



Typographical errors are unintentional and subject to correction.











GOOD OLD BOAT

Issue 134: September/October 2020

FEATURES

16 No Visible Means of Support

Freestanding rigs offer an intriguing comparison to traditional, stayed masts. *by Rob Mazza*

22 The Case of the Sinking Mast

Sourcing rigging tension creep reveals an old flaw. *by Zoran Glozinic*

- **36 Polished Up** Cleaning a fouled diesel tank started with polishing some dirty fuel on the fly. *by David Carey*
- **49 One Wing Flapping** Irascible and indomitable, the British Seagull was not for the faint of heart. *by John Vigor*

DEPARTMENTS

8 Review Boat Nonsuch 36: A Fast, Big Catboat Whose Watchword is Simplicity by Robert Neches

14 Design Comparison Nonsuch 36 and Two More Freestanding-Rigged, Solid Sailers *by Rob Mazza*

26 Sailing Tales Thanks to a little help from her friends, a good old boat finds a new paramour. by D.B. Davies

30 Learning Experience

Wherein a glorious small-boat adventure ends in ignominy and terror. *by John Vigor*

- 34 Across the Bar: Patrick Childress by Dan Spurr
- 35 Across the Bar: Brion Toss by Michael Robertson

39 Simple Solutions A clever application of non-skid

tape solves older winches' friction issues. by Bert Vermeer

40 Short Voyages

Georgia's Cumberland Island is a land of strange beauty and rich history. *by Wendy Mitman Clarke*

46 Simple Solutions With the ship's wheel as base, a clever design makes for finer dining. by Vern Hobbs

48 Simple Solutions

A simple system developed for RVs provides a versatile table for saloon and cockpit. *by Janet Gannon*

61 Reflections

Refined to its elements, a day of sailing becomes miraculous. *by Kevin Keystone*



On the Cover

Joe Oots works at the mast during a downwind run on the return trip from Marsh Harbour, Bahamas, to Washington, North Carolina, aboard *Worthless Wench*, a 1997 Pacific Seacraft 40, owned and captained by photographer Bill Kund.

September/October 2020

Impulse A-33 In-Sight Automatic Inflatable Life Vest with Harness

- In-Sight shows GREEN when ready to use
- Quickburst[®] zipper opens upon inflation
- USCG Type V, Type II performance
- Universal fit adults over 80 lbs, up to 65" chest
- Includes marine whistle

ltem 551363

63 Only

49⁹⁹

Twist 'n' Lock Manual Toilet

- Action handle guards against syphonic flooding and waste backflow
- Powerful, self-priming, double-acting piston pump for above/below waterline installation
- Inlet size: .75", Outlet size: 1.5"
- Compact bowl size: 13" H x 16-3/4" D x 17-1/2" W

ltem 506483



Only \$161999

WEST

Gflex

JABSCO°

3-Burner Gimballed North American Standard Propane Gas Stove with Oven

- Electronic ignition
- Output: (2) 3,800 and (1) 9,500 BTU burner
- Positive two-position, slide-away oven door recesses underneath to maximize galley space
- Cutout: 22"W x 21-1/4"D x 23-3/4"H

Sflex

Gflex

Item 401797

Perfect Epoxy for an Imperfect World



The Brands You Want and Trust in Stock

Knowledgeable In-House Sales Staff

Authorized Dealer for the Products We Sell

Defender.com 800-628-8225





Discounts for Members Available at Defender.com/def1stfaq or call 800-628-8225

Follow Us

GOOD OLD BOAT

CEO / CFO / PUBLISHER Karla Sandness

EDITOR Michael Robertson michael_r@goodoldboat.com

> SENIOR EDITOR Wendy Mitman Clarke

BOAT REVIEW EDITOR Dan Spurr

TECHNICAL EDITORS Drew Frye | Rob Mazza

ELECTRONICS EDITOR David Lynn

COPY EDITOR Marcia Landskroener

CREATIVE DIRECTOR Kelley Gudahl

ILLUSTRATORS Tom Payne | Fritz Seegers

CONTRIBUTING EDITORS Connie McBride | Cliff Moore | Fiona McGlynn Gregg Nestor | Allen Penticoff | Ed Zacko

> ADVERTISING SALES TEAM Behan Gifford | Nica Waters advertising@goodoldboat.com

DIRECTOR OF CIRCULATION & BOAT CLASSIFIEDS Brenda Ellingsen brenda@goodoldboat.com | 701-840-6137

FOUNDERS Karen Larson and Jerry Powlas

134 – VOLUME 24 NUMBER 5 GOOD OLD BOAT (ISSN 1099-6354; USPS 019327)

PUBLISHED BIMONTHLY BY Good Old Boat, Inc.

BUSINESS / EDITORIAL OFFICE: 1300 Evergreen Dr. N.W. | Jamestown, ND 58401-2204 701-952-9433 | karla@goodoldboat.com GoodOldBoat.com

SUBSCRIPTION RATES (1, 2, 3 YEARS): US and Canada – \$39.95/\$74.95/\$110.00 US Overseas – \$49.95/\$94.95/\$139.95 US DIGITAL-ONLY SUBSCRIPTION RATES US, Canada, and Overseas – \$29.95/\$54.95/\$79.95 US

© 2020 BY GOOD OLD BOAT, INC. All rights reserved. Reprinting in whole or part forbidden except by permission of the publisher. Printed in the USA. Editorial submissions are handled with care, but no liability is accepted. Opinions expressed by the writers are not necessarily those of *Good Old Boat* magazine.

Periodicals postage paid at Jamestown, ND 58401 and at additional mailing offices.

POSTMASTER, SEND ADDRESS CHANGES TO: Good Old Boat

1300 Evergreen Dr. N.W. Jamestown, ND 58401-2204



The sailing magazine for the rest of us.

Still Sailing

Maybe you're under the impression that all sailing channels on YouTube are made by young, bare-breasted cruising sailors competing to out-sensationalize each other for eyeballs and the dollars they generate. You'd be mostly right, but there are high-quality alternatives to these entertaining channels that feature high production values and relevant, instructive, no-nonsense content. Patrick Childress Sailing is one of them.

Patrick died of COVID-19 in June ("Across the Bar: Patrick Childress," page 34 of this issue), but not before he and his wife and sailing partner, Rebecca, created more than 60 videos that reflect Patrick's lifetime of learning aboard. The couple offers tips and tricks that range from fixing a clanging halyard to using AIS to repairing a stuck anemometer. They also cover passage preparation and stormy weather sailing, all shot aboard the couple's Valiant 40, *Brick House*.

All of their channel's content is still up, free to everyone. Rebecca recently released a video about losing Patrick, and she expresses her intent to keep making videos, at least to complete some of their unfinished work. We're rooting for her. Go to youtube.com and search Patrick Childress Sailing.



Hole in the Water TOM PAYNE HMM, AND SOME REMEMBER THESE STAINLESS STEEL ARE MARINE GRADE \$137.12!? FASTENERS COMPONENTS. WHAT THE. THAT'LL BE \$137.12 5 WOULD YOU LIKE TO APPLY FOR OUR MARINE GRADE CREDIT CARD? SIGH IT'S ORANGE AND IT FLOATS. @2020 TOM PAYNE

HEADSAIL FURLERS · MAINSAIL FURLERS

This boat has boat has purler does yours?

π

CDI has been involved in the sailing industry for over four decades. We stand firmly behind our products, and with unprecedented reliability our furling system will save you time and money. Backed by our comprehensive warranty, you will have peace of mind and more days on the water. Visit **Sailcdi.com** and sail away with ease. photo by @mikeydetemple



Defining a Community

BY MICHAEL ROBERTSON

n this issue, we say goodbye to two sailing luminaries, Brion Toss and Patrick Childress. Since I assumed this role, we've also said goodbye to Doug Peterson, Glen L. Witt, George Cuthbertson, Everett Pearson, and Jeremy McGeary. All of them made notable contributions to our world.

Our world.

Listening to NPR this morning, I learned of the death of Milton Glazer, the graphic designer who came up with the "I ● NY" logo that we all know. News of Glazer's death spread to millions of people. And this makes sense; he created a bit of pop culture, and so his passing bears interest.

Yet, despite the meaningful and significant contributions Brion and Patrick made, we didn't hear about their deaths from mass media, and it doesn't make sense that we would. Sailing is a small world. I'm gratified to see they are both being celebrated in the sailing magazines and on sailing social media, the news of

their lives and deaths spread to thousands of people.

Our people. Soon after I started working for Good Old Boat co-founder Karen Larson, she said she saw her magazine as engendering a community. I told her I didn't see it. This was a sailing magazine that arrived in sailors' mailboxes, and they read and enjoyed it individually. I didn't know any of them. Her notion was too amorphous and airy and wishful. This magazine wasn't about community.

"If that were true, it would break my heart," she wrote.

Well, her heart can remain safely intact. I was wrong. We are sailors, boaters, defined by our common interest. All over North America and around the world, we use common terminology and we know the names of people who are especially relevant to us, even if we've never met them-people like Brion and Patrick. And this means we are the people who know what they meant to sailing, who know they are gone; along with their families and friends, we are the people who will remember them. Maybe more than anything, this marks for me the community of which we are a part. For a short time at least, they'll be on all of our minds. They are but two of the founts of knowledge and inspiration we all seek as sailors.

And that knowledge and inspiration lives on, added to the sailing canon. In that regard, Brion documented comprehensive instructions related to his trade and craft in several books. Patrick informed and inspired via his adventures, his writing in sailing magazines and, more recently along with his wife, Rebecca, his excellent and entertaining videos on their YouTube channel (see this month's Websightings, on page 3).

Their works, like those of countless sailors who came and left before them, many of whose names we collectively still know after more than 100 years, are a part of the fabric of our community. And that fabric is tightly woven because much about the sea and sailing doesn't yield readily to change—a comforting attribute given the ever-increasing pace of change in just about every other facet of our lives.

Nonetheless, however slowly, change happens, even in our world, and that's not all bad. It means there is always room for people like Brion and Patrick to emerge from those among our community and share their discoveries, innovations, and inspiration. I just wish we were all here to appreciate them. That some of us are gone is not just a wake-up to me that we are a community, it's a reminder of how fragile a community can be.



(Human) Hazards to Navigation, More Debate on Paperless, and Another Old Love Reacquired

Incredulous

Having read "Riddles in the Dark" (May/ June 2020), I find it an incredulous situation to have gotten into for somebody who claims experience on the Inside Passage. When sailing the Inside Passage, one frequently encounters tugs towing barges. It is my experience that towing vessels scrupulously adhere to U.S. Coast Guard Navigation Rules 24 and 27, thus displaying vertically stacked navigation lights and symbols aloft. In the article, the author explains that the towing tug passed abeam without incident. Why didn't the author take note of the vertically stacked lights on the tug? Anyone with knowledge of Navigation Rules 24 and 27 would have immediately understood the situation. Why didn't the author (captain of the sailboat) use binoculars to assess the navigational status of the oncoming vessel when it was first visible? All the other things the author was doing to decipher his situation were a waste of time and evidence of the danger of too many electronic gadgets. The author said he should have been using radar, but it is doubtful radar would have helped. The towing vessel and barge were essentially directly forward of the sailboat and radar would not have shown the barge. The captain of the towing barge had no obligation to hail the sailboat because he was in compliance and not a hazard to navigation. And we can be certain that the captain of the tug saw the sailboat on his radar well before the sailboat saw the tug, notwithstanding the sailboat's noncompliant navigation lighting. Finally, for the sailboat to set out on the Columbia

River at night without proper navigation lights is foolhardy. But mostly, the article demonstrated the author is a hazard to navigation.

> —Donald Smith, *Gimme Shelter*, Anchorage, Alaska

Michael Robertson responds: *Thank you, Donald. You included with your letter a note indicating you didn't realize, until* after you'd written your letter, that I'd written the story in question, that I was the egregious captain. You noted that you considered softening your letter, but ultimately decided the harsh assessment was warranted and important. I agree, that's why I wrote the story, and I think my self-criticism in that article was honest and comprehensive. It's also why I've told the story to many people over the past several years, as a cautionary tale. Prior to this

MaryAnne Moseley took this photo of an aid to navigation while in Vietnam, exploring the Mekong Delta and the Mekong River in the area around Can Tho. "This photo shows the port bow of the typical local working boat on which I was traveling." Back home, MaryAnne sails her Catalina 25 and Coronado 15.

Do you have an interesting photo of an aid to navigation? (The more unusual the better!) Send it to Michael_r@ goodoldboat.com and if we use it here, we'll send you a *Good Old Boat* hat or shirt.



near-miss in 2013, I'd sailed several kinds of boats over many thousands of miles in waters all over the world, and this still happened to me.

But I do want to address some of the criticism you leveled—to clarify, not to excuse any of my errors.

In my opinion, the tugboat captain was a hazard to navigation. We were solidly in our lane of a very defined channel that went for several miles. The barge being towed was also in our lane, pushed there by a cross current. There was a towing tug and a pushing tug, and I think they were struggling to keep the barge in their lane. Not to excuse my confusion, but this was a cause of it. Even when I clearly saw and recognized the tug off my port bow, there seemed to be an amorphous white something ahead of me and I had no ability to orient and judge its distance until it was almost too late.

Inside Passage experience? I don't see this as a relevant or surprising factor. Because of the danger of hitting semi-submerged logs, we never navigated the Passage in darkness, therefore no nav light training there. Doesn't excuse me for not having a better understanding of nav light configurations. Binoculars? I totally agree. Had I had them at hand, they may have prevented everything. We think of binoculars as daytime tools, but they are valuable nighttime nav aids. I had a powerful 12-volt spotlight in a locker down below during this incident, probably next to the binoculars.

In short, I spent too much time nursing an idle confusion without acting. Only when a switch flipped and I sensed danger did I begin reaching out to the adequate tools I had at hand, and it was too late to do so effectively, too late to take my eyes off the situation in front of me.

And if any readers are feeling brave or masochistic, send me your story. I welcome submissions for the Learning Experience column, and we've all been there in some capacity.

Kudos for "Riddles"

I really enjoyed "Riddles in the Dark" (May/June 2020); it vividly brought back long-ago memories of nighttime transits through crowded waterways and shipping lanes—and your "takeaways" were honest, real, and enlightening.

-Bob Naylor, Rear Commodore, Arizona Yacht Club



Near Miss

A few years back, as an ASA sailing instructor in Southern California, I was tapped to supervise a Sunday day sail on a Catalina 30. We had sailed up to Long Beach in the morning and were lazily returning south, about two miles offshore, towards the entrance to Newport harbor. As we got within a couple of miles or so of the channel entrance, an oceangoing tug emerged slowly from the channel entrance heading straight out to sea. I gave the vessel no further thought.

At about a mile from the Newport channel entrance, a second vessel emerged. After a bit, I could tell it was a loaded barge. We continued south, about to sail between the tug, which was now a half mile out to sea, and the emerging barge. Then a blast from a distant air horn sounded: Whoop, Whoop, Whoop, Whoop, Whoop! Nobody on board seemed to take any notice, but I remembered that that signal meant "Danger!" or, "What the hell are you doing !?" It took another second before I put two and two together and realized we were heading straight between a tug and its tow. I couldn't see the two-inch cable connecting the two vessels, but it was there, under water, ready to tear our tender hull to ribbons. We came about.

I was reminded of two lessons right then and made them clear for all on board: take professional classes, paying close attention to information about aids to navigation, and tip your hat to the professional mariners, like that tug captain who saw the danger and signaled to prevent a wreck.

The ocean is unforgiving to the ignorant!

—Pete Begich, Quee Queg, 1983 Boston Whaler Harpoon, Prescott, Arizona

continued on page 52

We Want to Hear from You

Send your letters to michael_r@ goodoldboat.com. If we can't run your letter in this space, we'll try and get it into *The Dogwatch*. Speaking of which, are you getting *The Dogwatch* in your email inbox? It's free and the content is original. If you're missing it, email brenda@goodoldboat.com.

Nonsuch 36

A Fast, Big Catboat Whose Watchword is Simplicity

BY ROBERT NECHES

endy and Frank Glanznig were beating up Lake Huron's Georgian Bay in a CS30 sloop, tacking hard upwind with rails under, when they saw another boat driving to weather behind them and easily gaining. It was a Nonsuch 30, and as it passed them, they saw "a little old lady by herself in the cockpit," tucked within a full enclosure. "She was holding a china teacup," Wendy says, "looking nice and warm, tacking, tacking, tacking, and kicking our behind! Right then, I said, 'We gotta get one of those!" "

And so they did, though they went bigger and purchased hull #1 of the Nonsuch 36, the iteration of this popular, innovative design that many deem the queen of the fleet. Conceived by Mark Ellis as a boat whose essence is simplicity, making it easy for people to get out there and go sailing, the Nonsuch's signature feature—its unstayed, wishbone rig carrying a single, huge sail—appeals to those willing to experiment and learn, and those with sufficient experience to recognize its advantages.

History

Designed by Ellis, and mostly built by Hinterhoeller Yachts of Ontario, Canada, these boats' hallmark characteristics are the towering, unstayed mast in the bow, a windsurfer-like wishbone boom, a traditional New England-looking topsides, and a modern and efficient underbody. Nearly 1,000 of the boats between 22 to 36 feet have hit the water since the early 1980s.

Roughly 70 Nonsuch 36s were built from 1983 to 1990. Express Yachts built the first two and called them Nighthawks; when Express Yachts went bankrupt, Hinterhoeller built the rest. The late George Hinterhoeller, a master builder from Austria who emigrated to Canada in 1952, was a founding partner in C&C Yachts in 1969. He left C&C in 1975 and began building under the name Hinterhoeller Yachts in 1977, introducing the first Nonsuch, a 30, in 1978. The 36 followed in 1983.

One reason these boats remain so popular is the strength and support of the owners' group, the International Nonsuch Association. Although the last boats were built three decades ago and the factory is long gone, about two-thirds of current owners are members of the association. Their discussion forum is exceptionally helpful and above average in civility. The Nonsuch.org website also has digitized copies of owner's manuals, brochures, factory and owner-contributed maintenance recommendations, and sailing guidance.

Design and Construction

The factory brochure described Nonsuches as, "Greyhounds masquerading as catboats." To get a sense of what this means, look at a Catalina 36 of the same era. The Nonsuch 36 has 8 inches more beam, 3 feet 6 inches more waterline length, 188 square feet more sail area, a full ton more displacement, and a mast a dozen feet taller. Its theoretical hull speed, 7.78 knots, is .4 knots faster than the Catalina. On the outside, it's easy to mistake for a 40-footer. On the inside, it's easy to mistake for a 42-footer.

The Nonsuch concept was a collaboration between Ellis, Hinterhoeller, and the boat's

Without any shrouds to get in the way, the Nonsuch 36 can sail dead downwind with the mainsail run out past 90 degrees, at left.

To absorb the weight of the mast so far forward, designer Mark Ellis paid special attention to buoyancy in the bow; also note the traditional New England cabin profile with an eyebrow that circles not only the cabintop but also the cockpit coaming—without a break, at right. Photos courtesy Peter Moodie.





first customer, Gordon Fisher, who wanted a shorthanded one-design racer for himself and fellow Toronto sailors. Ellis says his design inspirations were the Laser, Finn, and International 14 racing dinghies that he sailed extensively on the St. Lawrence River and the Great Lakes. His approach for each of the Nonsuch models was to treat it as a racing dinghy but add enough buovancy above the waterline in the bow to keep it from burying its nose. Next, he refined the design to add balance and avoid weather helm through a combination of hull shape, keel structure, and rudder design. The wishbone rig to manage sail shape was inspired by the rigs of windsurfing boards (Ellis was an avid boardsailor) but proven for big boats by Garry Hoyt's Freedom line as well as 19th-century Herreshoff designs.

People don't expect the boat to perform well upwind. This surprises Ellis. Lasers and Finns do extremely well upwind, he points out; there's no reason a larger boat inspired by them wouldn't.

The boats were heavily built and generally well constructed. Deck and hull are fiberglass over balsa core, with reinforcements as needed in the deck. The keel is an external lead casting.

Chocks are incorporated in the deck bulwarks running all the way around. These are bolted to the hull through a stainless steel cap rail with a vinyl insert. This is one source of deck leaks in some boats, although the boats are generally regarded as tight.

The most expensive risk factors lie in and around the unstayed, keel-stepped mast in the bow. The mast drops through a large hole in the deck. Surrounded by an aluminum collar, it is wedged in place with a set of chocks The Nonsuch 36's signature wishbone boom was inspired in part by boardsailing booms. Its natural tendency to pull downward means there's no need for a boom vang. Photo courtesy Peter Moodie.

and covered with a mast boot. Below, it sits on a heavily reinforced aluminum base that is firmly attached to the keel. This usually works well, but these are key areas to check for water intrusion damage. Several factory notices discuss mast attachment, reinforcement, and crack avoidance. Potential buyers should carefully check the mast and its supporting system. Also, drilling holes in the mast can lead to cracking and should be avoided.

The original engines were 52-horsepower Westerbeke diesels. Owners consider OEM replacement parts spectacularly overpriced. Phil LeVine co-owns Nonsuch 36 hull #3, *MeSays*, with his wife, Sheri Ross. He recently repowered with what Westerbeke advertises as a drop-in replacement; he reports that this was nowhere near the case.

Original tankage was 49 gallons of diesel fuel, 112 gallons of fresh water, and 45 gallons of waste. The owners' group has negotiated group rates for 3/8-inch-thick, roto-molded replacement water and waste tanks of the same volume. Many owners have upgraded to these over the years, and/or added additional tanks.

On Deck

It's perhaps a good thing that the boat needs little crew. The cockpit is relatively small comfortable for four, maybe six, but increasingly crowded above that. Deep coamings

Looking aft from the mast at the wishbone boom and the myriad sail control lines, all led aft to the cockpit. Photo courtesy Robert Neches.







With the large-diameter mast so near the stem, there's barely room for an anchor windlass. The white post at left is a radar mast. Photo courtesy Robert Neches.

surround it, making seating comfortable and safe.

The cabintop runs over half the length of the boat. It's highly crowned and stops just short of the mast in the bow. This doesn't allow for much seating outside the cockpit. The sidedecks are comfortably wide, though, so moving forward is easy (especially with no shrouds to work around). Heavy cleats are at the bow, amidships, and stern on both sides.

Below Deck

Despite the racing pedigree, Ellis had the vision to design the Nonsuch 36 for long-range coastal cruisers and liveaboards, and the boats remain ideal for that purpose.

The companionway drops almost to the cabin sole, with a four-step ladder down to the huge interior. A large engine room behind the ladder runs underneath the cockpit sole almost to the stern. There's a spacious lazarette, wet locker, and navigation table to port, and a commodious quarter berth to starboard. A standing-headroom head with separate shower area is next to port, with an aft-facing U-shaped galley to starboard. Next comes an open saloon with U-shaped seating around a table for six to port and a long settee to starboard.

The stateroom forward has a double berth to port, counter and sink to starboard, and numerous lockers throughout that include access to the bow (where the anchor chain/rode locker and mast reside). In addition to roomy accommodations, the Nonsuch 36 is notable for huge amounts of storage space and well-thought-out access to maintenance items.

You could easily entertain eight people in the saloon, serving gourmet food from the galley. But I'd want to kick half of them off the boat before sailing.

LeVine adds that, "The boat is fabulously ventilated—10 opening portlights by Atkins and Hoyle and four large hatches. Also, four Dorade vents and two solar fans make the boat very dry and well ventilated when a breeze inside is



LINE DRAWINGS BY ROB MAZZA

impressive 5.7 knots upwind in 13 knots apparent at a wind angle under 30 degrees. Returning through the harbor entrance on a close reach in 19 knots apparent, the GPS recorded 7.46 knots. LeVine has hit 9.1 on a beam reach in 17 knots apparent.

Sailing year-round in the ocean channel between mainland Southern California and Catalina Island, LeVine often encounters afternoon winds in the high teens to low 20s. The wind can approach 30 knots before he considers a first reef.

The single, enormous sail provides a great deal of power, making electric winches for the halyard and mainsheet Comfort ratio 25.9 pretty much mandatory. To take the work out of raising and lowering the sail, owners prefer either more slippery bronze sail slides or retrofitting a low-friction sail track system such as

those made by Tides Marine.

Nonsuch 36

Mark Ellis

36'0"

33'9"

12'8"

5'6" 17,000 lb

38

197

6,500 lb

742 sq.ft.

17.92

Designer

LOA

LWL

Beam

Draft

Displ. Ballast

Bal/Displ.

Displ./LWL

Sail Area

SA/Displ

One advantage of the unstayed mast is that its highly tapered top section flexes to spill air when the wind picks up. This helps make the large sail more manageable than appearances would suggest. That feature combines with 6,500 pounds of lead ballast to control excessive heeling. Consequently, the boats sail remarkably flat. Ellis recommends using rudder feel rather than heel or weather helm to guide reefing. "Reef when you

Underway

needed."

I went for several sails on LeVine's Nonsuch 36. On a pleasant Southern California February afternoon, midway between San Pedro Harbor and Catalina Island, *MeSays* made an

Though not large, the cockpit feels very secure with high coamings. Photo courtesy Robert Neches.



unusual. The wishbone boom is held up by a topping lift aft, angling upwards at about 20 degrees forward and held up at the mast by a pair of fixed lines. Five jacklines, each hanging

from one side of the boom to the other, form a cradle holding the loose-footed sail when dropped. The natural tendency of the boom is to pull down

Review Boat

says.

with a seakindly motion. This

point was driven home on

another sail, from Redondo

submarine trench comes to a

point just off Redondo Harbor,

exacerbating the waves formed

than 60 feet within a few miles.

does in steep seas and confused

chop, this is a good place to go.

is responsive and will pick

up speed quickly when well

it will not draw attention to

itself. If you're admiring the

blue skies and watching the

20 to 30 degrees off course

The sail controls and

rigging are simple, although

you thought you were.

dolphins jump, it's easy to drift

before realizing you've slowed down and aren't heading where

trimmed. But, being forgiving,

Steering is light. The boat

If you want to test how a boat

as ocean depths recede from

several thousand feet to less

Beach to San Pedro. A

Space under the starboard settee has been compartmentalized for orderly stowage of supplies. Note the lee cloth and lines for making up a sea berth underway. Photo courtesy Robert Neches.

GoodOldBoat.com

feel the rudder dragging," he and forward. The downward Nonsuch 36s move well,

force eliminates the need for a boom vang. The forward force is counteracted by a single line called a choker that pulls the wishbone aft, flattening the sail.

Gung-ho and racing Nonsuch sailors tweak the topping lift and choker as frequently as other sailors play travelers, adjust vangs, tension halvards, and tweak sheets. However, many Nonsuch owners simply set their sail shape for the general conditions and then just sail for the rest of the day. The only control that requires some attention is the 100-foot mainsheet, which runs through two-part blocks and a turning block to a cockpit winch near the helm.

No jib, no jib sheets. Consequently, no complexities coming about. When it's time to tack, you just give the wheel a quarter turn. No muss, no fuss.

Jibing, however, must be done with full consideration of all the power captured by a 742-square-foot sail. Some owners sheet in and release the sail back out after carefully

My wife and I purchased hull #6 Nonsuch new in 1983. We raced Random Wind extensively for the first seven years.

In 1984, during a 150-mile upwind beat, we noticed the mast rotating in the direction of the sail each time we tacked. As it turned out, all 24 1/4-20 bolts securing the mast tube to the base casting had sheared off, which allowed the mast to rotate. Mark Ellis was immediately notified, and he arranged for a crew to unstep the mast and install a much more robust system of attachment.

In 1989 we participated in a 360-nautical-mile ocean race from Boston to Halifax, Nova Scotia. We are proud to say we won our class and the IMS division.

In 2007, while conducting a mast inspection, I discovered a horizontal crack roughly 10 inches down from the deck collar radiating out from a hole created for the purpose of exiting the wire from the mast. In checking into this issue, I learned that a Nonsuch 36 had been dismasted in the Caribbean as a result of a crack in the same location. We decided to have a carbon-fiber mast built. This arrived in 2008 and we have enjoyed the extra confidence that comes with a new mast. -Jim Hartling, Mahone

Bay, Nova Scotia

Construction is top notch by 1970s and '80s standards, very heavily built with good fit and finish. Accommodations are spectacular. We have been summer liveaboards for 36 years and have never felt cramped. This particular boat, 1986, has some spider webbing on radiused curves around the cockpit and cabin sides. That is the only structural deficiency that I notice. A previous Nonsuch, one of my 30s, had some deck delamination, but

the 36 is still solid. Sailing characteristics take some getting used to. Foot speed is excellent on all points of sail, but you have to get used to not pinching upwind. In PHRF racing I find that we are about 5 degrees off most sloops upwind, worsening as the wind diminishes. Off the wind these boats are very fast. In a blow the 36 just rolls on like a tank, very stiff. Sailhandling and reefing are a snap. My wife, 73, still takes her friends out sans men. The electric winch is a must.

-Jay Burke, Barrington, Rhode Island

My wife loved the lack of anything around the mast she could trip on or get tangled in. She also loved the ease of sailing it. I looked at a 36 owned by a man and his wife who had lived on it for years and were accomplished sailors. He said to me, "Do you want to spend all of your time changing sails or just enjoying sailing?" The only downside I have found to sailing it is that one has to be very careful jibing or avoid that entirely and do a 270-degree tack.

-John Waldhauser, Port Madison, Bainbridge Island, Washington

I advise that the mast be thoroughly inspected inch by inch, including behind the mast boot and down on the keel. Boats that come out of the water annually have those inspections, but if the boat is in the water all year, an annual inspection is warranted by a rigger. My insurance with Geico depreciated the very expensive mast (\$30,000 plus) 20 percent per year after 20 years and then 20 percent payout. A rider for \$60 per vear insures the mast for its full value. A good idea.

-Phil LeVine, San Pedro Harbor, California



Comments from Owners

crossing the wind. Others simply perform a surprisingly effective 270-degree tack. Still others jibe in a hard-to-explain S-curve maneuver. This last looks great when executed well. It's a different story if mistakes are made and that 100 feet of mainsheet catches the skipper or an innocent bystander while whipping across the cockpit.

At age 79, LeVine says the main reason he asks others to help sail the boat is just to keep them from feeling left out. It's that easy to sail. This is why they're so popular with shorthanded sailors, and why so many owners keep going well after others their age have been forced to retire from sailing.

Conclusion

The Nonsuch 36 is exceptionally easy to handle. Although built to enable long-range coastal cruising, the simple rig and good performance make it easy for owners to take them out as daysailers and go in whatever direction provides the best sailing. Racing them is also popular.

The boats may have a reputation as being for geriatric sailors, but the age of the ownership is probably far more due to unwillingness to let go of a great boat than anything else. Easy to handle, yes. Comfortable, yes. Sedate? Not unless you want it to be.

The Nonsuch 36 is what I would call a "serious" boat. They are substantial in size, and one would do well to remember Ferenc Máté's enjoinder in *Shipshape: The Art* of Sailboat Maintenance: "If you think your boat's too small, try doing the bottom yourself." Likewise, sliding multiple 20-plus-foot-long full battens back into the pockets of a Nonsuch 36 sail is a similarly infrequent but illuminating experience.

The Nonsuch 36 is not hard to maintain, but when you're getting a lot of boat for its size, you're also getting a lot of boat to maintain. Nonsuch owners who want reduced maintenance prefer later boats in which stainless steel replaced teak for handrails. Some have made extensive replacements of wood with faux teak products such as Plasteak.

Many are quite wellequipped, with lots of systems to maintain. LeVine's, for example, has a watermaker, radar, chartplotter, forwardfacing sonar, two radios, HVAC, inverter, power windlass, Harken electric winches, and so on. The rig is very sturdy, but unusual enough that riggers who understand and can maintain it are rare and valuable.

As of this writing, there were three 36s for sale at prices ranging from \$68,000 to \$70,000. Prices

usually vary more, depending on condition, equipment, and location. They offer a lot of boat for the money.

As a retired engineer, I see creative ideas as good. Things that work are better. Creatively

MeSays' saloon has been well kept with fresh varnish and handsome upholstery, above right.

The secure U-shaped galley has enabled some owners to cook gourmet dinners underway, at right. Owner Jim Hartling says that during one race, "we encountered prolonged winds in excess of 40 knots, while still accomplishing an oven-roasted chicken and prime rib roast with Yorkshire pudding." Photos courtesy Robert Neches. combining things that work is best. That's what makes the Nonsuch 36 a best old boat.

Robert Neches is a retired R&D manager. Sailing year-round in Southern California, he has owned and maintained one boat or another continuously since 1984. His personal motto is, "Sailing boats, plus working on them—two hobbies for the price of three."





Nonsuch 36

... and Two More Freestanding-Rigged, Solid Sailers

STORY AND ILLUSTRATIONS BY ROB MAZZA

ooking for boats to compare to the Nonsuch 36, the obvious commonality has to be the freestanding rig. That certainly narrowed the choice, and the Freedom 38 (an elongated version of the Freedom 36) and the Hunter Vision 36 nicely fit that bill. Full disclosure: I was working with Mark Ellis while the Nonsuch 36 was in production at Hinterhoeller Yachts, and I was chief designer at Hunter Marine in Alachua, Florida, while the Vision 36 was in production, but both of these designs preceded my tenure.

Looking at these distinctive sail plans, note that the Nonsuch is a true cat rig with the mast located well forward in the "eyes of the ship." In contrast, the Freedom and the Hunter position their masts far enough aft to allow for a forestay and small headsail; in fact, the mast is far enough aft in an area with enough beam to allow the installation of a stayed rig on these two designs.

All three of these boats take full advantage of the freestanding rig, but the sailplan configuration of the large main and small jib of the Freedom and Vision is not tied to the freestanding rig, while the Nonsuch is. During this same period, other designers were making similar efforts to make sailhandling easier on traditional stayed rigs by moving toward larger mainsails and smaller, non-overlapping jibs, and fractional rigs; the Gilbert 30 is a good example in

cruising boats and J/Boats an example in racing designs.

Adding a small headsail means the sail area is split between two sails, so the main is proportionally smaller for these boats than for the Nonsuch. Sixty-five percent of the Freedom's 572-square-foot total sail area is in the main, while 70 percent of the Vision's 677 square feet is in its main. All of the Nonsuch's 742 square feet of sail area is in its large single mainsail. The forestay on the Vision and Freedom also helped restrict the aft movement of the mast, so the boom would not droop into the cockpit and the mast would not pump as much in a seaway.

Note also that the Freedom and Vision employ a conventional main boom with



Nonsuch 36





Freedom 38

Hunter Vision 36

LOA	36'0"	38'0"	36'0"
LWL	33'9"	30'7½"	31'0"
Beam	12'8"	12'6"	12'9"
Draft	5'6"	6'0"	4'8"
Displacement	17,000	14,370	15,500
Ballast	6,500	6,500	5,900
LOA/LWL	1.07	1.24	1.16
Beam/LWL	.38	.41	.41
Displ./LWL	197	223	232
Bal./Displ.	38%	45%	38%
Sail Area (100%)	742	568	677
SA/Displ.	17.92	15.35	17.39
Capsize No.	1.97	2.06	2.05
Comfort Ratio	25.9	23.4	24.8
Designer	Mark Ellis	Gary Mull	Ola Wettergren & Hunter Design
Builder	Hinterhoeller Yachts	Tillotson-Pearson	Hunter Marine

mid-boom sheeting and vang, compared to the Nonsuch's self-vanging wishbone boom. Other than the freestanding mast, the only departure from a normal sloop rig in the Freedom is the use of the half-wishbone jib boom marketed as the "camberspar." The Nonsuch and the Vision have more than adequate sail areas resulting in sail area/ displacement ratios above 17, while the Freedom lags a bit at a little over 15.

Let's take a look at the hulls under these rigs. Certainly above the waterline the Nonsuch's profile reflects its catboat heritage. However, if you were to place your hand over the rigs on the drawings of the Freedom and Vision, these designs would not be much different in profile than stayed boats from the same design offices. This has ramifications when looking at the numbers. Note that the Nonsuch has the longest waterline length at 33 feet 9 inches, approximately 2 feet longer than the Freedom and the Vision. This longer waterline is largely a result of the severely truncated overhangs inherent in the catboat aesthetic. The length overall of the Nonsuch is only 7 percent longer than the waterline length, while it is 24 percent longer for the Freedom and 16 percent longer for the Vision. If the Nonsuch 36 had the same length overall/length waterline ratio as the Freedom at 1.24, it would be just shy of 42 feet long!

This obscuring of true size is also evident in the displacement figures. The Nonsuch is a full 2,600 pounds heavier than the Freedom and 1,600 pounds heavier than the Vision—this, despite the Nonsuch having the lowest displacement/length waterline ratio of the three at a performance-oriented 197, compared to 223 for the Freedom and 232 for the Vision. These differences in waterline length and displacement on a short length overall highlight the marketing challenges that always plagued the Nonsuch models when customers would invariably compare boats of the same overall length. All Nonsuches are substantially larger, and thus more expensive, than their length overall would indicate.

Note that the beams of these three boats are within 3 inches of each other. When comparing these beams to waterline length, we see that the Nonsuch is relatively narrow at .38 and the Freedom and Vision beamier at .41. This would indicate that not only have the ends of the Nonsuch been truncated, but the waterline length has possibly been stretched a tad as well. These similarities in beams, combined with variations in displacement, yield a slightly more favorable capsize number for the heavier Nonsuch at 1.97, and a less desirable 2.06 for the Freedom and 2.05 for the Vision. The comfort ratios also follow the displacement variation, with the heavier boats faring better than the lighter.

These are three large boats that incorporate the advantages, real and perceived, of the freestanding rig. All are attractive, but to my eye it is the earlier Nonsuch that incorporates the freestanding rig into a complete and harmonious package combining innovation with tradition. She is still a remarkably good-looking boat after all these years and inspires pure awe when seen sailing in any sort of breeze.

Rob Mazza is a Good Old Boat contributing editor. He set out on his career as a naval architect in the late 1960s, when he began working for Cuthbertson & Cassian. He's been familiar with good old boats from the time they were new and had a hand in designing a good many of them.



NEW & USED SAILBOATS

SAILBOAT HARDWARE RIGGING & SWAGING QUALITY SERVICE

> 800.377.8795 651.436.8795

TIPS ON HOW TO SAVE FUEL COSTS BUY A SAILBOAT

WWW.HOOPERSYACHTS.COM





Freestanding rigs offer an intriguing comparison to traditional, stayed masts.

BY ROB MAZZA

n 1985, when I joined the office of Mark Ellis Design, Mark took me sailing aboard a Nonsuch 30 called Lotus. He wanted to demonstrate the Nonsuch and the advantages of its unstayed, freestanding rig. With Mark sailing the boat entirely on his own, we charged upwind in a nice breeze, tacking at will with just his simple turning of the wheel. Then we went off on a reach with the main eased but with just a comfortable amount of weather helm. But the real revelation came when we turned downwind. Mark simply eased the main out beyond 90 degrees, with no shrouds getting in the way, allowing us to sail slightly by the lee with no real threat of an accidental jibe.

That day on the water made clear the ways in which a freestanding rig could make sailing easier-hence, more accessible—to many. There are really only two ways to hold a mast upright: support it with wires, or bury its base soundly below decks and build it strong and flexible enough to support itself. The former is the stayed mast, the latter is known as the freestanding mast. And while the freestanding mast has been around for a long time (think junk, lug, or cat rigs), daring innovators of the 1970s, including Mark Ellis, began to mate a freestanding mast to modern hulls. The result was a rig that offered benefits (and a few drawbacks) compared to boats with stayed masts. But there's more to understanding freestanding rigs than weighing the pros and cons-lots more.

What's Old Is New

While both freestanding and stayed masts have been around as long as there have been sailboats, stayed rigs have vastly outnumbered freestanding rigs throughout western and European history. The only boats that have consistently used freestanding masts are those on which the mast was placed so far forward in the

A Term is Born—RM

Eric Sponberg, a naval architect who designed the masts used on several of the boats built by Freedom Yachts, did not like the term "unstayed" applied to these spars. "It sounded too negative," he says on his website, ericwsponberg.com. "I adopted the term 'freestanding' to describe these rigs with no wires holding them up because it sounded like a much more positive term." *Feline Fine*, a Nonsuch 30 out of Quebec City, sails up the Saguenay River from Tadoussac, at left. Photo courtesy Carl Berdie.

A flotilla of Nonsuches sails off the wind, highlighting the ability to ease the main as much as desired, unimpeded by shrouds. Imagine sailing by the lee without the imminent possibility of an accidental jibe, at right! Photo courtesy Ray Dykstra.

hull that there was not enough beam to allow the installation of chainplates and shrouds. That applied specifically to catboats, on which the mast was located as far forward in the boat as possible to set one large single sail—think *Gloucester*, the subject of Winslow Homer's famous oil on canvas, "Breezing Up (A Fair Wind)," which he painted in the 1870s.

To avoid the stress concentrations and potential fatigue cracks associated with holes drilled into the mast wall, later Nonsuch masts attached the required halyard deflection block, wishbone "choker" tackle, and reef blocks to stainless steel and aluminum bands clamped around the mast, as shown on this Nonsuch 30. Note that even the lower end of the sail track is held in place with strapping. Note also the robust mast collar to take the high sideways load induced by the cantilevered freestanding rig. Photo courtesy Rob Mazza.



One hundred years after Homer's lovely work, along came Garry Hoyt's Freedom 40 in 1976, rigged as a cat ketch using two freestanding rigs of almost equal height. Other Freedom designs followed, and then in 1978 came the Nonsuch 30, a boat with a mast so far forward that its design is predicated on the same criteria as Homer's *Gloucester*: lack of beam to install chain-plates. (The 30 was soon followed by the 26, 36, 22, 33, and the cat ketch Nereus 40, all originally with spun-tapered aluminum masts.)

The inspiration behind the Nonsuch 30 was noted Toronto yachtsman Gordon Fisher, who worked closely with Ellis to realize Fisher's vision of a boat that was simple to sail with minimum crew. Fisher had owned several CCA and IOR racers and had become disillusioned with their complexity, cost, and difficulty to sail. He sought a simpler approach.





While Freedom started with an innovative, cat ketch, freestanding rig atop a hull with a shoal-draft, full keel with a centerboard, Nonsuch perched a traditional East Coast catboat design atop a modern hull with separate keel and rudder. As with all catboats, the freestanding mast for the single sail was located well forward. The primary improvement on the traditional gaff-rigged catboat configuration was to introduce a more flexible, tapered aluminum mast to support a single high-aspect-ratio sail, combined with a hull shape and keel configuration that did not build weather helm with heel angle, so prevalent in the traditional, wide-beam, centerboard catboat. A wishbone boom meshed with the desire for simplicity, self-vanging as it is. (The wishbone angle was increased on all Nonsuch models that followed the 30 to take greater advantage of its self-vanging characteristic.)

My sail with Mark aboard the jib-less, stay-less *Lotus* was eye-opening, and when we came off the wind, I realized

> that if the mainsheet were long enough, we could ease the main until it was streaming directly downwind. But surely, jibing such a large single sail would be a handful?

Yes and no—and again, history provided a guide.

Banshee seems aptly named, pictured here with a bone in her teeth, all of her sail area contained in one large Marconi sail conforming to mast bend. Note the lazy jack lines on this 1988 Nonsuch 36, hanging from the wishbone to contain the sail when it is dropped, at top right. Photo courtesy Bill Herlihy.

Betelgeuse, a 1982 Freedom 44 Cat Ketch, sitting at her mooring, employs conventional booms and vangs rather than sleeve luffs and wishbone booms as originally used. Her bowsprit is a modification to allow the flying of a jib, at left. Photo courtesy Peter and George Haydon.

UltraShade Sun Shade "The Shade is Awesome"

Ultrashade Awnings

Deep, glare-free shade with the black side down. Light, durable urethane-coated ripstop. Packs up smaller than a backpacking tent. Nighttime ambience with white side down. Machine washable.

Available online at www.crawfordboating.com Made in the USA





Why Marconi?-RM

It is ironic that the term Marconi rig is used to describe the high-aspectratio, triangular sail attached to a tall freestanding spar, such as that on the Nonsuch. The term Marconi rig was introduced in the early 20th century as sail plans transitioned from the traditional gaff rig to elongated higher-aspect-ratio "leg 'o mutton" or Bermuda rigs on tall, single-piece masts. People thought that the large numbers of wires required to support these slender masts resembled the wires supporting the Marconi radio towers springing up all over North America at that time. The term began to apply to the sail shape that these masts could support, rather than the mast itself. The irony is that a sail configuration owing its designation to a large number of supporting wires actually has no wires on the Nonsuch and other freestanding masts. But the designation persists.



The Marion, Massachusetts, Marconi array, circa 1914. Photo courtesy Sippican Historical Society.

The 19th-century sloops on the Hudson River, sailed by a man and a boy, developed a jibing technique that involved turning the boat over 90 degrees through the jibe so that when the main came around, it would have a soft landing and even luff slightly on what was now slightly closer than a beam reach. Once the main was on the new jibe, the course could be adjusted to downwind.

This maneuver is not for the faint of heart, but we performed the Hudson River jibe several times without incident. It was quite a demonstration of the ease-of-sailhandling advantages of the freestanding rig.

With the feasibility and success of mating freestanding rigs to modern hulls and sail plans established, other designers and companies followed Freedom and Nonsuch. Designer Yves-Marie Tanton drew his take on the freestanding rig for Offshore Yachts, a line that began with the 44 in 1980, all built by Ta Chiao in Taiwan. Eric Sponberg also designed many boats with freestanding rigs, parlaying the engineering experience he derived from working at Tillotson-Pearson, builders of the carbon-fiber masts used by Freedom.

Design Considerations

To deepen our understanding of these fundamentally different philosophies in rig design, let's start by understanding the primary difference between a modern freestanding mast and conventional stayed mast. To be freestanding, a mast must be stepped through a substantial collar at deck level and be seated in an equally substantial mast step beneath the cabin sole. In this way, the mast is essentially a cantilevered beam, subjected to bending loads only. To withstand these loads, the mast must be broader at the deck, tapering towards the top, and made of materials that possess the necessary strength and flexibility characteristics.

Stayed masts, on the other hand, are held upright by stays and shrouds. Stays support the mast fore and aft, while shrouds support the mast transversely. Unlike freestanding masts, stayed masts can

The design criteria for freestanding and stayed masts are entirely different and reflect the method of loading imposed on the mast—bending or compression. The freestanding mast, being a cantilevered beam, is designed to absorb only bending loads. The stayed mast is designed to withstand compression and buckling loads imposed by shrouds and stays. be either stepped on deck or through the deck on the keel, although keel-stepping the mast provides better lower column support. A stayed mast is subject to compression loads—a downward force on the mast column—induced by the tension on the shrouds and stays. If not designed properly, these loads can lead to the column buckling between the support points at the deck and spreaders. Unlike a freestanding mast, on which width tapers with height, the profile of a stayed mast remains essentially uniform over its length.

Sailboat designers have varied means of managing the potential loads on a stayed mast. For example, they can widen the base of the rig by moving the shrouds and chainplates outboard, reducing the total compression load on the mast proportionally. They can introduce more spreaders and shrouds to reduce the length of each unsupported section of column—greatly reducing the risk of buckling (the critical

A Single-Sail Precaution—RM

In a boat where all or the majority of the sail area is in one sail only, any loss of that sail due to a major tear, headboard failure, or loss of a halvard can be catastrophic-especially when sailing offshore. The primary source of propulsion is lost, with the engine now the only option. That single sail really is putting all the eggs in one basket. When considering the importance of the sail to a freestanding mast, a sailor should think also about. the failure points that could affect a crew's ability to fly the sail, such as the halyard, mainsheet, sail track, and topping lift. In addition, some owners pull their freestanding masts annually to inspect hardware and look for stress cracks.



buckling load is inversely proportional to the squared function of length). They can sweep the spreaders aft, inducing some fore and aft support from the shrouds. Those are a lot of factors to consider and balance.

The designer of a boat with a freestanding rig faces fewer such factors, and they are primarily material choice (aluminum or carbon fiber), mast diameter, and mast wall thickness. For example, to reduce the weight of a freestanding mast of a given material, a designer has only to increase the mast diameter and reduce

Freedom 40: The First-RM

The Freedom 40 was the first boat to take real advantage of and popularize the bend characteristics inherent in the freestanding rig. But in addition to its freestanding masts, the Freedom 40 was a platform for other innovations-some successful, others not so much. Among these was a wraparound sail rather than sail tracks to mate the sail with the mast, as well as a wishbone boom straddling the sail and spar, rather than a conventional boom and vang. It soon became obvious, however, that when the wraparound sail got wet it was difficult to lower, raise, or reef. Some earlier Freedoms also experimented-briefly-with rotating masts. Freedom eventually abandoned the wraparound sail and wishbone boom and adopted fully battened sails on tracks with conventional booms. Although the use of the carbon-fiber freestanding rig was, without question, Garry Hoyt's inspiration and execution, Freedom went through a variety of hull designers including Halsev Herreshoff, Jav Paris, Ron Holland, Dave Pedrick, and Garry Mull (as well as Garry Hoyt himself in the earlier models). The hulls evolved from shoal-draft, fullkeel configurations with centerboards to the separate keel and rudders of their IOR sisters. In fact, in Freedom Yacht's long history under various owners, the only real constant was the commitment to the freestanding rig, with ketches giving way to sloop rigs even in the largest models.

the wall thickness. However, this decision has the detrimental effect of increasing windage—both the overall windage of the mast, as well as the windage that disrupts the clean airflow as it meets the sail luff. In fact, the weight-or-windage dilemma is the reason there are few racing boats, other than one-design dinghies, with freestanding rigs.

A huge advantage of the freestanding mast is its ability to bend, both to absorb forces and control sail shape. The use of mast bend to control sail shape came to the fore in racing dinghies. The Finn, OK Dinghy, and Laser have all shown the benefit of mast bend to flatten a sail in heavy weather, as well as the benefits of the mast falling off to leeward in gusts to spill wind, relieving stress on the boat (and on the hiking helmsman). These dinghies also demonstrated that a single sail could go upwind very well, thank you very much. A jib was not essential.

Of course, mast bend also became popular in stayed rigs to control mainsail

Banshee, a 1988 Nonsuch 36, shows off the self-vanging charateristics of the wishbone boom when sailing downwind, and the ability of the sail to be eased as far as desired without the hindrance of shrouds. Photo courtesy Bill Herlihy.





fullness, but the desired bend must be induced with equipment and crew, whereas it happens automatically on a freestanding rig. And mast bend in stayed rigs can be induced only fore and aft, not transversely. Finally, inducing mast bend in a stayed rig immediately takes the mast out of column fore and aft, requiring the use of running backstays to prevent buckling of the column. Compared to a freestanding rig, mast bend in stayed rigs is a complicated affair.

As well, a freestanding mast exerts an entirely different set of forces on the hull it's attached to. While a stayed mast transfers a tremendous compression load to the mast step and a huge lifting force on the windward chainplate, a freestanding mast exerts none of those forces. Being a cantilever, the freestanding mast is supported in bending by the mast collar (at deck level) and the mast step. Because the mast is essentially a lever (picture a crowbar), with the fulcrum at the deck partners and the sail heeling forces acting at a point well above deck, you can see how great the "prying load" would be on the mast step.

While these forces are intuitive, there is a less intuitive and equally significant force that can be exerted on the hull by a freestanding mast: torsional loads. And the hull of a boat with a freestanding mast must be built to withstand them.

Thanks to its hull shape and low center of gravity achieved with a ballast

Goodwind, a 1984 Freedom 39 Pilothouse Schooner, features the original Freedom Cat Ketch rig as it evolved with full length battens and conventional booms and vangs. Photo courtesy Greq Cantori.

keel, a sailboat resists heeling. This resistance is called the righting moment. When wind pushes on a sail and that force is transferred to the mast and to the hull, that force is called the heeling moment. If the wind is strong enough, the heeling moment will exceed the righting moment and the sailboat will heel. (As the sailboat heels, the righting moment increases; when the two forces are in balance, the boat will cease further heeling.)

A sailboat's total righting moment can be considered roughly centered fore-aft, adjacent to the center of gravity and center of

buoyancy, in the vicinity of the keel. On a sailboat with a stayed mast, the mast is usually located about the same place, where the hull is beamy enough to attach shrouds. This works well, because the mast is exerting its heeling moment at roughly the same place that the hull is countering with its righting moment.

In the case of the Nonsuch, the mast is stepped well forward of the hull's righting moment. All good, except that when the forward-positioned mast exerts a heeling moment, that torque is resisted where the righting moment is, which might be, for example, many feet aft of the mast. That torsional or twisting load has to be absorbed by the hull. Nonsuches have a full bulkhead installed immediately aft of the mast to help transfer these torsional loads as well as to prevent hull distortion from the opposing mast collar and mast step loadings.

From an engineering point of view, a freestanding mast is a simpler design problem than a stayed mast with one exception: fatigue loading. Without question, the Achilles heel of aluminum freestanding masts has been metal fatigue, caused by the constant repetition of alternating loads. Compared to their stayed counterparts, freestanding masts are always in motion. With any structure subject to oscillating loads, be it an aircraft wing, bridge, or road sign, the ultimate life of that structure is a function of the loading experienced, the number of oscillating cycles encountered, and the stress concentrations involved. The higher the loading, the fewer cycles can be absorbed before fatigue failure. This inter-relationship between loading, stress concentrations, and the number of cycles all has to be taken into account in designing for fatigue. The key is to keep the working load below what is known as the "fatigue limit." If that is done, then a long life of well over a million cycles is pretty well assured.

On a heeled Nonsuch, where the mast is a cantilever beam in bending, the weather side of the mast is in tension, while the leeward side is in compression. When the boat tacks, the forces reverse. As the mast pumps in a seaway, the loads fluctuate. Over time, the sides of the mast alternate from tension to compression hundreds or thousands of times depending on how and how often the boat is used. This is classic fatigue loading.

Fatigue loading becomes especially problematic when there are holes drilled in the lower section of the spar. These holes introduce stress concentrations-or stress risers-that can result in fatigue cracks that then emanate from the holes, especially if they have rough edges or sharp corners. A number of early Nonsuch spars failed due to this problem, with fatigue cracks emanating from either the hole drilled for the mast tiedown pin at the mast collar or from the halvard exit. The fasteners at the mast splice were another source of problems, requiring a variety of remedies. Designers eventually figured out that the solution to fatigue failures involved avoiding holes in the mast and ensuring the mast wall thickness was sufficient to extend the fatigue limit. It took a while and involved the redesign and replacement of a lot of mast lower sections, but now aluminum freestanding rigs can be assured of many years of service.

Ultimately, the Nonsuch adopted carbon-fiber masts that had their own stringent requirements for the fastening of hardware and drilling of holes.

Almost 40 years after Mark Ellis impressed me with a sail on *Lotus*, the majority of sailboat masts are still held upright with wires. Despite their benefits as extolled by their devoted followers, we still don't see many sailboats with freestanding masts in our marinas. I'm not sure this situation will change anytime soon.

Rob Mazza's bio can be found on page 15.



The Case of the Sinking Mast

Sourcing rigging tension creep reveals an old flaw.

BY ZORAN GLOZINIC

P or a few years, the shrouds and stays on *Mikula*, my 24-foot Seafarer, would slowly lose their tension over the course of each sailing season.

Because I pull my mast each season, I have a habit of marking the turnbuckle screws so I can quickly get them to near-correct tension before using my tension gauge to fine-tune the whole rig. These marks made it plain to see that the turnbuckles weren't turning, yet my rig was loosening and usually required some tightening at least once during each season.

I did not believe that stretch could be the cause. *Mikula* displaces only 4,000 pounds and flies only 260 square feet of sail—³/₁₆-inch rigging is plenty for the loads generated under sail.

I was a bit concerned and determined to find out what was going on. At the

end of one sailing season I towed *Mikula* home, figuring that having my workshop and tools nearby would make finding the problem and correcting it easier.

The Seafarer 24 is a solidly built boat; the mast is deck-stepped, and the mast load is transferred to the swing keel housing via a 3-inch-diameter aluminum pipe compression post with ¼-inch walls. I could not detect any visible deformation on the hull, deck, or cabin, and all the chainplates looked perfect, with no leaks around them or loose bolts.

Sitting on the V-berth, I contemplated the rig. I'd ruled out stretch. None of the chainplates were pulling out. The mast could not be compressed. I ruled out hull deformation, deciding that the boat was too strongly built to be so easily deformed. That left one cause I'd not explored: The mast was somehow sinking into the hull. But how could that be possible?

I turned my attention to the compression post. Like many boats, the Seafarer is built with a fiberglass liner; in my boat, the lower half of the bulkhead between the saloon and forward cabin is incorporated into that liner. It resembles a rectangular box standing on its side, and the compression post sits inside this box at the end of the port-side bulkhead, which extends farther into the cabin than the starboard bulkhead.

While the top section of the compression post was totally visible, the

With her rig staying tuned after Zoran figured out and repaired the source of the sinking mast, *Mikula* enjoys an afternoon sail, above. lower section vanished into the box-like bulkhead, invisible and inaccessible.

The top surface of the bulkhead was covered with a wooden shelf, through which the post passed via a hole cut into the shelf. After removing the shelf's trim pieces, I slid it upward, which exposed an oblong hole in the top of fiberglass bulkhead. I looked inside.

At first, I did not see anything suspicious—the bottom of the post was sitting on a lump of fiberglass which was obviously on the top of the swing keel housing. It did not look nice, but I figured it had to be good; *Mikula* was at that time over 35 years old, and it was still holding together fairly well. I tried moving the compression post—up, down, around—without success.

I made myself a coffee and sat there for a while, thinking and looking. And then I realized something was not as it should be. Above its fiberglass base, the remainder of the bulkhead is finished with plywood. I realized that this plywood portion was not really aligned with curvature of the overhead and the cabin side.

On closer examination, I also found that there was a lip molded on the end of the fiberglass bulkhead inside the forward The mast was somehow sinking into the hull. But how could that be possible?

cabin. Instead of sitting on that lip, the lower edge of plywood bulkhead was actually below it and leaning away from the vertical surface of the bulkhead box. I vaguely remembered that I had noticed all of these things before and had attributed them at the time to sloppy finishing work. But now I was wondering: Could this actually be a sign of cabin deformation? Was I finally on to something here?

My conclusion was that the mast compression post somehow was pushing downward. What I did not understand is why everything did not return upward when the mast was removed. Was it possible that cabin was deformed beyond elasticity of fiberglass?

The only way to find out was to push the cabin top up and see what would

happen; would the plywood bulkhead then align better with the fiberglass bulkhead and lips on the overhead and cabin sides? Would I be able to move the mast compression post then?

I took a length of 4 x 4-inch wood post, laid a piece of thick plywood on the cabin floor, and positioned a hydraulic car jack to create lifting pressure via the wood post to the cabin overhead, as close to the compression post as possible. I inserted a piece of thick rubber between the wooden post and overhead to protect the gelcoat surface.

As I slowly applied pressure, I closely watched the cabin sole—I did not want to end up with a car jack breaking through the floor and ending up in the bilge! But the plywood piece spread the load on a large enough surface, and I could not detect any floor deflection or hear cracking fiberglass.

After every small stroke of the car jack handle, I tried to move the compression post, and I also went forward to check

The lower portion of the bulkhead between saloon and forward cabin is integral to the boat's fiberglass liner, and the compression post is installed at its end, below.

Using a hydraulic car jack and a 4 x 4 post, Zoran lifted the cabintop to its proper height. He also enlarged the hole at the top of the bulkhead to gain better access to the compression post's base within, below right.





After removing the post, Zoran identified the problem. The circular hole eaten by the open end of aluminum pipe is clearly visible, at right.

To contain the thickened epoxy in which Zoran planned to bed the new metal base for the post, he epoxied a piece of fiberglass vertically beside the area to create a kind of box, at far right.

The new metal base is set in thickened epoxy. The vertical slots help align the post once it's back on the base. Zoran made a long, primitive pliers from wood to help hold and position the aluminum plate into the epoxy, at bottom left.

The compression post is reinstalled on the new base, at bottom right.

the plywood bulkhead. I loosened all the screws holding the plywood bulkhead so I could check if by moving the bulkhead slightly it would fit better. Finally, the plywood bulkhead was sitting on the lip of the fiberglass bulkhead, and it aligned perfectly with the overhead and sides of the cabin. There was now about a half-inch gap between the overhead and compression post as well.

I grabbed the compression post, and after some wrestling I was able to lift it completely from the fiberglass bulkhead box. Finally, I could have a really good look inside.

The compression post stood on top of the lump of thickened polyester (or vinylester, or even maybe epoxy), but without any kind of flat, hard base. While the builders had installed a piece of flat metal between the cabin overhead and top of the compression post—which is the proper way of doing it—they did not follow suit on the bottom.

Made of pipe open at both ends, the compression post was slowly grinding its way down and through the lump of whatever thickened goo they had used. Granted, it had taken nearly 30 years to sink nearly half an inch, but it would have been much better had they installed a 4-inch-square piece of aluminum or stainless plate there instead.

From there on, it was an easy fix—if sometimes awkward. To gain enough access to the inside of the bulkhead, I had to enlarge the oblong hole in its top so that I could go in with both hands and arms. Even with the hole enlarged, it was a tight fit to access the swing keel housing, and since it was about 24 inches down to the area where I had to work, it's a good thing I have long arms.











For Your Best Sleep Ever

- + works like a box-spring
- + fits under any mattress, even v-berths!
- + outstanding comfort
- + customized firmness
- + under-mattress ventilation
- + moisture mitigation
- + quick and easy installation

call 888-463-7654 or visit FroliSleepSystems.com - by Nickle Atlantic, LLC - Froli is made in Germany

I fabricated a simple base for the compression post from two short sections of aluminum L-profile, leaving two vertical notches to hold the compression post in place and riveting the sections together.

In the area where the new base would sit, I vacuumed everything the best I could, then used a stiff brush attached to a long handle to wash the area with acetone. I epoxied a piece of glass cloth on one side of the goo lump to create a containment area so that I could pour thickened epoxy on top of the keel housing where I would glue in the new base.

I installed four 2-inch-long #10 machine screws on each corner of the base's horizontal surface to act as anchors buried in thickened epoxy.

After the epoxy cured, I made a batch of thickened epoxy and filled the cavity completely before positioning the aluminum base, gently rocking it back and forth to ensure there were no voids beneath it. I did my best to make it horizontal both lengthwise and athwartships. That required a few small pieces of wood to wedge the base against the vertical sides of the bulkhead interior until the epoxy cured. I did not bother to remove them afterward, since no one would likely ever see them there.

During all that work, I left the hydraulic jack and wooden post in place to hold the cabin top at the correct height, and the next day I carefully measured the distance from the new base surface to the metal plate on the cabin ceiling. I then shortened the compression post to the proper new length.

I made a small batch of thickened epoxy and poured it in a circular pattern on the aluminum base where the compression post would sit. Then I maneuvered the compression post inside the lower bulkhead, eventually inserting it onto the new aluminum base. With the post nearly vertical, I jacked up the cabin overhead an extra half inch to bring the post into a completely vertical position. Then I slowly released the pressure in the hydraulic jack.

The cabin top came down, sitting exactly on top of the post. There was a very slight pressure on it, but I could still move the post a bit—perfect! I refastened the plywood bulkhead after that; it looked much better now, aligned as it should be with cabin and bulkhead contours around it.

The rest of the work involved reinstalling the wooden trim and refastening



a wooden collar that held the top of the compression post in place.

As expected, my rig stayed tuned all season long. \clubsuit

Zoran Glozinic is a retired business professional who has been messing around boats and old cars all his life. He currently lives in After lifting the cabintop to its proper height, the plywood bulkhead returned to its proper place on the lip built into the fiberglass bulkhead base.

Laval, Quebec, where he divides his free time between a good old English bilge-keel boat and an 18-year-old Saab car.



New Love for an Old Mistress

Thanks to a little help from her friends, a good old boat finds a new paramour.

didn't really know Nat. Nothing beyond a friendly smile and hello as we passed each other on the docks. He was in his 90s when he died, but until that time I saw him regularly at the helm of his little blue-hulled sailboat on even the most inhospitable days, chugging out of the harbor and bouncing out into the lake, crashing through white caps. Hardware store letters on the stern spelled Mistress, and I often imagined Nat saying to people in his life, "Well, I'm off to see my mistress."

Just a few years ago, our Highland Yacht Club on Lake Ontario presented Nat with a special award for saving a life. Nat had invited his son-in-law and grandson for a sail, but the weather was not welcoming. A raging wind and dark skies threatened torrents of rain. No matter, Nat refused to miss this opportunity to take his grandson sailing. So, with several club members watching from the dock, mumbling concern for Nat and his crew aboard his 25-footer, Mistress left the safety of the sheltered harbor and struggled into a turbulent sea, three figures huddled in the cockpit.

A few miles out, they decided they'd had enough. As they came about, the rain started, and Nat's grandson BY D.B. DAVIES



Nat sits in the cockpit of *Mistress*, his Hinterhoeller 25, following one of his last sails aboard her.

pointed at what looked like a large log in the water. Fearing it might be a hazard to navigation, Nat eased *Mistress*' reefed main to get a closer look. Minutes later, as *Mistress* rose to the top of a large swell, they made out the head of a person clinging to a paddleboard.

The drowning young man was suffering from hypothermia and couldn't move his arms or legs. It took all three of the *Mistress* crew to pull him aboard. Once ashore, he was rushed to the hospital. After making a full recovery, he said he thought he was a goner because no one would be out in that kind of weather.

Two years ago, I volunteered to help launch club boats at the start of the season. I was surprised when told *Mistress* would need a tow. A tow? Everyone knew that Nat kept his engine in perfect running order—and where was Nat? I pulled Nat's beloved boat to her dock with a stranger grasping her tiller.

I learned later that Nat had been in the hospital for weeks prior to the launch and that he died the day the rest of us put our boats in the water. As the weeks passed and Nat stories were shared, life at the club went on as we all warmed to the sailing season. Midsummer, our vice commodore approached me to see if I would mentor Chervl, Nat's daughter, who had inherited the boat. She had decided to become a member of the club and to keep the boat at its dock. I immediately emailed Cheryl suggesting we get together the following Saturday to look the boat over and see what had to be done.

After not hearing from her or seeing her, I assumed she was an experienced sailor and didn't need help. Then, two



A younger Nat smiles aboard a younger Mistress after a successful fishing trip.

weeks before haulout time, I received an email from Cheryl. She'd been too busy to come down to the boat.

"What is haulout?" she asked. "Do I have to do something about haulout?" Do something about engine. She responded quickly: "OMG."

Cheryl had last sailed *Mistress* when she was a teenager. She knew nothing about sailing or owning a boat, but she knew her father loved the boat and so she wanted

Cheryl realized that *Mistress* wasn't a boat she was ever going to sail.

haulout? Do something about haulout! I told her that at the very least she had to prepare her cradle, prepare the boat, mark the slings, and service the to keep it, thinking all she had to do was pay her club fees. I could see her heart sink as I explained about work hours, club fees, boat maintenance, and other revelations. Then I did what any sailor would do. I told Cheryl I'd help, and everything would be okay.

Mistress is a Hinterhoeller 25 built in Niagara-on-the-Lake in 1969. I came to learn that Nat hadn't really been able to take care of her in his later years the way he had decades ago. The wooden hatch had some dry rot, the traveler didn't travel, the brightwork was all dry and grey, the little outboard engine hadn't been started or serviced all season, and most of the equipment was original and had seen better days. I also learned that Nat never-never, ever-threw anything away. The lockers were packed with old, mildewed Mae West jackets, a hundred old frayed and stiff lines, original sails, sails from other boats he was going to refit, fishing gear, charts, books, pamphlets, and clothes. I finally told Cheryl that I didn't know what of all the stuff aboard might mean something to her and so she'd have to clean the boat out.

Soon after, Cheryl gave me an article she found below, one Nat had

written about his

1985 trip down

the Intracoastal

picture of Nat in

for adventure. During his trip, he

encountered and overcame problems under power on

the Chesapeake and ICW. But on the Atlantic, he hit big weather

and his autopilot

gave out. After not

sleeping for more

uninterrupted for

than 15 minutes

the cockpit, young, lithe, confident, and smiling as he headed out

There was a

Waterway (ICW).

three days, Nat finally pulled into a yacht club in Virginia, hallucinating, dehydrated, and malnourished. He had *Mistress* shipped back to Lake Ontario where he sailed for the rest of his days.

Over the winter, Cheryl realized that *Mistress* wasn't a boat she was ever going to sail and that her father's attachment to it was the only thing that kept her hanging on to it. Reluctantly, she decided to put it up for sale, "free to a good home." There were no takers.

Come spring, I received an email from my friend, Larry, whom I'd not seen in a while. He was coming to Toronto and wanted to know if I'd have time to take him out sailing, as we'd done in previous seasons. He'd always loved the experience. I emailed him back: "Why don't we go sailing on *your* boat?" That got his attention.

Understanding the importance of setting expectations, I tried to give Larry a better idea of what he was getting himself into: the condition of the boat, the responsibilities of ownership, the expense of

Larry, proud new owner, stands on the dock near his new *Mistress*.



September/October 2020

Larry learning the joys of boat ownership as he works on restoring the companionway cover.

refitting her and paying mooring fees at a marina or yacht club. Nothing seemed to deter him; he was all in. The day I was to meet Larry for our sail, he was already at the dock when I arrived.

"Is that her?" he said pointing to *Mistress*.

"That's her," I answered, trying to read him.

Larry grinned, "She's beautiful." All that season,

Larry worked tirelessly to refit *Mistress*, always with the help of a willing club member who was either a friend of Nat or who just appreciated seeing an old boat given another life. At one point, our entire parking lot was strewn with sails, lines, tackle, and other paraphernalia taken from the boat and carried ashore. Someone observed that it was like watching the clowns at the circus emerge from a small compact car.

Running rigging was renewed, rotten wood replaced, old hardware repaired, and blocks exchanged. The electrics were a nightmare. Our club marine electronics guru was both perplexed and challenged. He spent one entire day with a multimeter assessing which wires could be torn out and which could still serve. In the end, we all celebrated when we heard the crackle of the VHF radio.

On a crisp fall day in September, with the old mainsail resting on the boom, a working jib furled on a small roller at the bow, and the



engine idling at the dock, Larry and I decided it was time for *Mistress* to get reacquainted with the lake. Though the wind and waves were substantial, there was just something about *Mistress* that told you she'd handle it. We motored out into 3-foot swells and 20-knot winds. With the release of the furling line, the jib snapped open with a loud crack, and *Mistress* leaped into the open water as my hands grappled to cleat the sheet. Larry and I were holding tight to new lifelines surrounding the cockpit. With the wind in his hair and the spray in his eyes as he clutched the tiller, Larry yelled, "Look at her go! Just a small jib and she's flying!"

And so she was, and with all the power at the bow it was like she was vaulting from one swell to another, romping across the waves feeling a joy she'd been denied those past two years. Larry wanted to stay out and sail longer, but I pointed out that the jib was as old as the main, and if it ripped we might have trouble getting back in as the little outboard would struggle motoring into the headwinds. He agreed and reluctantly brought her about.

Larry's work took much of his time after that first sail and before we knew it, it was the middle of October, and a decision had to be made. Where would *Mistress*

spend the winter? Larry considered joining our club, but it was a long drive from his home, and there was another club just a five-minute walk for him. The challenge would be moving *Mistress* from Highland to her new home during the blustery days of October.

Mistress rests in a slip during the refit under Larry's care.





After watching the weather carefully for several days, we decided that there wouldn't be any good days, just some days that were a bit better than others. And so, on a threatening day with cloudy skies, temperatures just above freezing, and a strong wind, Larry and a friend, who was surely wondering what he'd got himself into, motored out of our protected harbor. As he passed us, his Highland support crew, he pointed to the big genoa-not the old working jib-hanked on to the bow. We looked at each other and then we all jumped into a C&C 30, figuring Larry might just need an escort down

the lake. We'd all put in too much work on the boat to see it go badly now.

Once out past the lighthouse, the white caps were up, and the cold was ripping through our jackets. We could see Mistress further out, struggling. She was sitting head-to-wind with Larry bouncing on the foredeck. As we tacked to sail closer, Larry brought Mistress about and headed back into harbor under the reefed main with the huge head sail flapping. Aboard the C&C, we were concerned. As bad as this weather was, nothing in the forecast was better, and we were running out of time. Haulout was just a few days away. We tried Larry on the radio, but he was too busy handling the boat. We waited on the lake. Soon, *Mistress* peeked her head out with the old, furled staysail at the bow. Larry wasn't giving up, he just had to get out of the wind to get that big headsail down. Now we were ready to sail.

With the wind from the southeast, we made good time down the lake under a broad reach. *Mistress* kept up with us, although she did disappear between swells every now and then. When we reached Toronto harbor, we pulled in for a lunch break. We tied up Oddly enough, there was no wiring diagram for *Mistress*!

and then caught *Mistress* as she motored to the dock. The sun was coming out and it was warming up. Over sandwiches and adult beverages, we talked about the fast sail here, and about the slogging those of us returning on the C&C would have to endure. We all applauded and toasted Larry's seamanship and *Mistress*' seaworthiness. Nat would have been proud.

Later in the week I called Larry. "How are things with the boat?"

"All good. I got the cradle up and finished a few more projects...spending a lot of time down there," he said. "It's always fun to announce to my wife in front of her friends that I'm off to see my *Mistress*. She always wishes me a good time."

D.B. Davies is a sailor and writer who is a frequent contributor to Good Old Boat. He sails Affinity, his 1974 Grampian 30, around Lake Ontario. After extensively researching the men and sailing schooners of Canada's Maritime provinces, he wrote a dramatic screenplay about the famous Bluenose and her skipper, Angus Walters. You can find out more at thebluenosemovie.com.



The End of His Rope

Wherein a glorious small-boat adventure ends in ignominy and terror.

BY JOHN VIGOR

hen I was young and thought I knew everything about boats and sailing, I would have laughed in your face if you had suggested that being towed was dangerous. I mean, come on—towing? Pulling one small boat behind another? What could be dangerous about that?

I was still quite young when I found out.

My education in this matter started when my librarian friend, Bob Stephen, came to see me in Madrid, Spain, where I was teaching conversational English. He had been reading a book by a British doctor who was exploring the French system of canals and waterways (*Small Boat Through France*, by Roger Pilkington.)

"Let's go to England, buy a boat, and cruise the French canals," said Bob.

"We could go through the European canals to the Baltic," I said. "I hear there are naked blondes running through the woods in Sweden, chased by young men bearing birch branches."

"Let's do it," said Bob. "But I need you because I don't know how to sail."

"And I need you because I'm broke. But if you buy the boat, I'll sail her," I promised.

And so, in England a few weeks later, Bob bought an ancient Thames Estuary One Design. She was a lapstrake open racing boat, an 18-foot centerboard dinghy that had been partially decked and provided with a small cuddy cabin just big enough to sleep



two. She was sloop-rigged and equipped with a small and smoky British Seagull outboard motor. Her name was *Salty Dog*.

We sailed her across the busy English Channel, about

in the middle of it. I had read somewhere that a kellet—a heavy weight—would absorb slack in the towline and prevent snatching. It would smooth out the ride. You're likely not

I began to sense the uneasy roll of a boat that is starting to flood.

22 miles from Dover to Calais. After an uneventful passage, in Calais we lowered the mast, entered the vast French inland canal system, and motored north and east under a blue cloud of Seagull smoke.

People were so friendly to us along the way, and so insistent on showering us with hospitality, that after three months, we ran out of summer in Amsterdam. The Swedish nymphs would have to frolic in the woods without us. We had to turn back for home.

In Calais once more, we made ready for the return Channel crossing and waited impatiently for two days while a contrary gale blew itself out. On the afternoon of the third day, things had calmed down, and the British skipper of a 30-foot cabin cruiser moored ahead of us stopped by.

"Are you headed for Dover?" he asked.

"Yes, leaving on the evening tide."

"Me, too. Not much wind for sailboats though. Would you like a tow?"

I smiled at our good fortune. "Very kind of you, so long as you don't go too fast."

He laughed, "Don't worry, we just piddle along."

So that afternoon, I sorted out a 75-foot length of nylon towline and made fast a kellet picturing my kellet though, a handy-sized chunk of concrete with a loop of iron rod conveniently sticking out. I had found it on an adjacent building site.

We left Calais at sunset, towed by the powerboat. Just outside the harbor, the boat towing us slowed to a stop, and the skipper stepped into the cockpit to shout back to us, "Which way is Dover?"

I could hardly believe my ears. I gave him the course, which I had memorized, and he disappeared into the cabin where his three compatriots waited. He reappeared a couple of minutes later, again shouting back to us, "Can one of you come aboard and help us?"

Bob couldn't be trusted to handle *Salty Dog*; he would have to go. We pulled alongside the cabin cruiser and Bob hopped aboard with our chart. I wondered about the value Bob offered; I knew he was not a navigator and had never steered a compass course.

We set off again in the darkness on what seemed to me to be roughly the right course. Then the nightmare began.

I heard a throaty roar from the twin engines of our towboat and felt a sudden acceleration. I clutched the tiller tightly as *Salty Dog* took a slight sheer and began to heel. I had lowered the heavy steel centerboard to add stability, but every time she wandered from her course by more than a couple of degrees, the centerboard would gain lift and she would heel to port or starboard. That meant quick corrective action at the tiller. It also meant I daren't leave the tiller for a second. I was stuck. I couldn't go below to raise the centerboard.

We were doing 10 knots by my estimate and the stupid kellet was skipping along the surface of the water and sending back great showers of spray every time it slammed into a wave. The spray landed in the cockpit, drenching me before draining directly into the bilge. The bow wave also sent spray flying aft. It, too, drained into the bilge after soaking me.

After a short while, and to my horror, I began to sense

the uneasy roll of a boat that is starting to flood. By some good fortune, the bilge pump was fixed on the cockpit coaming, within reach of the helm. I started pumping.

As we tore along through the dark night, I wanted nothing more than to cast off the towline and get things back under control. But I couldn't move to the bow where the line was made fast without causing the boat to nose-dive as the bilge water moved forward with me.

I screamed, "Slow down! Slow down!" until I was hoarse, but nobody heard me over the noise of the powerboat. I clung to the tiller and was dragged willy-nilly through the pitch-dark night, across the cold English Channel. I prayed we were at least going in the right direction.



Lifeline, a pioneer in AGM technology, was developed in 1985 for military aircraft. Lifeline's series of maintenance free deep cycle batteries has been the leading AGM battery in the Marine and Motor Coach industry for the past 15 years. To learn more about Lifeline Batteries, contact us or visit LifelineBatteries.com



LIFELINE BATTERIES, INC.

292 E. Arrow Hwy San Dimas, CA 91773 800-527-3224 www.lifelinebatteries.com After what seemed like half the night, we came upon a large ship at anchor. As we ran down its side, the skipper of our towboat shouted to a man on deck, "Where are we?" The man pointed down at the side of the ship. Six-foot tall white letters spelled out *SOUTH GOODWIN*. It was a lightship guarding the edge of the notorious Goodwin Sands.

"Which way to Dover?" asked the skipper. I cringed with shame and tried to look invisible. "Over there, mate," said the man, pointing to a cluster of lights on the horizon.

About half an hour later we reached the port of Dover. The motorboat towed us into the first darkened berth and made fast. With great relief I hauled *Salty Dog* up astern of the cabin cruiser. Almost instantly a gang of uniformed men surrounded us and ordered us not to move. Our motorboat skipper had towed us into a restricted berth, possibly a submarine pen.

The Takeaway—JV

I was a lucky kid in this episode, doing what I could to survive—and I did survive. Now, with decades of wisdom gained through sailing and boating, I have a few common-sense rules that can lessen the risks of being towed, should you have to be towed.

- Especially if you are singlehanded, make sure you can cast off the towline from the helm position. To make this possible, lead the line through a fairlead at the bow or take a turn around a forestay or Samson post, and take the end back to a sturdy cleat in the steering cockpit. You may want to keep a sharp knife handy in case the line won't come off the cleat for some reason.
- Don't allow yourself to be towed at more than your hull speed. A displacement boat towed too fast will go down by the stern to the extent that the stern wave will curl over into the cockpit and probably sink the boat. If your towboat speeds up too much, simply slip your towline. This is knowledge that should be shared with

the towboat operator before the tow begins.

- Raise your plate if you are a centerboarder.
- Work out some means of instant communication between the two boats. A handheld VHF radio in the towed boat should suffice, provided it doesn't get swamped with spray and provided the towboat is listening on the same frequency. At night, a powerful flashlight might attract the attention of the towboat. Ideally, by day or night, someone on the towboat should be designated to keep a full-time watch on the towed boat.
- Being towed is a helpless feeling. You have no control over where you're going or how fast. You have no way to control your direction, no way to ensure you don't end up on a sandbank or on rocks. Be wary if the towboat draws much less than your boat. And be very careful about who tows you.
- Finally, make sure you're not a salvage prize, or it could be the most expensive tow of your life.

We were interrogated individually. *Salty Dog* and the motorboat were searched from stem to stern. They tapped the base of our mast, as if looking for something hidden there, and slit open our two fenders. They even delved deep into my old navy kitbag, which held two weeks' worth of sweaty old socks and used underwear.

It was some time after midnight when Bob and I were freed. I fired up the Seagull and we smoked our way around into the marina next door. The uniformed men were still fussing around the motorboat as we left.

We learned later that there had been a daring jewel heist in southern France. Interpol had alerted British ports. We wondered if it explained why four gormless non-sailors who had no idea how to navigate were trying to cross the Channel at night. But we never did hear what happened to the motorboat or its crew. We were only too glad to be rid of them. I hoped and prayed I would never be towed again.

John Vigor is a retired journalist and the author of 12 books about small boats, among them Things I Wish I'd Known Before I Started Sailing, which won the prestigious John Southam Award, and Small Boat to Freedom. A former editorial writer for the San Diego Union-Tribune, he's also the former editor of Sea magazine and a former copy editor of Good Old Boat. A national sailing dinghy champion in South Africa's International Mirror Class, he now lives in Bellingham, Washington. Find him at johnvigor.com.



THROUGH HIGH TIDE OR LOW TIDE

SAIL ON

We can't wait to see you this October at the largest in-water sailboat show.

UNITED STATES SAILBOAT SHOW

OCTOBER 8-12, 2020 CITY DOCK, ANNAPOLIS, MD

SHOW UPDATES + TICKETS AT AnnapolisBoatShows.com

Across the Bar: Patrick Childress

BY DAN SPURR

fter nearly three weeks on a ventilator in a Cape Town, South Africa, hospital, stricken with COVID-19, world voyager Patrick Childress sailed over the horizon for the last time on June 8, 2020. He was several years into his second circumnavigation, this time with Rebecca, his wife of nearly 13 years, when they both contracted the dread disease. She recovered. He didn't.

An uncommon adventurer and consummate seaman, Patrick was 69 years old.

I first met Patrick in the mid-80s when he came to Newport, Rhode Island, where I worked on the editorial team of *Cruising World* magazine. Not long before, on Nov. 18, 1984, he'd departed St. Thomas, USVI, on what was to have been his second circumnavigation, aboard a 12-foot 9-inch sailboat



named *Slippery Turtle*, designed for him by Steve Callahan (author of the epic survival tale *Adrift*). Inspired by a news piece by television anchor Walter Cronkite on Robert Manry and his tiny *Tinkerbelle*, Patrick's aim was to circle the globe on the smallest boat ever.

"It was evident immediately that he was experienced, meticulous, and practical, and we settled on approaching this as if creating a survival craft capable of making ocean voyages, and at much better average speed than prior microvoyagers," Steve said.

Of the design and construction at Gulf Coast Yacht Consultants in St. Croix, Patrick described the goal to "create a real sailing boat rather than an overweight light bulb," which he felt characterized too many microvoyagers that were overburdened by stores.

His solution: to make water and find food along the way by means of solar stills, fishing, and-get this-collecting plankton. After successfully transiting the Gulf of Mexico and the Panama Canal, he was well into the Pacific Ocean when he was shipwrecked on an island in the Galapagos archipelago. But the dream didn't die on that tropical reef.

Patrick was born in 1951, growing up in Miami, Florida. Boats were prominent early in his life. He told me that in his teens, he and friends had an outboard-powered open boat for fishing and exploring. His parents would ask where he'd been all day and he'd say simply, "The islands." They assumed he meant Key Biscayne or another nearby bar of sand.

"Actually," he said with a big grin, "we were crossing the Gulf Stream to the Bahamas."

By the late 1970s, he'd completed a military tour in Vietnam, earned a U.S. Coast Guard Master Mariner's license, saved enough money to buy a Catalina 27, and spent \$15,500 upgrading it for offshore sailing. Later, in discussing that project, he was quick to acknowledge that the boat was not intended for offshore, but that with intelligent reinforcements Juggernaut was up to the task. He left Miami on Jan. 3, 1979, and completed his circumnavigation in St. Thomas on Jan. 2, 1982. He wryly told Cruising World's Passage Notes: "I think it speaks well for the builder of Juggernaut that I was able to circumnavigate on a nineyear-old weekender and return with her in as good a condition as when she left port."

While living in Rhode Island, he started a construction company. Patrick was seemingly capable of making or fixing just about anything—essential skills for shorthanded world cruising, if not home remodels.

Later, skippering a delivery for Offshore Passage

Opportunities, he met Rebecca, who'd emerged from a divorce with a Valiant 40 on which she was eager to set sail for distant shores. All she needed was some experience and a likeminded partner, fortuitously finding both in Patrick.

Patrick shared his experiences and knowledge with others in many forms: how-to articles in *Cruising World*, *SAIL*, and *Bluewater Sailing*, co-authoring the *Cruising Guide to Narragansett Bay and the South Coast of Massachusetts*, and most recently in a YouTube series. He was always happy to help others, welcoming them into the cruising community.

At sea, Patrick liked to trail a fishing line. During one passage aboard a Hinckley 50 from Virgin Gorda to Northeast Harbor, Maine, we landed two big beautiful mahi mahi. We ate one and saved the other for dockhands while bunkering fuel in Bermuda. Back at sea that afternoon we had a spectacular showing of the green flash. A day later, conditions grew rough and Patrick decided to turn off the autopilot and hand steer as we sped through the breaking seas. Zipped to the chin in foul weather gear, grinning like this was the best fun he'd had all week, he yelled, "Spurr! Let's make a list of songs to play sailing in 30 knots! I nominate Free Bird!"

Dan Spurr is Good Old Boat's boat review editor.

Across the Bar: Brion Toss

BY MICHAEL ROBERTSON

I fyou're lucky in this life, you uncover, understand, and embrace what makes you happy. And if you're gifted in this passion, if you can make it the foundation of your purpose and career, and your desire and aptitude for sharing your passion are equal, then chances are you will give a gift to the world.

In our world of sailboats and sailing, Brion Toss gave such a gift to many through his craft, skill, and joy as a master rigger. On June 6, Brion died at home at age 69 of bile-duct cancer, and the sailing community lost a singular, luminous craftsman and, by all accounts, a kind and radiant man.

A little over a year ago, I sent Brion an email asking if he'd write an article for *Good Old Boat*—not about knots or sailboat rigging, but about the life of a rigger, the trade, how someone goes about becoming a rigger. I didn't know Brion personally, but I'd referenced his books over the years. Who better for this than a rigger-writer?

Brion replied quickly, "Sounds like great fun." He added that he'd need a couple of months, that he was in "a bit of a medical interlude."

A couple weeks later, I leaned on my new friend for some advice on an article we were about to run on spreader angles. Brion got back to me with clear, comprehensive information. Months later, when I was about to touch base about the article he was eager to write for us, I heard from another friend that Brion was not well. It sounded dire.

Raw from the then-recent death of Jeremy McGeary, *Good Old Boat*'s senior editor, I felt compelled to say goodbye, to offer something kind and sincere. I told Brion that I am an amateur student of information design, "and I think your *Rigger's Apprentice* book is a master class in just that. The art in there is a warm invitation to keep turning the pages. The book is accessible and clear and perfect, a real work to give the world."

In the mailbox a week later, I received his new book, *Falling*, and a request I review it—I'd just experienced a twinkle of his sense of humor.

Falling was totally unexpected, like hearing first-hand over a beer the author's favorite stories about the singular danger inherent to his trade: "unimpeded gravity." But he steered away from gruesome tragedy and towards characteristic wit. Brion wanted readers to "learn from the mistakes and misfortunes of the fallen," not to "fixate on the fall itself." And so this book is direct and also waxes philosophical, and I liked it very much. After my review ran, I received a card in the mail from Brion. He was full of hope that the "five-week course of zappage" he'd undergone had pulled him out of the woods. He expressed a renewed

interest in writing the article we'd talked about. Then he was gone.

I've since learned more about Brion, much from Carol Hasse, the master sailmaker in Port Townsend, Washington, whose loft has been within throwing distance of Brion's shop for nearly 40 years. Carol describes a friend with unbounded mirth, who loved puzzles and sought levity in every situation, and never at the expense of others. She's mourning a raucous laugh she's used to hearing boom across the harbor regularly. She told me that Brion was working on a book when he died, working hard to finish it. She assured me the book was coming, to

be finished by Ian Weedman, the rigger who has worked for Brion for decades, the rigger Brion trusted to carry on his business. I learned that Brion wasn't a sailor turned rigger, he was a young guy fascinated with knots who saw rigging as a trade that would let him tie more of them. Even after

he embraced the trade and came to spend more time on sailboats than many of us, Brion wasn't passionate about sailing, he was passionate about the practical role his work played in creating the beauty he saw in a yacht under sail.

Maybe you've met people doing what they're born to do? People who early on embraced a vocation that was perfectly aligned with their interests and aptitudes? Not only are these folks usually the best in their chosen fields, they're also happy and balanced—at peace. By all accounts, that was Brion Toss.

Michael Robertson is Good Old Boat's *editor*.



Polished Up

Cleaning a fouled diesel tank started with polishing some dirty fuel on the fly.

BY DAVID CAREY

board our 1984 Moody 47, diesel is the elixir of electricity, and electricity is what drives our lives aboard. When our diesel-powered generator is humming, so is the inverter, the TV, the laptops, and all lights and other electronics. My wife, Erin, even likes to run an electric scented-oil burner to mask the odors our three boys and their stuff make aboard. So, on the fateful evening our generator unexpectedly powered itself down to a low idle, sputtered, and died, four faces turned to stare at me. I jumped to action.

I had been dealing with issues similar to this, and I was sure the generator's temperature sensor was acting up again. When the connections to that sensor fail, the generator thinks it's overheating and shuts down. But after checking the wiring connections to the problematic sensor, I couldn't find a fault. I wondered if this was a fuel problem.

There was plenty of diesel in the tank, so my next step was to confirm that diesel was getting to the generator. Fischer Panda generators use an electric lift pump to draw diesel from the main tank, through a water separator/filter, and to a mechanical high-pressure fuel pump that supplies the injectors. I disconnected the fuel hose where it feeds the high-pressure pump, stuck the end of that hose into an empty Coke bottle, and activated the lift pump using an override switch. The lift pump made its normal pumping sounds, but to my surprise, no fuel ran into the Coke bottle.

I focused my attention on the water separator/filter. The water separator has internal ports that can become blocked. I pulled the unit apart, cleaned and inspected it, changed the filter, reassembled everything, and then tried again to draw fuel into the empty Coke bottle. Nothing. Clogged fuel hoses? I disconnected sections of hose and successfully blew through each. No problems there. I now eyed the fuel tank.

Moody located the large steel fuel tank under the aft cabin berth. After disconnecting the flexible fuel hose, I unscrewed the fitting at the top of the tank that supports the

rigid stainless steel fuel pickup tube that supplies the generator. After I pulled the tube out, I blew hard into one end and a large glob of sludge flew across the cabin. I had found the problem.

In my previous life as an aircraft technician in the military, I spent many long, uncomfortable hours *inside* the wings of the P-3 Orion reconnaissance aircraft, that is to say, inside the fuel tanks, repairing fuel leaks. These tanks were scrupulously maintained and always as clean as the day they were made. I knew now that the fuel tank aboard our boat wasn't as squeaky clean, and that this was a problem. I also knew I couldn't crawl around inside this tank to clean it. After seeing a quote to polish my fuel from the local fuel provider, it was clear this was going to be another DIY job.

The first step was to remove and clean the diesel in the tank. I decided to use the generator's lift pump to suck the fuel out of the tank, through the water separator/filter, and into clean jerry cans. But the pump was connected to the generator's dedicated



David's fuel tank beneath the aft cabin bunk has an access panel fastened into the top.



12-volt starter battery, and this battery isn't sized to run this pump for a long period without the generator running. To drain this tank, I disconnected the lift pump from the starter battery and connected it to the main house battery bank.

With the fuel removed from the tank, filtered, and stowed temporarily in jerry cans, it was time to open the tank up and scrub it clean. I gathered my tools and removed the 28 bolts that secured the access panel. As a matter of habit gained in the military, I kept my work area very tidy, ensured that my tools were kept track of and that nothing unknown could fall into the tank opening.

While fuel tanks are nasty places, diesel fortunately has a very low flash point, meaning it will not easily combust at atmospheric pressure (gasoline is an absolutely different story). Nevertheless, before opening the tank, I opened every hatch and portlight on the boat and ran a fan to increase airflow. And I donned nitrile gloves before I got started to avoid getting diesel fuel on my skin—never do this bare-handed!

With the tank drained and opened, I peered carefully inside to see what I was dealing with. (Expensive, confinedspace entry equipment isn't typical aboard



David pulled fuel from the tank through the water separator/filter and into clean jerry cans where it stayed until the tank was clean.

any sailboat, so those with an access port large enough to allow a head inside must be careful to avoid breathing the air inside the tank.) It was obvious I had a sludge problem; the lower surfaces had clumps forming in various places, and other random debris had accumulated in the low spots, just waiting to block fuel lines, ports, or filters.

Keep It Clean—DC

Following are four common causes of water contamination of fuel.

- A broken O-ring on a deck fill cap: A poorly sealing deck fill cap can allow a lot of water to get where you don't want it. Some decks with a high cap rail (mine included) incorporate deck fill caps that are submerged when the boat is heeling, making a good seal even more critical. Carefully check this O-ring every time you refuel and replace it periodically.
- Fuel tank vent installed in the wrong position: Take a look at your fuel tank vent fitting. Is it oriented in a way that might make it prone to water entry? Could a following sea force water into the vent line and to the tank? Are hoses run correctly to allow venting, but to prevent water flow? Maybe consider relocating a vent that's caused problems in the past.
- Condensation formed in a partially empty tank: A tank left partially empty in a tropical climate allows condensation to form on interior tank walls and then settle and accumulate at the bottom of the tank. Keep the tank topped off.
- Contaminated fuel from the source: Fuel delivery trucks and marina

fuel docks are a part of your fuel system! Any water or contamination that gets into the fuel during transportation, storage, or delivery has the potential to wind up in your tank. To decrease the likelihood of receiving contaminated fuel, go to busy, high-turnover fuel stations when possible. These stations have a shorter span between delivery and sale, so tanks are likely to be cleaner. The quality and freshness of fuel found at a land-based station can sometimes be much higher than at a sleepy fuel dock-of course, that may mean getting the fuel to your boat via jerry can.



The O-ring, like the one on this deck fill cap, can be a source of water in fuel.

The good news is that clean, lint-free rags and enough access for an arm to reach inside are all that were required to wipe out the tank and remove debris. I wiped thoroughly, careful to reach every part of the tank; this wasn't a job I wanted to have to repeat anytime soon.

With the tank now clean, I replaced the access hatch, tightening the access-panel



bolts in a random sequence to ensure a proper seal, much like tightening the bolts that secure an internal combustion engine's cylinder head to the block. Finally, I refilled the tank to the brim and checked to confirm that the access panel wasn't leaking. (And, it's good practice to keep your fuel tank filled because it limits the area of interior walls on which condensation can form. This is important because water is where bacteria, which creates sludge in fuel, breeds.)

With this problem solved, I felt a renewed sense of confidence in my boat.

My fuel tank was clean, and I was determined to keep it that way (in the sidebars attached to this article, I outline all the steps I take to keep my fuel and its tank clean). It's good practice, but more than that, it's because I know the generator likes clean fuel, and I know that the generator turns that clean fuel into electricity, and I know my family loves electricity.

David Carey lives aboard his 1984 Moody 47 with his wife and three kids. Having never owned a boat before, he and his wife purchased their yacht in the Caribbean and embarked

Critter Control—DC

When it comes to long-term management of diesel fuel, polishing your fuel and cleaning your tank can get you back to square one, but the goal should be staying close to square one. All of the tips I give for preventing water and contaminants from getting into the tank are important, but adding a biocide to the fuel is often a good tactic for keeping contaminants at bay.

A biocide is an effective way to kill growth inside your tank. A biocide that's coupled with a water-separating additive will help to demulsify any water present from the fuel, making it easier for a fuel/water separator to remove water. ValvTect Bioguard and Biobor JF are two of many products that are effective in killing off bacteria and fungi that live in the water in the fuel and feed on the fuel itself. Be warned that in the case of heavily contaminated tanks, biocides have the ability to kill off enough organisms that they become suspended in the fuel and can clog filters. For this reason, when using a biocide, it's important to closely monitor the fuel lines, and more filter changes will help mitigate the problem—that is, unless the fuel pick-up line gets clogged.





Custom Sailboat Fabrications

Stainless steel chainplates, stem plates, anchor rollers, stanchion bases, and more to replace worn out or damaged deck hardware

Davit systems and stainless swim platforms with precision waterjet cut starboard decking available for most sailboats

We take pride in using only North American raw materials. We ship anywhere in the US and Canada.

800-268-0395 www.stainlessoutfitters.com on a steep learning curve as they cruised the Windward and Leeward islands. They successfully crossed the Atlantic Ocean in 2019, arriving in the Azores where their boat is currently anchored.

A Little Polish—Editors

David Carey relates the sticker shock he experienced when a professional quoted a price to polish his boat's fuel. For cruising sailors who might need to obtain fuel in places where the quality or cleanliness of the diesel can't be assured, a dedicated on-board fuel polishing system is an alternative.

There are two types. The first is independent of the engine fuel delivery system. The second is integral to that system.

In the first method, all the plumbing is run independently. Separate pick-ups and returns are typically installed in a tank's access panel. This often means removing the panel and asking a welder to weld bosses into it to support the necessary fittings. From the fittings, hoses run to a dedicated polishing pump and filter. There are several on the market; Reverso is a well-known option with several sizes to accommodate fuel capacity. The benefit of this type of system is that there are fewer connections that can cause leaks, and it can operate whether the engine or generator is running or not.

The second method ties the fuel polishing system's pump and filters into the fuel delivery system through a series of connections and valves. The benefit of this method is that fuel tanks don't need any modifications. The downside is that it requires multiple valves and connections (thus more complexity) than in an independent system. This approach doesn't allow for the fuel to be polished while the engine or generator is running.

A dedicated fuel polishing system isn't inexpensive, but can be effective in keeping fuel clean, thus preventing unexpected and inopportune engine shut-down due to contaminated fuel.

Slip Not

A clever application of non-skid tape solves older winches' friction issues.

BY BERT VERMEER

The two-speed Barient sheet winches aboard *Natasha* were showing their age. I maintain them, but they've been aboard the Islander Bahama 30 since she was built in 1978, and the original etching on the surface of the drum had worn quite smooth. Because of this, I needed more and more wraps to keep the genoa sheet from slipping when the winds picked up.

And, the winches looked old, the chrome worn to dull metal. I sent both drums out to be re-etched and re-chromed. They came back looking beautiful, but the new etching is too fine, and the line-slip problem persisted. Replacing the aging sheets had no effect. Wetting the sheets provided some improvement, the moisture creating more friction in the line, but that wasn't a long-term solution. Replacing the aging Barients with new self-tailing winches was not in the boat budget. There had to be another way.

After a bit of experimentation, I came up with an inexpensive solution that works. I bought a role of 3M Safety-Walk, a non-skid tape designed to be used on steps and other potentially slippery surfaces.

I cleaned the drum with acetone and then wrapped a 3-inch-wide strip around the drum where the textured surface would normally be. Sailing trials proved the texture had too much grip; when I wanted to ease the sheets under load, they would not release smoothly, no matter how little tension was applied or how few wraps remained. This was a bit dangerous to the fingers when the tension was high.

I removed the tape and reapplied a piece that was only wide (tall) enough to cover the uppermost inch of the drum. My reasoning is that four or five wraps of the sheet would be required in rising winds anyway, and it might suffice if only the top two wraps reached the tape.

It worked like a charm! In lighter airs, with only two or three wraps around the drum, the 3M tape is not a factor. The line rides the drum just below the edge of the tape. However, when the wind picks up and a fourth or fifth wrap is needed, the non-skid comes into play. The grip is amazing! Very little tension is required on the tail to keep the line from slipping. To release, I simply remove the wraps resting on the tape and then feed the line out smoothly on the bottom portion of the drum.

The tape has withstood a year of sailing abuse on both winches with no sign of failing. Tension on the line applies compression pressure to the material on the drum—the more tension, the more pressure. The self-adhesive feature on the tape has proven its worth. I carry a couple extra lengths of tape but haven't had to use them yet. Until the boat budget allows for replacement winches, bring on the wind!

Bert Vermeer and his wife, Carey, live in a sailor's paradise. They have been sailing the coast of British Columbia for more than 30 years. Natasha is their fourth boat (following a Balboa 20, an O'Day 25, and another Islander Bahama 30). Bert tends to rebuild his boats from the keel up. Now, as a retired police officer, he also maintains and repairs boats for several non-resident owners.

The re-chromed and re-etched winches looked terrific, but the etching wasn't deep enough to effectively prevent wraps of the sheet from slipping.

Adding a strip of 3M Safety-Walk tape around the top of the etched section did the trick for preventing line slipping in stronger winds.







Georgia's Cumberland Island is a land of strange beauty and rich history.

BY WENDY MITMAN CLARKE

t may be the world's largest Thanksgiving potluck. Six miles up St. Marys River, the dividing line between Georgia and Florida, something like 170 boats were moored, anchored, and rafted off the little town of St. Marys, famous for hosting this annual rite of southbound snowbirds on boats. But this was my first Thanksgiving without my mom, and when more than 300 sailors gathered ashore for the feast, it was all a bit much. We'd just sailed 24 hours from Charleston, South Carolina, and I felt overwhelmingly lonely in the crowd of jovial strangers who all seemed to know one another.

"Can we just go to the island?" I said to my husband, Johnny. And so our crew, which also included our two kids, retraced our tracks downriver and anchored in a sliver of cove alongside Cumberland Island's southwestern flank, just off a floating dock where a ranger station overlooked the water. From there, a short dinghy ride led us to a land of history and natural beauty, silence and ghosts.

Awed and beguiled, we spent days here on that first visit, hunting for fossilized shark's teeth, walking the mileslong pure white beach along the Atlantic, meandering through the twisted, salt-pruned live oaks of the maritime forest, and visiting the National Historic District of Dungeness and the ruins of Thomas M. Carnegie's 1880s-era estate. Wild ponies strolled the dunes and armadillos skittered under the sawtooth palmettos. It was like nowhere we had been, exotic and mysterious, a fantastic blend of human history and natural beauty, imbued with a kind of stillness that seemed to whisper its stories.

"There is something in the trees and the palmettos and the Spanish moss, or maybe just the spirit of the place, that quiets everything down," I wrote in my journal. "When you walk on the trails, sound is muted, absorbed. Even the distant sound of the surf hitting the beach on the east side is strangely quiet. Amid these huge old gnarled oaks-Gandalf trees, the kids call them-I feel the weight of time and evolution. Not weight as in a burden, but as in the wisdom of time, the ancientness of things."

It felt like a place that hadn't let go of its history, where the past was still somehow very present. And we found, over nearly five years and 25,000 miles of sailing that followed, that we could never quite let go of it. We would return to Cumberland Island several

The Clarkes' Adams 45, *Osprey*, rests in the anchorage at Cumberland Island while the sun sets over the saltmarshes beyond. The Sea Camp dock is in the foreground.

times, on each visit finding something new and unforgettable.

The proper name for the place is Cumberland Island National Seashore, an 18-milelong island of over 9,000 acres comprising diverse ecosystems of dunes, saltmarsh, beach, and maritime forest. It's the southernmost of Georgia's barrier islands, with the St. Marys River inlet carving its southern tip.

To the east is the Atlantic, to the west Cumberland Sound, part of the Intracoastal Waterway. Across the sound to the west is also Naval Submarine Base Kings Bay, whose orange-yellow loom we saw well offshore as we approached our destination that first trip. On a later visit, we would scoot through the inlet just ahead of one of the massive Ohio-class ballistic missile subs that call this base home.

On our first visit, one of the rangers told us to walk down past Raccoon Flats, where we would find mountains of spoil put here when the channel was dredged, years ago, to accommodate these subs.

"It's the best place on the island to find fossil shark teeth," she told us, and although it's possible to walk the sandy paths of Cumberland and find sharks teeth everywhere, we spent many hours patiently excavating those piles of dirt, coming home with treasures of ancient teeth of jet black and gray, still sharp enough to cut.

The only way to the island is by private boat, on the private ferry run by the Greyfield Inn (see Resources sidebar), or aboard the small ferry from St. Marys. The latter brings campers who pitch their tents in a variety of campgrounds on the island, and day visitors



(top to bottom) With a following breeze pushing them along, the author's kids ride down part of the island's 18-milelong beach along the Atlantic Ocean.

Lucy Carnegie commissioned construction of Plum Orchard in 1898 for her son, George, and his new wife, Margaret Thaw. Thaw added two large wings to bring its total size to 22,000 square feet.

Part of a day's haul of hunting for shark teeth on Cumberland Island.

who want to see the ruins at Dungeness or tour Plum Orchard, a fully restored Georgian Revival mansion built in 1898. We shared the anchorage with a handful of other boats, and each night, when the day visitors boarded the last ferry back to St. Marys, I always pinched myself because I was lucky enough to stay and watch twilight settle over the island.

The island's history is a microcosm of the American experience from pre-contact through the Industrial Revolution and the early 20th century. There are few visible traces left of its first inhabitants, the Tacatacuru of the Timucua people who









(top to bottom) Cruising sailors heading for the anchorage at Cumberland Island look back at a submarine making its way to Naval Submarine Base Kings Bay.

The ruins of Dungeness, the estate of Thomas M. Carnegie, dominate the island's southern end.

A mare and foal walk along the bulkhead at low tide near the island ranger station. The feral horses on Cumberland Island are descendants of the horses used for farming and transportation in the 1700s, 1800s, and early 1900s.

lived in what is now northern Florida and southern Georgia. In the late 1500s, the Spanish settled Georgia's Sea Islands and in 1569 built a large fort on Cumberland. They followed it in 1587 with the San Pedro de Tacatacuru mission, purposed to convert the Tacatacuru to Catholicism. Like so many native peoples, the Timucua had no immunity to European diseases, and by 1595, their population in the region, estimated at one time at 200,000, had been wasted to 50,000. By the turn of the 18th century, the tribe was extinct.

Spanish occupation gave way to English aspiration when

James Edward Oglethorpe, founder of the colony of Georgia, took possession of the island, named it Cumberland, and built a hunting lodge he called Dungeness near its southern end. In 1803, Catherine Littlefield Greene, widow of Revolutionary War Continental Army Gen. Nathanael Green, built a home here; the British occupied it during the War of 1812, and the house burned in 1866, although a dwelling called the Tabby House or Nathanael Greene Cottage remains. (On one of our walks we wandered past an old cemetery and found the headstone of Gen. Henry "Light-Horse Harry" Lee, father of Robert E. Lee, who died at Greene's home and was buried here.)

According to the National Park Service (NPS), about 10 plantations occupied the land by the Civil War, all of them producing cotton by the labor of some 455 slaves. When the plantation system collapsed after the Civil War, the Carnegie family's influence began with Thomas M. Carnegie, brother of American industrialist Andrew Carnegie, who bought a 1,891-acre estate and built a 59-room Queen Anne-style mansion, calling it Dungeness. It burned in 1959 and now stands as a marvelous wreck, where wild ponies wander about the once-pristine grounds and its enormous, elaborate fountains.

In 1898, Lucy Carnegie built Plum Orchard for her son and his new wife. In 1972, the NPS acquired the island, much of



The original First African Baptist Church was built of logs in late 1893; the structure standing today was rebuilt in 1937. Photo courtesy National Park Service.

it—including Plum Orchard donated by descendants of those early elite families. On one of our visits, we rented bikes (available through the ferry boat operator) and rode the 7 miles from the ranger station north to Plum Orchard to tour this example of the opulent lifestyle of that era's rich and famous.

The free guided tour took us through the main foyer and dining room, upstairs through some of the bedrooms and downstairs through the kitchen, even to the basement to see the original coal-fired furnace. Among the remarkable pieces on display were two tortoise-pattern Tiffany lamps in the library; a story in Ameliaislandliving.com says the NPS has estimated the lamps are worth \$5 million each.

Aside from the tour of Plum Orchard, you could get a real sense of life in one of these



estates by booking a stay at Greyfield Inn—the only place to spend the night on the island unless you're camping. In 1900, Lucy and Thomas Carnegie commissioned this mansion, located on 200 private acres, for their daughter. It was converted to an inn in 1962, and the Carnegie family still oversees it. While the inn has always lured the rich and famous, it drew worldwide attention in 1996 when John F. Kennedy Jr. and Caroline Bessette celebrated their wedding here, reportedly in an attempt to foil the paparazzi.

They chose to marry in a tiny chapel located near the northern end of the island in a community called The Settlement. Today, the First African Baptist Church stands as an equally notable yet utterly disparate historic structure to those enormous mansions. According to the NPS, The Settlement was where "African American residents were able to purchase their first deeded property on the island at the end of the 1800s." Several of this church's founders were freed slaves. Spare and simple, it possesses a quiet dignity and humble grace that tell an entirely different story about the island's past.

Yet, the human story of Cumberland Island isn't as compelling as the natural history and the complex ecosystems packed into one small island. This was confirmed for me on the bike ride back to the ranger station. From the maritime forest, we took off on a side trail through the dunes. The scent of the sea grew stronger until it was before us, the vast Atlantic fronted by an expanse of beach. With a frisky breeze behind us, we sailed south, tires gliding over hard-packed sand.

"I cannot decide which is more beautiful, the maritime forest, the dunes, the marshes, or the beach," I wrote, "so I walked an hour in the forest, listening to the wind rustle the palms below and watching it sweep the Spanish moss above. The live oaks there are the most amazing trees I've ever seen, curled and twisted like wooden flame...Then I walked through a cut over the dunes, which links the forest





The dunes at Cumberland Island stretch as far as you can see and serve as a buffer between the sea and the maritime forest inland, at left.

A young Kailani Clarke walks among the live oaks of the maritime forest at Cumberland Island National Seashore, below.



Before you visit Cumberland Island National Seashore, check the website (nps. gov/cuis) for updates about COVID-19 restrictions, as well as any closures due to hurricane or storm damage. Although camping opened up in early July, the guided Lands and Legacies and Plum Island Mansion tours had not yet resumed.

Unless you're arriving on your own boat, the main access to the island is via the Cumberland Island Ferry, which runs out of St. Marys. Find the ferry schedule and any updated restrictions at

Resources—WMC

cumberlandislandferry.com. You can rent bikes and book tours (when they are running) through the ferry operator.

If you don't have your own boat to retreat to each evening, camping offers an option to stay on the island overnight. You must make reservations online in advance at the park's website. While Sea Camp is the largest and most easily accessible campsite on the island, others are more remote for more intrepid campers. Stafford Beach Campground requires a 3¹/₂-mile walk-in and has some facilities, while Hickory Hill, Yankee Paradise, and Brickhill Bluff

are designated wilderness sites with no amenities. They are between 5 and 10 miles from the Sea Camp dock and require that you carry in your food, hang it during the night, carry out your waste, and leave no trace.

If upscale is what you're after, Greyfield Inn (greyfieldinn.com) is the grand option. The inn has its own ferry service from Fernandina Beach, Florida, which is directly south of Cumberland Island across the St. Marys River entrance.

No matter how you visit the island, a hearty bug spray is advisable. to the beaches, in and of itself a mysterious and seemingly barren place, yet here is what I saw: the tracks of hermit crabs, ghost crabs, armadillos, deer, wild ponies, the skittery paw print of sea oats bent over to brush the pure white sand, fine as talc."

The 18-mile-long beach is one of Georgia's most important nesting sites for federally threatened loggerhead sea turtles, and a park program monitors the nesting females each spring. According to the park's website, in 2019 alone 885 sea turtle nests were noted, and between 2016 and 2019, monitors tallied more than 1,800 nests.

In the maritime forest, whole branches of live oaks are covered with bright green resurrection ferns, creating a tropical atmosphere. Prized by shipbuilders for their curves, angles, and strength, these trees were felled throughout the 1700s until, by 1802, only 20 percent of the island's trees remained.

On the island's western side, the saltmarsh dominates along Cumberland Sound. From the anchorage, we watched the sun set over the waterway and marsh, while skates jumped around the boat and the ever-present dolphins slid through the water.

A year after that first visit, we returned for another Thanksgiving, this time with several of our sailing friends and family who were also traveling south. We potlucked at picnic tables near the ranger station, and as the sun set over the sound to the west, I realized I didn't feel lonely at all anymore. I felt like I was home.

Wendy Mitman Clarke is Good Old Boat's senior editor and a lifelong sailor. She's also a science writer and editor at Maryland Sea Grant, and an award-winning poet and novelist.

Table for Two, Please!

With the ship's wheel as base, a clever design makes for finer dining.

BY VERN HOBBS

ur good old Bristol 35 has a cozy dinette in the main saloon, but the weather here in Florida often invites dining beneath the stars. Moving to the cockpit means leaving crew and guests to precariously balance plates on laps.

A cockpit table would solve that problem, but any table would have to fit into the space available, maximize that space, yet not overly restrict movement about the cockpit. It would have to be easily removed and stored when not in use. These considerations meant off-the-shelf products were off the table, leaving us to build our own. We set a spending limit of \$100, then got to work designing the perfect cockpit table.

Because the imagined table would only be used when not underway, our Bristol's wheel helm-positioned forward in the cockpit-stood out as a logical support for the forward end of the table. I imagined notches, cut into extensions of the outer framing, fitting over the spokes of the wheel after the wheel was locked with two spokes oriented horizontally. (This design could easily be reversed to use helms positioned at the aft end of the cockpit.) At the other end of the table, I envisioned support legs that could retract into the table's frame for storage.

Vern's wife, Sally, enjoys the convenience and beauty of the new cockpit table.

We made the inner framing, retracting support legs, and crossmembers using $1\frac{1}{2} \times \frac{1}{2}$ -inch poplar strips, purchased in 36-inch lengths. The tabletop is $\frac{1}{4}$ -inch birch plywood. For the outer frame we used $3 \times \frac{1}{2}$ -inch oak strips, also purchased in 36-inch



GoodOldBoat.com

lengths. We chose the lumber using durability, workability, affordability, and finished appearance as our criteria. Other hardwoods could be used, but softwoods should be avoided.

I completed all the joinery using 1-inch #6 brass wood screws and polyurethane glue. I used stainless steel carriage bolts ($\frac{1}{4}$ x 2 inches) to attach the support legs and still allow them to pivot. These are backed with washers and wingnuts to allow easy tightening of the legs.

I finished the table using high-gloss polyurethane varnish. Construction, excluding finish sanding and varnishing, took about six hours. I used only common hand tools and basic woodworking skills. In the end, the total cost of materials was \$58.

Our custom cockpit table passed its shakedown with flying colors. Installation and removal are as simple as I imagined, taking only minutes and requiring no tools. As it folds flat, there are numerous places to store it below. And, not only has the table made dining under the stars easy and comfortable, it's also proved its worth for cockpit card games and general socializing over everyone's favorite boat drink.

Vern Hobbs is a retired pilot and freelance writer who explores the islands, bays, and backwaters of coastal Florida aboard a Bristol 35 with his wife, Sally, and feline companions.



Notches cut into the outer frame slip easily over the spokes of the wheel, which is locked into place to keep the table level.





Beauty and durability – Epifanes coatings offer you both. Our long-lasting varnish formulas let you craft brightwork that outshines and outlasts the rest. Our two-part Poly-urethane paints flow perfectly and apply easily with a roller-only application, resulting in superior

abrasion protection and an unsurpassed mirror-like finish. Look for Epifanes at your favorite marine store.



AALSMEER, HOLLAND = THOMASTON, MAINE = MIDLAND, ONTARIO 1-800-269-0961 = www.epifanes.com = **C**

Table Manners

A simple system developed for RVs provides a versatile table for saloon and cockpit.

BY JANET GANNON

ulmar, our 1982 Pacific Seacraft 37, came to us without a dining table-not in the saloon, not in the cockpit. The charm of balancing plates on laps soon wore off. The cabin layout doesn't lend itself to a bulkhead-mounted table, and installing a pedestal table didn't appeal, given their bulk and expense. Our boat is tiller-steered, so there isn't a binnacle on which to mount a table in the cockpit. We found the solution aboard a friend's boat.

The Lagun Table System is used more commonly in RVs than on boats, but being made of anodized aluminum, it would work in the marine environment. The system comprises two pieces: the table leg (a table support attached to a pivoting arm and leg) and a mounting bracket from which the table leg can be easily removed. We installed one mounting bracket for the table leg below and one mounting bracket in the cockpit. With two mounting brackets permanently installed, we can move the table leg between the cabin and cockpit at will.

Installation was simple. The mounting bracket attaches to a surface using four bolts, and it comes with its own backing plate. We installed the first bracket in the saloon, on a vertical surface below the settee (this surface is



perpendicular to the waterline; the kit came with two shims for mounting to a surface that is not plumb). We

Below, the table system is mounted to the vertical settee surface. The leg moves up and down in the mount, and the arm rotates 360 degrees on two points, around the leg and at the interface with the table itself, at top left.

At left, the table is lowered, folded, and swung next to the galley to act as a coffee table or a place to put a laptop when watching movies.



Installed in Fulmar's cockpit, the Lagun Table System supports a 36-inch folding teak table, providing a lovely space for dining.

installed the second bracket in the cockpit, also on a vertical surface, beneath the cockpit seating.

We could have built our own tabletop to attach to the table leg but opted instead for a teak folding table from Marine Teak. When it arrived, we applied three coats of clear satin polyurethane (sanding with 220-grit paper between coats) and used screws to attach it to the table leg.

The system allows the table leg to move up and down in the mounting bracket and to rotate 360 degrees on two points the arm swings around the leg, and the table swings around its joint as well. This allows the table to raise and lower, slide back and forth, and spin. We can fold it out to accommodate guests, lock it in place when dinner begins, and swing it out of the way when we get up from the settee.

Lagun advertises that the system can support up to 50 pounds. We remove the table and stow it when sailing, as we don't think it would stand up to pounding. Otherwise, it's a versatile solution to two problems.

Janet Gannon is a sailor, scientist, and writer who sails out of Brunswick, Georgia, with her husband. Her father bought a Sea Snark (made of styrofoam!) when she was just a tot, and she's been a sailor ever since. She is a true East Coast boater, having been on the water from the Bay of Fundy to Key West. Janet is also the founder and administrator of the Facebook group Cruisers Who Care About Climate.

One Wing Flapping

Irascible and indomitable, the British Seagull was not for the faint of heart.

BY JOHN VIGOR

I ong before the Energizer Bunny, there was the British Seagull outboard motor. Conceived in the 1930s, it was ugly, dirty, loud, and smelly, but like the bunny, it kept going. And going. It kept going so long that it became a collector's piece, a cult engine. Many are still in use today, more than 60 years after manufacture, often clamped to the transoms of vintage wooden yachts.

The passing years have endowed the British Seagull with its own folklore. The yachting scene is awash with stories about Seagulls, mostly apocryphal, but plenty of them true enough. For example, there's the one about the Seagull that was used as an emergency overnight anchor. It was recovered the next morning, attached to the transom, and started at the third pull.

And there's the Seagull story to cap all others, the one about the motor that was recovered by divers after 10 years under water. It, too, started at the third pull. (As far as storytelling goes, the third pull is a nice touch. Nobody would believe you if you said it started at the first pull. But the third pull adds a touch of verisimilitude to an otherwise bald and unconvincing narrative, which ensures that the story, like the engine, will keep going and going.)

Some stories are based on facts that just *might* be true, but probably aren't, such as those insisting that a Seagull will run on kerosene—or even sunflower oil—in a pinch. Others bear the ring of truth, like this one from a sailor in New Zealand who wrote on a sailing bulletin board: "Had a Seagull backfire and start running backwards. Starter cord was still hooked in the slot. Starter cord gave me a good whipping, about 15 good welts down the back of my arm before I could rip the plug wire off. I found the base plate loose and the timing was out."

To anyone stumbling across a Seagull for the first time, it must be

an odd-looking beast. It could have come straight off Rube Goldberg's drawing board. At first sight, you'd be forgiven for thinking that someone had at last discovered the missing link between oars and Evinrudes. Someone might even have dug the original Seagull out of the fossil beds of the white cliffs of Dover.

As a piece of engineering, it is primitive in the extreme. It could have been designed by an 11-year-old with an Erector set—a couple of long pipes with a disc on top and a large propeller at the bottom. There was a metal gas tank perched up high and a rudimentary carburetor on one side. At a guess, it might have been an overgrown kitchen blender, or a hedge cutter, or a portable fan.

Could this strange machine possibly have come from the same country that made those superb Sunbeam motorcycles? The same country that invented Rolls-Royces and Spitfires? Well, yes, actually.

Two engineers share the credit (or blame) for inventing the Seagull, a machine that was one small step for man and one large step backward for mankind, environmentally speaking. They are John Way-Hope and Bill Pinniger. Both men worked for the marine division of the Sunbeam Motor Company.

They produced the first Seagulls in the 1930s, and the design remained essentially unchanged for the next 60 years until production ceased in 1996. Their idea was to build an engine that was simple to operate and maintain, a lightweight, portable outboard designed to drive a small, slow-moving boat at hull speed under all conditions of wind and sea. To this end, it was given a large multibladed propeller with a fine pitch.

As far as maintenance went, it was said that all you needed in the way of tools was a pair of pliers, a screwdriver, and an adjustable wrench.

There were two engine blocks, each supporting a single cylinder. The first, displacing 64 cubic centimeters and known as the model Forty, produced between 1½ and 3 horsepower. The second engine, displacing 102 cubic centimeters and known as the Century model, developed anything from 4 to 6 horsepower. The differences in power came about because over the years there were some 90 variations of the two basic designs in the form of different carburetors, gear ratios, propellers, and shaft lengths.

During the Seagull's heyday in the 1970s, the factory was producing about 80,000 engines a year. Some—just a



few-featured a dog clutch and neutral gears, but on the majority of Seagulls, the propeller kept spinning as long as the engine was running. That, combined with the fact that there was no way of stopping the engine quickly (unless you were lucky enough to have an extra-long throttle cable that would push past the idle position) made coming alongside a boat, a pier, or a mooring buoy fraught with excitement.

Now, more than 60 years later and more than 20 years after they were last manufactured, there are still hundreds of used models for sale in various parts of the world. And plenty of spare parts, too. You'll find lots on eBay and on several specialized British Seagull websites.

Admittedly, this homely little engine exudes a certain air of je ne sais quoi, but that doesn't explain why it is so sought after, although part of its popularity may be due to the endearing eccentricity that surrounds the Seagull. The people who built it and sold it were undoubtedly eccentric, so it's no wonder they produced an outboard reminiscent of a smelly old uncle set aside at a family reunion-disreputable, but still loved.

Who else would build a motor that had no clutch, or reverse gear? Who else would build an engine without a cover, with an exposed magneto flywheel? A motor you had to start by twisting a bit of rope around the flywheel and pulling like crazy until whiplash made you (and anyone else within range) give up.

In the eyes of the Seagull's builders, to provide a clutch on an

outboard motor was to pander to weak-minded sissies. The same applied to a recoil starter. Real sailors used a real starter cord. And only wimps complained when the sleeves of their sweaters

were ripped off by an exposed, whirring magneto flywheel. Buyers of Seagulls were expected to display a stiff British upper lip, dammit.

I first became aware of the manufacturers' eccentricities when my friend, Bernie Borland, wanted to buy a 5¹/₂-horsepower Seagull for a small sailboat he owned. While he was in England on business, he went to Seagull headquarters in Poole, Dorset. There he met a woman he understood to be the owner of the British Seagull factory.

"I'd like to buy a $5^{1/2}$ -horsepower Seagull, please."

"What for?"

"How do you mean?" Bernie asked. "It's for a boat."

The woman stared right back. "What boat?"

"An 11-foot boat. An International Mirror." "You can't have it," she said. "I won't sell that motor for a Mirror, it's too big. Seagulls like to run hot, under load, otherwise they oil up. I'll sell you a 2½-horsepower model, the Forty. Nothing more. It's plenty."

And so Bernie, despite feeling somewhat browbeaten by Ms. Seagull but strangely privileged at having been allowed to buy one of her engines, came flying home with a small Seagull in his excess baggage. It was, as the woman said, plenty.

The Seagull Owner's Handbook was another example of corporate eccentricity. "The world of engine owners is divided into two classes...the vast majority are those who never get into any trouble and get heaps of pleasure, whilst the second class is a very small minority, which is always in trouble, causing misery to itself and constantly drawing on the kindness and good fellowship of other people for aid and assistance."

This mournful document was not a great deal of help when it came to advice about what to do if your engine wouldn't run. There was little information in the way of a troubleshooting guide to turn to. The Seagull experts had boiled it down to only one suggestion: "Check the spark plug."

And in case owners didn't quite understand this simple advice, the handbook continued: "But will people do this? No, they won't ... instead, they go on pulling the starting cord for twenty minutes or so, pumping more and more petrol into the engine, filling the plug with oil, and then

have to row home, and sometimes (if they've got the strength) write a furious letter to the manufacturers. We have no sympathy with these people at all"

One has to wonder how many furious letters provoked them to include this addition.



In my youth, I motored hundreds of miles on European waterways. The boat was a 17-foot daysailer. The motor was a Seagull. Its single cylinder housed a very sloppy piston, topped by a spinning, exposed flywheel that allegedly made electricity for the spark plug. Tacked on to one side was the simple carburetor. The float bowl had a small button sticking out of the top that I knew to press down with a finger until the whole thing flooded and overflowed with gasoline. This was known in Seagull circles as "tickling the carb." A spreading rainbow sheen on the water around me was my signal to wind the starter cord around the disc on top, flick closed the crude metal slide that served as a choke, and pull like mad.

After I was hit on the back of my neck by the starter cord as it came off the flywheel, there were two ways I had to tell whether the motor had started or not.

The first was to listen for a great echoing, gurgling roar, a noise fit to wake the dead. Anyone could hear a Seagull coming from miles away. The second was to observe a great cloud of blue-white smoke rising from the water astern. That was the exhaust, which consisted of 50 percent burned gasoline and 50 percent lubricating oil, just slightly singed by the Bronze Age combustion process.

The exhaust added its own smear of oil to the water around the stern, of course though smear might be too wispy a word to describe the fearful results of a Seagull's passage through the water. It was often said that you couldn't get lost if you had a Seagull; you just followed the smoking oil streaks back home.

One afternoon, while I motored along an otherwise quiet canal in Belgium, the gas tank fell off and nearly went overboard. I screwed it down to the afterdeck and fed gas to the carburetor via a plastic tube. It worked just fine that way.

As forecast in the owner's manual, the spark plug frequently oiled up and stopped the engine, usually in moments of crisis, often when a huge barge was approaching head-on and seeming to fill a narrow canal. At times like that I needed asbestos fingers to remove the old plug and screw in a clean one with lightning speed.

My Seagull was a two-stroke, of course, so I had to mix thick, gooey engine oil in with the gasoline so that the clunky bits inside the engine received adequate lubrication. Built before 1979, mine ran on a gas-to-oil mixture of 10:1. Later models ran on a ratio of 1:25 (even this was about four times as much as modern two-strokes used before they were deemed unacceptably polluting at 100:1). The Seagull was (and still is) the ultimate global-warming machine.

As I suspect is the case with all Seagulls, mine had its unique set of eccentricities. It wouldn't start if the exhaust pipe was too far under water (the back pressure was too much). It overheated if I left it to idle (the water pump couldn't lift water to the power head at low revs). There was a strange seal at the prop shaft that seemed to have been deliberately designed to leak. The seal allowed oil to escape. Water replaced it, and the gearbox was filled with a gray-brown slurry. I learned later that Seagulls were designed from the beginning without a proper oil seal, the gears were expected to run on an emulsion of oil and water. It seemed to work just fine.

To be fair, there were some advantages to the Seagull. For a start, it made people laugh. The noise and the smoke attracted attention to itself and its owner. It would run while tilted over to an angle of 45 degrees when we were under sail. And, finally, a Seagull owner could throw it away in a fit of rage without feeling any remorse.

I'll leave you with some Seagull thoughts from the well-known boating writer, editor, and Seagull owner, Chris Caswell, the winner of more than 50 awards for writing and yachting journalism. Chris has been the editor of *Sea* magazine and a longtime senior editor of *Yachting* magazine, so he knows what he is talking about:

"So how do you stop a Seagull? In theory, you could just shut off the fuel, which would kill it in an hour or two. But, since the sturdy four-bladed prop was still spinning, that wasn't realistic in most situations. One way was to put your hand over the carb air intake but, if it happened to backfire before stopping, it would install a perfectly round (and quite painful) blister on your palm. Another way was to pull the plug wire, but if it wasn't absolutely insulated (and it rarely was), this would provide great amusement to anyone watching as you did a St. Vitus dance from a blast of electricity. I knew one Seagull owner who kept a short length of lumber that he would shove carefully into the prop to stall the engine...

"Thinking back on the Seagulls I've owned, I wish I had one now. Smelly, noisy, and oily, Seagulls were like an aging favorite dog with fleas and mange, you loved it anyway. I'd hang the Seagull on my wall like a museum piece, just so I could look at it and I'd laugh and relive my childhood memories. The Seagull taught a generation of sailors about boat handling, and even today I never get in a dinghy that doesn't have oars."

John Vigor's bio can be found on page 32.



Online Resources—JV

Sheridan Marine presently bears responsibility for the Seagull, supplying new spare parts and technical tips: britishseagull.com.

A suitably eccentric website run by Englishman John Williams: saving-old-seagulls.co.uk/.

continued from page 7

Audio to Video

I have used magnetic-tape telltales for many years and they work well ("Tale of the Tape," May/June 2020). If you are not from the muscle-car-and-8-track generation, you may not have a tape at hand. But a good substitute is VHS videotape, and those are widely available in thrift stores for a dollar or two.

—**Tom Seibold**, *John Galt*, Pearson 365 pilothouse, Dunwoody, Georgia

Tom, who is John Galt?



A Better Navigator

I just finished reading your editorial ("The Case for Paperless," May/June 2020) in which you presented an argument that sailing without paper charts is acceptable if you have redundancy. I feel the need to comment after 34 years sailing professionally in the U.S. Merchant Marine and a lifetime of cruising. I welcomed the arrival of GPS and electronic charts and they made things easier, less stressful, and more enjoyable on two cruises to the Bahamas, as well as among the islands of the Maine coast. As a professional captain of a vessel drawing 50 feet of water, I cannot overstate the value of an accurate, real-time position when entering San Francisco Bay, crossing several of the shallower stretches on the Bar, and rounding Alcatraz Island. I previously endured the stress of navigating on radar ranges and several-minutes-old plotted positions. However, I find your argument a bit curious.

Is it that much of a hardship to carry a small chart booklet that will easily lie under a mattress? At last check, I found that I can have up-to-date paper charts in a waterproof booklet for \$50 that will cover 75 percent of my summer cruising grounds. So the argument really can't be made that paper charts are inconvenient or all that expensive when it comes to boat costs.

My second reason for carrying paper charts is that they make me a better navigator because I use them with the electronic charts. Reviewing a paper chart of an upcoming passage is so much easier than scrolling up and down a screen. It lets me review the route and pick out dangers that may not be obvious when staring at the pixels for too long. You may have heard about the vessel that sailed onto a reef in the past Volvo Ocean Race because the

> navigator was so busy with other duties that he simply laid out the route without reviewing it closely. Every year I see vessels high and dry on Maine ledges despite the ability to always know exactly where they are. Many studies have been done in the airline industry that show pilots lose an edge when depending on the electronics too long. I know the same is true for those of us afloat.

Lastly, the argument that lightning is not that much of a

concern is a little troubling. Maine is not Tampa Bay, but I know of five vessels that have been struck by lightning. In one case, the crew placed their phones and devices inside the stove's oven, which acted like a Faraday cage and saved the day. In the other cases the electronics were fried. A local electronics tech told me he had an iPod in a leather case inside of a wood drawer and it was toast after a lightning strike. A prudent navigator knows how to use both the paper charts and electronics well. He or she will be well served with a firm foundation in navigation of all types.

—Dave Witherill, Cumberland, Maine

Michael Robertson responds: I appreciate your taking the time to respond, Dave. I encourage you to use paper charts if you find them easier and they offer peace of mind, no argument. But the point of my editorial isn't that paper charts are inferior, just that they are no longer a necessity, that a sailor who prudently goes without them is not reckless. And I stand behind the argument I made, including about lightning. I didn't write that boats don't get struck by lightning, I wrote

that lightning is not a significant factor with regard to the paper-chart calculus. How many of the five people you know whose boats were hit, whose electronics were fried, then relied on paper charts to get them to safe port?

The Right Direction

I found "The Case for Paperless" (May/ June 2020) interesting since you listed myriad reasons why having paper charts aboard is prudent. Also, not everyone can afford a redundancy of electronic navigation items or systems. Obviously you can, and that's OK. But, when Mr. Murphy comes along while you're down to your last tablet and the unforeseen happens whereby you lose your last piece of navigation equipment, you'll be wishing you had your paper charts. But, hey, hail me on channel 16 and if I'm in the area, I'll point you in the right direction.

> —Dan Hayes, Charleston, South Carolina

Michael Robertson responds:

Thank you for the offer to help, Dan. Just a note about cost. We recently cruised for seven years, from Mexico to Alaska to Mexico to Australia. We were on a budget, and I can assure you that electronic navigation tools are a serious bargain compared to paper charts. Over that time, we sent maybe a few hundred dollars to the good folks at Navionics. That's it. The iPads we ran the software on, we'd have had those anyway, paper or no paper. Same with the two handheld GPS units. Same with the mounted GPS plotter for which we never bought data and used primarily for AIS info in the cabin. Same with my laptop, and my wife's laptop.

What Goes Around, Comes Around

After purchasing my last boat, a friend and fellow sailor presented me with a beautiful brass ship's clock. He explained that this clock had been passed from one boat owner, after selling their boat, to another deserving skipper upon taking ownership of a new vessel. Some years later when I sold my boat, I dutifully passed the clock on to a couple who had built a beautiful junk-rigged yawl.

I was reminded of this legacy by the recent kind decision by *Good Old Boat* to extend all subscription terms, automatically and without charge, during these trying times. This is yet another example of the caring and sharing community of which we are all lucky to be a part.

-Paul Skene, Aylmer, Quebec

A Second Rise of the Phoenix

I enjoyed "There and Back Again," by Ann Hoffner, chronicling the purchase, cruise, sale, and repurchase of the Gale Force 34, *Kraken* (July/August 2020). The article concludes, "...I haven't met anyone who bought back their first cruising boat." If my wife, Cathy, and I run into Ann in some distant harbor, she will have met someone. And we have her and her husband beat, by a fair bit.

We purchased our Ohlson 41, *Phoenix*, in 1978, restored her from the ravages of rust and rot over a six-year period, then cruised her 30,000 miles, from Florida to her birthplace in Gothenberg, Sweden, to the fjords of Norway, throughout Europe, to Brazil, the Caribbean, Panama, and back to our home in San Francisco. And then, like the responsible adults we weren't, we sold her and went on to have kids, build second careers, a business, and a life.

Three years ago, Cathy found *Phoenix* online. We became "internet buddies" with the current owners, who were preparing *Phoenix* for her next saga, headed to Mexico and points beyond. After they launched, their first stop was the Bay Area and we met them and reconnected with our beloved *Phoenix*. A few weeks later, they called; they'd just been offered a bigger, newer boat, and *Phoenix* was for sale. We thought about it, for 30 seconds. Then we made an offer and bought the boat we'd sold 35 years before.

She's a survivor, a CCA racing design built from .1-inch Corten steel, with wood decks and cabin-she's not a boat designed to be off cruising 50 years after her launch. Heck, she was on her way to the bottom when we bought her at 11 years old in 1978. But she's since had loving owners who've done what it takes to keep her going. We spent 2018 and much of 2019 stripping paint off mahogany, removing miles of wiring, welding a few thin spots, and changing some systems. In October 2019, we sailed out the gate for Southern California and Mexico. Coincidentally, the couple we bought her back from departed for Mexico six hours ahead of us.

We got as far as Banderas Bay, on Mexico's Gold Coast, before COVID-19 stopped us in our tracks. We headed back to California, where we plan to cruise the Channel Islands this summer, then back home to the Bay Area. Damned virus.



So, Tom and Ann, you're not the only crazies who never fell out of love with your first cruising sailboat.

-Steve Wolf and Cathy Siegel, Phoenix

Compass, Be Gone

I agree with you mostly on the paperless charts ("The Case for Paperless," May/June 2020) although there is always Murphy's law to contend with. The other traditional but archaic thing onboard is a compass. When was the last time most of us used the compass on our boat? How many have ever had their compass adjusted? How accurate is our compass? I find trying to steer my 36-foot boat by compass in any kind of seaway virtually impossible. I have tried steering a 120-foot schooner on a compass course. The captain was happy if I could keep it within 20 degrees of the desired course. Modern electronics have virtually done away with the necessity for charts or a compass. I recently converted my wheel-steered boat to a tiller-steered boat and I removed the binnacle in the process. I stored the compass in my barn; I have two iPhones, a tablet, a chart plotter, and a handheld compass to help me find my way home.

> -Russ Campbell, Cape Dory 36, Bolton, Vermont

Michael Robertson responds: Russ, I've heard for years the mounted-compass-no-longer-needed argument. I can only say that practically, I still find a compass in the cockpit invaluable on occasion. For example, sailing at night, my wife and I rely on the compass to add a reef to the main. After noting our heading on the compass, we turn on the

spreader lights, and any visual landmarks or reference points to steer by disappear. One of us goes forward, ready to drop the main and put in the reef, the other steers the boat into a hove-to position from the helm. After the reef is in and the deckhand back in the cockpit, the helmsman relies on the compass to steer out of the hove-to position and return to course, without overshooting. That's the only necessary use I can think of now, but I find it handy for other things.

Ditch the Switch?

Regarding the VHF backup battery article ("Communication Skills," July/August 2020), instead of having a switch used to select between the house and backup batteries, why not connect the VHF only to the backup battery, which is constantly recharged through the diode by the house battery?

—Isaiah Laderman, *Molto Tortissimo*, Sea Sprite 23, Woods Hole, Massachusetts

John Churchill responds:

Good question, Isaiah, your suggestion is a reasonable and admittedly simpler arrangement. However, without a switch, it would not be possible to quickly tell if the backup battery is functional. I can always flip the switch and confirm my Plan B works. Also, full disclosure, there is a coolness factor of a red covered switch.

Avoiding the Crazies

I certainly enjoyed Vicki McCash Brennan's article about their trip through Florida's Okeechobee Waterway ("Puttering Through Nowhere," July/ August 2020). I have always been curious about this area and she shed light on it. It sounded like an interesting adventure, though I'm not sure that I agree with her husband's characterization that it's "bucolic" because it seems like there was very little sailing, not much to look at, and a lot of work with those five locks. However, there definitely was some interesting history about the St. Lucie Canal, Indiantown, and of course Lake Okeechobee itself. The most important information for me was to avoid the craziness of Miami, Fort Lauderdale, and Biscavne Bay, so this would be a good alternative when sailing from the Gulf side to the Atlantic without having to endure that situation.

> —**Chris Jones**, *Cat-a-list*, Nonsuch 22, Lake Powell, Arizona

Missing Man

Hoping to enjoy our second season aboard our Whitby 42, I especially enjoyed your article about Ted Brewer ("A Stand-Up Draftsman," July/August 2020). But I'm moved to write because of the photos and captions included in the article "There and Back Again" in the same issue. There are two people in each photo. It would be great if Ann could track down the name of the person working on replacing the shaft on *Kraken*. At the very least, *Good Old Boat* should have acknowledged this person's presence in the photo. I recommend acknowledging the oversight in an editorial correction.

-Ralph Wolf, Sag Harbor, New York

Michael Robertson responds: Thank you, Ralph, point taken, sincerely. We were remiss in not acknowledging the presence of the Caicos Marina & Shipyard employee in the photo. Understandably, after more than a quarter-century, the story's author doesn't recall the name of that employee.

Too New?

The magazine is looking sharp and fresh while retaining its core values. Change is good and good change is even better. I like the new tagline too: "Inspiring Hands-On Sailors." I'm sure the founders' intent was nothing except to be clever, but "The Sailing Magazine for the Rest of Us" smacks of us-and-them-ism. Now, before anyone accuses me of being overly PC, hear me out. For over 15 years, *Good Old Boat* has been a valued resource for me as I refitted a 1980s Pacific Seacraft Orion 27, and then upgraded to a like-vintage Pacific Seacraft 34. Being a sailor is a frame of mind, and *Good Old Boat's* solution-based focus sets the tone for the kind of sailor I want to be. Yet, today I'm writing from aboard my 5-year-old Blue Jacket 40 that has yet to lose its new-fiberglass smell. With its twin helms, Solent rig, and broad beam aft, it looks nothing like the boats on your pages. So, I guess I'm officially no longer a good old boater?

No. There isn't a weekend that goes by when I'm not tweaking a system, or just messing around with stuff that will make the boat more comfortable or easier to sail. Sure, a Blue Jacket 40 costs a pretty penny; I'm fortunate. But we all have the same blood running through our veins and the same passion for sailing and sailboats. I still look forward to what each new *Good Old Boat* has in store. I'm sure some day, long after my final voyage, boats like my BJ40 will be included in your pages. Time has a funny way of making all sailors equal and all boats good old boats.

-Karl Westman, New York, New York

It's really a clever business model that founders Karen and Jerry came up with. As most of the production sailboats were built of fiberglass, these boats have a half-life of about three million years. So, if they aren't going anywhere, then every year, the number of good old boats grows. These days, we're reviewing good old boats that were designed and built after the magazine started in 1998—so our market is that much bigger. We'll catch up to your Blue Jacket soon, hopefully long before your final voyage. Thank you for the kind words. Karl.

—Editors

Department of Corrections

In our VHF backup battery article ("Communication Skills," July/August 2020), our electrical diagram of the author's implementation is inaccurate. Sharp-eyed reader John Hughes, who sails a Hunter 336 called *Seaker*, first caught this. In short, on page 42 of that issue, we erroneously drew a line connecting the two switch terminals, which doesn't make for an operable switch. There is also an erroneous line drawn straight through the diode, which is nonsensical. Our electronics editor, David Lynn, was aghast too. Who failed to share this with David before we went to press? Because our faithful editor doesn't make mistakes, we've suspended the entire staff pending results of an investigation. (And, we fixed the problem in the digital version of the magazine.)

VHF Powered by Either Ship's Battery or Backup Battery



ILLUSTRATION BY FRITZ SEEGERS

Product Profiles

Chain Lube Change-up

Steering chains lurk unloved, out of sight, in one of the toughest environments on the boat, a constantly damp bilge. And steering failure ranks near the top of the list of reasons why boats are abandoned at sea. Edson Chain Care+ is a spray lubricant specifically formulated to protect chains in these damp conditions.

When first applied, a diluting solvent thins it for quick and deep penetration so that it migrates inside cable guides. But as soon as it dries, it turns quite viscous and sticky. Like gear lubes and chainsaw bar lube, it is formulated with high levels of cling additives so that it won't wash off. This characteristic wouldn't work for applications on deck or for exposed cabin locations, where it would attract dirt, but it's perfect for a steering chain.



I tested it for wash-off resistance and corrosion protection. For three days, I ran three carbon steel coupons, untreated and treated with this product and other marine anti-corrosion sprays, on a rotating test rig, round and round in seawater. (A corrosion coupon is a standardized metal sample, of a known alloy and shape, used to measure corrosion rates in the lab and in the field.) After cleaning, it was visually obvious that the material treated with this product was better protected against corrosion than any of the other coupons.

As a chemist, I could get more technical about the merits of this product than this space allows, but I'll refrain. The bottom line is that I think Edson has taken it up a notch in steering chain lube.

For more information: edsonmarine.com.

-Drew Frye, Good Old Boat Technical Editor

Recycle, Reuse, Reline

Marlow Blue Ocean, as far as I know, is the first dockline made entirely from recycled bottles. Though counterintuitive, plastic water bottles are made from the same polymer used to make virgin polyester fiber for rope, fleece jackets, and polyester shirts. If we want our recyclable materials recycled, we need to buy recycled products. But do these docklines make the grade?

Nylon is usually preferred for docklines because of its stretch characteristic. Polyester stretches less (these lines are polyester).

But if the docklines are long enough, such as in spring lines or in bow and stern lines rigged in a crisscross manner, there should be plenty of stretch in polyester. If tied to floating docks, stretch might not be as big a factor as it is when tying to fixed docks or pilings. The best way to find out if your lines are stretching enough is to stay aboard on a windy day or during tide swings; you'll feel your boat jerking if more stretch is needed.

Where polyester beats nylon is in strength and chafe resistance, both important



considerations for docklines. In terms of strength, Marlow rates this recycled product about 10 percent weaker than its polyester lines made from virgin materials, putting it on par with nylon. To test chafe resistance, I attached an 8-foot piece of this rope to a 75-pound weight and let it swing across a cinderblock for 15 minutes. I did the same for a double-braided nylon rope. The block wore right through the cover of the nylon rope, while this polyester rope was only slightly abraded.

After a year, I'm still using the recycled dockline. It looks

and feels good, and the splices show good workmanship. I still prefer nylon where stretch characteristics are required, but the best answer for many boats may be a combination; I use polyester lines on the more exposed side and thin stretchy nylon lines on the other to pull in the slack. When I use all nylon of the suggested size, the boat bounces in gusty conditions.

For more information: marlowropes.com.

—Drew Frye, Good Old Boat Technical Editor

We present these profiles as a service, as firsthand accounts from fellow boaters. Neither *Good Old Boat* magazine nor the folks who profiled the products on this page were paid for these profiles. Most products were sent to *Good Old Boat* for review consideration by the manufacturers. We profile only a small percentage of the products that marketers contact us about, choosing only those we're interested in, in the hope you're interested too. A few products we pick up on our own, because we want to share.

Boats for Sale



Morgan 25

1967. Vintage! Well maintained fiberglass aft-cockpit sloop, LOA 24'11" Draft 2'9" Honda 4-stroke 9.9 OB. Ready to sail w/new bottom paint, professionally cleaned sails (2 sets), RF jib, boom vang, spinnaker, sail covers, new halyards, head, V-berth, galley, sleeps 4+, new custom companionway doors still in box, 1,900lb lead ballast, dual batteries, upgrades. Charlie Morgan said,"It will sail around the world." Sailed Maine to Miami, so far. Oak Harbor Marina, MD. REDUCED to BEST OFFER.

> Michael Thompson 410-551-3043 thomahawk@verizon.net



S2 7.9

1994. 25'11" Great cond, FW, adj draft w/lifting keel + tip-up rudder, tandem trailer. Yanmar 1GM10 diesel w/MaxProp, tiller pilot, B&G instruments, VHF. Harken RF, North Sails. Fixed vang, mast/ boom refinished, recent standing/ running rigging. Interprotect 2000e epoxy barrier coat + VC17 bottom. Custom stanchions w/ double lifelines, much spare equipment, daysailed. Ashtabula, OH. \$20,000.

> Robert Bollman 440-812-5616 rbollman3@outlook.com



Atkin Schooner 33 1957. Gaff-rigged. 32′9″x9′8″x4′4″ restored 2012-17, new African mahogany plywood/glass deck.

Bald cypress deck beams, white oak frames, 3" floor timbers, 7x6" stem, white cedar hood ends, 1½" carvel planking, both garboards and 3 planks above. Set of 5 sails including gollywobbler. Bulletproof Sabb-2hr, 18hp, new rings and cylinder sleeves '12. 6' standing headroom, sleeps 3+, July '18 survey. Sale incl hurricane mooring in Colonel Willis Cove, RI. Wishing \$60,000, best offer.

> Jim De Reynier 860-305-1582 Jimder40@gmail.com



Downeast 38

1975. Cutter rigged. Rebuilt inside/ out '08. New bottom, rigging replaced. Interior exc cond. Marine survey '09/'19, new zincs, 3.5KW genset. AC blows cold, VHF, AP, full instrumentation, GPS. Many pics avail. Ft. Walton Beach, FL. \$98,500.

James DeSimone 850-939-7241 jdesim2015@gmail.com



Pearson 26

1971. Sailed out of Warwick, RI, for 25yrs. Great sailer, loves her jib! Honda 9.9 4-stroke LS, highthrust, power-tilt, remote motor control. Foresail RF, teak toe rails, teak sprit anchor roller. Mahogany hatchboards. Dodger, 2-burner Origo alcohol stove, 2 deepcycle batteries. Custom trailer, 7' hard dinghy. Northborough, MA. \$10,000.

Richard Chouinard richandveronica@verizon.net 508-393-9559

All of these classified ads and more appear on our website GOODOLDBOAT.com



Lancer 28 MkIV

1980. Sloop for singlehanding, Hoyt jib boom, Garhauer traveler. All teak clad interior, redesigned as elegant daysailer w/2 settees, quarterberths, custom cabinetry, stone countertops, 6'2" headroom. 15hp Mariner elec. start OB. FB mainsail w/MackPack cover. WS. Dodger + bimini. Isoteak cockpit surfaces. Custom winter cover, and more. Always freshwater. Shelburne, VT. \$8,000.

Joe Nieters joefreda1@comcast.net



Pearson Triton 28

1964. East Coast version, good cond. and ready to sail! Full set of sails in exc cond, many spare sails in fair cond. Early version Atomic 4 with upgrades. Havre de Grace, MD. \$4,500.

Jon Redifer 610-715-6679 jonredifer@gmail.com



Cal 2-46

1973. 50' sloop major refit '89. Great liveaboard cruiser w/Cal 40 heritage. Perkins 4-236 diesel. Large queen-berth cabins fore/aft w/encl. heads/showers. Aft setee converts to bunk beds. Great storage/headroom including amidships engine room w/workbench, large saloon w/galley/table seating 8. Owner motivated, downsizing. Located in San Carlos, MX, gateway to Sea of Cortez cruising. Reduced to \$34,950.

Ernie Binz ebinz@earthlink.net



Pearson 26 Weekender 1976. Great daysailer, exc PHRF racer, heavy-duty gear, spinnaker-rigged. Lots of accessories. Incl LS OB, car trailer, steel cradle. Plymouth, MN. \$8,000.

Michael Barnes 763-557-2962 granite55446@gmail.com



C&C 39

1974. This is a very special boat, combining beauty, speed, and outstanding handling. One of Bob Perry's favorites! Well equipped: AP, radar, full instrumentation. Bottom redone in '19. New Perry-designed rudder. Canvas recently rebuilt. New "base" elec system, incl new alternator, smart regulator, batteries, starter, etc. Well cared for and ready to sail away. Annapolis, MD. \$29,900.

Nikos Singelis 202-374-3288 nsingelis@aol.com



Nimble Yawl 30 1986. K/CB. LOA 31', Beam 9', Draft CB down 5'6", up 39". Ted

Brewer design. New Beta Marine 16hp, new furler, like-new sails. Origo kerosene stove/oven. Air Head composting toilet. VHF, AP, stereo. Elec. windlass. Love this boat but time to downsize! Free spring launch can be arranged. Dorchester, MA. \$16,500.

Mark Whipple 617-429-2561 mark@whipplefamily.com



Westsail 32

1975. Turnkey, Orig, owner. 54hp Yanmar diesel, AC, cockpit backrests, electronics, 9cuft icebox w/ icemaker, SS Shipmate stove w/ oven, Balmar alternator w/regulator. 2 40gal alum fuel tanks, dripless shaft seal, 70gal water in poly tanks. H/C shower, hull insulated to waterline. Ready to live aboard or go cruising. For complete equip. list and custom upgrades, call or email. Located CT. \$59,000. Skip Shepherd

727-365-0943 skip1shep@gmail.com



Alberg 30

1966. Well-maintained, Universal diesel, RF jib, all new teak ('09), new hull/deck paint and rigging ('13), new head, sleeps 4. Cockpit seats 6-8. Much loved! Annapolis, MD. \$9,950.

Arthur Chotin 410-849-2352 afpadc@yahoo.com



Nonsuch 30 Classic 1980. Rare wooden wheel, custom teak cockpit floorboards, holly/

teak cabin sole, Volvo Penta saildrive 1990s installed runs well. Radar, VHF, stereo, anchors and ground tackle, electric windless, H/C pressure water, prop. 3-burner stove/oven, cold plate, gas grill. Branford, CT. Reduced to \$22,500.

Kerry Lange 203-605-1929 lange235@yahoo.com



Nauticat 35 Pilothouse

1988. Extend your season! Built for extended cruising or liveaboard. Custom designed. Extra capacity for fresh water + fuel, inside steering, standing headroom over 6', H/C pressurized water, diesel heater, AP, spacious aft cabin w/ queen-sized-plus bed, hanging storage forward in the V, custom canvas w/bimini, deep cabinets in galley w/gimballed stove + oven, refrigeration. Only 2 owners, each w/16 years of great sailing. Age caught up with us. On Lake Superior since '92. Cornucopia, WI. \$79,000.

Louise Dobbe 651-295-6596 Ldobbe@gmail.com



Seaward 26RK

2010. Hake designed + built robust cruiser w/winch-driven retractable keel. 3 sails; Stackpack + Strong Track main, RF jib, RF genniker on retractable bow sprit. Raymarine electronics, tiller steering w/two tillerpilots, 9.9 Suzuki OB, composting head. Custom topper and sheets for V-berth, Rocna anchor, 3 Anderson ST winches, 2 AGM batteries, solar panel/charge controller. New bottom paint. Detailed description + photos available, currently on high quality trailer in Ohio. \$45,000.

Steve Holekamp steve_holekamp@yahoo.com 740-605-2650



Vineyard Vixen 34 1979. Yanmar 3YM30, low hrs, solid glass hull. Five berths, exc storage. New holding tank+ hoses, LED cabin lights, Origo galley stove, 12V electrical panel, shift/ throttle controls, bronze ports rebed w/new glass. Minimal electronics, 3 sails in good cond. RF, tiller steering, Maxprop. Exterior varnish stripped. Wants cosmetics; some done. Handsome, traditional lines + interior. In the water. CT. \$34,000.

> Roger Barnes 203-506-1848 rsbarnes32@comcast.net



Cal 2-29

1974. Moses is in good cond. Rigid vang, Schaefer furler, composting head, HW heater added, Doyle sails in good cond, rail mounted grill. Freshwater boat. Finger Lakes, Central NY. \$10,000. Don Trepanier dtrepan1@gmail.com

315-415-7173



C&C 30 1979. Hull #528. All original sailing specs. Yanmar 2QM15 auxiliary diesel engine. Folding prop. Mainsail, genoa, 150 mylar genoa, Yankee jib, asym spinnaker. New dodger '18. 30' LOA, 10' beam, 5' draft. Regular annual maintenance performed by yard. Assorted gear (BBQ, dinghy, Lifesling, etc.) included. Paperwork and fees up-to-date. Moving up to larger boat. *Blue Dolphin* is currently located in NJ. Winterized by yard. \$4,999.

> Mike Bauer 732-778-5585 njcc301979@gmail.com



Herreshoff Caribbean 50 1970s. Fiberglass ketch, project boat, needs significant refit. 54' LOA, 14.4' beam, full keel, displaces about 50k lb. Built to Lloyd's A1 spec when built by Dave Cheng yard in Hong Kong. Center cockpit, large, comfortable aft cabin w/head, sit down shower. Second head forward. 6 cyl Perkins w/approx 3,000 hrs. Carries a ton of fuel + a ton of water. 2019 survey available. Stored on the hard 9 years. Napa, CA. \$50,000 Negotiable.

Robert Neefus captneefus@icloud.com



Beneteau First 285 1990. Designer: Groupe Finot (France); built in Charleston, SC. Wing keel and Volvo-Penta 18hp diesel; folding and fixed props. LOA 28'3"; LWL 24'4"; Beam 9'10"; Displ 6,160lb. 2 cabins w/ 5'11" headroom; nav. table. Enclosed head. 3 jibs: 150, 110, kevlar; 1 main; wheel + pedestal. Well maintained for little use; freshwater since before '03. Marine radio; AM/FM/ CD player w/4 speakers. Prop. stove and portable microwave. Lake Lanier, Georgia. \$16,000. William Start wrsparky@comcast.net



Cal 9.2R

1982. Great sailing boat! Clean, well maintained, stored indoors, a great price when you compare. Includes several sails and cradle. Spec sheet available. Contact Peter. Saxon Harbor, WI. \$7,900. **Peter Kester**

906-364-5570 kesterp78@gmail.com



C&C Viking 33/34

1981. C&C built by Ontario Yachts, recent sails, engine rebuild (3GM Yanmar), Awlgrip (Aristo Blue). B&G instruments, Auto-Helm autopilot. Summer dockage paid. Steel cradle incl, three axle trailer avail. Boat in water and in beautiful condition at Miller Marina, Saint Claire Shores, MI. \$21,000.

John Juntunen 313-820-2475 jfjuntunen@gmail.com



Herreshoff Eagle 22 1976. Sailed, maintained and updated with love. Wheeled steering, split mast, electrical panel, new rudder, electrical system design, solar panels, rebuilt 6hp motor, trailer included. My husband loved this boat and loved working on it; he just didn't get a chance to finish it. Sailable as is but some assembly required for the new electrical. In Rossport, ONT. Please call. Asking \$8,900 USD.

> Nannette Price 807-824-1182



Cheoy Lee 47 Cutter 1985. Pedrick-designed. *La Luna*, formerly *Shimshon*, center-cockpit bluewater cruiser. She served us well for 18 years, including a 5-year cruise and two Atlantic crossings. We returned to the States in 2015, intending to get her ready for another cruise. One owner's health has prevented us from completing the projects and we are selling her as a project boat. \$60,000.

Barbara J. Hart 904-814-9930 barbatsea@gmail.com



Preserve www.bloxygen.com your finish (888) 810-8311





Fiberglass Restoration

Make Your Boat Shine Like New

No Compounding

No Waxing

www.NewGlass2.com 800-785-7675





Rigging

Delivered

Worldwide

wespeak sailing!





Services boat brochures owner's manuals blue prints **YOUR SOURCE** FOR OLD BOAT LITERATURE BOATBROCHURE.COM power.sail.**info** Can't find what you need? askus@boatbrochure.com Where skilled craftsmen produce top quality results at competitive shop rates Boat 4 FIBERGLASS 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 Scientists sav that 98.7% of Good Old Boat readers read these classifieds. Diamond Teak Shouldn't they be

reading yours?

Advertising@GoodOldBoat.com

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

Panels

More!

The Power of Flight

Refined to its elements, a day of sailing becomes miraculous.

BY KEVIN KEYSTONE

ind and physics create the lift, sucking me along, the same dynamics as flight. One man, two sails, three sheets, aboard a Laser II. What more could I ask for?

I fly, my head hanging upside down over the hull, the land points down instead of up, the water is above the trees, and the trees are above the sky, and I'm *moving*. Isn't that enough?

My hair hangs, the ends nearly grazing the water while the wind whips through it, and I'm sucked along, hiked back over the seat edge. The sun, and the wind, and the physics, and miraculous movement—what more could I ask?

To be *seen*, I suppose. My ego demands that I sail along and be seen, that there be witnesses to my grandness, to the success of my two-sails-one-manness. Two decades have passed since I've sailed faster than today. Then I was 12, eyes closed, now I'm remembering, reliving, re-feeling—"Still got it!"

No, but that's not enough, and now I'm around the bend, out of sight, out of mind. Miracle of flight on water, sun and blue sky and green trees on land. If no one bears witness to a miracle, does it still happen?

And so I tack, perfectly, and head in the opposite direction. The strong wind threatens to ruin my grand exhibition, but I grab hold. I clench. I go up, almost over, but I release just the right line at just the right moment, and I right my boat. I congratulate myself for my control. I adjust the sheets, clip them in, slide towards the bow, and trim my jib. Again I'm flying and in fine form, gliding beneath two full sails.

Master of the Universe! Man of Destiny! In my glory, I whip my curls in the air, shake my mane back and forth, and glance back to the crowd on the dock, rapt fans, all surely thinking, "Oh wow! It's not Kevin, it's Superman!"

But the deck chairs are empty. Not a soul in sight. They've probably gone in for lunch, someplace warm and together. While out here, in all my solitary glory,



chilled by wind and water, I am left with my hubris, my uncleated vanity, all running untethered through blocks and jam cleats.

I return my attention to the sun, and the wind, and the light, and the sails. To the magnificent, glorious, and semi-divine forces urging me along. I tack, and sail on. When not sailing his beloved Laser II in Algonquin Park, Ontario, Kevin Keystone can be found hiking long-distance trails in places of meaning and importance, such as the West Bank, Palestine. His letters home from that trip were published in the Jewish Independent. He is also a contributor to the Literary Review of Canada.



Confidence and self-reliance come standard when you choose Sailrite. With the **Sailrite® Ultrafeed® Sewing Machine** and our Sail Repair Series of free video tutorials at Sailrite.com, you can feel secure any time you're out on the water. We're always here for you, so you'll never have to worry about being stranded at sea!

👿 Sailrite.com | 🥒 260.244.4647

f 🤊 You 🗰 🔰 🧿

#sailrite

