam over the years and had a slight vibration.

**“With the second coat, the boat looked beautiful.”**

I used West System epoxy with fairing filler for this and it worked great.

At last the time came to apply the first coat of blue. I caught a weekend in late April 2011 that was forecast to be 46 to 50 Fahrenheit. I mixed the paint (based on volume), let it stand, and applied it with a high-density foam roller. These are not the inexpensive black rollers you buy at the hardware store. We used West System rollers. Tim rolled and I followed immediately, tipping the paint out with a high-quality brush.

We were disappointed when the first coat didn't cover as well as we'd hoped. It was a bit too cold and we discovered that the paint didn't level out as well as we'd hoped. It flowed OK while we were applying it, but a higher temperature would have made it “settle” better.

After letting the paint harden, we sanded the hull once again, this time with 220-grit paper, and cleaned it again with MEK. Waiting for warmer weather in order to apply the second and third coats was unbearable, but I finally had a couple of days that looked acceptable and applied another coat by myself.

With the second coat, the boat looked beautiful and we decided to do a third coat, if needed, in the spring of 2012. All that remained was the cove striping. We opted for gold as we also had a small gold pinstripe at the waterline. Originally, we were going to paint it, but I found a nice gold vinyl tape that fit perfectly in our cove. The waterline stripe was one that remained from one

of my Chris-Craft restorations and we applied that also.

### Additions and improvements

While the mast was down and it was too cold for painting, we removed, restored (that is to say, filled the rot), and varnished the oak spreaders. I also rerouted some of the wiring and installed spreader lights using automotive LED fog lamps.

During the winter and spring of 2012, we installed a second lifeline and a new imitation-wood cabin sole. I used a product I had discovered at Menards (also at Lowe's) called Aquarius. It is specifically made to be 100-percent waterproof and snaps together like most modern laminate flooring. This was a great and inexpensive way to quickly improve the appearance of the old cabin.

All that is left to do now is to repaint the deck and cabintop and maybe even put on PlasTeak decking. Before we tackle those items, I'd like to look into getting new sails, halyards, and lines even though the current ones aren't too bad. I'd just like to be sure that nothing fails while in 40-knot winds on Lake Michigan. A good old boat is always a work in process. *▲*

*E-J Ohler was a very active sailor as a child and in his teens. He and his wife, Doris, now sail with their boat partners, Tim and Mary Hafner, out of South Haven, Michigan, on the Irwin 32, SailMates, they have been restoring.*



The original plan was to buy a sailboat to see if it would be fun. E-J, in the cockpit, at left, knew it would be but Tim had not sailed before. Their wives, at right, Doris Ohler (left) and Mary Hafner (right), apparently take having fun very seriously.

# Hurricane on the Hudson

*High winds and high waters wreak havoc upriver*

by Clenn Reed

*On October 29, 2012, the center of Hurricane Sandy made landfall near Atlantic City, New Jersey. The accompanying storm surge, driven by a high winds over a vast area of the Atlantic and boosted by a full-moon high tide, caused widespread damage across coastal New Jersey and New York. Lower Manhattan was inundated and in the dark for days, but even 40 miles up the Hudson River in Verplanck, New York, the river reached unprecedented heights. —Eds.*

## Saturday

There was bustle, bravado, some folks drinking beer in their deck chairs, and breezy talk about past storms endured. Preparations were under way, some more serious than others. Einar Johannsen, the owner of Viking Marina, and his crew were hauling and blocking boats. The wind was sending a fast-paced mixed concoction of clouds scudding up from the south. As it brewed above, what it was wasn't quite clear. The news had Sandy's center hundreds of miles offshore and Cape Hatteras was feeling it.

Would the storm turn? And if so, when? The reports had it likely coming ashore somewhere in New Jersey. I soaked it all in and wondered: would I be better off in the water or tucked up on the stands? I walked around the yard, surveying the situations of several boats that had been put up. An elderly couple had just hauled their 50-foot trawler and were struggling in the wind, trying to pull an enormous tarp over the wheelhouse. I pictured that tarp — one of those gray ones from Home Depot — beating in the stronger wind to come and, worse, pulling like a parachute hard enough to rock the boat off its stands.

*Windigo*, my Cape Dory 28, was in a slip beside a 34-foot cruiser. Her owner, Ralph, had been tying off to the array of cleats on the main dock and finger piers. His approach — about 13 lines leading to every available anchor point — suggested that, even though no one knew for sure how things would pan out, he planned to be prepared. As he snapped photos of his lines, close-ups of his attachment points, and general photos of the big picture, we talked about what I should do. He suggested that I move my boat around to the other side of the dock. I considered: she would be by herself in a double slip, tucked between two pilings on her aft quarters, rather than in the open, and the cleats were a bit more solid and not already crowded with lines. The pilings at the ends of the finger piers were also about a foot taller, a little insurance should the water rise. Could it rise *that* high?

I started *Windigo* up and pulled her around. Then, with my neighbor's help, we arranged lines and tied her off. I stripped and bagged the sails, unbolted the boom, and called it a day.



Clenn's preparations paid off. After the storm, *Windigo* above, looked remarkably unscathed despite the wild ride she must have had — the water rose to within a foot of the top of the piling off her quarter. The 50-foot sloop that had been tied to a long finger dock wasn't so fortunate, below.

## Sunday

The pace and tone of the yard had changed decidedly. There was an urgency in the air and the skies were furrows of slate. The sense that this was going to be just another bad nor'easter had disappeared with sleep. Whatever bravado remained was spent in lugging lines out of lockers and cinching them tight around anything that looked like it wouldn't come loose. Reports were growing more ominous; Sandy was coming true. A replica tall ship used in the movie *Mutiny on the Bounty* was reportedly taking on water off the coast; its crew was boarding life rafts. Later





“I wondered if *Windigo* would be better off away from all the docks.”



In the Viking yard, above, several powerboats and smaller sailboats floated off their cradles and jack stands and came to rest where the wind blew them — unfortunately, on top of their rudders and propellers. The yard next door presented a similar picture, below.



we would learn the captain and one crewmember were lost. In the yard, the lift was busy. People scrambled and hustled. Wary owners walked the docks, talking into their cell phones. Andy, a marine electrician, who had his 50-foot sloop moored picturesquely in the bay all summer long, had moved her in and tied her off on a long stretch of finger at the end of our main dock. He had built this beautiful sailboat himself, spending, in his words, “all of my adult life” bringing that dream into reality.

The strongest winds in a hurricane are on its right side where, due to the storm’s counterclockwise rotation, its winds are in the easterly quadrant. Forecasts had the center of the storm coming ashore around Atlantic City, New Jersey. But given the size of the swirl — some 900 miles across — it was apparent that New York and the Hudson River were in the path of the most dangerous side of a pounding, historic storm. I looked over *Windigo* — looked at the lay of my docklines, thought again about having her pulled, then looked over at the lift hauling and blocking boat after boat. I went below and started heaping anything of value into the cockpit — binoculars, splicing fids, inflatable lifejackets, lantern and flashlights, books, cushions that were a winter re-covering project — and I wondered: if she goes down, what will these things mean?

I looked around at others. They all seemed to have the same expression on their faces: “This could be very bad, but what should I be doing?” I put the main boom below and cushioned it so it wouldn’t damage the sole, then lashed it to keep it from moving. As the midday tide came in, I stood silently watching how *Windigo* moved on her docklines. Ralph, who had suggested I move her around, asked, “You waiting for a train?”

“Yeah,” I replied, a bit grimly, “The Sandy Express,” and he managed a chuckle.

“You’re good,” he said. “You’ve done all you can do.” I wanted to believe that, but as I looked around me and up at the foreboding sky, I wondered.

On my way home along the river, I saw two sailboats anchored in the lee of Croton Point. The wind was predicted to come out of the northeast. There would be little fetch from the eastern shore and as the wind swung around to the south, as predicted, they would be protected by Croton Point. I wondered if *Windigo* would be better off away from all the docks and the other boats in the marina, some obviously neglected and bound to come loose if things got wild as promised. Then again, how would it be for a boat to weather it out with 85-mph winds doing all they can to yank her off the bottom and send her reeling down the river? I put it out of my mind. There are braver souls than thee in the world, I conceded to myself.

### Monday morning

If there was any doubt in anyone’s mind about what might be on its way, it was washed away by Monday’s midday tide. Schools were closed for at least two days, the wind was building fast, and the time for decision-making had passed in the night. Einar, with a helper, was using a forklift to lift up and block the soda machine that sits in front of the marina office — three layers of railroad tie blocks ought to do it.

I walked onto the dock. It was high tide and the ramp, which even at high tide would normally be angled down, was level with the land. Water was lapping within about a foot of the top of the bulkhead. Boats were racketing around and halyards were slapping on masts.

The New York Police Department had moved in with three workboats; they were made fast to an old barge that had been brought in and positioned at the mouth of our harbor to prevent . . . what? Boats and debris from washing in? Boats from washing out? If ground zero was New York Harbor, perhaps these boats were being kept behind the lines as part of the backup plan. Out on the river, several big boats and barges were anchored facing south.

It was now a waiting game and the biggest player was about to come through the door. Winds were steady in the 30s and gusting hard and the docks were heaving. The tenor of the situation had become more manic. If there had been any question in anyone's mind about what he ought to do, it dissolved now into finding whatever ropes might still be stowed and tying them to whatever cleats remained. One sailboat had its mast base roped off to the dock. Lines crisscrossed slips. A couple of larger boats put out anchors, apparently to keep them from floating onto the shore should the tide rise high enough.

I tightened *Windigo's* lines and doubled what I could. I cut some polypropylene hose I had stowed to replace water lines and wrapped my springline. It seemed petty at the time. All I could picture was my loose boat being slammed and sunk by whatever might break loose. I had a fenderboard from our trip across the Erie Canal over the summer. I draped it over a pair of fenders to buffer any hits from a nearby piling. I tied another line to the deck cleat and another to the base of a shroud. With 10 lines out, I ran out of cleats. I wrapped the mast with my spinnaker halyard and that was it. There was really no more to do.

### Monday night

She came. Or he came. My daughter asked: "Is Sandy a boy's name or a girl's name?" We watched the trees in the streetlights blown about like rags in the wind. Then the power went out; the neighborhood went dark, and we heard the sound of exploding transformers and the cracking of branches. Our family slept together downstairs in the living room.

### Tuesday

Overnight, an immense oak had fallen at the bottom of the street, taking with it the overhead wires and cracking the poles. In the morning, I had to sneak my car under the police tape and through the wreckage to get to the boat. The wind was cranking and there were few cars on the road. As I came down the hill toward the boatyard, I saw cars lined up and parked along both sides of the road. Motorboats had been blown through the gate at the yard adjacent to ours and now lay in the street. Others were piled up against the fence, the only barrier that kept them from spilling out into the roadway.

As I neared the gate to our yard, I saw masts pointed skyward at 45-degrees and, looking along our yard's fence, I noticed lifejackets, ladders, and boathooks lodged between

**“All I could picture was my loose boat being slammed and sunk by whatever might break loose.”**



In the marina, docks broke loose when they were lifted above their pilings, above, but the boats attached to them in general fared quite well and suffered little damage. An assortment of debris lodged in the boatyard fence, below, shows the height the water reached.






the posts and the mesh, evidence that where I was standing had, some six hours earlier, been submerged up to my waist at least. In the yard, boats that had been lifted off their jack stands were keeled over and sitting on their props and bottoms. In the harbor, finger docks jutted into the air, having been lifted over the tops of their 6- to 8-foot pilings with the rising water. On the shore to the north, Andy's beautiful sloop lay on its side on the rocks, its mast tipping back and forth as the waves slapped the hull.

The end of the dock where *Windigo* was tied had broken loose as well, and floated at an angle. Finger docks that had broken off were floating loose among the wreckage. A long dock that ran the length of the marina's breakwall was gone completely.

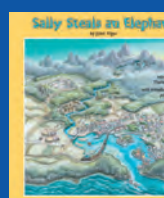
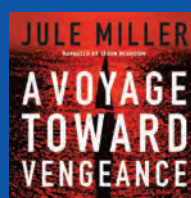
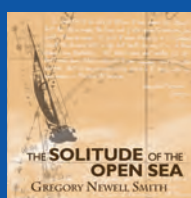
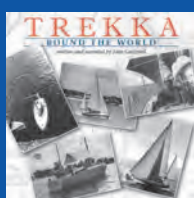
*Windigo*? She survived with a seriously bruised toerail. Einar said that when he looked out, she was rolling back

and forth 45 degrees. The nearby marina office and Einar's home had been flooded with 6 feet of water. I asked Molly Johannsen, Einar's mother and the matriarch of the marina, if she'd ever seen anything like it in all her years. In her spirited and ever-optimistic voice she said, "No, we've never had anything like this." Hers was a voice that promised, "We'll get through *this*," as she swept water toward the door. 

*Clenn Reed grew up and learned to sail on the New York end of Lake Erie. He, his wife, Kate, and their two daughters, 6 and 11, have spent their last few summers aboard Windigo, their 28-foot Cape Dory. Last summer they brought Windigo across the Erie Canal from Barcelona Harbor, New York, to winter over in the Hudson River near their home.*



Boats ended up in a jumble, top left, although the deep-draft sailboat at the right of the photo stayed put. The road outside the adjacent marina was strewn with boats that had washed through the gate, top right. The sailboat, above, belonging to Andy, the electrician, suffered damage to her port side from the dock and to her bottom from the rocks. She was later pulled off by the Johannsens' tug, at left, that also rode out the storm at the marina.



# If You Like Audiobooks . . . Have You Listened to Ours Yet?

**Good Old Boat has produced 14 audiobooks (downloads priced between \$15 and \$35)**

## Historical Fiction:

- *A Matter of Honor* written by William Hammond and narrated by Spencer King
- *Voyages in Desperate Times* written by Jule Miller and narrated by Spencer King

## True Adventures on the Water:

- *Trekka Round the World* written and narrated by John Guzzwell
- *Into the Light* written by Dave Martin and narrated by Jaja Martin
- *The Solitude of the Open Sea* written and narrated by Greg Smith
- *A Year in a Yawl* by Russell Doubleday and produced and narrated by Geoff Safron
- *Sailing Alone Around the World* by Joshua Slocum and narrated by Jerry Stearns

## Thrills, Chills, and Suspense at Sea

- *The Riddle of the Sands* by Erskine Childers and narrated by Jeremy McGeary
- *Telegram from the Palace* by Geoffrey Towe and narrated by Jeremy McGeary
- *A Voyage Toward Vengeance* by Jule Miller and narrated by Jason Beaudoin

## Great Listening for Young Sailors (ages 8 to 12 specifically recommended)

- *Danger, Dolphins, and Ginger Beer* by John Vigor and narrated by Theresa Meis
- *Sally Steals an Elephant*, a sequel, by John Vigor and narrated by Theresa Meis
- *So Long, Foxtrot Charlie* by John Vigor and narrated by Theresa Meis

(We also recommend *A Year in a Yawl* for this age group as well as for adults.)

## And What's More

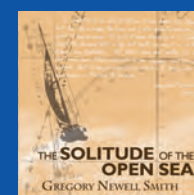
- Good Old Boat's *Bookends*, narrated by Karen Larson
- 100 musings from *View from Here* and *Last Tack* columns by the editors of Good Old Boat



[www.AudioSeaStories.com](http://www.AudioSeaStories.com)

# GOOD OLD BOAT

THE SAILING MAGAZINE FOR THE REST OF US!



[www.goodoldboat.com](http://www.goodoldboat.com) • [www.audioseastories.com](http://www.audioseastories.com)



# Water by gravity

## *Simplifying the water supply led to galley efficiencies*

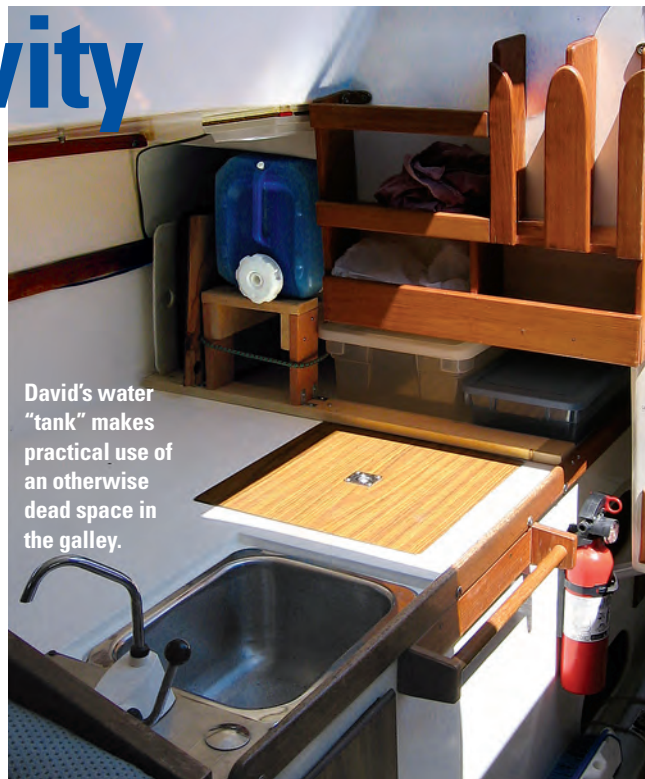
by David Strong

**O**ur 1976 Tanzer 26 served us very well for several years as a cruising boat on Lake Winnipeg in Manitoba, but on such a small boat the galley area was always in competitive demand as a multifunctional space. Inspired by Lin and Larry Pardey's famous penchant for simplicity and their gravity-fed water system, I transformed an awkward original galley arrangement and leaking water tank into a premier workspace and galley storage system.

The heart of the design is a simple wooden stand, built from scrap 1- x 2-inch stock, that elevates a 10-liter plastic water jug above the level of a pot rim or a 1-liter drinking-water bottle. The plastic water jug is a standard item from Reliance Products, called an Aqua-Pak 2.5G/10L. Others generally like it are available in big-box stores.

The stand for the jug is fixed in the difficult-to-use area on the aft end of the galley counter under the cockpit seat. I left enough space outboard between the stand and the hull to store our cutting board and a one-burner butane stove in its case with a friction fit. A bungee through the handle and secured to two eye screws on the stand holds the jug in place and a raised edge at the back of the stand prevents the jug from sliding aft.

It's very simple to load a fresh jug with 10 liters of water onto the stand, after which a turn of the tap produces gravity-fed water on demand. Working with jugs of water makes measuring our water consumption simple. We typically use only one 10-liter jug per weekend but for longer cruises we carry extra water in a couple of 20-liter containers (Aqua-Pak 5G/20L). Since it's easy to refill the 10-liter jug from one of these, we have abandoned any interest in replacing the expensive central water tank and



David's water "tank" makes practical use of an otherwise dead space in the galley.

hand pump. The original tank area is now dedicated to storage space.

Inherent in the design is a subtlety that makes the water system integral to the overall galley performance. The water stand is fixed to a wooden crosspiece on the counter located just aft of the cooler lid. That crosspiece forms an effective fiddle to retain two plastic storage containers (the type with lids that are sold just about anywhere). We bought containers to fit the space, and they hold a substantial volume of galley condiments and cutlery. An original fiddle on the counter prevents the containers from shifting inboard and they cannot shift aft because of the structure of the boat. To remove them, we lift them over the crosspiece. They have remained locked in their positions in all conditions over several years of sailing.

In the end, I only had to drill four new screw holes in the boat, and we could not be happier with the performance, economy, and simplicity of this improvement to the galley. *▲*

*David Strong is a professional engineer who works for the Royal Canadian Air Force in Winnipeg, Manitoba. For the last 10 years, Dave his wife, Eveline, and their rambunctious golden retriever, Montana, have cruised through the summers on progressively larger keelboats around Lake Winnipeg. They're currently sailing and recapitalizing Scheherezade, a 1976 Ontario 32.*



## Custom Fabrications

- \* Stainless stem plates/anchor rollers to replace worn out aluminum castings
- \* Stainless chainplates to prevent rig failure from fatigued aluminum castings
- \* Stainless platforms to upgrade your sailboat
- \* Custom fabrications using our new waterjet capabilities

*We take pride in using only North American raw materials.*



**STAINLESS OUTFITTERS**  
800-268-0395

WE SHIP ANYWHERE IN  
THE US AND CANADA  
[www.stainlessoutfitters.com](http://www.stainlessoutfitters.com)

# STAINLESS STEEL



*Strength, Quality  
and Dependability . . .  
plus a Lifetime Warranty!*

Stainless Steel  
Marine Hardware, Rigging & Fittings at Reasonable Prices  
*See our complete catalog and order on the Web!*

**www.BOSUNSUPPLIES.COM**

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

**SUNCOR**  
Stainless

# The Original FLEXIBLE FURLER

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

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

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

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

**CDI**  
CRUISING DESIGN INC.

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



BoatU.S. photo

**Life's been rough.  
We know.**

Sailors from the East Coast to Lake Erie have been experiencing some very tough times. Some of our subscribers have lost boats and experienced damage at the hand of hurricanes. If you're among them, we're thinking of you. As an expression of our concern, we'll extend your *Good Old Boat* subscription by one year. Just get in touch: 701-952-9433, mark@goodoldboat.com.

**And we care.**





Deployed, at left, the step extension makes a comfortable seat. Folded down, below, it becomes part of the cabin's teak décor.



# Multitasking companionway step

*A fold-away extension is a seat and a workspace*

by Henk Grasmeyer

In 2003, a couple of years before retirement, my wife and I fell in love with and purchased a handsome trailerable 25-foot 1995 Catalina, hull #151, with water ballast and a centerboard. Out of necessity and, yes, for the sheer fun of doing projects, we made a series of modifications and improvements to complement the excellent layout of this well-engineered but petite cruiser.

A shortage of seats when entertaining and doing galley stuff, and a desire to have an “inside” lookout perch during foul weather periods, gave us the incentive to add a foldable seat to the companionway steps. Now, many seasons later, we could not imagine what we would do without it.

The concept was simple. As we were often perched on the companionway step until forced to move by a “numb bum,” we agreed to modify one of the hatch steps into a comfortable additional seat.

Our design criteria for the step were extensive: it must be functional and multipurpose, it must be stowed simply and out of the way, it must be available anytime, it must blend with our teak woodwork and interior decor, it must not add clutter, and it must be safe to use.

We wanted this addition to provide extra seating in the cabin for guests and for use when preparing meals. It would also have to serve as a lookout seat in the cabin as well as a perch that would allow for an all-around view when at anchor, moored, or under way. It would allow one of us to be seated while under way when the weather was cold, miserable, or rainy. In addition to all this, our seat should also serve as an extra platform for meal preparation, a holding place for dishes, and as a location for a heater or ventilation unit.

As on most boats, the second step up from the sole is at approximately normal seat height of about 17 inches. In our Catalina it also happens to be the right height to give someone sitting on it an unobstructed view through the cabin windows forward, partly to port, to starboard, and also aft through our homemade one-piece  $\frac{3}{8}$ -inch acrylic hatchboard.

Shopping around for wood to match the interior's teak trim, we found 1-inch-thick teak to match the thickness of the existing step. The dimensions of the new step were determined by the rise between the first and second step and the measurements of the existing step. We also used teak for the folding leg and glued a felt strip to the bottom to prevent abrasion and slipping where wood meets wood.



When the extension is stowed away, at left, the support leg tucks away diagonally under the companionway step. The fore-and-aft dimension of the extension fits exactly between the companionway treads. In this view of the extension deployed, at right, the simple lap joints in the support leg are clearly visible.

The teak support leg is 1 inch square, which may be overkill. It could be smaller or be made of aluminum or stainless-steel tubing. The key to the project is making sure there's sufficient room to fold and store the leg behind the step when it's hinged down. A stainless-steel piano hinge, with one side attached to the bottom of the existing step and the other to the underside of the back edge of the extension, allows the step to swing down and be easily stored when not in use.

The teak support leg is also attached to the front of the seat extension with a stainless-steel piano hinge. The setback from the front edge of the step extension is determined by the space behind the step in the fold-down position. By angling the leg diagonally, I was able to gain a

little length, and it fits nicely out of the way between the companionway steps. This should be measured accurately and adjusted to suit each situation. We finished our new step by oiling the teak.

Having used the seat during extended cruises for many seasons, we have come to rely on it to add to our comfort. It is one of those things that make life aboard a pocket cruiser just that much more enjoyable. *▲*

*Henk Grasmeyer, a native of Holland, learned to sail at the age of 6 in a rowboat with an oar and a bedsheet. Later, when living in British Columbia, he owned a Hobie Cat for years. Now retired, he and his wife, Johanna, tow and sail their Catalina 25 all over North America.*



On the workbench, at left, the step/seat's construction is apparent. It's attached to the original step with a piano hinge. The support leg is a simple rectangle of 1-inch teak stock. The folding stool shows that the step is at standard seat height, at right.




# Hose wrench

## A nifty way to persuade hose onto a barb

by Clarence Jones

**A**fter I replaced my boat engine's water-pump impeller, the supply hose refused to slip back onto the fitting. Even though I had lubricated the fitting, the hose was stiff, and I couldn't get a hand into the tight space to grab and pull the hose over the fitting nub. I own a lot of tools, but not one would do what I needed.

My solution was to tie two pieces of heavy nylon twine to the hose with slip knots. Using a wrench as a handle, I could pull on both lines, up, down, and side-to-side. The two pieces of string became a harness that made it easy to pull and wiggle the hose completely onto the fitting so I could re-attach the hose clamp. 

*Clarence Jones is a writer, news media consultant, photographer, sailor, tinkerer, and inventor. He and his wife, Ellen, sail their Catalina 28 from Anna Maria Island in the mouth of Tampa Bay. Clarence recently published his ebook, Sailboat Projects, in which he describes inexpensive ways he has enhanced his boats and his sailing enjoyment.*



Two lengths of nylon twine tied around the hose gave Clarence the purchase needed to pull the hose onto the barb.

## INTRODUCING the MARINE KINETIX 450

The best of both worlds.

Until now you've had to choose between low-wind speed start-up and high-wind output. The MK450 delivers BOTH and it does it quietly and without any operator input!

- 5 knot start-up speed
- Low yaw-error wind tracking
- Carbon-fiber composite blades
- PWM controller
- Innovative design
- Superior components
- Quality construction
- 3 year warranty
- 20 amps @ 25kts
- Includes microprocessor/charge controller
- Affordable Price - \$1099.00



Don't settle for 6 hrs/day of solar power when you can get quiet wind power 24/7.

See us at booth 327  
Miami Strictly Sail  
Feb 14-18th



**COST EFFECTIVE EQUIPMENT FOR LIFE UNDER SAIL**  
**info@cruisingsolutions.com**  
**1-800-460-7456**



## The Coastal Passage

The Australian Boating Newspaper

**FREE** editions online

Australia and the South Pacific



**Come Sail With US!**  
**www.thecoastalpassage.com**

# Green stain be gone

*A little elevation keeps the toilet base dry*

by Glyn Judson

I have seen quite a few marine toilet installations where the presence of even a little amount of salt water has caused green stains to run out from beneath the toilet's bronze base. When I recently installed a fully rebuilt Wilcox



The elevated toilet base doesn't corrode and stain the fiberglass platform green.

Crittenden Skipper II marine toilet in our 1979 Ericson Independence 31, I resolved not to let that happen to me.

My solution was to raise the bronze base slightly above the platform by stacking four nylon washers under each lag-screw mount, sandwiched between the toilet base and the platform it's screwed to. The stacked washers measure ¼ inch in total thickness.

The air space means there is now virtually no chance of getting those green streaks. Also, from time to time I can simply splash a tumbler of fresh water beneath the base to flush out (forgive the intentional pun) any salt water and debris from under there, ensuring the space remains fresh and clean. ▽

*Glyn Judson and his wife, Marilyn, have sailed Santa Monica Bay and the Channel Islands together since 1982, for the last 17 years on their 1979 Ericson Independence 31 that they keep in Marina del Rey, California. They always sail with Glyn's current guide dog in training.*

**New!**  
**Deck Wash Handle**  
Easier to grip.  
Easier to turn.

**Ports Available in Stainless Steel and Bronze**

Port pricing begins at \$109.95

See us at Strictly Sail Chicago and Miami Boatshows!

**888-437-5512**

**Newfoundmetals.com**  
**nfm@newfoundmetals.com**

## BUY OR RENT

The World's

- smallest package
- lightest weight
- least expensive

4-6 MAN

4"x12"x14"

12 lbs.

\$1370

9-13 MAN

5"x12"x14"

18 lbs.

\$1785

New!!! FAA TSO Approved Life Rafts

**Emergency Lifteraft**

TSO'd and Non TSO'd

Call Survival Products, the manufacturer for customer/distributor/service information.  
**MADE IN USA**



**SURVIVAL** PRODUCTS INC.

Phone: 954-966-7329 • Fax: 954-966-3584

5614 S.W. 25 Street • Hollywood, FL 33023

www.survivalproductsinc.com • sales@survivalproductsinc.com



continued from page 9

## Sail-kit pliers

I totally agree with your "pliers in the sail kit" opinion (November 2012 editorial). I've had a pair in my kit for more than 40 years. However, I believe that it is important that this pair should be smooth-jawed, no teeth, to eliminate nicking or roughing the needles and making them snag the cloth. Your article did not mention this difference but I believe it is quite important. They are not easy to find but are out there. Some types of pliers will work with the teeth ground off.

That aside, yours is the only sailing magazine I subscribe to anymore. Good old boats for us good old sailors. One request though: I am a very visual person and would appreciate an accommodation plan with the boat reviews. It is much more informative for me than a verbal description.

—Jim Cozy, Ashtabula, Ohio

*Your every wish is our command! As it turns out, we just began publishing the accommodation plans with our September issue. So there you go! We knew you were going to ask us to add them!*

—Karen Larson, Editor

## Clean pliers? There's a thought

Being a gearhead I have lots of greasy pliers, but I bet you have a preference for clean non-engine-marred pliers



for your sail sewing. There are some things that need to be dedicated to specific tasks.

—Drew Gangle, Waukegan, Iowa

## Boatyard sights

I've seen a few odd things in boatyards in my time but this one is truly weird — although there is a definite logic to it. I observed this snow plow adapter for a forklift at Pugh Marina in Racine, Wisconsin (at bottom left). Apparently the plow needed a bit of weight to work effectively and an old wing keel seemed just the ticket. Also at Racine was this land-sailer I noticed in the boatyard of the Racine Yacht Club (at bottom right). I have no idea how well it works. The bucket is over the mast holder. It looks like maybe it uses an Optimist sail and mast, and apparently you steer with your feet.

—Allen Penticoff, Rockford, Ill.

## Ups and downs of lake sailing

I started sailing about eight years ago and currently serve as the commodore for the Blue Valley Yacht Club, located on Tuttle Creek Lake near Manhattan, Kansas. No one thinks of Kansas as a place for sailors, but we have a fair number of lakes and seem to always have wind.

The big challenge we have is the variable lake level. Our lake was built by the Army Corps of Engineers for flood control, municipal water supply, and maintenance of



## The Mainsail Management System that sells for under \$400

Simple process: Release the halyard - the mainsail settles into the Crib. The safe and practical way to douse or reef the mainsail.



**SailCrib**  
218-547-1188

- Single hand the boat with confidence
- No strings to get snagged in the sail
- No lines to run up the mast
- No sail or sail cover modification needed
- Built of UV A and UV B resistant Marine materials
- Installation available for the hands-off sailor
- Adjustable in length to accommodate all size mainsails

## Has your Lifesling cover seen better days?



**Standout Yacht Fittings makes Sunbrella replacement covers to match the rest of your canvas.**

Specify the color you want and whether you have a Standard or Slim size Lifesling. We will make & ship a new Sunbrella cover that looks great and matches your canvas. \$65 plus shipping, pay c.k. after receipt

To order, call 800-622-1877 or email [Jo@standoutyachtfittings.com](mailto:Jo@standoutyachtfittings.com)  
[www.StandoutYachtFittings.com](http://www.StandoutYachtFittings.com)

downstream navigation on the Missouri River. Recreation was at the bottom of the list. The normal lake level is 1,075 feet above sea level. Because of the drought throughout the Midwest this year, we are currently 10 feet below that. In July of 2011, the lake was 20 feet above normal.

You can see from the photo what we have to deal with: primarily trees and stumps. The Capri 22, *Graceful*, is probably stuck on the lake for the winter since the water at all the boat ramps is now too shallow for her 4 feet and more of draft. The club's boat ramp is located just to the right of the dock walkway in the photo. There is 45 feet of mud between the end of the ramp and the water's edge. Across the cove you can see the public ramp. Last year the water was at the top of that ramp and into the parking lot. If you look closely, you can find several mooring balls in the trees.

I expect that our situation is not too unusual this year. Several of our members are going to deal with keel and rudder damage as a result of hitting stumps this year.

—Daryl Strouts, Manhattan, Kan.



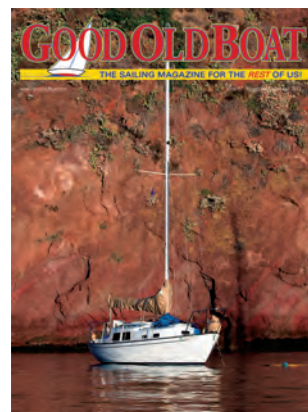
## Moonstone Cove memories

In 1980, I bought a Columbia 28 in Los Angeles Harbor and immediately began to sail her to Catalina Island since it was only 26 nautical miles away (remember the song?). I fell in love with the island's beauty, its numerous coves and anchorages, and even the feral goats and American bison that freely roamed the steep mountains, valleys, and beaches.

The Cal 30 at Moonstone Cove on the cover of the November 2012 issue is tethered to the exact mooring that I used regularly during the summer of 1982 when I was a harbor patrolman for the Catalina Cove and Camp Agency. Boy, what good memories that photo brought up! Moonstone Cove was one of three areas inside a large bight off Long Point at Catalina Island. The mooring field/anchorage is located only about 3 miles west of the city of Avalon so, on busy summer weekends, we would always get an overflow of vessels that couldn't get an open mooring. This would usually result in my renting all of our 100 cans and assisting many other vessels in finding the best spots to anchor. On the busiest weekends and holidays, such as the Fourth of July, we could have more than 300 vessels in the bight, ranging from tiny 20-footers to 100-foot-plus megayachts. There was never a dull moment because everyone was partying around the clock, swimming, diving, imbibing, romancing, wrapping up mooring lines on props and rudders, dragging anchors, and even stranding vessels on the beach. That single summer I gained so much practical boating experience that I parlayed it into a 100-ton Masters license that I still keep current.

By the way, the Cal 30's owner is not practicing best mooring etiquette by allowing the pickup wand to be floating free near his bow. Cheers and good sailing.

—Joe Ratliff, Winnemucca, Nev.  
*continued on page 66*



## Save Your Aft!

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

**BottomSiders**

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

**SPEEDSEAL** *Life*

Award winning Bearing Encased

**DOUBLE  
IMPELLER  
LIFE**

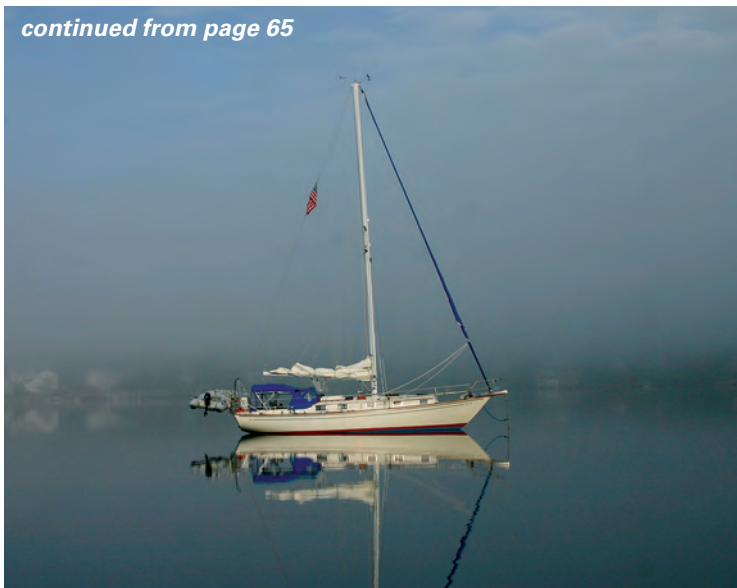
**RUN-DRY  
SAFETY**

now on military,  
rescue & lifeboats

**Upgrade**  
kits available  
**800 675 1105**  
[www.speedseal.com](http://www.speedseal.com)



*continued from page 65*



Ken and Maggie Bernholz sent in this photo of their 1987 Dickerson 37, *Morning Light*, at anchor in the Niantic River, Connecticut. Send your sailboat photos to [jstearns@goodoldboat.com](mailto: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.

of investigation revealed any procedural problem. I was about to toss the hockey puck when I happened to take off my eyeglasses and set them down on my desk next to it — causing the card to swing. Now I compensate for metal eyeglass-frame-induced deviation by lining up the compass in the usual fashion, then extending it out away from my face while maintaining alignment and reading the bearing after the card settles again.

—Jim Snow, Toronto, Ontario

### Bristol Yacht owners group

I can't remember how long I've been a subscriber. It doesn't matter. You're still producing the only magazine of any kind that I read. As a member of a Bristol Yacht owners' online group <<http://groups.yahoo.com/bristolboatowners>>. I frequently find members quoting *Good Old Boat* and referring to GOB as a reference for advertisers. Good mag: good group.

—Chris Crilly, Havelock, Quebec

### Another mystery cover boat

I love getting my *Good Old Boat* magazine and especially that I can have it delivered to Singapore where I live most of the year. It really is head and shoulders above every other sailing magazine I've seen. I have to say that the photo on the cover of the September 2012 issue is fantastic. As I gazed at it, I couldn't figure out what kind of boat the two-masted one in the foreground is. Any way you can pass on that information?

—Steve Smith, Singapore



### Paul, the photographer, answers

The boat in question looked like a really old boat for sure. I don't know what kind of boat it is. We can see that it is a schooner and that there is a gaff on the foresail. The main-sail has a sail cover on it, and I can't tell whether it is gaff-rigged or not. It doesn't have the usual turnbuckles, but instead has the old block-and-tackle-style tensioners for the shrouds. It has a wooden wheel at the helm, no tiller.

—Paul Rezendes, Royalston, Mass.

*Here's your chance, readers. Anyone know this good old schooner?*

### Hand-bearing compass lessons

When I began practicing with a hockey-puck compass I got results that were . . . unbelievable. Going back to the gunsight type resulted in reliable numbers, and no amount

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



## Sheets and Halyards

*Enter your boat model,  
get rigging specs  
and low prices!*

Don't know what sizes you need?  
We have specs on more than 4,000 boats  
We use only top quality,  
US-made Samson marine lines.  
Add splices, whips, and  
shackles or do it yourself.  
Ordering running rigging has  
never been easier.

<http://shop.SailboatOwners.com/rigging>  
or call free 877-932-7245.

 **SailboatOwners.com**  
Sailboat parts online since 1997

## Boats



### Columbia 28

Solid construction. Beautifully maintained. New hull and deck paint in '12. Atomic 4 inboard. 9 sails. Lots of custom wood and added equipment. Many new parts and upgrades: fuel tank, holding tank, wiring, interior lights, mast lights, navy blue cushions in exc cond, cockpit cushions. New main cover, speedo, speakers, mainsheet tackle. Microwave, stereo, BBQ, TV/DVD, 2 anchors, shorepower, wood-and-fiberglass dinghy. Ontario. \$9,000.

**Kevin Alles**

519-733-2187

kevin.sailor@gmail.com



### Pacific Seacraft 25

1979. VG sailaway condition. Located in Lake Superior Apostle Islands area. See display ad on sailboatlistings.com for complete information. New UK Halsey tanbark sails. Many custom improvements inside and out. Hauled on 10/29/12. Winter boat storage included. \$24,000 OBO.

**Mark McGinley**

715-292-2909

saildaboard@yahoo.com

www.sailboatlistings.com/  
view/30276



### Pearson Coaster 30

1967 sloop, original owner. Equipped for offshore sailing,

storm sails, self-steering vane, bunk boards, and weathercloths. Settee-model customized interior w/Tiny Tot cabin heater. Atomic 4 overhauled '08. Extensive equipment including Lowrance Global Map chart plotter; 9 sails including spinnaker. Fresh water since '74. Much-loved sturdy Pearson will take you anywhere. Sodus Bay, NY, Lake Ontario. \$10,000.

**Phil Wilkinson**

585-223-5227

pwilky@aol.com



### Allied Luders 33

1968. Bill Luders design. Built by Allied Yachts of Catskill, NY. Classified as a cruiser/racer w/ design emphasis on seakeeping ability. An incredible seaworthy classic that draws attention wherever she goes. More photos and detailed specifications on website. New Bern, NC. \$38,500.

**Vicki Rasmussen**

301-261-5775

vicki@integrityyachtsales.com

www.integrityyachtsales.com



### Allied Seabreeze 35

1966. The Allied Seabreeze is highly regarded for its sailing ability and bluewater potential. Full keel and bronze centerboard, good sails, '12 reverse-cycle air conditioning, recent canvas and a lightly used 29-hp Perkins M30 diesel. *North Star* has been professionally maintained and is in sailaway cond. Deltaville, VA. \$42,000.

**Skip Madden**

804-436-7131

skipmadden@gmail.com



### Ranger 28

1977. *Gilded Lily*. Fully restored. GOB feature boat Sept. '06. Many upgrades. Beautiful, fast, comfortable sailer. Enhanced Atomic 4. New bottom paint. Dinghy, davits. On the hard, Atlanta. \$12,500.

**Walt Hodge**

770-498-1678

walt@wingwing.com

www.wingwing.com



### Cheoy Lee Bermuda 30

1966 ketch. Truly a *Good Old Boat* project. Completely rebuilt in the last 6+ years w/attention to traditional details as well as contemporary upgrades. 2012 upgrades: new Harken RF, new cabin cushions, and other cabin features. Yanmar 3GM diesel. So. Dartmouth, MA. \$38,000.

**Edward & Ellen Carlson**

508-993-4515

barefoot-girl@comcast.net



### Sea Sprite Custom 30

1985. Beautiful and weatherly classic full-keel cruiser, Bill Luders design. Lightly used, 6'3" headroom, many upgrades since

2006. Hood RF w/new sail, pressurized H/C water, Origo alcohol stove, meticulously refinished cherry-and-teak interior to Bristol cond. Garmin 2000C GPS. Universal diesel w/very low hours. Inflatable and 5 jackstands included. Jefferson, ME. \$27,500.

**Thomas Shippee**

207-563-6170

teship@gmail.com



### Cape Dory 28

1976. Bluewater family sailboat. Original: 8 bronze ports, 2 Bomar hatches, bronze through-hulls stand the test of time. New refit. Clean interior w/green cushions. Mast, boom, ProFurl, standing rigging, turnbuckles, chainplates, blocks. Main, jib, Lewmar #16 ST winches. GPS, VHF, D/S, 25-lb CQR anchor. 1983 Volvo MS2 18-hp diesel rebuilt 1998. Bonus: trailer, aluminum I-Beam twin-axle w/steel cradle. 6 Acme thread pads. St. Petersburg, FL. \$14,500.

**Tim Stark**

727-403-9900

timstark@tampabay.rr.com



### Nonsuch 26

1982 classic, hull #62. *Wing*. 2006 Yanmar 3YM20; dripless shaft seal, Autoprop. AGM batts, Xantrex charger. Raytheon ST4000 AP, 2009 Ray Marine ST60 D/W, Garmin GPSMAP 4000. New mast and running rigging '10. Tides Marine Track and Slide System, electric halyard winch. Dodger and Bimini. Interior freshly varnished. Awlgrip paint. Slip is in a hurricane hole and is also for sale. Miami, FL. \$42,000.

**Fred Edwards**

703-798-0404

wingsailor@gmail.com

Most of our classified ads appear on the

**GOOD OLD BOAT**

website:

www.goodoldboat.com/resources\_for\_sailors/sailing\_classifieds/



## Boats, Cont.



### Finnsailer 29

Very seaworthy and comfortable motorsailer. Hull, superstructure, and deck solid fiberglass in accordance w/Lloyds. Updates include watermaker, on-demand HW, Force 10 propane stove, fridge. Very stout S/S rigging and newer Harken RF. New Yanmar 30-hp diesel and new mainsail 2012. Includes dinghy w/2.5-hp Yamaha 4-stroke OB. Mooring on Lake Champlain in Charlotte, VT. \$19,500.

Peter Geise  
gofans@aol.com



### Luger Voyager 30

1982. Great cruiser with 6'2" headroom, lots of storage. Clean interior, nice wood trim, blue vinyl cushions, perfect topside, cockpit, rudder painted w/Imron in '12. Bottom barrier coat, 3 layers glass/epoxy, Trinidad 2012, ready for water. Main, jib in exc cond. Rig oversized, mast raise/lower system. Large lazarette for outboard w/vertical slide. Bonus: trailer, steel with triple axle and adjustable bunks. St. Petersburg, FL. \$11,500.

Tim Stark  
727-403-9900  
timstark@tampabay.rr.com

### Hunter 25

1985 pop-top (opens for extra room in cabin), sleeps 6 (if you are not too tall), inboard diesel, tiller. Porta Potty. Lots of cockpit space. Inflatable dinghy w/OB included. Nyack, NY. \$5,500.

Jeffrey Silverstein  
917-846-1300  
oldbrain@optonline.net



### Falmouth Cutter

1981. *Honu* is a rare Sam Morse factory-finished Falmouth Cutter with a high-quality trailer. This Lyle Hess design, based on the working craft of Falmouth, England, is similar to *Seraffym*, made famous by the exploits of Lin and Larry Pardey that have inspired generations of cruisers. This pocket cruiser can carry one or two persons across oceans safely. It can also be trailered. St. Petersburg, FL. \$55,000.

David Foster  
727-330-0031  
dfoster6011@gmail.com

## Products-General



### Don't recoat Coppercoat

Environmentally Responsible  
Proven for over 20 years  
worldwide.

### The 10 YEAR Anti-Fouling Paint

For more info  
www.CoppercoatUSA.com or  
Please call 321.514.9197

## Portlight Screens



Bronze Insect Screens for Cape Dory, Westsail & Pacific SeaCraft portlights.

Screens of Schooner Bay  
screensofschoonerbay.com  
(612) 308-2994



Bronze ball bearing  
Cam Cleat, 7/16" line max.  
Bronze Wingtip Navigation lights  
with Glass Lenses.  
Side lights (top and side mount),  
Stern and Steaming lights.

JM Reineck & Son  
781.925.3312  
JMRandSon@aol.com  
BronzeBlocks.com

## PortVisor



### Rain shields for opening portholes

~ NEW ~  
Engine panel shields

www.seaworthygoods.com  
Smart Stuff. Smart Boats.  
941.448.9173

## Smooth Sailing

OVER 30 YEARS

## FOSS FOAM

Rudder Replacements  
FOSS FOAM PRODUCTS  
OF FLORIDA, INC.

7060 Hwy 41 North  
Williston, FL 32696

Tel: 352-529-1104  
Fax: 352-529-1106

www.newrudders.com

Cal • Hooks Marine • Sovereign  
Catalina • Irwin Spindrift • Com-Pac  
Marine Innovators • Starwind Caliber  
Endeavour • Starrett • Captiva  
Mirage Tanzer • CSY • Morgan • TMI  
G. Cat • Nimble Watkins • Gulfstar  
O'Day • Traditional Watercraft  
Hunter Marine • Pearson



The ORIGINAL, since 2001  
www.airheadtoilet.com  
PO Box 5 Mt. Vernon, OH 43050  
740-392-3642

## 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

## Custom Wooden Products

Tables • Drop Boards • Handrails



Finger Lakes Sailing Services  
730 Willow Ave., Ithaca, NY 14850  
607-272-9227  
Sailithaca.com

## Teak Seat

(fittings included)



Install on straight tube or in a corner with a diagonal stay. Tensioned/hinged support leg with rubber foot can be cut to suitable length.

Made by NOA in Sweden

www.svhotwire.com  
727-943-0424  
hotwired@aol.com

For the Captain  
who has everything...



**Handcrafted Replica  
Signaling Cannons**

[www.rbgcannons.com](http://www.rbgcannons.com)

**LE TONKINOIS**



**A NATURAL OIL VARNISH  
BASED ON A CENTURIES OLD FORMULA.**

Very easy to apply and maintain, produces a beautiful deep finish that is durable and forgiving. Does not crack or chip, forget water-caused black spots. Perfect for those who would rather sail than varnish.

AVAILABLE AT THESE FINE LOCATIONS:

Admiral Ship Supply • Port Townsend, WA  
Berkeley Marine Center • Berkeley, CA  
Deer Harbor Boat Works • Orcas Island, WA  
Hamilton Marine • Portland, ME • Seaport, ME

**AMERICAN ROPE & TAR**

[www.tarsmell.com](http://www.tarsmell.com)

1-877-965-1800

**NewGlass2**  
Fiberglass Restoration

**Make Your Boat  
Shine Like New**

**No Compounding**

**No Waxing**

**No Buffing**

[www.NewGlass2.com](http://www.NewGlass2.com)

800-785-7675

**Traditional Marine Stoves**



**Solid Fuel  
Cast Iron &  
Porcelain  
Heating  
Cooking**

[marinestove.com](http://marinestove.com) 360 376 5161

**NATURE'S HEAD**

**Self-Contained  
Composting Marine Toilets**



**5-Year Warranty  
Proudly Made in  
the USA**

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

**Order Today -- Ships Tomorrow!**

**251-295-3043**

[www.NaturesHead.net](http://www.NaturesHead.net)

**Small ad, small prices:**

- standing and running rigging
- lifelines • furling gear • winches
- line • windlasses • travelers
- wire and terminals • blocks
- vangs • clutches • etc.

**Problem solving and  
discount mail order  
since 1984**

**Rigging Only**

Phone: 508-992-0434

Email: [sail@riggingonly.com](mailto:sail@riggingonly.com)

Web: [riggingonly.com](http://riggingonly.com)

**we speak  
sailing!**

- Standing Rigging, Running Rigging, & Lifelines
- Self-Fit Wire Terminal Experts
- Hardware, Furling Systems & Spars
- Prompt Service & World-Wide Shipping
- 35+ years of success
- Call for free Catalog

**Sailing Services, Inc.**

The Rigging & Sailboat Hardware Experts

800-458-1074

[www.sailingservices.com](http://www.sailingservices.com)

Fax: 305-754-0257 • Email: [sales@sailingservices.com](mailto:sales@sailingservices.com)  
80 NW 73rd Street • Miami, FL 33150

**Custom Wooden Products  
Companionway Door Systems**



Finger Lakes Sailing Services  
730 Willow Ave., Ithaca, NY 14850

607-272-9227

[Sailithaca.com](http://Sailithaca.com)

**We Buy & Sell  
New & Used Boat Parts**

- Masts • Sails • Rudders
- Centerboards • Parts

**727.403.9900**

**DIY Marine Supply**



**Your  
Search  
Is Over!**

**CajunRope.com**

**Custom Yacht  
Rigging**



Call Toll Free:

1-888-ASK-CAJUN  
(275-2258)

Email:

[cajun4rope@gmail.com](mailto:cajun4rope@gmail.com)



**Zephyrwerks  
The Sheave  
Factory**

Custom Delrin Sheaves & Sheet Rollers  
[www.zephyrwerks.com](http://www.zephyrwerks.com)

(360) 385-2720 [edlouchard@gmail.com](mailto:edlouchard@gmail.com)

**KNOTSTICK**

Measure boatspeed  
mechanically  
for any size boat.

[www.knotstick.com](http://www.knotstick.com)

Box 6340, Vero Beach, FL 32961

**Mast Mate™**

Climb your  
mast alone  
with  
**MAST MATE**

Made in the  
USA

for 20 yrs.  
Satisfaction  
Guaranteed

**207-596-0495**

[www.MastMate.com](http://www.MastMate.com)

**Anchor Buoy**

Self adjusting



Do you know where your anchor is? You would with the self-adjusting Anchor Buoy from SWI-TEC! Precisely marks the anchor's set position and keeps other boaters at a distance. Can be used to a maximum depth of 65 ft.

**SWI-TEC America**

INNOVATIVE MARINE PRODUCTS

[www.swi-tec.us](http://www.swi-tec.us)

**TAILING SYSTEMS**  
CUSTOM TAIL HOOKS



[www.tailinghook.com](http://www.tailinghook.com)  
(360) 427-9308

Made in America by  
Capt. Clark H Jennings  
Designed to ease the tailing  
of standard winches.



Full Kit: \$39.95/S&H, 2 Hooks: \$19.95/S&H

**UNSCREW-UMS™  
broken-screw  
extractors**

Remove damaged fastenings. Minimal damage to wood. Hollow tool uses stub as guide. Sizes to remove screws from No. 2 to No. 24, lags, nails, and drifts.



**T&L TOOLS**

24 Vinegar Hill Rd., Gales Ferry, CT 06335  
Phone: 860-464-9485 • Fax: 860-464-9709  
[unscrew-ums@tltools.com](http://unscrew-ums@tltools.com)

[www.tltools.com](http://www.tltools.com)



**Products Gen- Cont.**

**BLOXYGEN**  
Inert Gas Preservation System



www.bloxygen.com  
(888) 810-8311

**Products-Electrical**

**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

**Electric Auxiliary LLC**  
7 Gay Street Place  
Rockland, Maine 04841  
207 596-0731



**ElectricAuxiliary.com**  
The Sailor's Solution  
*It Beats an Oar!*



**superwind.com**  
(716) 213-0771

**ALPENGLOW LIGHTS**



Handcrafted, Overhead interior lights with night-vision option.

Choose LED or CFL (compact fluorescent)

Wood finish choices. Splashproof model available.

LED Reading Lights.  
**NEW:** Dimmable Version!  
Smaller LED Berth Lights for limited spaces.

www.alpenglowlights.com  
**406.889.3586**

**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

**Solar for boats only...**

Superior power  
Good looking  
Lightweight  
Ultrathin  
Walk-on



www.aurinco.com

**RAW WATER ALARM**



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

**GET dazzLED!**



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

**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**



Your boat draws a crowd, people ask where you got her. She sails like a dream; each trip in her--the experience of a lifetime. The credit goes to you because YOU built her! Send \$9.95 for catalog of 300 boats YOU can build. Sail/Power/Row, 5' to 55'.

**Glen-L • 9152 Rosecrans Ave • Bellflower, CA 90706 • 888-700-5007 • Glen-L.com/GB (online catalog)**

**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@DIAMONDTTEAK.COM • 215-453-2196

**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

**FIBERGLASS SUPPLIES**

Everything You Need To Build and Repair with Fiberglass, Carbon Fiber, and Kevlar!!!

**NIDACORE Divinycell**

Technical Assistance  
UPS Shipping Daily  
Call for Free Catalog  
800-231-6537  
www.lbifiberglass.com

**LBI**

973 North Road Rt. 117  
Groton, Connecticut 06340

**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

## 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

## Restoration

### Paint Stripper That Works!



Restoration made easy



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

Remove 30 coats of varnish  
and paint in 20 seconds.



No Chemicals  
No Sanders  
Lead Safe

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

## Cushions/Bedding



Simply  
add  
Springs



and enjoy

relaxing comfort, dry bunks, too!

Nickle Atlantic, LLC 888-463-7654

## Sails/Canvas

**NATIONAL  
SAIL SUPPLY**  
Best sails  
for the money

New sails, used sails,  
furling gear, off the  
shelf or custom -  
But always at the  
lowest price - Try us!

*Sailing doesn't have to be expensive*

Phone 800 611-3823  
Fax 813 200-1385  
E-mail: NewSails@nationalsail.com  
www.nationalsail.com

**Minney's**  
Yacht Surplus

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"®

Visit our website for a site to see!

www.GoodOldBoat.com

## ShoreLine Sailmakers



ROLLY TASKER SAILS  
INTERNATIONAL SAILMAKERS

CUSTOM SAILS AT THE BEST PRICES



NEW CUSTOM SAILS  
SEOLADAIR BOOMKICKER  
FACNOR FURLING SYSTEMS  
CDI FLEXIBLE FURLING SYSTEMS  
MAINSAIL COVERS

info@shorelinesailmakers.com  
www.shorelinesailmakers.com  
314.828.6863

## Watching Your Budget?



## Buy Sell Trade

New and used sails  
secondwindsails.com  
800-273-8398

Turn unwanted sails into cash

## New & Used Surplus Sails Buy • Sell • Trade Furling Packages

New  
Custom Sails

Made in  
America

800-507-0119  
www.porpoisesailing.com  
Sarasota, FL 34243

Your online  
source for quality  
pre-owned sails!

**NORTH  
Sail  
Outlet**  
Certified Pre-Owned Sails

www.northsailoutlet.com  
1-800-SAIL-123. ext.948

**Sail  
Care** 20 Years  
Of Service  
To Sailors

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

## Books & Videos



By  
Guy G.  
Lemieux

### WHICH WAY TO STARBOARD?

Enjoy this firsthand account  
of the sport of family sailing.  
Lemieux buys a wooden  
boat with a history, restores  
it, and after seven years,  
enjoys the results of his  
labours.

Order from IUNIVERSE or Amazon

## Websites

**SAILFAR.NET**  
Small boats, Long distances...

## By-The-Sea

AN ONLINE BOATING MAGAZINE  
BOATBUILDERS • RESTORERS  
PLANS • KITS • SUPPLIES  
OLD BOAT BROKERS • CLASSIFIEDS  
www.by-the-sea.com

## Services

### Eternity in Paradise

Ash Scattering  
Memorial Services in Hawaii  
ashesatseaoahu.com  
808-235-2284

### Eisen Shine Clear Vinyl Restoration



Amazing and affordable  
restoration of cloudy and  
oxidized vinyl windows.

**305-587-7444**  
eisenshine.com  
info@eisenshine.com



**Services- Cont.**

*Where skilled craftsmen  
produce top quality results at  
competitive shop rates*



**Bingham Boat  
Works LTD.**

*We can build and repair your  
fiberglass and wood projects*

906-225-1427  
906-225-0050  
Fax 906-225-0604  
BoatsWeDo@aol.com

boat brochures  
owner's manuals  
blue prints

**YOUR SOURCE  
FOR OLD BOAT  
LITERATURE**



Can't find what you need?  
askus@boatbrochure.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/](http://www.goodoldboat.com/resources_for_sailors/sailing_classifieds/)  
or call 701-952-9433.

**Clothing**



<b>NEW GOOD OLD BOAT AD DEADLINES</b>	
Issue	Deadline
May/June	Feb 20
Jul/Aug	April 18



**For Good Old Boat back issues & more visit**

**[www.AudioSeaStories.com](http://www.AudioSeaStories.com)**

**Fiberglass**

*"Itching  
for fun"*



**Supply**

*Fast Friendly  
Service Plus Great Pricing  
Shipping Worldwide Daily:*

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

**No Minimum Order**

*Check out our catalog at:  
[www.fiberglasssupply.com](http://www.fiberglasssupply.com)  
Or call: 509-493-3464  
Located in Bingen, WA*

**PerfectPitch  
Props**

For Auxiliary Diesel & Gas to 40-hp

**Atomic 4  
Westerbeke  
Universal  
Yanmar  
Most others**



More thrust in forward  
and reverse.  
Extended props to improve  
hull clearance.

**Performance Propellers**

44 James St., Homer, NY 13077  
Phone 607-749-3165 • Fax 607-749-4604

[performance.props@verizon.net](mailto:performance.props@verizon.net)  
[www.performancepropellers.com](http://www.performancepropellers.com)

**SMALL CRAFT  
A D V I S O R**



**MAGAZINE**

*"Likely to pick up where  
Small Boat Journal left off."*

From a review in Good Old Boat

The only magazine focused exclusively on  
trailerable sailboats. Each issue is full of boat  
reviews, plan studies, boat modification articles,  
and tales of small-boat adventure.



1-year sub \$29.95: (360)379-1930  
P.O. Box 1343 Port Townsend WA 98368  
[www.SmallCraftAdvisor.com](http://www.SmallCraftAdvisor.com)

# A passion for the Cal 25

*To Charlie Husar, the Annapolis fleet is his flock*

by Carrie Gentile

Annapolis, Maryland, is home to many high-performance racing boats such as Farr 30s, J/105s, and J/70s. But you'll also find on the racecourse a thriving fleet of old and comparatively slow Cal 25s. At its helm is Charlie Husar.

When I mention to a fellow sailor that I co-own a Cal 25, the response is, "Oh, I know Charlie." Everybody in the Annapolis sailing community knows Charlie. He's been racing with the Annapolis Cal 25s since the 1970s and skippering since the 1980s, and is aptly called the Godfather of the fleet.

After racing, you can find him back at the dock, Miller Genuine Draft in hand, doling out advice on jib-car placement, backstay tension, or where to find replacement parts that will fit the boats. Over the years, Charlie has helped me get our Cal 25 to point better

... so much better that we've even been able to beat him a few times during frostbite races. He doesn't seem to mind.

"He's the fleet's greatest promoter and cheerleader," says Tim Bloomfield, owner of the Cal 25, *White Cap*. "He has the ability to bring in new crewmembers and convince them to purchase their own boat for the fleet."

Charlie has spawned a half-dozen Cal owners from his own crew. He admits it can be painful to let go of good crew, but he knows that's what it takes to develop the fleet.

"Spreading knowledge makes the whole fleet more competitive. The more competitive the fleet is as a whole, the better the chances of it surviving," he says. "The key is to get people interested, help them develop their skills, and keep them interested with good competition."

A Cal 25 has a PHRF rating of 231 and the last one was built before I was born. Despite the boats' age and sloth-like speed, the Annapolis fleet has grown slowly over the years to about 20 active boats. As Charlie says, "PHRF ratings don't matter in one-design racing, but competition does."

The Cal 25 is a Bill Lapworth design easily recognized by its flush deck and long cockpit. Jensen Marine built about 2,000 of them between 1965 and 1976, marketing the boat as an ocean racer/cruiser. Although it's hard to imagine racing a Cal 25 in the ocean, it's a very stiff boat with a manageable sail area of 286 square feet and plenty of lead in the keel.

"I'm just plain addicted," says Charlie about the Cal fleet. "It's my baby. The boats are cheap, competitive, and fun ... and the people are fantastic."

He likes Cal boats so much he owns three: two Cal 25s he races (*Chicken Little* and *Fahrvergnügen* — *fahrvergnügen* means "the pleasure of driving" in German) and a Cal 40



for cruising Chesapeake Bay. Charlie has earned six or seven (he can't recall the exact number) top finishes in the Chesapeake Yacht Racing Association's High Point Series.

"Charlie takes new owners under his wing and teaches them how to make repairs and where to buy the parts they haven't made in 30 years," says Cal 25 owner Dave Hoyt.

Dave bought a new hard-to-find rubrail from Charlie, who located the original vendor and purchased a couple of hundred feet of the extrusion. He also ordered custom mast sheaves in bulk to secure a better price for the fleet. He's been repairing and refitting his Cals so long he's figured out which boat parts will work on Cals. He receives emails and phone calls about free Cal 25s about to be cut up and he'll rescue hard-to-find parts like booms, tillers, slider hatches, and spinnaker poles.

Charlie's passion for the fleet extends beyond the racecourse. He has organized racing and tactics seminars, fleet dinners, and races to the Chesapeake's Eastern Shore for crab dinners.

In the 1990s, Charlie joined a local yacht club with the goal of representing the Cal 25 fleet ... only to learn the club wasn't allowing older boats to race. So, together with Don Frye, he organized a regatta for "sailboats of some experience." This year's Good Old Boat Regatta was the 13th such event held each fall in Annapolis.

Those who think they can't afford a raceboat or think they have to race in the newest, hottest fleet, just need to spend a moment or two with Charlie. His passion is infectious. *▲*

*Carrie Gentile and her boyfriend own a Cal 25 and raced with the Annapolis Cal 25 fleet for five years. They live aboard their 1986 Nautique with their two dogs.*



# GET YOUR FREE

2013 SAILRITE CATALOG\*

TO REQUEST YOUR COPY CALL:

**800.348.2769**

OR VISIT US ONLINE AT

[www.sailrite.com/catalog-request](http://www.sailrite.com/catalog-request)

*Sailrite*

**2013**  
PRODUCT CATALOG

TO ORDER CALL:  
**800.348.2769**  
OR VISIT US ONLINE AT  
[www.sailrite.com](http://www.sailrite.com)

\*Free to U.S. mailing addresses only.