The Anchoring Issue *starting on pg16* | **Bad Metal** *pg49* | **Review : Passport 42** *pg8*

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Issue 138: May/June 2021

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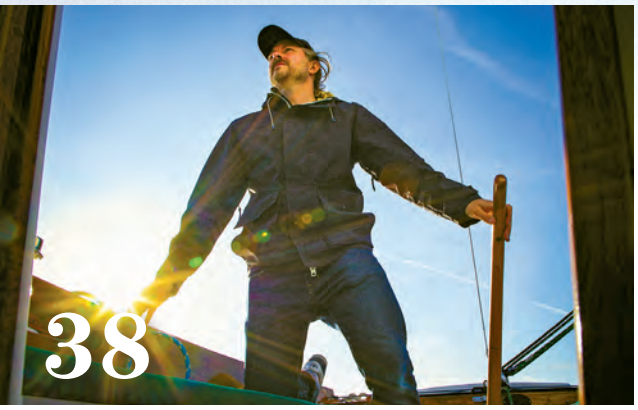

Good Old Boat

Issue 138: May/June 2021

⚓ THE ANCHORING ISSUE

DEPARTMENTS

On the Cover

With the February sun setting in Marina del Rey, California, David Blake Fischer sails his lovely *Delilah*, a 1972 Cape Dory 25. Ryan Steven Green shot the photo from the dock at Burton Chase Park. Find the photog on Instagram: @ryanstevengreen

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The sailing magazine for the rest of us.

Outta the Park

Every February, Boating Writers International (BWI) awards $15,000 in prizes to marine journalists whose work published the prior year is judged the best. On February 18, 2021, nautical writers, photographers, and editors tuned in online to watch the awards presentation in Florida. Works published in 26 magazines were recognized, and no single magazine published more award-winning articles than *Good Old Boat*!

Our editors and staff are overjoyed that our peers have recognized what we have known for a long time: Our content is top quality.

This independent sailing magazine for the rest of us, one that began in a Minnesota basement over 20 years ago, is going stronger than ever. We want to acknowledge here the 10 *Good Old Boat* contributors and their 12 award-winning works in 2020:

January/February 2020

- Andy Cross "(Re)Power Assisted" (2nd—Boat Projects, Renovations & Retrofits)

March/April 2020

- Benoit Fleury "True North" (Merit—Boating Adventures)
- Drew Frye "Taking Charge" (Merit—Gear, Electronics & Product Tests)

May/June 2020

- D.B. Davies "Old Salts" (Merit—Seamanship, Rescue & Safety)
- Jerry Thompson "Ahead of the Game" (Merit—Boat Projects, Renovations & Retrofits)
- Michael Robertson "Riddles in the Dark" (2nd—Seamanship, Rescue & Safety)
- Ed Zacko "Staying Power" (3rd—Boat Projects, Renovations & Retrofits)

July/August 2020

- Fiona McGlynn "A Stand-Up Draftsman" (3rd—Profiles)

September/October 2020

- John Vigor "The End of his Rope" (Merit—Seamanship, Rescue & Safety)
- John Vigor "One Wing Flapping" (1st—Gear, Electronics & Product Tests)
- Rob Mazza "No Visible Means of Support" (3rd—Gear, Electronics & Product Tests)

November/December 2020

- Fiona McGlynn "The Maestro" (Merit—Profiles)

We invite readers who may have missed any of these stories to find them all, in one collection, on our website, at bit.ly/bwi-winners.

Dropping and Stopping

BY MICHAEL ROBERTSON

I was a Southern California kid, still a bit lost in my early 20s, when I decided sailing was something I should be doing. It pains me to type these words, but my motivation stemmed from pop-culture delusion. *Miami Vice*'s Sonny Crocket made marina liveaboard life cool, and from Captain Ron I learned that swagger was all that was needed to get a boat from point A to point B.

One day, I approached a local charter operator in Santa Barbara to schedule a Catalina 25 for a coming weekend. Bow from stern was about all I knew, and I was confident there was not that much more *to* know. Besides, the outboard that hung off the back of that sailboat looked clean and easy to start, much newer than the one I'd grown up with on my dad's runabout. And I'd been a guest on a sailboat in the Caribbean years before, where I'd pulled on ropes to raise sails, cleated them off—I even steered that boat, a bigger boat. This small sailboat before me would be even easier.

"No, no, I won't need a captain, just my girlfriend and me; we'll probably head out to Santa Cruz Island for an overnight."

Instead of taking my credit card, the operator, an old salt, invited me to sit. Then he started a conversation. He seemed to want to get to know me and it clicked right away; he could see that I belonged here, and he was looking for a worker. I began preparing my response for when the offer came—I would thank him, let him know that I was happy, that the tips and the hours at the restaurant where I worked would be hard for him to beat. But thank you, anyway.

"Well, it sounds like you've spent a lot of time on boats."

"Oh yeah, lots."

"And you can cleat a line? Flake a sail?"

"Totally."

"When you anchor, how much scope do you usually use?"

"How much scope..." *A trick question?* "Um, I don't think I've ever used any scope."

My inexperience—greater than I could have imagined—was laid bare and my sailboat chartering hopes dashed. But the old salt was gracious. His radio crackled and after a short exchange, he turned to me and asked, "Want to go for a ride?"

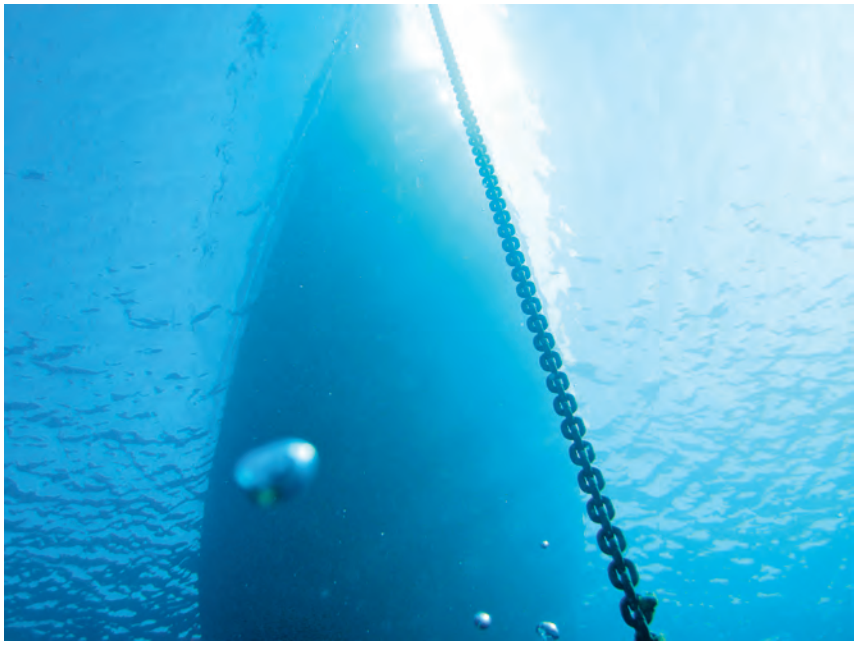
For the next hour and a half, I bounced around in a skiff as we ran a mission to deliver some things to charterers on one of his boats anchored up the coast. The whole time, we talked boats and sailing over the din of the outboard. I dropped the façade, asked questions, and listened. It's not saying much to say my knowledge tripled during that short trip, but it's notable that my sailing interest was piqued by something more substantive than Hollywood.

Being a touch-the-hot-stove kind of learner, I knew my only path into this world would be aboard my own sailboat. I started saving. Two years later, I bought a Newport 27 in Ventura harbor and began teaching myself to sail—and to anchor.

I started with a 15-pound Danforth on rust-stained, ½-inch three-strand. I soon upgraded to a 22-pound Bruce with 125 feet of ¼-inch chain and new three-strand. The years passed, the boats grew, the ground tackle grew, the rode became all-chain, and a windlass relieved my back and arms. But through it all, one thing remained constant: 7:1 scope.

It's what the old salt in Santa Barbara told me was the right answer to his question. I've dropped the hook thousands of times since then, on every kind of bottom imaginable. Only when it wasn't possible—anchored in 125 feet of water, or med-moored, or anchored bow-and-stern in close quarters—have I not set 7:1 scope.

And I know that for many, especially when hanging from a new-generation anchor on all-chain rode, 7:1 scope is considered excessive. (And, it can also mean anchoring apart from others to accommodate larger swing radiuses.) But in all those years, in all kinds of conditions, my boat has dragged once—only once—and it was shortly after the hook was set and we were aboard. I write that off as a fluke (har, har), accepting that it was a false set, that the anchor caught on something on the seabed that gave way.



What I wouldn't give to let that old salt see me now. To see the cocky kid who said he "doesn't use scope," now the editor of a sailing magazine writing this column in an issue dedicated to anchoring.

Does that make me the old salt?

The Diversity Discussion, Anxiety Irony, and Another Rusty Seagull

Cogent Case

Well done on the editorial, "There's Room on the Water" (March/April 2021). Very well done. It's as cogent a case for outreach as I have ever read. You should be proud.

I imagine you're going to get some unfavorable blowback; it is human nature that those who are privileged take their status for granted, and when they consider the topic at all are inclined to view their position as owing exclusively to merit. Opening the newspapers these days brings graphic reminders of what happens when such complacence feels challenged. Nevertheless, nothing will change until people feel sufficiently encouraged to reach beyond their circle. Advocating for such action is the responsibility of all who would see progress in our time. You have stood up and done the right thing. That merits praise but often receives little more than complaints. Take a bow and carry on.

—**Steve Marshall**, *Toad Away!*, 1974 Balboa 26, Los Angeles, California

Grabbing the Rail

Diversity, equity, and inclusion are three catchwords that any savvy media person should have recognized immediately as politically charged, especially after the past eight months of racial and political tension and violence by radical groups claiming to embrace these values. US Sailing could have chosen any number of other words to better make their case. In particular, equity has nothing to do with equality, more to do with providing an excuse to condemn, cancel, and boycott if predetermined outcomes are not apparent. AARP lost members by going down this road. Michael made a mistake with his editorial ("There's Room on the Water," March/April 2021) by believing he could touch this political rail and not lose readers over it.

—**Paul Karolides**, Summerville, South Carolina

Michael Robertson responds:

Thank you, Paul. There is a lot I'd like to say in response—and I'd prefer to sit and have a long in-person conversation—but this is not a political magazine, it's a sailing magazine. The bottom line is that US Sailing is working honestly and openly to drum up interest in sailing among diverse people not currently adequately represented in our ranks. If they are successful, there will be more sailors and more diversity. Good Old Boat *is 100 percent behind these efforts of US Sailing, without regard to whether they're viewed as political by some.*

Obviously, we're not media noobs, we get it, we understand that these words are politically charged for many. We're not touching the rail, we're grabbing on to it; we're not going to turn our backs on positive efforts being made to grow sailing because some ridiculously regard diversity, equity, and inclusion as political threats. In your letter, you referred to these as values; that's how we feel too. You also suggested that US Sailing could have chosen "any number of other words to better make their case." We wish you'd listed examples

This is the third photo we've published from reader Steve Christensen, all of aids to navigation that are either off-station or struggling in one way or another. Like the others, this one was spotted on the Mississippi River, near Hastings, Minnesota, just south of St. Paul. U.S. Coast Guard, what's going on?

"I tied my phone to the main halyard and set it to auto-shot—which takes a photo every second for 25 seconds—and quickly hauled the phone to the top of the mast. It took me four tries to get this shot." Lee Brubacher went on to share that his "30-foot selfie-stick" shot won first prize in his marina's photo contest.

because we do the English language for a living, and we can't think of any.

A Career Derailed

Thank you for Michael Robertson's recent editorial regarding promoting diversity, equity, and inclusion in sailing. It is timely, and it is important.

Like Michael, my wife and I are both white and heterosexual. I am new-ish to sailing, having dabbled in the sport over my four decades on this planet, but my wife was an accomplished racer some time ago, before leaving the sport to pursue a university education. To be clear, her accomplishments were such that a sailing career was in the cards before she chose to leave. Among her reasons for leaving were general attitudes summarized perfectly by the three examples that Michael shared in his editorial—and that was 20-plus years ago!

Michael is spot on: people who look and sound like us have an important role to play in addressing the fact that systemic racism exists, and it prevents access to the sport and to the community of sailing. Addressing this issue is not an either-or situation. Creating inviting access pathways to sailing enjoyment for underrepresented populations does not diminish access for those of us already sailing. Quite the opposite. In 2021, growing sailing must include increasing equity, diversity, and inclusion. Or, at the very least, shut up and get out of the way.

—**Adam Bonnycastle**, Guelph, Ontario

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.

Video Love

I just want to say how much I enjoyed the video series, "Reaching Reality" (recommended in the February issue of *The Dogwatch*) and the video story of Onne van der Wal's restoration of a Pearson 36-1, *Snoek* ("Websightings," March/April 2021). "Reaching Reality" reminded me of a similar, though less ambitious, trip from my youth. Two of my college fraternity brothers and I set out for a week on my 22-foot Rhodes Continental, sailing from Mystic, Connecticut, to Martha's Vineyard and back, via Block Island. On the leg from Block Island to Menemsha, we could see the America's Cup boats racing in the distance near Newport when we were hit with a violent squall that reduced visibility to zero. Both of my crewmen were seasick as we flew downwind toward an unseen lee shore at Gay Head. We survived, and the next day we read that the Swedish America's Cup boat, *Sverige*, was dismasted in the same squall. Our little Rhodes was damp but otherwise just fine.

And you were spot on in your column, "There's Room on the Water." It's a diverse world, and we all need to learn to relate to people who aren't like us. Sailing is a great way to bring people together and we need that more than ever.

—**Mark Branse,** 1967 Morgan 34, *Rigoler*

Kudos and a Peeve

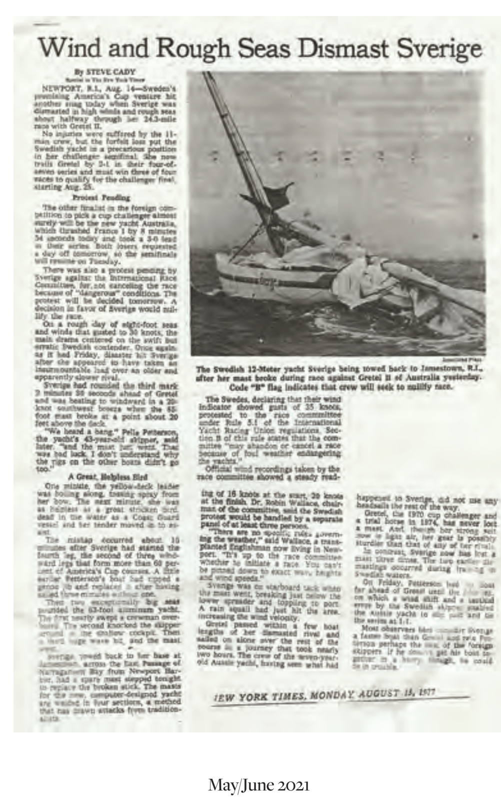
Regarding "There's Room on the Water," good on ya! Beautifully said and spot on!

—**Ben Tupper**, Yarmouth, Maine

Michael Robertson responds:
Thank you for the kind words, Ben.

Readers, Ben included in his email to me a link to an organization I'm familiar with: Rocking the Boat (rockingtheboat.org). This is one example of the types of groups I recommended in that column that sailors get involved with. Located in the South Bronx,

continued on page 54



Wind and Rough Seas Dismast Sverige

By STEVE CADY

Special to The New York Times

NEWPORT, R.I., Aug. 14—Sweden's promising America's Cup venture hit another snag today when Sverige was dismasted in high winds and rough seas about halfway through her 24.3-mile race with Gretel II.

No injuries were suffered by the 11-man crew, but the forfeit loss put the Swedish yacht in a precarious position in her challenger semifinal. She now trails Gretel by 2-1 in their four-of-seven series and must win three of four races to qualify for the challenger final, starting Aug. 25.

Protest Pending

The other finalist in the foreign competition to pick a cup challenger almost surely will be the new yacht Australia, which thrashed France 1 by 8 minutes 54 seconds today and took a 3-0 lead in their series. Both losers requested a day off tomorrow, so the semifinals will resume on Tuesday.

There was also a protest pending by Sverige against the International Race Committee, for not canceling the race because of "dangerous" conditions. The protest will be decided tomorrow. A decision in favor of Sverige would nullify the race.

On a rough day of eight-foot seas and winds that gusted to 30 knots, the main drama centered on the swift but erratic Swedish contender. Once again, as it had Friday, disaster hit Sverige after she appeared to have taken an insurmountable lead over an older and apparently slower rival.

Sverige had rounded the third mark 2 minutes 26 seconds ahead of Gretel and was beating to windward in a 20-knot southwest breeze when the 85-foot mast broke at a point about 20 feet above the deck.

"We heard a bang," Pelle Petterson, the yacht's 43-year-old skipper, said later, "and the mast just went. That was bad luck. I don't understand why the rigs on the other boats didn't go too."

A Great, Helpless Bird

One minute, the yellow-deck leader was boiling along, tossing spray from her bow. The next minute, she was as helpless as a great stricken bird, dead in the water as a Coast Guard vessel and her tender moved in to assist.

The mishap occurred about 10 minutes after Sverige had started the fourth leg, the second of three windward legs that form more than 60 percent of America's Cup courses. A little earlier Petterson's boat had ripped a genoa jib and replaced it after having sailed three minutes without one.

Then two exceptionally big seas pounded the 63-foot aluminum yacht. The first nearly swept a crewman overboard. The second knocked the skipper around in the shallow cockpit. Then a third huge wave hit, and the mast went.

Sverige, towed back to her base at Jamestown, across the East Passage of Narragansett Bay from Newport Harbor, had a spare mast stepped tonight to replace the broken stick. The masts for the new, computer-designed yacht are welded in four sections, a method that has drawn attacks from traditionalists.

The Swedish 12-Meter yacht Sverige being towed back to Jamestown, R.I., after her mast broke during race against Gretel II of Australia yesterday. Code "B" flag indicates that crew will seek to nullify race.

The Swedes, declaring that their wind indicator showed gusts of 35 knots, protested to the race committee under Rule 5.1 of the International Yacht Racing Union regulations. Section B of this rule states that the committee "may abandon or cancel a race because of foul weather endangering the yachts."

Official wind recordings taken by the race committee showed a steady reading of 16 knots at the start, 20 knots at the finish. Dr. Robin Wallace, chairman of the committee, said the Swedish protest would be handled by a separate panel of at least three persons.

"There are no specific rules governing the weather," said Wallace, a transplanted Englishman now living in Newport. "It's up to the race committee whether to initiate a race. You can't be pinned down to exact wave heights and wind speeds."

Sverige was on starboard tack when the mast went, breaking just below the lower spreader and toppling to port. A rain squall had just hit the area, increasing the wind velocity.

Gretel passed within a few boat lengths of her dismasted rival and sailed on alone over the rest of the course in a journey that took nearly two hours. The crew of the seven-year-old Aussie yacht, having seen what had happened to Sverige, did not use any headsails the rest of the way.

Gretel, the 1970 cup challenger and a trial horse in 1974, has never lost a mast. And though her strong suit now is light air, her gear is possibly sturdier than that of any of her rivals.

In contrast, Sverige now has lost a mast three times. The two earlier dismastings occurred during training in Swedish waters.

On Friday, Petterson had his boat far ahead of Gretel until the [illegible], on which a wind shift and a tactical error by the Swedish skipper enabled the Aussie yacht to [illegible] and tie the series at 1-1.

Most observers here consider Sverige a faster boat than Gretel and rate Petterson perhaps the best of the foreign skippers. If he doesn't get his boat together in a hurry, though, he could be in trouble.

NEW YORK TIMES, MONDAY, AUGUST 15, 1977


Boundless
SAN FRANCISCO

Passport 42

Checking all the Boxes

BY BRANDON FORD

After only a few dates, Scott Voltz and Connie Bunyer knew two things: They liked each other, and they liked sailing. Well... Scott knew he loved sailing; Connie was pretty sure she would, even though she'd never been. Scott worked as a computer guy for Seattle's Harborview Hospital and was a part-time sailing instructor for the University of Washington's sailing club. Connie was a musician and single mom soon to have an empty nest. Scott invited Connie to join him and some friends on a sailing charter in Mexico.

"The boat was an old Morgan called *Seascape*," Scott says. "We called it *Seascrape* because the bottom was covered with mussels and barnacles that would scrape you bloody when you were swimming and brushed against it." The boat left much to be desired, but they loved the experience.

They decided to look for a boat that would be comfortable to live aboard and could cruise Mexico and beyond. Scott had owned a Newport 27 for many years, and his work as a sailing instructor had informed his opinions about boats. Connie trusted she would know The Boat when it presented itself to her.

"We looked at about 30 boats, but none of them were just right," Scott says. Then they spotted a 1981 Passport 42 for sale in San Diego. For Scott, the Passport 42 checked all the boxes. She was a heavy-displacement cutter, and inside she had a spacious galley, staterooms fore and aft, and plenty of headroom for his 6-foot 2-inch frame. With a canoe stern and a pleasing sheer, she was the very profile of a no-nonsense, serious cruising boat.

The boat's original owner loved her but had aged out of boat ownership. The couple's plans for the boat thrilled him, and everyone happily made a deal. Scott and Connie quit their jobs, sold everything that wouldn't fit on their new boat—named *Traveler*—and began their adventure. They sailed from San Diego to Ensenada, Mexico, to begin a five-month refit. The following October, they began a four-year cruise of the Sea

***Boundless* shows off the handsome profile and solid seakindliness the Passport 42 is known for.** Photo courtesy of Julian Jones, sailboundless.com

of Cortez and Mexico's Gold Coast.

While in La Paz, they decided to sail to Hawaii on their return to the Pacific Northwest. They made a 21-day, 2,700-mile crossing from Cabo San Lucas to Hilo, Hawaii. After a bit of island hopping in Hawaii, they sailed 21 days north and east to landfall in Ketchikan, Alaska.

They made their way down the coast of British Columbia to Washington, where they lived aboard in Olympia for a year, then acquired a small home and moved off *Traveler*.

Eventually, they bought a small day-charter business, named it Mystic Journeys on *Traveler*, and worked for the next two years booking up to 80 charters annually. Most were "three-hour tours" sailing on Olympia's Budd Inlet, but if a client wanted something different, they tried to make it happen. For instance, one couple only wanted to dine and sleep aboard. Scott and Connie set them up in the afternoon and left them to enjoy *Traveler* until the next morning.

For most of their clients, it's the first time ever on a sailboat, and both of them find it deeply rewarding to introduce new people to sailing. In 2020, the pandemic prevented them from working their business, but they plan to resume as soon as possible.

The teak decks and cabintop, typical of most Passport 42s that were built in Taiwan, often need repair after 40-plus years, at top left. Photo courtesy of Two the Horizon Sailing, @twothehorizon.

***Traveler*'s guests enjoy the view from the foredeck while touring the waters of Olympia, Washington.**

History and Design

Designed by Canadian Stan Huntingford, the Passport 42 first came off the line at Solar Marine in Taiwan in 1980 and sometimes was referred to as the Solar 42. In 1983, Miracle Marine took over construction, and by 1987 production moved to Hai Yang Boat Building. A variety of importers marketed them in North America, and about 50 boats were produced under the Passport 42 name between 1981 and 1988.

Huntingford's other designs were largely built in Taiwan and Canada during the late 1970s and early '80s, including the Slocum 43, which differs only slightly from the Passport 42, and a 51-footer for Passport in 1982. He also designed the Cooper 353, 367, 416, and 508; the Maple Leaf 42, 45, 48, and 54; and several other cruising boats in the 35- to 50-foot range.

With its sharp bow and canoe stern, the Passport 42 resembles Robert Perry's Valiant series, though on closer inspection, the Passport carries the 12-foot-10-inch-wide beam further aft, providing a roomier interior. The stern is not the refined Nordic-style shape of many Perry designs, but rather a fuller, more hemispheric profile. Scott says it does a fine job of keeping water out of the cockpit in a following sea.

Underwater, the Passport 42 has a lot going on—a deep forefoot that blends into a fin keel with a long chord, and an elongated, molded strut with bearing to support the prop shaft. Further aft is a beefy skeg protecting the rudder. The maximum draft is 6 feet 4 inches. This tried-and-true configuration is reassuring to many bluewater sailors, but it also racks up a lot of wetted

The cockpit layout is designed with offshore security in mind. Photo courtesy of Julian Jones, sailboundless.com

surface that, combined with relatively small sail area, can make the boat sluggish in light winds and through a tack.

The design weight of the Passport 42 is 25,500 pounds with ballast accounting for 9,000 of that. With ample stowage below and cruising sailors as its primary market, it's a safe bet that most boats are a good deal heavier—probably closer to 30,000 pounds. Scott says the weight of the boat gives him confidence and provides an easy motion at sea.

Construction

One of the things Scott and Connie like most about their Passport is the robust construction. The fiberglass hull seems to be thick in the right places. Like most Taiwanese boats, the interior teak joinery is impressive. Scott was even more impressed when he was able to remove and replace two 55-gallon black iron (carbon steel) diesel tanks from under the cockpit sole. They just fit through a locker door in the aft cabin without removing any joinery.

Scott and Connie's Passport came with teak decks and cabintop—a ubiquitous feature of Taiwanese boats of this period. Forty years of hot Southern California sun, plus time in Mexico and Hawaii, have had their way with them. This is a common refrain in these teak-decked boats; the caulking used to seal the teak bungs over deck screws deteriorates and allows water to migrate down the screw, past the layer of fiberglass underneath, and into the deck core, potentially causing rot and a spongy feel underfoot. For many, the cost and skill to repair is prohibitive. The good news is that if the core is still solid, the fiberglass deck can be made perfectly serviceable. Scott and Connie are removing the boards a section at a time, filling and fairing the screw holes, and painting with white non-skid paint. The teak boards on the cabintop are in the best shape, and Scott and Connie are considering leaving them for now.

The ballast in the keel is fully encapsulated with fiberglass, which obviates the need for keel bolts. Construction and layup varied with the sundry builders; one owner says the hulls are solid fiberglass below the waterline and cored with foam above, and that the deck is cored with 4-inch teak squares to limit water migration.

The interior is stick-built with bulkheads tabbed to the hull. The shower/tub assembly is a fiberglass module, as are the interior walls of the head. During a haulout in Mazatlán, Scott and Connie hired a yard to strip the hull for blisters and reseal it with vinylester resin.

Chainplates on the Passport 42 were glassed in, a practice that most boatbuilders discontinued in the 1960s. Glassing over stainless steel is a bad idea because of crevice corrosion, the inability to inspect, and the difficulty replacing parts. Many Passport owners have dug out the old chainplates and replaced them, but it's a big job. Scott and Connie got a quote for $10,000 and are saving their pennies to get this done.

Below Deck

The companionway is off center to starboard to allow more space for the portside aft cabin. "From Mexico to Hawaii and Hawaii to Alaska we were always on the starboard tack," Scott says. "So it was nice to climb down into the cabin on the high side. The combination of a low dodger and bridge deck made it tough for me to get through the hatch, but once I did, it was easy to descend the stairs facing forward."

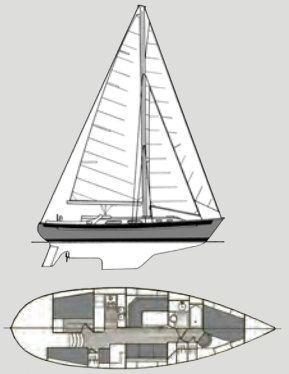
At the bottom of the stairs to port is an aft cabin with a large double bunk and reasonable storage. A small hatch and two portlights keep it from feeling like a teak-clad cave. To starboard is a quarter berth with a navigation station featuring a large chart table. The arrangement allows quick access from the cockpit to the navigation station and a comfortable, secure berth for the off watch.

Forward of the aft cabin is the galley. Its U shape and size make it easy for the cook to feel secure in a seaway. It is just large enough that a second person can wash dishes or chop vegetables, what my wife calls a "two-butt galley." The double sink is on the centerline of the boat. The refrigerator and freezer are huge, with access from the top and the side.

Forward of the galley is a roomy dinette, which faces a settee long enough to serve as a single bunk. The keel-stepped mast is at the end of the forward seat of the dinette and close to the bulkhead for the head.

The head is on the port side and is spacious enough to have a small tub, though Scott and Connie say they have only used it as a shower. In some Passports, this feature is replaced with a dedicated shower stall.

Starboard of the head is a hanging locker and stowage. Forward of that is a cabin with a double bunk on the port side and a comfy seat built in to



LINE DRAWINGS BY ROB MAZZA

Passport 42

Designer	Stan Huntingford
LOA	42'0"
LWL	34'10"
Beam	12'10"
Draft	6'4"
Displacement	25,500 lb
Ballast	9,000 lb
Displ./LOA	269
Sail area	764 sq ft
Sail area/Displ.	14

starboard. Overall, the layout is traditional, practical, and spacious for a 42-footer.

Mechanicals

The steering on the Passport 42 is a wheel with chain-to-cable and a heavy bronze quadrant, providing peace of mind for sailors enduring prolonged difficult conditions.

The boats came with a Perkins 4-108 diesel mounted below the cabin sole near the sinks. This location keeps the weight low, although it increases the risk of water from the engine exhaust getting sucked into the engine cylinders—the dreaded waterlock. And, for full access to the engine, you need to dismantle part of the cabinetry. Scott says he has spent a lot of time on his belly working on the engine. Considering the age of the boats, those with an original engine will most likely need a transplant; *Traveler*'s was tired, cranky, and leaked oil, so they repowered with a Beta.

Traveler has tanks for 150 gallons of freshwater and 110 gallons of diesel. This may differ in other Passport 42s. *Traveler* and other sisterships have had problems with leaky tanks. There have been cracks reported in the fiberglass blackwater tank, and in addition to replacing the black iron fuel tanks on *Traveler*, Scott and Connie also had to deal with the stainless steel freshwater tanks under the cabin sole developing pinhole leaks. They fixed them by cleaning and applying a spray sealant to the interior of the tank. Good inspection and cleaning ports in those tanks made that fix possible.

Comments From Owners

We love the cutter rig. Initially the boat came with a large 120 percent genoa, which was a challenge to tack through the relatively narrow slot between the foresail furler and the staysail furler, and we traded this for a new high-cut foresail that complements the staysail and gives us better heavy weather options and less flogging in light airs. The boat is very stiff. Even in a blow, she does not heel excessively, and inspires tremendous confidence under sail.

We love that *Boundless* is a double-ender, and we appreciate the Monitor self-steering gear mounted to the stern, but there are times at anchor when we would be pleased to have a walk-through transom for easy access to the dinghy or swimming. We are stuck with storing our dinghy on the foredeck.

—**Julian Jones**
San Francisco, California

My hurricane encounters at sea were as fierce and demanding as one could think. The heavy displacement gave me confidence and comfort to ride out the situation. Had it been a lighter displacement boat, I may not have survived. The cockpit has high coamings which are more than adequate to serve crew and myself, a singlehanded sailor. Everything is within reach at the helm or nearby.

Peregrine has a hard dodger, which, after taking several big ones over the bow, was a lifesaver. Had it been canvas, it'd have been a total disaster. Stowage is quite ample as I provisioned for more than a year. Lots of space for tools, spares, and books.

—**Michael Berry**
San Francisco, California

We cannot praise the build quality enough. The floorboards don't creak and bounce. The interior craftsmanship is top notch. The louvered cabinet doors keep everything dry, and we have yet to encounter any mold issues.

Our biggest challenge is engine access. The galley sink cabinet lives on top of the engine bay. The cabinet shelves are removable for quick access, but we still have to bend into a pretzel to work on our Kubota. For bigger engine repairs/maintenance, the entire sink cabinet can be disassembled and removed completely. Also, when lying down on the cabin sole, we still can't reach the bottom of the bilge, so be careful not to drop anything.

Our main problem was the leaking steel fuel tanks. They are located under the cockpit sole in the lazarette space, and from inside they are behind a lot of cabinetry.

—**Jack Patton** and **Sonya David**
Safe Harbors, California

Most deck hardware is mounted on raised bosses so water can't puddle around the attachments. Stanchion bases are attached to inside face of bulwarks rather than the decks. 1¼-inch stanchions and bow/stern pulpits. Substantial mast pulpits with 1½-inch diameter tubing and three legs. The embedded steel plates in the deck for hardware attachment are mild steel. The steel rusts and stains the deck wherever water can breech the bedding compound and migrate to the steel. The genoa T track is mounted on top of the teak cap rail and can't be removed for maintenance because the nuts underneath are loose. It would be necessary to remove the teak cap rail for access to the nuts.

—**Gary Wilson**
Olympia, Washington

Sails like a dream. Large water tanks—185 gallons. Large fuel capacity at 120 gallons. Large chain locker; we carry 400 feet of ⅜-inch BBB chain on the primary and 50 feet of chain and 200 feet of rode on the secondary.

—**Ed** and **Cindy Lowrie**
Kemah, Texas

Three-quarter-inch solid fiberglass below the waterline, and 1⅛ inches total above the waterline (⅝-inch foam core), at least based on the two holes I've drilled in the hull. You're going to drop a ratchet, socket, or toolset into the bilge one day. Fabricate a few different sticks with magnets on the end. My favorite is a length of bailing wire with a large neodymium magnet epoxied onto the end. Get a grabber stick for non-magnetic items. Check the deck scuppers; the bedding failed on mine and soaked my inverter on a particularly boisterous passage from San Miguel Island to Morrow Bay—also a great way to fill up your bilge quickly.

—**Mathias Schmidt**
Emeryville, California

On Deck

The cockpit is small and secure. Behind the wheel, the helmsman stands on a raised portion of the sole to allow better viewing over the cabintop. While a good idea in terms of enhancing visibility, during our sea trial I stumbled on it every time I moved from the main part of the cockpit to behind the wheel. That was mostly because I'm clumsy, and it's the kind of thing that wouldn't be a problem after I got used to the boat. The cockpit seats, while long enough to recline, are not long enough to lay down and sleep.

The sidedecks are wide and the shrouds terminate near the toerail, so going forward is easy, generally unobstructed, and secure with good handholds. The cabintop is also a nice height for sitting, something Scott and Connie use to good effect during their day charters. They festoon the cabintop forward of the mast with cushions and stadium chairs, and that's where the guests usually hang out for the duration of the voyage. *Traveler*'s stability and the high double lifelines make everyone feel comfortable.

Underway and Conclusion

The Passport 42 has a cutter rig, a favorite of cruisers with bluewater ambitions. The mainsail and foretriangle have a combined square footage of about 765 square feet, which feels conservative for a boat this heavy. The right staysail and jib or genoa combination could jazz things up considerably. Scott and Connie have an asymmetrical spinnaker that helps a lot in light winds.

We went sailing in a light breeze, typical of sunny days on Puget Sound. *Traveler* ghosted along nicely under main and a roller-furling genoa. She was slow to accelerate and had to be coaxed through some of her tacks, but otherwise performed well. Scott says she really sings when the wind picks up and doesn't have any bad habits.

Despite the predictable issues that are typical with boats of this era, the Passport 42 remains a coveted catch among those who want to know that they can take safely to blue water or even just cruise coastally in comfort. Depending on the boat's age, upgrades, and background, they can range quite widely in price. A brief check of the used boat market found a 1981 model for sale at $72,000, and a 1988 for $146,500.

The designer of the Passport 42 was a conscientious craftsman who set out to answer the needs of bluewater cruisers. *Traveler* is a case in point: She is seaworthy and has an extensive list of features that serious offshore sailors value. She checks nearly every box—some of them twice.

Brandon Ford, a former reporter, editor, and public information officer, and his wife, Virginia, recently returned from a two-year cruise to California, Mexico, and seven of the eight main Hawaiian Islands. Before their cruise they spent three years refitting their 1971 Columbia 43, Oceanus. *Lifelong sailors, they continue to live aboard* Oceanus *and cruise the Salish Sea from their home base in Olympia, Washington.*

The saloon of *Boundless* highlights the beautiful interior joinery typical of these boats, at left. Photo courtesy of Julian Jones, sailboundless.com

Although these galley configurations are slightly different, each provides a secure space for the offshore chef. *Boundless* photo (bottom left) courtesy of Julian Jones, sailboundless.com and *Gemini* photo (below) courtesy of Two the Horizon Sailing, @twothehorizon.

Passport 42

. . . and Two More Performance Cruisers

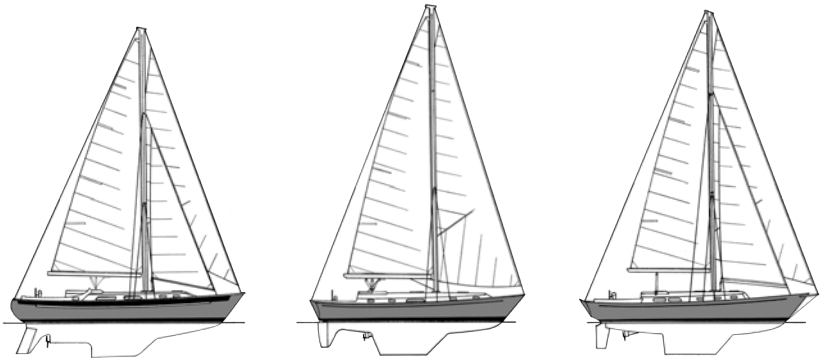
STORY AND ILLUSTRATIONS BY ROB MAZZA

I assumed the Passport 42 would be a Bob Perry design, an assumption further reinforced when I saw she had a Valiant 40-style canoe stern. However, despite the fact that Bob designed *seven* boats for Passport, the 42 is a Stan Huntingford design, as is the 1982 Passport 51, also with a canoe stern. I wish I knew more about Huntington, a fellow Canadian, but our paths never crossed, and there is a distinct lack of information online.

The 1973 Perry-designed Valiant 40 would seem to be the logical boat to compare to the Passport 42, but that would be too obvious and would be comparing boats from different decades, despite their similarities. I thought it best, instead, to compare her to a later Perry design, coincidently by the same builder as the 42, the 1980 Passport 40. This would allow the inclusion of a Perry design contemporary with the Huntingford design and perhaps one more representative of Perry's evolved thinking on the breed. The third boat in our comparison is the Mark Ellis-designed, George Hinterhoeller-built, Niagara 42. The 42 was in the tooling stage when I joined Mark in 1985, so I was not directly involved in her design, although I did become involved with interior liner discussions and details.

The term "performance cruiser" is a good way to describe these three boats because they all incorporate split keel and rudder, as well as other design features introduced on race boats. With regard to rudders, note that the Passport 40 and 42 incorporate a small, leading-edge skeg, while the Niagara employs an all-movable rudder. The rather exaggerated angle of rudder rake on the Passport 42 contrasts with the more vertical rudder shafts of the Passport 40 and the Niagara 42. This rake seems more in character with boats from the '70s than the '80s.

The performance aspect of cruising is also illustrated in their rigs, each using tall, double-spreader, cutter rigs with large foretriangles and



	Passport 42	Passport 40	Niagra 42
LOA	42'0"	39'5"	42'0"
LWL	34'10"	33'5"	32'6"
Beam	12'10"	12'8"	12'9"
Draftt	6'4"	5'9"	5'8"
Displ.	25,500	22,771	19,800
Ballast	9,000	8,500	9,100
LOA/LWL	1.21	1.18	1.29
Beam/LWL	.37	.38	.39
Displ./LWL	269	272.3	257.5
Bal./Displ.	35%	37%	46%
Sail Area (100%)	764	788	849
SA/Displ.	14.08	15.66	18.52
Capsize No.	1.75	1.79	1.89
Comfort Ratio	35.6	33.96	29.18
Year Introduced	1981	1980	1984
Designer	Stan Huntingford	Robert Perry	Mark Ellis
Builder	Passport Yachts Inc.	Passport Yachts Inc.	Hinterhoeller Yachts

relatively narrow mainsails. I have shown the Passport 40 with an open foretriangle, but a quick Google search shows a large number with staysail stays. The challenge in any cutter rig is determining how best to adequately support the mast in way of the staysail stay hounds. Running backstays are the most efficient method, but a nuisance, so it is interesting to see the Passport 42 and the Niagara use fixed staysail shrouds set aft of the lower shroud chainplates. This restricts the amount the main can be eased off the wind but greatly simplifies tacking and jibing.

The size of these three boats is reflected in both their waterline lengths and their displacements. The Passport 42 is the largest at 34 feet 10 inches waterline length and 25,500 pounds displacement. The Passport 40 is next at 33 feet 5 inches and 22,771 pounds, and the Niagara 42 the smallest at 32 feet 6 inches and 19,800 pounds. The performance aspect is also evident in their displacement/waterline length ratios, with a low of 258 for the lighter Niagara, and 269 and 272 for the Passport 42 and 40, respectively. Traditional heavy-displacement, full-keel cruising designs are generally well over 300.

Sail areas are a consistent 764 and 788 for the Passport 42 and 40, and a much higher 849 for the lighter Niagara 42. The Niagara is the only one of the three that uses a bowsprit. This increases the J dimension substantially over the other two boats, helping to generate that larger sail area. Those numbers produce a range of sail area/displacement ratios from a low of 14.08 for the Passport 42, a moderate 15.66 for the 40, and a performance-oriented 18.52 for the Niagara 42.

Ballast weights are consistent, ranging from a low of 8,500 pounds for the Passport 40 to a high of 9,100 pounds for the lighter Niagara 42. This reflects itself in the ballast/displacement ratios of 35 percent for the Passport 42 and a high of 46 percent for the Niagara 42. (That high ballast ratio, low displacement/waterline length, and high sail area/displacement ratio causes me to suspect that the Niagara's published displacement may be on the light side.)

Beams are also consistent, varying only 2 inches for all three boats, producing narrow beam/waterline length ratios of .37 to .39. These relatively narrow beams on moderate displacements yield very safe capsize numbers of 1.75, 1.79, and 1.89, all comfortably below the threshold of 2 and all in inverse proportion to the displacement figures. Comfort ratios for the three boats decline in direct relation to displacement, with the heavier Passport 42 coming in at 35.6, the lighter Passport 40 yielding 33.96, and the lightest Niagara 42 coming in at a slightly less comfortable, but still respectable, 29.18.

All three exhibit classic shear lines, traditional transom configurations, narrow beams, moderate overhangs combined with straight stems, and relatively tall rigs, indicating a satisfying combination of traditional CCA aesthetics with the less egregious aspects of IOR performance. In that regard, it's hard to pick a winner among these three, but if I had to, I'd lean towards the Niagara, while acknowledging my obvious bias.

Good Old Boat *Technical Editor Rob Mazza 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.*

Fit to be Hauled

Designing a windlass install to fit in a bow locker called on an array of skills.

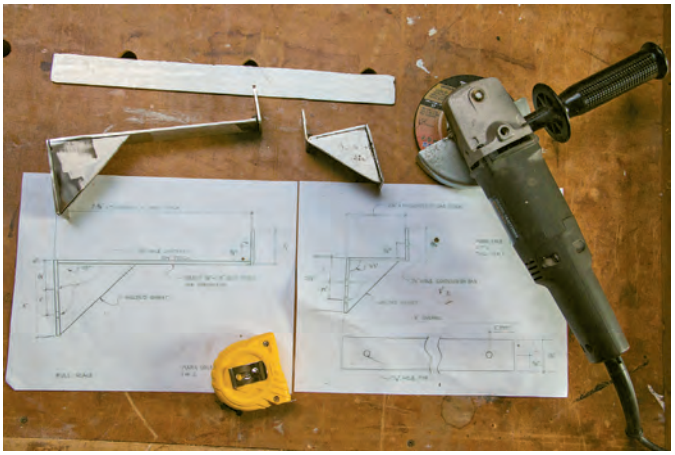
BY MARK COLE

After our first season sailing *Fiddler's Green* and weighing the anchor by hand—over and over again—an electric windlass moved *way* up the project list.

She's a 1993 Catalina 320 and features an ample rode locker accessed by a large hatch. Inside, a shelf molded into the fiberglass was designed for a particular horizontal windlass and foot switch. Unfortunately, the original owner of *Fiddler's Green* was a racing sailor and ordered her sans windlass. Worse, that particular original windlass for which the locker space was designed is no longer sold, and parts are scarce for existing units (knowledge I gained from the active Catalina 320 online owners' group). Time to research windlasses.

The factory-installed windlass mounted inside the chain locker with no parts protruding above deck. I needed to stay with this configuration, as the hatch covering the chain locker is too thin to support the working loads of a windlass. And, if I installed the unit behind the aft edge of the chain locker hatch, it would protrude into the V-berth, and I wanted to avoid that. Working within the existing molded shape of the chain locker, a horizontal windlass would have been too wide to fit where I needed it to, so I focused on vertical windlass models.

The next step was figuring out what size windlass I needed. Formulas instructed me to multiply the combined weight of my rode and anchor by six. I planned to use 250 feet of ½-inch rope (at .25 pounds per foot), 60 feet of ¼-inch high-test chain (at .75 pounds per foot), and my trusty 37-pound CQR anchor. I figured that with 310 feet of rode, I wouldn't anchor in more than 60 feet of water, so the windlass would be making a maximum dead lift of 82 pounds (all chain plus anchor), so my working load would be 492 pounds. I rounded up to 500 pounds. Since I wanted to use a combination rope/chain rode, I needed a windlass with a gypsy that would handle both.

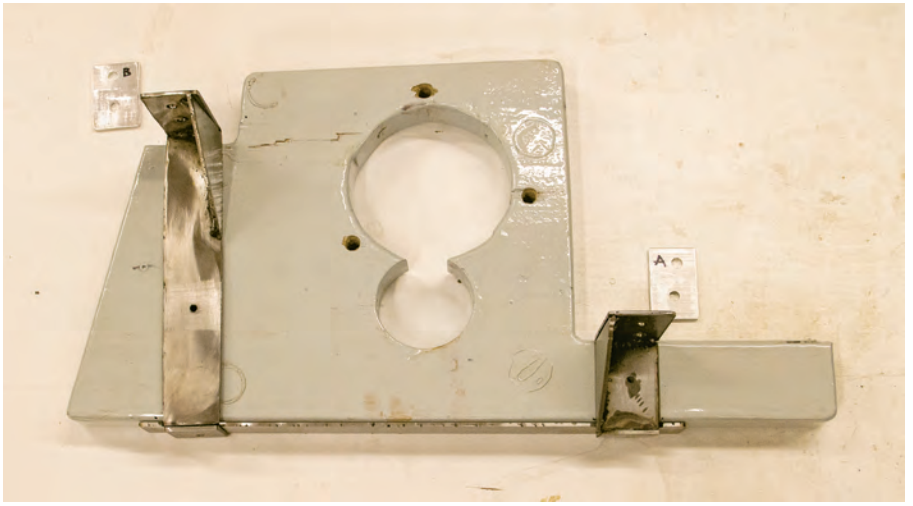


Mark made a template for the windlass support shelf, using ⅛-inch MDF plywood and a hot-melt glue gun to determine the shelf's shape, above.

Rough plans for the brackets and the actual brackets after the first bit of clean-up, at right.

I now knew I needed a vertical windlass with a working load rating over 500 pounds and a combination gypsy. Based partly on a recommendation from a marine mechanic friend, I purchased the Maxwell RC6, with a rope/chain gypsy and a working load of 770 pounds.

A major consideration for an electric windlass installation is ensuring the manufacturer-specified "fall" distance is available. The model I chose requires



8 inches of "unobstructed fall from the lowest part of the windlass." Fortunately, my anchor locker was plenty deep.

The most complex part of the installation was going to be building a sturdy enough platform inside the chain locker on which to mount the windlass. I decided to work with wood and steel.

Nothing on a boat is square or plumb, so I made a template of the space where the wood shelf would fit. I measured the angles and marked them on the template. Using the template in my shop made quick work of milling the basic shelf. The windlass included a template for cutting the holes necessary for the motor and the chain to pass through; I used this to cut these holes on the shelf. One concern I had was that the chain, rattling down through the hole in the shelf, would chafe and enlarge the hole over time. Fortunately, I found a galvanized metal collar intended for use on a mooring buoy that fit perfectly, so that problem was solved.

I'm very comfortable with woodworking, but not so much with metal fabrication. Fortunately, I have a friend who has all the metalworking tools needed to make the brackets I designed. He even showed me how to weld stainless steel. Four hours later, the brackets I brought home were pretty rough looking but strong enough to do the job. Besides, once the installation is complete, the only way to see them is to fall headfirst into the chain locker.

After removing a decorative plywood panel in the V-berth, I was able to cut two square holes in the fiberglass liner, allowing me access to the space behind the chain locker. From here, I could reach the back side of the through-bolts that would secure the metal shelf brackets, even allowing me to fit backing plates before tightening down the nuts. It was an easy run to get the power cables up to this space and locate the solenoid and all other wiring connections inside this watertight area.

Wiring was straightforward and consisted of running positive and negative cable from buss bars at my house battery

After a friend with the right gear showed him how to weld, Mark fabricated the brackets and used a grinder to clean up his work, at top left.

The underside of the shelf with the brackets in place. The small rectangular plates are the backing plates for each bracket, at left.

To access the area behind the chain locker, Mark removed a decorative plywood panel and cut two holes in the hull liner. The top of the solenoid and one of the backing plates are visible in the right hole, at left.

The shelf in place. Note the galvanized collar in the chain drop hole, the PVC holder for the windlass brake Allen wrench to the left of the shelf, and the raised floor in the bottom of the chain locker to keep the rode out of any water in the locker, at bottom left.

bank to a solenoid inches below the foot switch. A 70-amp breaker came with the windlass for wiring into the positive power lead, close to the battery bank. The wiring diagram in the installation manual showed the full deal wired to the solenoid; foot switches for both up and down, plus a remote panel to control the windlass. I only wanted to install one foot switch to

Working the Discount-MC

Early in 2020, I decided I had a few major projects still to go on *Fiddler's Green* to prepare for extended cruising. I'm retired, so boat dollars are limited, and I needed some help making the work pencil out. For this project, retail price for the windlass is around $1,200, the eight-plait rope is $.65 per foot and the ¼-inch high-test chain is $5.39 per foot.

But, my total install cost for this project was $1,089.47, including the foot switch, miscellaneous wiring, the mooring buoy collar, and fasteners. How?

I made the decision to commit to working for my local marine chandlery for two years—not so much for the hourly pay, but more for the employee discount on purchases. It has been worth it for the savings on all boat purchases, but it has also been fun helping boaters just like me find the products they need to make their boat as close to perfect as possible.

I worked pretty hard during the summer months, but very few hours the rest of the year. I accomplished three major projects on the boat during 2020 and have two more to go. I don't think I would have been able to get these projects done if I had to pay full price for the materials.

Completed install with rode in place and chain tensioner mounted. Mark added the 90-degree bracket to the right of the windlass to stop the platform's bounce during retrieval, at left.

Mark learned to splice rope to chain for the new rode. He found it easier to use a ¼-inch splicing fid to tuck strand pairs under rope strands, above.

raise the anchor, as I planned to use the windlass brake to lower the anchor. I think someone should always be on the bow during anchoring, so I didn't bother to install the remote panel.

The cable run from battery bank to windlass motor and back was 27 feet, and a cable size selection chart in the manual recommended 6 AWG wire (which I happened to have on hand, helping keep costs down).

With the hard part done, bolting the windlass to the shelf and connecting the cables to the windlass took just a few minutes. I added a Lewmar chain tensioner ($43 at West Marine) to the right of the windlass, to take the strain of the chain and anchor off the gypsy. When the anchor is set, I accomplish this by attaching an anchor bridle to two large cleats on either side of the bow.

There was one more skill to learn with this project. I've done lots of splicing in three-strand and double-braid ropes, but Maxwell recommended eight-plait rope to work best with the gypsy, and it needed to be spliced to my ¼-inch chain to be able to run through the gypsy. Using instructions I found on the New England Ropes website, I learned to splice ½-inch, eight-plait rope to chain. I used paint pens to mark the rope every 25 feet after the chain and loaded it all into the anchor locker.

On the first test, I noticed that the windlass and shelf bounced a bit while raising the anchor. To stiffen my shelf, I made a simple 90-degree bracket to attach above the shelf at the aft end. Problem solved, and my back feels better already!

Mark Cole learned to sail while in the Navy stationed in Japan in the mid-1970s and earned his USCG 100-ton master's license. He and his wife, Dawne, have been together more than 30 years, and their story of finding Fiddler's Green, *"Love, Carefully," was in the January/February issue. They cruise the Salish Sea of Washington State and British Columbia.*

The axis on which a gypsy rotates distinguishes vertical from horizontal windlasses.

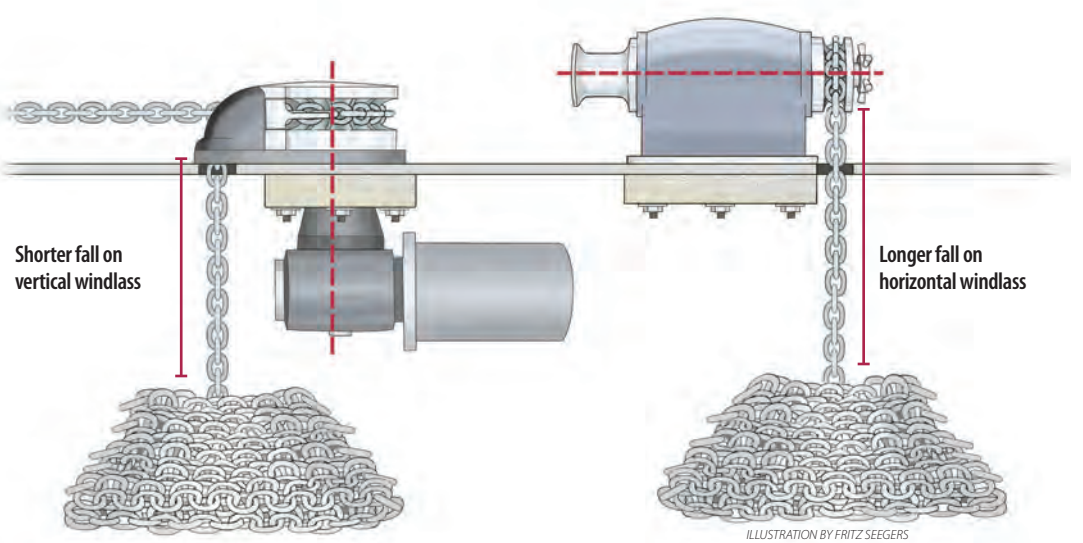


ILLUSTRATION BY FRITZ SEEGERS

Wedging in a Windlass

The Bristol 29.9 seemed too small for a windlass, but doctor's orders demanded one.

BY KIMBERLY BONEHAM

As we embarked on the refit of *Pegu Club*, our 1977 Bristol 29.9, my husband, Jeff, and I made the conscious decision to forego a windlass. We were prepping for a cruising life and were determined to keep things simple. Why have a windlass when Jeff was perfectly capable of weighing our 22-pound anchor?

The answer came on Christmas Eve, when Jeff landed in the ICU with a diagnosis of congestive heart failure.

After two weeks, the hospital sent Jeff home with permanent lifting restrictions. We considered a manual windlass, but then envisioned a worst-case scenario in which I was incapacitated, and Jeff needed to weigh anchor quickly. An electric windlass was the best option, but how would we install one on a boat not originally designed for one? We searched online for inspiration and information, but we couldn't find any examples of a Bristol 29.9 with an electric windlass. We were on our own.

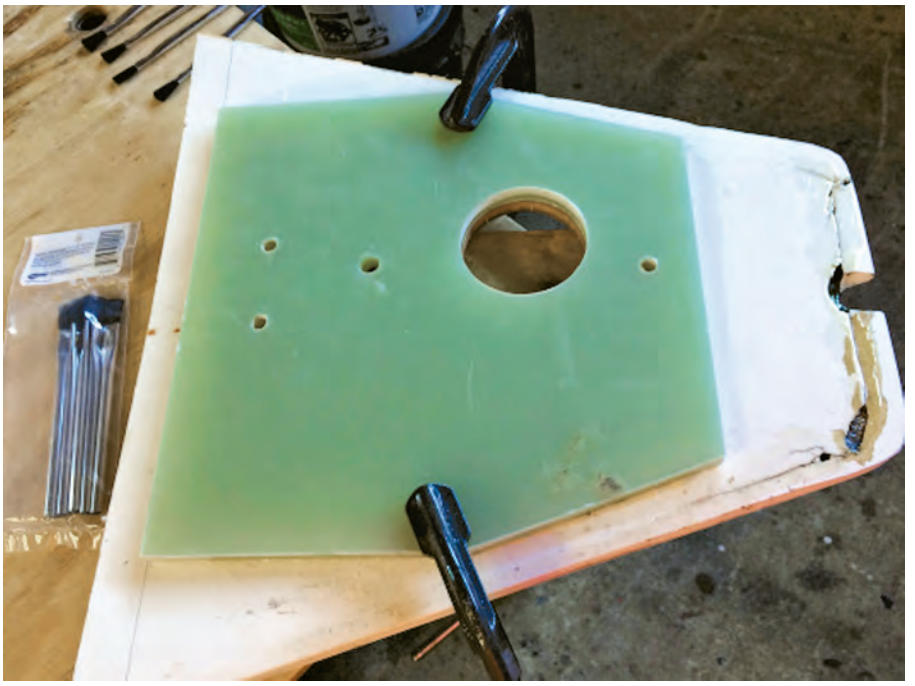
The first obstacle we faced was positioning a windlass. There was no space forward of the anchor locker to mount one, and the anchor locker on the 29.9 is only 7 inches deep, barely enough room in there to stow our rode, so no space there either. There seemed only one solution to the location problem: atop the anchor locker hatch. Our plan was to cut the hatch in half athwartships, permanently affixing the forward half as a deck for the windlass and leaving the after portion available to open and access the locker.

We considered a low-profile vertical windlass (the windlass motor is below deck, only the gypsy is above deck), but the rode leaves the gypsy at deck level, meaning that the distance of our fall is limited to the depth of our anchor locker. In contrast, a horizontal windlass sits entirely above deck and the gypsy is a bit higher than the deck, allowing more distance for the rode to fall. In either case, we don't have an anchor locker deep enough to permit the recommended fall distance, but it was clear the horizontal configuration would give us an edge. We focused our search on a horizontal windlass.

Because *Pegu Club*'s rode is a combination of 125 feet of 5/16-inch G4 chain and 175 feet of

By cutting the anchor locker hatch lid and permanently attaching the front portion, Kim and Jeff created the real estate needed to securely position the anchor windlass, above.

Splitting the anchor locker hatch into two pieces provided a place to mount the windlass while still providing access to the chain and rode, at right.



Kim and Jeff beefed up the hatch cover with G10 to serve as a backing plate for the new windlass, at left.

A pattern taped to the hatch cover provided the template for cutting out the holes for attaching the windlass, at bottom left.

deck beneath all of our cleats and stanchions, and we were confident in its strength.)

We then did a dry fit of the windlass, the hatch, and the G10 (Whew! We cut the holes in the right places!) before affixing the G10 to the underside of the anchor locker hatch with thickened West System epoxy. Next, we brushed neat epoxy on all of the exposed core.

The next day we installed a cable clam to run the electric cables from the cabin interior into the anchor locker. If water made it into the locker, the cable clam would prevent it from running down below. Fortunately, we were able to use an existing hole from a previously removed anchor washdown fitting installed by a former owner.

9/16-inch eight-plait rope, we needed a rope/chain windlass. We selected a Maxwell HRC-8. Though we're about an inch shy of the specified fall distance for this model, this hasn't proven to be an issue.

After removing and cutting the anchor locker hatch, we used the manufacturer-provided template to cut holes in the forward part of the hatch, where we would install the windlass. Next, we placed half-inch-thick G10 on the underside of the lid, and using the holes in the lid as a guide, we cut identical holes in the G10. The G10 would serve as a backing plate on the hatch to reinforce it for the windlass install. (We used G10 similarly to reinforce the

One of our concerns was ensuring the windlass wouldn't rip the locker hatch off the boat, no matter how much load was placed on it. We decided to use a belt-and-suspenders approach by attaching the lid with thickened epoxy and screwing it down around the perimeter, securing the hatch to the solid fiberglass lip of the anchor locker. Between reinforcing the lid and securing it so well, we felt comfortable that if conditions ever resulted in the windlass breaking free, we would have bigger problems to worry about.

Once we finished the windlass portion of the anchor locker hatch, we cut the piano hinge to size for the remaining hatch portion and installed it. Voila! The windlass was mechanically attached to the boat!

Of course, this was only half of the job completed; we needed to build an electrical circuit for our windlass. With our limited electrical knowledge, the manufacturer's wiring schematic was daunting. Fortunately, we had electrically savvy boating friends we could turn to when we were stuck.

We opted not to install a separate windlass-dedicated battery in the bow. Between the water tank, our anchor, and rode, we felt there was already enough weight forward. That meant we would need to run wires (cables) from the windlass aft to our battery bank under the quarter berth.

The breaker/isolator switch was mounted on the starboard side of the quarter berth, at right.

The reversing solenoid was mounted onto the bulkhead underneath the sink in the head, at far right.

We also needed to find homes for the up/down control switch, the reversing solenoid, a breaker/isolator switch, and a 3-amp manually resettable breaker.

The up/down switch was easy. We wanted to install it in the cockpit so the helmsman could operate the windlass. The reversing solenoid pack went under the sink in the head without trouble. The breaker/isolator switch needed to be located within 6 feet of the batteries, so we installed it on the quarter berth bulkhead. Jeff carefully used a jab saw to cut the hole, while on the other side of the bulkhead I held cables out of the way. (You know you trust your partner's toolhandling skills when you place your arm uncomfortably close to live cables and a jab saw in action.)

Everything was going smoothly until we came to the 3-amp manually resettable breaker. We spun our wheels for a while trying to decide if we even needed it. We weren't installing foot switches, and it hadn't been included with the windlass.

We surveyed our electrically savvy boating friends and received conflicting answers. Ultimately, we concluded that we needed one because it protects the up/down control switch and would also serve as protection for foot switches if we decided to install them in the future.

The breaker was easy to find at the chandlery, but it needed to be installed within 40 inches of the battery, and we were running out of places to cut holes in the quarter berth bulkhead while keeping the breaker within reach. We settled on attaching it to the engine side of the bulkhead with a piece of Velcro. Not ideal, but it worked.

The final step was running the wiring. Without fish tape, it would have been a non-starter trying to pull the size 6 AWG wires from the windlass through impossible-to-reach spaces beneath berths and around tanks to where they attached to the reversing solenoid.

From the reversing solenoid pack, we ran two pairs of wires—10 AWG and 6 AWG—beneath the sole in the head, past the mast, and under the cabin sole. From there, the 6 AWG pair ran to the opposite side of the engine room, where I connected the positive wire to the breaker/isolator switch and then to the battery. The negative 6 AWG wire continued to the battery.

We ran the 10 AWG wire pair through the engine room and up to the cockpit switch. To complete that circuit, we connected another 10 AWG wire to the positive side of the switch and ran it to the 3-amp manually resettable breaker and on to the breaker/isolator. Finally—and not shown in the illustration—the wiring instructions had us attach a small 10 AWG jumper wire from one terminal on the reversing solenoid to another, to complete the negative side of the cockpit switch circuit.

I'll be honest, there were many times during this project that I thought about the Pardeys and how they got by with a manual windlass and no electrical system, and it sounded pretty good to me. But then, we were finished, and it was time for the moment of truth. After starting the engine, I triggered the control switch from the helm while Jeff stood at the bow. When I saw his thumbs up, my "Whoo-hoo!" echoed throughout our marina. We did it! We installed an electric windlass on a Bristol 29.9.

Like many boat projects, this one didn't turn out to be particularly difficult, just time-consuming and occasionally patience-testing. Now that we've been cruising full-time and anchoring often, I can say that this was one of our top upgrades (not that we had much of a choice given Jeff's lifting restrictions).

Additionally, having the electric windless enabled us to upgrade to a larger anchor (33 pounds), which lets us sleep more soundly. The electric windlass also makes it an easy decision to re-anchor whenever we think it might be a good idea. It was money and time well spent.

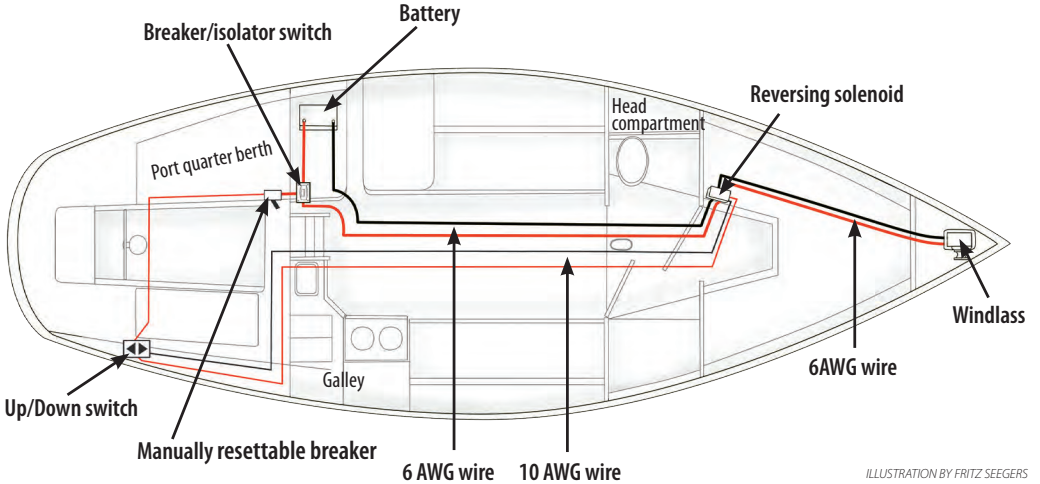


ILLUSTRATION BY FRITZ SEEGERS

Jeff and Kimberly Boneham have been cruising full-time since September 2018 on their 1977 Bristol 29.9 Pegu Club. *Traveling along the U.S. East Coast and the Bahamas, Kimberly posts about the highs and lows of their adventures on her blog, adventuresontheclub.com.*

A Killer (Simple) Kellet

Spare chain and the right placement make an easy kellet for an all-rope anchor rode.

BY DREW FRYE

Small boats often use only rope for rode. This is understandable; chain is heavy, and small boats can't carry much weight. But compared to boats that can carry and deploy chain rode, boats anchored on only rope rode tend to yaw more. They also tend to swing more freely with changes in the wind direction. They don't move in sync with all-chain-rode neighbors in crowded anchorages. Worst of all, rope rode can drift under the boat with tidal currents, fouling the keel or rudder and potentially abrading on sharp edges.

The traditional solution is a kellet, a 10- to 20-pound lump of iron that can be slid down the rope rode once it's deployed, toward the anchor. The reason for deploying a kellet is to weight the rope rode near the anchor. This serves to decrease the angle between the rode and the bottom, increasing the anchor's holding power. The added weight also keeps the rode taut, eliminating all of the drawbacks to the all-rope rode I listed above.

But the kellet isn't a magic bullet. It has its own drawback. Deploying a kellet can mean leaning down and forward over the bow, reaching around the forestay, and trying to attach a heavy lump of metal to the rode. It's a great way to strain your back or knock a hole in the deck.

I've come up with an alternative to the traditional kellet that offers the same benefits but that I find easier to stow and deploy.

A loop of chain, secured to the rode with a sling and a Prusik hitch, plays easily over the bow roller with no awkward reaching around the forestay. There is nothing to ding the deck. I leave mine attached, but I can relocate it in moments if anchoring in a different depth by simply loosening the hitch, sliding the hitch along the rode, and cinching. Best of all, the cost of this kellet alternative is nearly zero for anyone with some old chain lying about.

The weight of chain should be at least half that of the anchor, though it can be more. I use 8 to 10 pounds of chain in combination with 8- to 12-pound anchors. The chain-and-sling combination should be 18 to 36 inches long, thus allowing the rope rode to float up off the bottom, reducing wear and the chance of snagging. (You never want the rope right on the bottom.)

To keep the rode low and to increase effective scope at the anchor, secure the chain kellet within 10 feet of the anchor. To reduce yawing and to swing more like boats on all-chain rode, locate the chain kellet at the midpoint between the roller and the anchor. To keep the rode away from the keel in a strong tide, secure the chain a distance from the roller equal to about 150 percent of water depth.

A different version of the chain kellet, a single loop of chain. The chain kellet and Northill anchor are a workable combination for the shallow anchor well on Drew's F-24, above.

In this configuration, the chain loop is gathered using a soft shackle or lashing. It's then secured to the rode with a sling tied in a Prusik hitch, at right.

Give it a try; your back—and your anchorage neighbors—may thank you.

Good Old Boat *Technical Editor Drew Frye draws on his training as a chemical engineer and pastimes of climbing and sailing to solve boat problems. He cruises Chesapeake Bay and the mid-Atlantic coast in his Corsair F-24 trimaran,* Fast and Furry-ous, *using its shoal draft to venture into less-explored waters. He is most recently author of* Rigging Modern Anchors *(2018, Seaworthy Publications).*

Holding Power

Nearly 90 years old, the revolutionary Northill anchor continues to inform today's generation of ground tackle.

BY DREW FRYE

At first glance, it's just another fisherman anchor. But a closer examination of the Northill anchor reveals an impetus and geometry that revolutionized anchor design. The Northill laid the foundation for an entire class of new-generation anchors, including the Mantus, Manson Supreme, Rocna, and Spade.

Before the Northill, anchors were largely designed to hold vessels primarily through dead weight and limited digging. But in the early 1900s, flying boats became the future of transoceanic transport, and carrying an anchor with the dead weight required to hold a high-windage aircraft in place while it was in the water was incompatible with getting airborne. A far more efficient approach was needed.

By considering how planes move through the air and how tools cut metal, John Northrop (yup, the airplane guy) and his nephew, architect Harry Gesner (who trained under Frank Lloyd Wright), set out to design an anchor that would "develop holding power largely independent of the weight of the anchor." The two men put a completely new spin on the traditional fisherman anchor by enlarging the flukes, changing angles, and moving the cross stock to the crown, where it could improve holding capacity and roll stability.

They made their anchor foldable and fabricated it from stainless steel (non-magnetic). They applied for their patent in 1933 (US2075827), and the Northill was soon the standard-equipment anchor on the Consolidated PBY Catalina (known as the Canso when flown by the Royal Canadian Air Force).

Drew slides the cross stock through in seconds. A carabiner on a small chain retainer clipped through a hole secures it.

The assembled shape of the Northill is bulky, but rests calmly on deck while rigging if it is placed on the crown end. No rolling, no snagging, no scratching.

About this time, Richard Danforth came up with his own lightweight anchor design that was also widely adopted for military use, primarily to pull grounded landing craft off the beach, but also to anchor flying boats. Because Danforth's anchor used the same basic angles, Northill Manufacturing sued him in 1942 for patent infringement. The court decided the designs were too different to be considered conflicting and let it go.

After World War II, Northill Manufacturing advertised its product as the first "scientifically designed" anchor and started selling it to the recreational marine market. A simpler version, the Northill Utility, was also introduced. Made of galvanized steel, it features a simpler folding mechanism and great durability.

Both continued in production through about 1954, when the patent expired. Northill knockoffs, including the KB Ultralight, were produced as recently as the mid-1970s. These days, commercial fishermen are about the only users of the Northill design (homemade welded knockoffs adorn the bows of commercial fishing boats around the world), but the protruding fluke is a liability for overnight anchoring; the rode can wrap around the fluke, potentially tripping the anchor.

Playing the Angles

How an anchor digs and holds is largely dependent on the fluke-shank angle, and all new-generation anchors have an angle that falls within a very narrow range. Too great, and the anchor won't dig into harder bottoms. Too shallow, and the anchor will shave its way into the hardest bottom, but it won't go very deep and holding power will be limited.

In fact, all modern anchors have a fluke-shank angle that is within a few degrees of the Northill design, the perfect compromise between initial bite and maximum holding power in sand and firm mud bottoms. Notably, the Fortress anchor (a descendant of the Danforth) has an adjustable angle (32 degrees or 45 degrees), with a default setting of 32 degrees. If

Purchasing Tips—DF

The primary sources for Northill anchors these days are Craigslist and eBay. The 12- and 25-pound Northill Utility anchors go for $60 to $100. They are sometimes missing the cross stock, but they are easy to replace, and it keeps the price down. Stainless folding versions can be found for $175 to $250, and often much more if the seller fancies he's selling an antique. Offer less.

The original design included a spring clip; the channel-shaped stock was pushed through the crown and a clip popped up, securing it. To remove, the clip was pressed down. Either because the clip snapped or because the cross stock was simply misplaced, about half of the Northill Utility anchors offered on eBay are missing this critical part. But don't dismay, it's easy to make a replacement.

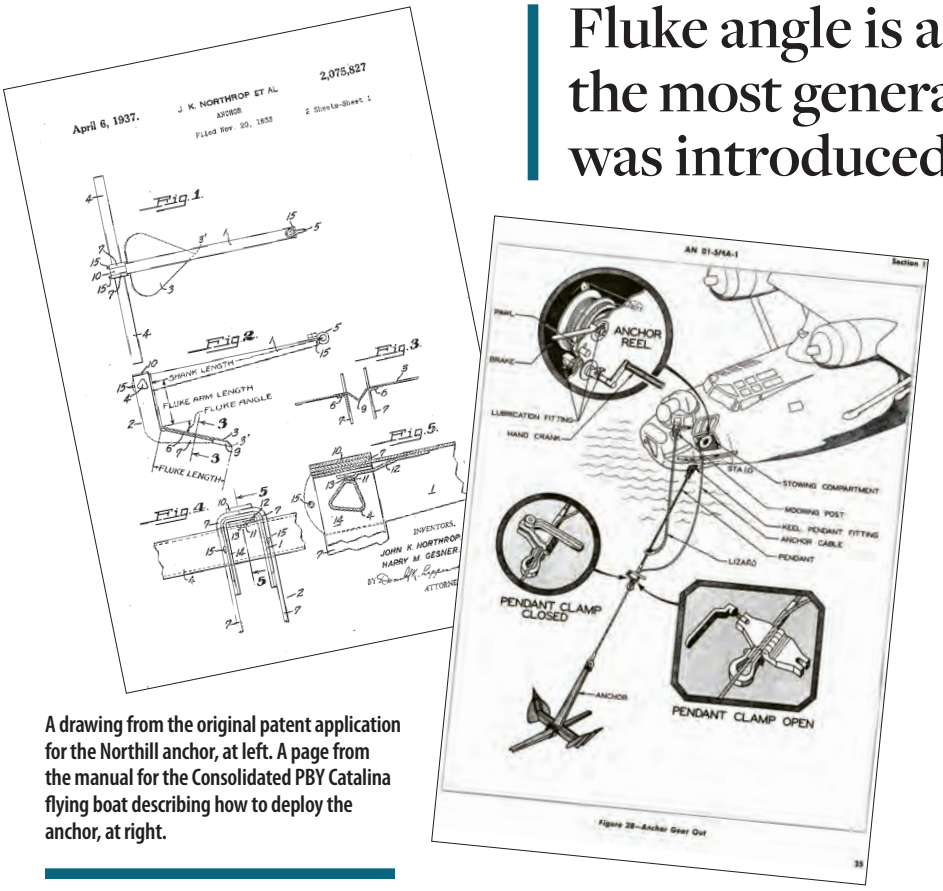
The stock itself is a standard channel dimension. If that is unavailable, two 90-degree angle sections joined side-by-side with an ⅛-inch steel plate will serve just as well, the steel plate serving as a stop to prevent it from sliding clear through. Instead of a spring clip, drill a small hole to accept a stainless carabiner or clip. There is no load on this clip; it serves only as a secure positioning pin. If galvanized material is not available, regular steel holds up reasonably well if kept painted. It's not a high-stress part. I still use my 30-year-old replacement cross stock, although it has needed a serious wire brush clean-up and painting every five years.

Drew's old cross stock, and the parts for the new cross stock, ready for paint and assembly.

How long is the cross stock? The original Utility cross stock was limited to 90 percent of the shank length so that it could neatly clip into a recess on the side of the shank. The stainless folding version cross stock was 120 percent of the shank length. The shorter cross stock allows deeper burying and very slightly greater holding capacity in softer bottoms, but the longer cross stock rotates better with wind shifts. Unless you are hung up on the idea of neat storage, I think the longer length is a better choice.

Do not buy a Northill with a steel rod welded in place of a channel cross stock. Holding capacity is diminished and storage will be a real drag.

Fluke angle is a compromise, and the most generally useful geometry was introduced by Northill.



A drawing from the original patent application for the Northill anchor, at left. A page from the manual for the Consolidated PBY Catalina flying boat describing how to deploy the anchor, at right.

set at 45 degrees, the Fortress won't penetrate sand or firm mud, but it becomes monstrously strong in soft mud and will dig many feet below the surface, into firm mud underneath. Thus, fluke angle is a compromise, and the most generally useful geometry was introduced by Northill.

Still Working

I've used the same 12-pound Northill Utility anchor aboard three different boats over a span of nearly 30 years. Occasionally, the Northill was the primary anchor, often it was a secondary or special use anchor, but it always saw regular use.

Before the invention of tip weighting (Delta and Spade) and roll bars (Bügel and its descendants, including Mantus, Rocna, and Manson Supreme), a cross stock was used to force the tip into the bottom. It works marvelously, angling the fluke toward the bottom so that it is ready to dig. Like all modern anchors, the tip is sharp, and it is capped with a beak to help penetrate weed and sneak into the cracks.

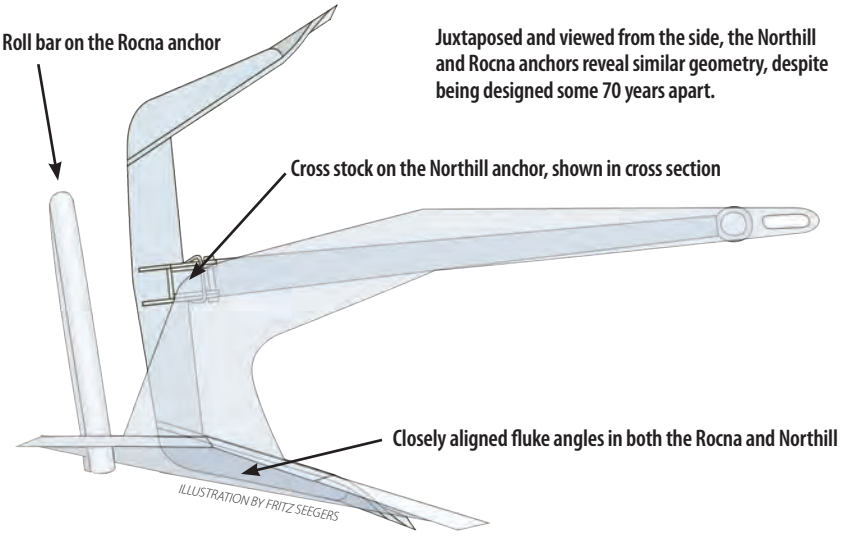
Setting is extremely rapid, within a shank's length in firm bottoms. When the crown of the anchor reaches the bottom, the cross stock channel digs in securely, reinforcing the hold. Although the cross stock will continue to bury under increasing load, this generally stops with the upper fluke still barely exposed. Unless extreme force is used, the shank is generally only slightly buried and the cross stock just slightly under the surface.

Although the fluke area on a Northill is smaller than that of a new-generation anchor of equal weight, holding capacity is very similar; the forward portion of the fluke, located in deeper, firmer, stronger soil, provides most of the holding capacity, and the Northill fluke is in a forward, deep position. The cross stock also provides considerable grip. Tested against modern roll bar anchors in sand and mud, the holding capacity per pound is 70-100 percent, depending on the bottom and the competing anchor.

Because the Northill fluke is relatively small and sharp, it sets easily with limited power, such as with a small outboard. A larger fluke would increase holding capacity but would make setting and penetration of weeds and hard bottoms more difficult—a compromise. As long as the current does not reverse, the cross stock makes the Northill very stable, able to rotate to face the new wind direction without disengaging from the bottom.

I bought my Northill for anchoring over shale, cobbles, and oyster rock, an application where fisherman anchors were known to shine. My 25-pound Delta would often just slide along on its side, but the 12-pound Northill would hook right in, often out-performing anchors as much as three times heavier. Aboard boats from 1,200 to 9,000 pounds, when I am fishing over rock slabs and oyster rock, the Northill is my go-to hooking anchor.

I discovered another benefit of the Northill when I began sailing my F-24 trimaran. The foredeck anchor locker on that boat is too shallow to accommodate any of the new-generation anchors, and



Juxtaposed and viewed from the side, the Northill and Rocna anchors reveal similar geometry, despite being designed some 70 years apart.

In Praise of the Fisherman—Alvah Simon

At the core of sound seamanship, aside from all the navigational, weather, and sailing skills required, lies a deep and thoughtful preparedness for all contingencies. At sea, what can go wrong will. On board our *Roger Henry* this translates into back-ups for our back-ups. I take this so far that I should hang a sign above our equipment locker: "The Department of Redundancy Department."

Regarding ground tackle, this means a minimum of two spare anchors, extra chain, rode, swivels, shackles, and marking floats. When it comes to spare anchors, one can carry replacements of similar design to the primary anchor, or replacements of varied design. This flexibility provides the replacement should the primary hook be lost, as well as the ability to gain holding over varied types of bottom terrain and odd situations, whether or not the primary is lost.

I chose the latter approach because, through a lifetime of sailing around the thornier edges of the world, I have often had to fall back on one of the oldest anchor designs known, the fisherman anchor (aka the admiralty anchor).

I'll be the first to admit that it is a dangerously poor performer in soft mud, only moderate in sand, and too often trips itself in fluky winds and changing tides. But in its defense, the traditional fisherman can be short-scoped, it sets quickly, and stows flat in the bilge or rode locker, saving precious space.

The fisherman's true raison d'être, though, lies in slate bottoms, boulder fields, thick kelp, and rubble where even the best modern anchors may leave you alarmingly awoken to things that go bump in the night.

Roger Henry **sidled up next to the ice, with her fisherman anchor firmly attached.**

As to the aforementioned odd situations, in the steep and deep canals of Chile near Cape Horn, you dare not actually anchor, as the depths close to shore are prohibitively precipitous, and the williwaws rip across exposed waters in excess of 100 knots. *No* anchor will hold! (Read Hal Roth's *After Fifty Thousand Miles* for the gory details.)

But, if you are naturally literate and read the signs nature always provides, you will find that wind, however ferocious, cannot make a 90-degree bend. Thus, you find an arm perpendicular to the prevailing wind and anchor by color. That is, you search the rocky shoreline for fresh green leaves on stunted bushes and trees, which indicate a void in the paint-stripping winds. There you must pass as close to an off-lying rock or shallow ledge as you dare and from the stern throw a fisherman directly on top of it.

You nearly crash into the overhanging trees, snubbing off the fisherman at the last second and run a line around the strongest tree. Then you haul off just slightly on the fisherman's rode. In my experience, while the waters not a hundred yards astern were whipped into a white foam, we could have lit a candle on deck. However, this proximity to hull-crushing rock requires complete confidence that the fisherman will hold you just slightly off.

Another admittedly odd situation is ice. When threatened with thickening ice in Arctic waters, we would seek shelter in a cul-de-sac of an iceberg or large ice pan. As long as our haven remained on the lee side of the drift, the pan would protect us from larger and more threatening bergs. We found the narrow-fluked style of fisherman to be as effective in holding to floating ice pans as a piton. With the fisherman tossed from the bow and an ice axe planted from the stern, we remained safely belayed until the pan turned towards the oncoming icebergs or broke up.

I mention this because there are two style of fisherman—the wide-fluked and the narrow. Of course, the wide fluke will hold better in mud or soft sand, but in these situations, we prefer to use our more efficient modern Rocna or backup CQR. Also, the wider flukes do not slip as easily into tiny cracks on smooth slate bottoms. I only exaggerate slightly when I claim that the fisherman could hold on a basketball court.

There is no denying that modern anchor designs are highly efficient, require no assembly, and stow conveniently on typical bow rollers. But to close with a simple analogy, I still believe it is better to be a belt-and-suspenders type of sailor than the two-belt type.

Alvah Simon and his wife, Diana, have sailed their 36-foot steel cutter Roger Henry *to extreme latitudes and shared their adventures in* Cruising World *and in the gripping and lyrical memoir* North to the Night.

The tried-and-true fisherman anchor, this version with narrow flukes, is what Alvah turns to in specific difficult situations.

Side by side, the Mantus (left) and Northill, both about 12 pounds, reveal similar angles. The Mantus fluke is larger, but the forward part, responsible for most of the holding capacity, is very similar.

while a Danforth or Fortress would fit, they don't suit all bottoms or deal well with wind shifts. My Northill Utility anchor folds flat in seconds by releasing a clip and withdrawing the cross stock, and it fits easily.

The Catch

I have found a couple of downsides to the Northill. First, unless it will be folded for storage, it is awkwardly large. On the other hand, it is not as ungainly to handle on deck as you might suppose and will rest comfortably on the crown, supported by the flukes and cross stock.

Worse, if the wind or tide does a 360-degree rotation, and the transition is not gradual, the rode will likely wrap around the fluke. This scenario has unfolded for me a few times, without causing the anchor to drag, but only because I was very lucky, and the wind was light. Otherwise, once fouled, the anchor will pull out as easily as if you pulled on a tripping line. This fatal flaw generally relegates the Northill to fishing, lunch-hook, and second-anchor status.

Many have suggested that the folding design could be fragile, but that's not been my experience and I've not found user reports of fragility. (I've seen photos of bent shanks, but the accompanying stories describe anchors that were caught between rocks and aggressively horsed on during recovery.) As for durability, I've never seen a rusty one, and that's pretty impressive for a galvanized anchor that's 80 years old. They did something very right.

I have one of practically every anchor on my shelf: Danforth, Delta, Excel, Fortress, Manson, and Mantus. Mushrooms, claws, and grapples. And yet, this 90-year-old design still holds a place on my A roster for difficult bottoms.

Does a Northill make sense in your anchor lineup? If your anchoring is always sand or mud, modern designs are more convenient to handle, hold slightly more, perform slightly better in wind shifts, and most importantly, won't foul during tide reversals. If you anchor in rock or weed, consider a Northill.

Drew Frye's bio can be found on page 23.

Putting a Stop to It

A pawl, aka chain stopper, can take the strain when your windlass won't.

BY JOHN VIGOR

Once, when I was working for a yachting magazine, we received an anguished letter from a cruising sailor. He and his wife had nearly lost their lives anchored off a lee shore aboard their Hans Christian 38.

He wrote that it was blowing about 50 knots and seas were breaking heavily in 50 feet of water. A reef lay dangerously close aft. The couple had decided it was time to weigh anchor and get out to sea.

But when he tried to raise the 45-pound anchor to motor out of there, the all-chain rode just kept flying off the gypsy every time the bow rose on a wave, allowing even more chain to run out before it caught again. The boat was effectively pinned in place by the anchor, and the threatening reef astern kept getting closer.

Eventually, in appalling conditions and soaked by waves sweeping over the bow, the husband managed to sever the chain with bolt cutters and power to safety offshore. The question he asked in his letter was, why? Why did the chain keep slipping? What went wrong?

Well, the first thing that went wrong was allowing himself to be caught on a lee shore with no shelter from the seaward side. He should have known when he dropped the hook that if the wind came up strong from the unprotected side, he would be in trouble. He should have kept a full-time anchor watch and been prepared to hightail it on short notice.

But it was nighttime when the wind shifted and started blowing onshore, and so he procrastinated, putting off any action until the situation became desperate. It was a good thing that they carried the huge bolt cutters needed to cut the chain; freeing the boat from the anchor had become imperative to save the boat and her crew.

Second, the letter writer shouldn't have expected the windlass to take the strain of a heavy boat plunging wildly in rough seas, *and on top of that* to pull her forward to the anchor. Most anchor chains contact only a quarter of the circumference of most windlass gypsies, and windlasses are designed to take little more than the weight of the anchor and chain. Being asked to hold the boat in 50 knots and breaking waves, this chain and windlass behaved exactly as they should have been expected to—poorly and dangerously.

The simplest solution to this problem is a chain pawl, also known as a chain stopper. These are designed to accept the enormous strain that an anchor rode can impart.

I remember Eric Hiscock describing, in one of his splendid books, a rudimentary stopper built into the bow roller of *Wanderer III*. It was no more than a hinged steel flap that bore upon the line where it passed over the roller. Its job was to act as a kind of one-way valve, allowing the rode to come inboard but not fly out again. To allow the line to run out, the stopper just needed to be flipped over.

These days, chain stoppers are manufactured and sold in chandleries. They are available for all rode sizes (all boat sizes) and should be heavily bolted down to a hardened part of the foredeck and oriented in-line with the path of the rode between the bow roller and the windlass.

The additional bonus of a chain stopper is that on a boat of 30 feet or less, it can make a windlass unnecessary. By allowing the rode to go in only one direction, all the sailor has to do is wait for the rode to go slack, pull in the slack, let the stopper take the strain—such as when the bow is pitching—and then pull again when the slack returns. (A chain stopper will also work with a rope anchor rode in a pinch, but repeated use will damage the line.)

With the help of a chain stopper, a reasonably fit person should be able to handle a 35-pound anchor with 5/16-inch chain without the help of a winch, and without crushing any vertebrae.

John Vigor is a retired newspaper columnist and the author of 12 books about small sailboats, including Small Boat to Freedom. *He lives in Bellingham, Washington. johnvigor.com*

Don't Snub the Snubber

When using all-chain rode while anchoring, a proper snubber is a critical link.

BY GINO DEL GUERCIO

Carolyn and I cut the docklines two years ago and we've since learned that our ability to securely anchor our boat is arguably our most important boathandling skill. This idea was reinforced last fall as we were moving down the East Coast headed for the Bahamas. While anchored off Atlantic Highlands, New Jersey, a nor'easter blew in with gusts topping 50 knots.

In the middle of the day, a solid blue-water cruising boat anchored just off the beach broke loose. The owner was aboard and recognized the problem immediately, but despite his best efforts, his boat was on the beach in minutes. Fortunately, it was a soft grounding and there was little damage to the boat. Unfortunately, he washed ashore at the peak of an exceptionally high tide and he could not find anyone to get him off for a reasonable price. Ultimately, he had no choice but to sell his boat to a tug operator and fly home to Germany, his dreams of sailing the world dashed.

We're surprised how often we see boats drag, even when winds are under 30 knots. Most boats seem to have decent ground tackle, but the majority we see anchored have inadequate snubber arrangements, in our opinion. And a good snubber arrangement is critical when using an all-chain rode.

> When all hell breaks loose, a snubber works as a shock absorber.

In the Bahamas recently, we saw boats with snubbers that were a jumbled mess, snubbers that were too short, snubbers secured with line-weakening knots, and snubbers with undersized line. Worst of all, we saw boats with no snubber at all. It seems that many sailors don't really understand the purpose of a snubber. And when it comes to keeping a boat off the rocks, for a boat using all-chain rode, a good snubber is just as important as a good anchor.

When using all-chain rode, a good snubber serves three functions: 1) It isolates a windlass from the rode load; 2) It acts as a sound dampener. Taut chain readily transmits the sounds generated when the chain drags across the bottom; a snubber interrupts that transmission by allowing the chain closest to the bow to go slack; 3) It serves as a shock absorber between the boat and the anchor, isolating the anchor from pitching and surging forces the boat might experience and

Gino's snubber in use. A Dyneema bridle, cleated to either side of the bow, attaches to the three-strand snubber shown here as it descends beneath the water, above.

Gino's complete snubber fits neatly into its own bag and has plenty of nylon three-strand for stretch and Dyneema double-braid for chafe protection, at left.

Gino fabricated a Dyneema soft shackle to attach the snubber to the chain. It's stronger than the three-strand nylon it's attached to, doesn't fall off, and doesn't seem to wear, at bottom left.

helping prevent it from being yanked out of the bottom.

Most of the time, conditions in an anchorage are benign and any old snubber fulfills these first two tasks. This lulls sailors into thinking their snubber suffices. It's only when all hell breaks loose that a snubber needs to work as a shock absorber, and that's when many fail, to their owner's dismay. It doesn't have to be this way.

There are two main considerations for snubbers: the rope used and how that rope is attached to the anchor rode. The rope must be strong enough, long enough, and made of a material with enough elasticity to absorb the shock of wind and wave. For snubber rope, it's generally agreed that nylon is best; it has good strength, UV protection, and elasticity. The breaking strength of the nylon rope must be equal to or greater than that of the anchor rode.

Look up the breaking strength of your chain rode and then choose a diameter of nylon rope that exceeds that breaking strength. For instance, we use 5/16-inch, high-test chain, which has a breaking strength of 11,600 pounds. Our snubber is made from 3/4-inch, three-strand nylon rope, which has a breaking strength of 17,150 pounds.

Of course, the snubber must be rigged so that enough line is in use to provide the necessary elasticity, to satisfy the need for shock absorption—and this is where sailors often go wrong. We regularly see boats anchored using snubbers that are way too short, often only 2 or 3 feet. Consider that 3/4-inch nylon three-strand stretches 12 percent at 20 percent of its breaking strength. If we rigged our snubber at 3 feet long, we could expect only about 8 inches of stretch when we need it most. How much good is 8 inches going to do?

Ideally, 3 or 4 feet of stretch should be available to absorb the bow swing-off in a big gust, or the pitching or surging that results from a big swell or wave entering an anchorage. Unfortunately, in our case, this amount of stretch would require a snubber that is approximately 44 feet. We've used snubbers up to half the length of our boat, but in shallow Bahamian anchorages, for example, we find that the far end of the snubber is often sitting in sand or mud (the dirt and grit can damage the line over time). We've compromised with a snubber of 15 feet, which gives us acceptable—if not ideal—shock absorption.

There are a variety of ways to attach the snubber to your chain: you can tie the snubber to the chain using a rolling hitch or similar knot; you can use a commercial chain hook; or you can use a solution like we employ, a soft shackle of 1/4-inch Dyneema.

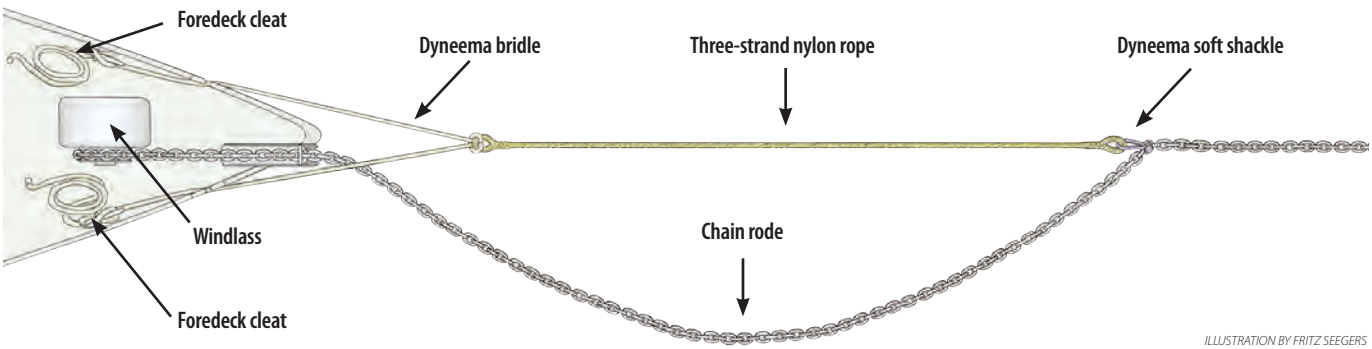


ILLUSTRATION BY FRITZ SEEGERS

In both of these examples, the snubber is too short, not allowing enough stretch in wind gusts and swell. It's the most common mistake Gino sees.

The rolling hitch can work if it's tied properly, but as with any knot in a rope, it becomes a weak point. Commercial chain hooks can work, but they're susceptible to falling off when the chain rode goes slack (although some newer designs eliminate this drawback—but they are expensive).

Our favorite approach, the Dyneema soft shackle, has the advantages of being secure and easy to rig. The ¼-inch Dyneema has a breaking strength of 9,700 pounds, which is 1,900 pounds less than the chain, but anything thicker and I can't get it through the chain links. This introduces a known weakest point, but I reason that this weakest point is still strong enough (and the chain hooks I've seen don't even publish their breaking strengths). To use the soft shackle, it's simply a matter of joining the eye spliced in one end of the ¾-inch nylon snubber to a link in the chain rode.

To attach our length of snubber to the boat, I use a bridle made from a 20-foot length of 12-mm Dyneema sheathed in a length of New England Ropes Endure Braid, for sun and chafe protection. I use a cow hitch at the center of the 20-foot Dyneema to attach it to the eye in the boat end of the snubber, then run the resulting two 10-foot legs of the bridle through chocks at the bow and cleat them off.

Once I've got the snubber attached, I let out enough chain so that the snubber has accepted all of the load, and then let out roughly 6 more feet of chain so that the snubber can stretch several feet without the chain coming taut.

All in all, our system allows us to get a sound sleep in even the windiest and bumpiest of anchorages. Now all we worry about is the other boats anchored upwind of us with poorly constructed snubbers—hopefully they read *Good Old Boat*.

Visit our YouTube channel for more on this tactic.

Gino and Carolyn Del Guercio have lived aboard their Brewer 44, Andiamo, *for the past few years, spending summers in New England and winters in the Bahamas.* Andiamo *is one of very few boats that have twice graced the cover of* Good Old Boat.

Ringing off the Hook

No windlass? No problem with this nifty, time-tested, anchor ring hack.

BY DAMON GANNON

In high school, I worked as a deckhand on a charter fishing boat. Bottom fishing for cod in the Gulf of Maine with rod and reel, we routinely anchored 15 to 20 miles offshore in depths up to 200 feet.

Keeping the boat in place took a lot of scope. There was no windlass aboard; when it was time to weigh anchor, the captain would send me and another teenaged crew forward. Fortunately, my crewmate and I spent less time straining and grunting and more time managing a simple anchor retrieval ring that effected all the heavy lifting.

It's one of many clever tricks I learned on that job, and it can come in handy when you don't have a windlass.

All you need is an anchor ring (also known as an anchor lift ring, anchor retrieval ring, or anchor puller ring), attached with a short piece of line to a buoy or fender. The ring is simply a stout galvanized or stainless steel ring that can range from 4 to 8 inches in diameter, depending on anchor size. Some rings are split and can be attached to the rode when it's time to weigh anchor; others, like the one I use, is a solid ring. The buoy or fender needs enough buoyancy to support the weight of the anchor plus the chain—a 14-inch-diameter buoy, for example, will support 60 pounds.

Here's how it works: When I deploy the anchor, I have already set it up so that the rode will run through the anchor ring. As I deploy (and while anchored), the ring and buoy stay onboard, secured on deck. I set the anchor normally, the only difference being that the rode is traveling through the anchor ring.

When it's time to weigh anchor, I slide the ring and buoy down the rode into the water. I make the rode fast to a cleat, snubber, or chain stopper. Then, I motor ahead at an angle of about 45 degrees away from the rode (this keeps the rode clear of the keel, prop, and rudder). At this heading, the boat isn't pulling on the rode. The rode is simply falling away to the side and gaining slack, and the buoy is also falling to the side as we motor away from it.

Once the boat passes the spot where the anchor is set, I start to turn in a wide arc around the anchor, the radius of which is approximately equal to the length of the rode. As I do this, the buoy's drag resistance causes it to stay put while the boat pulls the rode through the ring. And because the buoy's buoyancy prevents it from being pulled under, the rode is lifted and scope decreases. By the time the pull on the anchor becomes nearly vertical, that pull is in about the opposite direction at which the anchor is set, and the anchor pops free. (By now, the boat is a fair distance from the buoy as I continue traveling in my arc.)

Once the anchor is free, the rode continues running through the ring as the buoyancy of the buoy lifts the anchor off the bottom (this is why you need a buoy that can support the weight of the anchor and chain).

When the anchor meets the ring, the shank slides through it, but the flukes/spade get caught. At this point, the buoy does a telltale hop and the anchor sits cradled in the ring, the weight of the chain preventing the anchor from tipping forward and falling back out. Now, the boat can slow down and turn toward the buoy, allowing the crew

Attached to a properly sized buoy, the anchor ring allows the rode to slide through during anchor retrieval.

to retrieve the slack rode easily by hand. The full weight of the anchor and chain is off the seafloor and at or near the surface, hanging under the buoy.

Anchor rings work best with a combination rope/chain rode in which the weight of the chain exceeds that of the anchor. Anchor rings also require plenty of space in the anchorage to maneuver. This method works particularly well with Fortress- and Danforth-type anchors but will work with most anchors as long as the shank fits through the ring, the chain weighs more than the anchor, and the buoy has a rated buoyancy that exceeds the combined weight of the anchor and chain.

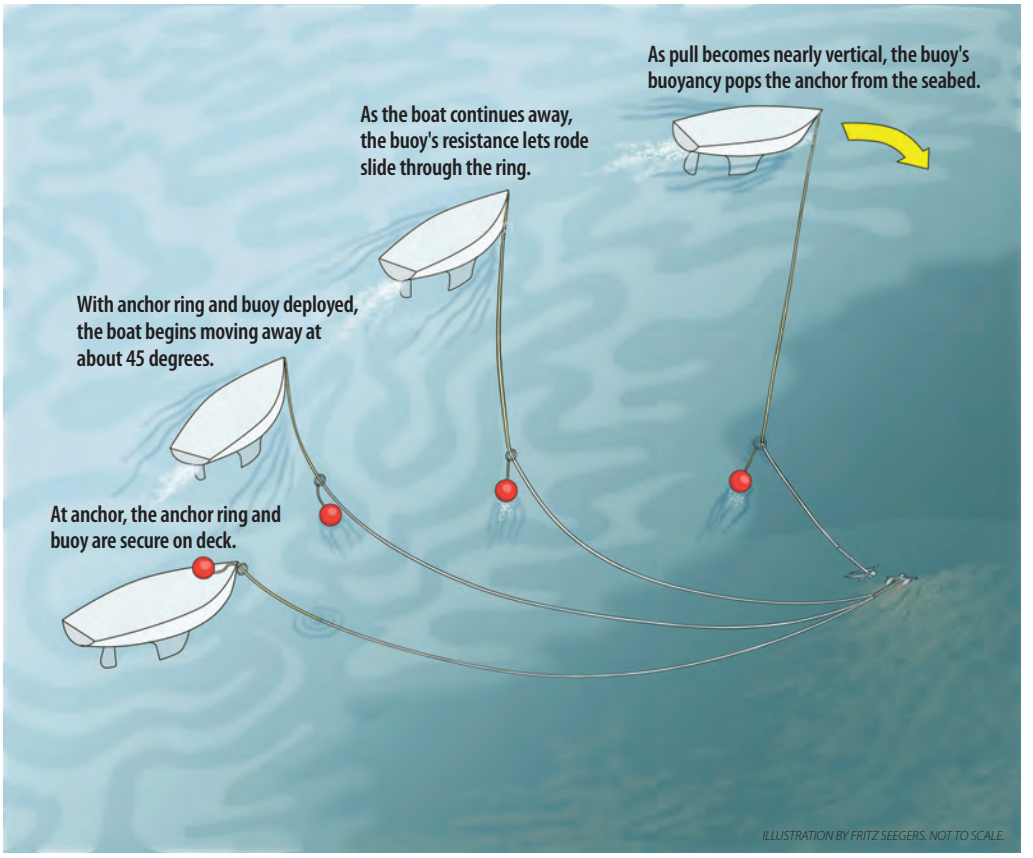
On that charter fishing boat, we performed this evolution up to four times a day with a 45-pound Danforth anchor, 40 feet of chain, and total rode length of up to 1,000 feet. The ring was 6 inches in diameter, and we used a 27-inch ball-shaped buoy.

On *Fulmar*, the boat I sail today, our primary anchor is a 44-pound spade with 75 feet of chain. Because of the width of the spade's shank, we use an 8-inch-diameter stainless steel ring with two or three large fenders.

Welded stainless steel or galvanized rings can be purchased online and at chandleries that cater to commercial fisheries. A large stainless ring usually costs less than $20, galvanized is cheaper. You can purchase rings specifically marketed for anchor retrieval, but most of the ones I have seen appear too flimsy for anchors over 15 pounds.

We only retrieve the anchor this way sometimes, just to make sure we could do it if our windlass fails. Using an anchor ring isn't as quick or easy as using a windlass, but it's much easier than muscling the hook and chain off the bottom by hand.

Damon Gannon is a marine biologist who has conducted research on marine mammals, fishes, and seabirds from the Gulf of Mexico to the Bay of Fundy. He is assistant director of the University of Georgia Marine Institute on Sapelo Island. He and his wife, Janet, sail Fulmar, *their Pacific Seacraft 37, out of Brunswick, Georgia.*



Worth the Weight?

The catenary effect justifies carrying heavy chain rode. Right?

BY MICHAEL ROBERTSON

Every sailor knows that in polite company, it is best not to discuss politics, religion, or anchors. But rode is fair game. After all, you will be hard pressed to find a sailor who doesn't advocate attaching a length of chain to the anchor. Right? Are we all in agreement?

But why?

I think most folks will explain that chain adds weight to the rode, and that this weight near the anchor serves to keep the pull on the shank low. As Beth Leonard wrote in *The Voyager's Handbook*, "The weight of the chain keeps the pull on the anchor parallel to the bottom, making it more difficult for the forces of wind and tide to trip the anchor." From this, the progression is logical: the more weight, the better.

What she's referring to is the catenary effect, the sag that results when gravity exerts its force on a length of chain supported only at its ends. The heavier the chain, the greater the catenary effect. So should you carry the heaviest chain you, your boat, and your windlass can reasonably manage? Should you use a kellet to add weight and induce further catenary effect? Are the benefits of the catenary effect worthwhile?

After more than 30 years and 100,000 miles of cruising, New Zealander Peter Smith says no. Several years ago, Smith (who co-designed the Rocna anchor with his son, Craig) published a compelling argument that the catenary effect disappears when most needed and should therefore be *ignored* as a consideration when selecting anchor rode.

He doesn't dispute the value of keeping the pull on an anchor shank as close to parallel with the seabed as possible—that's how anchors are designed. But he argues that the catenary effect is not the best means to achieve

Chain, Chain, Chain...—MR

Years ago, when I first started investigating the windlass gypsy problems I had aboard our 1978 Fuji 40, I didn't even know what it meant that my chain was stamped "G3"—and none of my dockmates at the time knew more than I did. I've since learned about chain, including what the G3 stamp means...and more. The following specs compare 10mm (⅜-inch) chain.

Common Name*	Grade	Peerless-Acco link stamp designation**	Working Load Limit (WLL)***	Metallurgy	Notes
BBB (Triple-B)	30	3B	2,650 lbs	Low Carbon Steel	Regardless of the chain size (measured in link diameter), 3B chain features a shorter link length than standard. This was the chain specified by most windlass manufacturers until recent years. Today, Grade 30 chain is no longer widely recommended for anchoring.
Proof Coil	30	G3	2,650 lbs	Low Carbon Steel	Today, Grade 30 chain is no longer widely recommended for anchoring—though it is still very common.
High-Test	43	G4	5,400 lbs	High Carbon Steel	Often confused with Hi-Tensile (see below). Sailors today will often step up to Grade 43 chain from Grade 30 and then step down a size to save weight, as this chain offers twice the strength for the same size.
Transport	70	G7	6,600 lbs	Hi-Tensile (Heat- treated High Carbon Steel)	Grade 70 chain is stronger still (for a given weight) and gaining popularity. Because it is heat treated, it is not recommended that it ever be regalvanized, as the hot-dip galvanizing process can weaken heat-treated alloys if not done correctly.

*These common names are specific to North America. Internationally, the common names and grades have different nomenclature, but equivalency charts can be found online.

**These link stamps are specific to manufacturer, but generally similar. For example, one manufacturer may stamp every link, another one link per foot. One may use "G3" while another uses "G30."

***Manufacturers of quality chain test batches and offer a Proof Test certificate as evidence that a batch meets specifications.

this, only scope is. Citing data and mathematical models from Frenchman Alain Fraysse and Rocna Anchors of Canada, Smith says that in moderate conditions (wind speed of about 20 knots) in which the pull on the rode is not great enough to eliminate catenary (not enough force to pull the rode taut), a set anchor is not at risk of dragging.

And when conditions (wind speed of about 50 knots) exacerbate forces to the point where the rode is pulled taut and catenary is nearly gone, the angle of pull on the set anchor is primarily determined by scope; the weight of the rode is no longer a factor in the anchor's ability to remain set.

"While catenary disappears, geometry cannot be argued with; for a constant depth, a longer rode means a lower maximum possible angle of pull on the anchor," writes Smith. According to his argument, the catenary effect is *both effective and superfluous up to the point it disappears*.

Two adherents to this approach are lifelong cruisers and authors Steve and Linda Dashew. At the bow of the couple's 83-foot, 50-ton *Wind Horse* is ⅜-inch chain attached to a 250-pound anchor. That's the same weight/diameter chain we used aboard our 40-foot, 12-ton Fuji 40—and our anchor was just over one-quarter the size! (Of course, the Dashews use G7 chain, which has a much higher working load limit than our G3 chain—see sidebar).

Acknowledging that heavy chain rode is useless for increasing the holding power of a set anchor when the catenary effect is nearly eliminated, I asked Peter and Craig Smith about the role of the catenary effect in setting an anchor. Wouldn't eliminating weight close to the shank make it harder to set an anchor in the first place?

They responded, citing anchor tests: "A modern anchor of adequate size will quickly offer resistance force as it begins to set. In testing, we routinely see the test line chain leader being mostly straightened before the anchor is even half set. The amount of force required to fully set *an anchor* is well over the forces catenary contributes."

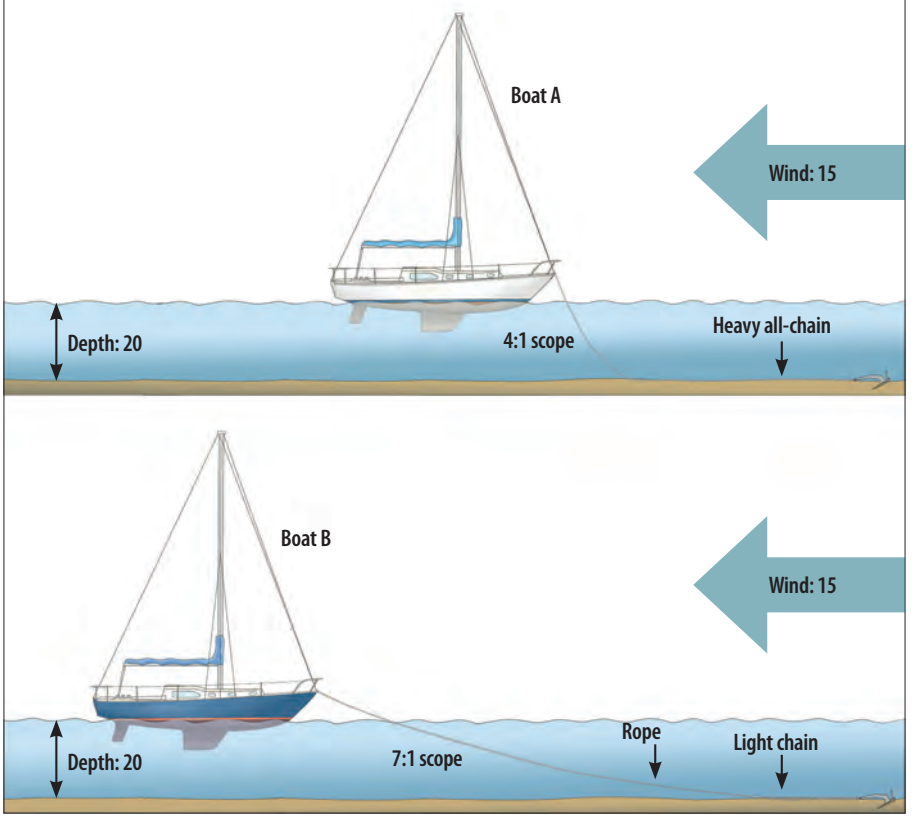
Some may point out the beneficial shock absorbing characteristic the catenary effect offers—especially when induced with a heavy all-chain rode. But the same argument applies: if the catenary effect that produces this benefit disappears with the onset of heavier conditions, a proper snubber should be rigged anyway, negating the value of the catenary effect.

Even discounting any benefits of the catenary effect, others will claim that heavy chain lying on the seabed produces friction that can serve to limit anchor re-sets in conditions where moderate winds are expected to shift. This may be a benefit of a rode made up of only heavy chain, but absent other reasons for otherwise unnecessary weight, this use case seems too limited to justify the approach.

So, are there any conditions for which it makes sense to carry heavier rode to

Are there conditions for which it makes sense to carry heavier rode to induce a catenary effect?

Scenario 1: Boat A is anchored in 20 feet with a heavy, all-chain rode at a 4:1 scope, while Boat B is using a lightweight rode at a scope of 7:1. In moderate conditions where the wind speed is not enough to remove the catenary effect, neither anchor is in danger of dragging.



ILLUSTRATIONS BY FRITZ SEEGERS. NOT TO SCALE.

induce a catenary effect? What about the Pacific Northwest, where anchorages often offer challenges that include deep water, fast-changing weather, and strong tidal currents?

It turns out that deep water *is* a special case.

The models Peter Smith uses in his technical article are based on depths (from the seabed to the roller) of about 25 feet. He readily concedes that in the case of an all-chain rode—and only in the case of an all-chain rode—the role of the catenary effect in deeper anchorages is greater (and the role in shallower depths is lesser).

This is because while all of the other forces remain constant, as the depth increases, the weight of the vertical column of chain increases and can be significantly greater when anchored in 85 feet of water, for example. To understand this, imagine you and your friend each holding the ends of a length of chain. If that length of chain is only 6 feet, it will be easy for you both to pull it straight. If that length of chain is 85 feet...you get the idea.

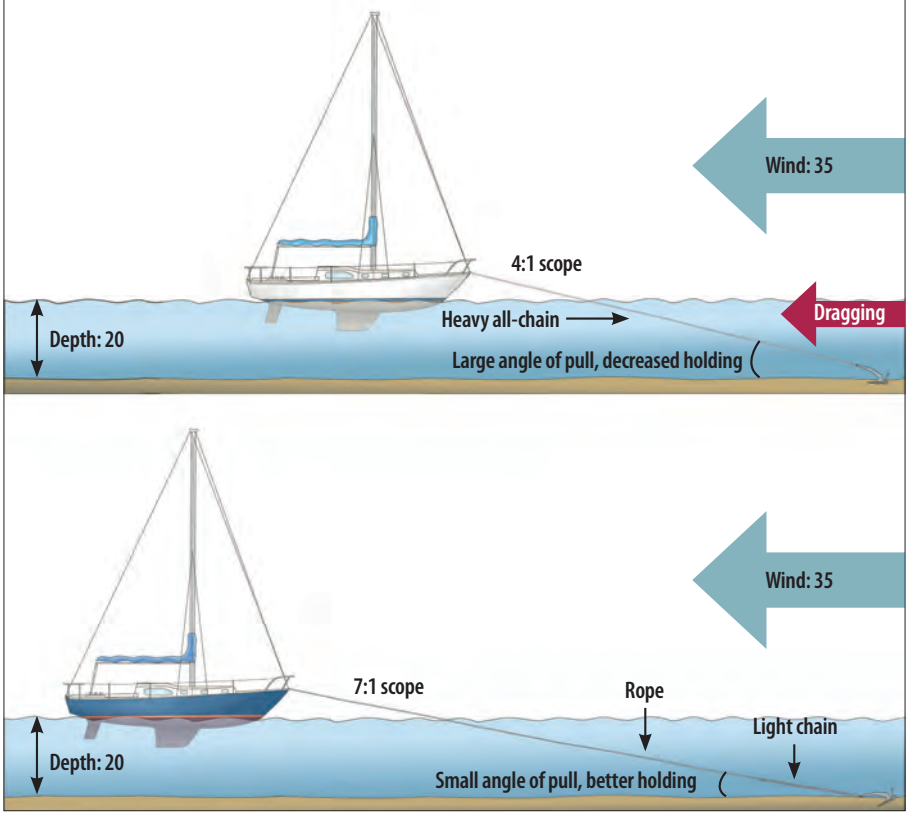
Accordingly, sailors with enough all-chain rode to deploy adequate scope in 100 feet of water may never see the wind speeds necessary to reduce the catenary effect to the point where it doesn't play a role. In this case, heavier chain than needed—in terms of working load—may serve you well. Perhaps that is what John Rousmaniere meant when he wrote in 1983 about anchoring, in the first edition of *The Annapolis Book of Seamanship*, "While it won't stretch, a chain rode is so heavy that it will take a hurricane to straighten it out."

And of course, sailors who have long anchored successfully on ground tackle that is bought and paid for (including the gypsy), may not have much incentive to make an expensive, wholesale change. In fact, Peter Smith outfitted his *Kiwi Roa* back in the 1990s with both a windlass and a 300-foot length of heavy chain at each end (bow and stern)—and still used that setup decades later. Despite being a proponent for a contrary approach, cost kept him from changing.

Just as no two cruising boats are alike and no two anchorages are alike, no two ground tackle approaches are the same. Most cruisers swear by the anchor and approach that has worked for them and that allows them to sleep at night. But for those unsettled on a ground tackle solution or approaching the problem anew, it may make sense to reconsider the anchor rode, to rethink using heavy chain for the sake of inducing the catenary effect. And if you decide you can shed some pounds in the form of lighter or less chain, you may reduce pitching motion and improve sailing performance and fuel economy. Anchors aweigh!

Michael Robertson is the editor of Good Old Boat.

Scenario 2: Here, the wind speed is strong enough to pull both anchor rodes taut, removing the catenary effect completely. Because the force required to drag a properly set anchor is much higher than the force required to pull even unnecessarily heavy, all-chain rode taut (in shallow water), catenary effect disappears when it is needed most. A longer rode (increased scope) and the corresponding smaller angle of pull will be the biggest determinant of the anchor's holding power in these conditions.



Hey There *Delilah*

Love ruins everything, until the right one comes along.

BY DAVID BLAKE FISCHER

I grew up with a sailboat because I have a big brother. Steve is five years older than me with a can-do attitude and an engineering mind to match. He built the forts and fixed the bikes; I played with them. So when family friends gave big bro an ailing mid-century catamaran in the early '90s, I was the lucky sailor.

Our summer place was on Bois Blanc Island, a sparsely populated, dusty piece of paradise on the eastern wing of Michigan's Straits of Mackinac. To call it a cabin is a stretch; it was an old mobile home our parents brought over on a barge in the mid-'70s. But Lake Huron was a stone's throw. The end of our gravel driveway opened on an expanse so big it looked like an ocean.

That first summer with the boat, my brother patched the sails and rigged some lines. From that day on, I was hooked and spent every minute I could on the water, tacking along the island's cedar- and birch-lined coast with a sense of wonder only kids enjoy.

I was about 10 when a neighbor let me use his Snark, an 11-foot dinghy that would flip and turtle if you so much as looked at it. I loved that little boat. Then, a couple of years later for 50 bucks I got a Scorpion, a 14-foot Sunfish knockoff with a gash in the hull that we "repaired" each year with kitchen caulk until the summer she sank. RIP. I loved that boat too.

But there's one sailboat that really had my heart. *Blue Moon* was a 21-foot sloop with salty lines that spent summers on a mooring and provided a picturesque backdrop to our secluded little bay. The boat belonged to Jerry, whose son, Ben, was my best bud. Jerry had a beard, smoked a corncob pipe, and listened to Creedence. Over the years, I watched in awe as he waded waist-deep in the water, launched his dinghy, then shuttled out in the waves to *Blue Moon* before disappearing into the horizon. I loved all of this. Most of all, I loved the way Jerry loved his boat.

Long past when he thought he'd own a boat again, David found *Delilah*.

All photos courtesy of Ryan Steven Green.

But of course, I was just a kid, then. And, anyway, it was all a long time ago.

When I move to California, these memories are behind me. I come to LA for grad school, but stay, get married, and begin to raise kids. And while Emily and I love the Pacific Coast, I all but let go of the possibility that I'll ever be *that* kind of sailor—neither the kid I once was nor the adult I thought I would become.

Then, one day, I suffer an Achilles tear that seems to confirm my emerging place in middle age. The week of my surgery, a global pandemic upends the world, so for the next few days I lie in bed and make a sport out of balancing an elevated leg on a teetering stack of books, pillows, and kids' toys. I'm perfectly unhappy until I see a YouTube video of Sam Holmes single-handing a 23-foot sailboat from LA to Hawaii.

I watch and rewatch that video; I show it to Emily; I forward it to friends. A person in my state should really get a therapist, but instead I begin to seriously consider getting a sailboat. "Life is short," I tell Emily. "Whatever it is we thought our lives would be about, we need to start doing that stuff now."

I have a flair for the dramatic. Emily's learned not

***Delilah*'s previous owner had finished a major refit, including deck and topsides repainting.**

I'm awash with worry about the boat I haven't found but may at some point buy.

to take my big ideas seriously until I take them seriously myself. But, this time I'm for real. "I think it makes a ton of sense," she tells me. "You've been talking about it for years. Let's get you a sailboat!"

If all I had was a dinghy, that would be enough. Then I start looking at used sailboats online. Here's a 40-footer on eBay for five grand. Here's a free, double-masted schooner. I forgive myself for going down these rabbit holes. I tell Emily that from now on, I'll focus on practical, local boats in Southern California...and the West Coast...and, OK, maybe British Columbia.

Over the spring, I enjoy long phone calls with friendly sellers across the state. I spend countless hours on blogs and YouTube. And, late at night, when the family's asleep, I form a habit of sneaking back into the living room to pore over a web browser where no fewer than 100 tabs are open to all sorts of sailboats. This one's great but needs sails; this one needs rigging; and what about the chainplates? Wing keel, fin keel, or full keel? And what if we decide to live aboard, grow our hair down to our butts, homeschool the kids, and travel the world as a floating group of family singers?

"What?" Emily says.

"Nothing," I say.

The search for a sailboat expands my knowledge, but it also increases my awareness of all the potential pitfalls of owning a boat: the costs, the upkeep, the critical questions I should—but definitely won't—ask when I finally find the right boat. As my anxiety grows, it gnaws away at my enjoyment. And so, by early summer, I'm awash with worry about the boat I haven't found but may at some point buy. And while I really need some emotional support, I also recognize that this whole sailboat scene is way too bougie to earn me any real sympathy.

But, I do find some solace. I'm on my third phone call with a guy up north who's got a Catalina Capri 22, 30 years' experience, and a voice like a children's author that's calming my boat-buying jitters. "I've been there," he tells me. "In my experience, you can spend forever looking for the perfect boat. But, at a certain point, you get a sailboat and go sailing. The rest you work out along the way."

Well said.

The rest of the summer I skip back and forth across Southern California to see boats. Masked up, kids in tow, I check out a Catalina 22, a Pearson 28, a Cal/Hunt 24, and a gorgeous Nonsuch 26 that really grabs my eye. I learn a lot from these experiences, both about sailboats and about myself. "We're not going to get one, are we?" my 6-year-old blurts as we step off a 25-footer in San Diego. "All you do is look and look, and you *never* buy!"

Kids.

Back at the car I kneel down and hug my son. I tell him I swear I have no idea what he's talking about.

It's pretty simple. Some sailboats speak to me, others don't. In my head, I know all the logical reasons for getting a newer boat; but love isn't logical; love ruins everything. And by October, I've come to grips with the fact that I have a type. I fall hard for the vintage designs of Rhodes and Alberg with their teak, narrow beams, and low freeboards. The attitude and aesthetic speak to me. And so, when Emily echoes the same, I know we're onto something.

At Oxnard's Channel Islands Harbor, there are two

Delilah **heads for home at sunset with David tall at the tiller.**

Cape Dory 28s for sale. One is too expensive and the other is riddled with leaky hatches, bad seacocks, old wiring, and some corroding backing plates that genuinely scare me. After seeing the boats, Emily and I head to the beach to debrief. We stand ankle deep in the water and watch the kids play as the sun disappears behind the Channel Islands. We agree that there's a lot to love about the Cape Dorys, though taking on a fixer-upper is less than ideal. Still, for the first time in our six-month search for a sailboat, we both know exactly what we want.

My target's specific now, so I expand my online search beyond California to include Arizona and Texas. It's a bit of a reach, but what the hell, I include the Pacific Northwest as well. Then, one morning in late October, I stumble upon a freshly published Craigslist ad from Washington state: *1972 Cape Dory 25—with trailer—refit and upgraded.*

The listing is detailed and meticulous. The owner has just completed an extensive, 3.5-year refit that's given *Delilah* new sails, reworked deck coring, a strip and renewal of the gelcoat, new standing and running rigging, new wiring, fresh paint, and more. As an early Cape Dory 25, *Delilah* is a George Stadel design, not an Alberg, but she's every bit as pretty.

I watch as Emily reads the ad for the first time. Her smile says it all. "So beautiful," she says, swiping through the photos. "And it's hunter green! David, email him right now."

It's a fact: 85 percent of people pursuing out-of-state sailboats in the time of COVID are either crazy-in-love or stupid. By now I'm both, so I have to work to win over the seller, who initially tells me he hopes to sell to someone local who can easily see the boat. And so, after exercising some soft skills over email I find myself on the phone with Wade, the seller, swapping stories, reviewing images of the refit, and later sending along a deposit that'll effectively hold the boat.

One week later, my unlikely plan is in motion. Friday at 4 a.m., a buddy and I load up a rented pickup and leave California on a 19-hour drive to Wenatchee, Washington. We drive 1,200 miles and make it to Wenatchee by midnight. In a small motel, we do the COVID shuffle, disinfecting doorknobs, wiping surfaces, and playing paper-rock-scissor where the loser has to touch the TV remote. After a quick toast, we zonk out.

We're up early, before the vacuums hit the hallways. The motel is just minutes from the boat, so I've barely had my coffee when we pull into Wade's driveway where *Delilah* is resting on her trailer. Even covered in ice, the boat looks amazing. Wade gives me a walkaround and details the many ways he's prepared her for the long drive back to California. I also get a peek at the garage-workspace of a talented guy who can do woodwork, weld, fiberglass, and restore a vintage boat. A guy who's spent hundreds of hours sanding, so I can go sailing.

I wish we could stay longer, but it's a pandemic. So, when the paperwork is done, we're on our way, towing *Delilah* down the driveway and waving goodbye. I feel a rush of emotion as we go. Maybe it's because of what *Delilah* has meant to Wade, or maybe it's because of what she's already beginning to mean to me.

Anyway, I'm two miles down the road, wiping tears from my eyes, when the phone rings: "Did you mean to overpay?" Wade asks, laughing. "There's too much money in this envelope." I am totally unqualified for financial matters; it's one of my best qualities.

When we circle back, Wade's standing in the driveway with the extra cash in an envelope. "Take this too," he says. He hands me a small tote bag he recently sewed from Dacron left over from one of *Delilah*'s old sails. "I'm glad the boat's going to someone who appreciates her," he says. "Have fun."

Twenty-plus hours of mountain passes, rain, snow, and way too many A.M. radio stations dedicated to political conspiracy theories later, we arrive back in LA. The family comes running out when we pull into the driveway. The kids crawl around the boat, opening compartments and poking heads out of the hatch. That sense of joy from my childhood is coming full circle now, and I sleep well that night.

In the morning, I take *Delilah* down to Marina Del Rey where a friend and I rig a sailboat for the first time. Astonishingly, we successfully step the mast. Then, when all's good and ready, I back *Delilah* down the launch ramp and watch as she floats effortlessly off her trailer and onto the water.

The outboard is empty but will run on fumes to get us to the slip. I stand tall and hold the tiller, looking over *Delilah*'s bow and listening to the sound of water as it laps at the hull. I know then that I love this little boat too. And, tomorrow, when I raise her main, unfurl her jib, and fall off the warm Pacific wind I'll swear I'm that kid again.

David Blake Fischer lives in Pasadena, California. His work has been published in McSweeney's, theMOTH, *and* Buzzfeed, *among others. Follow his sailing adventures on Instagram at @sailingdelilah*

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(Un)welcome Party

A mission to meet a circumnavigating friend takes an unexpected turn.

BY BERT VERMEER

Bill Norrie had been singlehanding *Pixie*, his Bristol Channel Cutter 28, for nearly 90 days, sailing from Christchurch, New Zealand, to Victoria, British Columbia. This passage was the home stretch of a yearlong circumnavigation.

And what a last leg. After suffering a severe knockdown, Bill had been using a transom-mounted generator to charge his batteries since saltwater had seized the diesel's starter. Although *Pixie* was well equipped with electronics, including an AIS transceiver, Bill was approaching British Columbia with low batteries and limited communications. Friends and family ashore had only a satellite tracking device to follow *Pixie*'s progress.

Bill would also have to transit the Juan de Fuca Strait, a 60-mile-long body of water separating Washington from Vancouver Island that runs eastward towards Victoria from the Pacific Ocean. At 15 miles wide, the strait is notorious for strong westerly winds and extended calms. Strong currents are common, with the eastern end experiencing up to 6 knots during large tides.

I'd known Bill for several years and had helped him prep *Pixie* for departure, and I thought he would appreciate an escort into his home port of the Royal Victoria Yacht Club, Cadboro Bay, near Victoria.

> **My immediate fear was of a collision—with *Sauterelle*, or *Pixie*, or a ship.**

I also thought that with his engine kaput, a tow might be useful when he transited Juan de Fuca Strait's busy commercial traffic lanes.

So it was that on one pretty morning, I eagerly departed my home port of Sidney aboard *Natasha*, our Islander Bahama 30, and headed for Sooke Harbour to await *Pixie*, due to sail by sometime the following day. There, I met John and Marg Green of *Sauterelle*, a Farrier 31 trimaran. Longtime friends of Bill, they had the same idea of being *Pixie's* welcome party.

Due to calm winds but roiled seas, it took *Pixie* three days to finally pass by Sooke Harbour. Having calculated his timing, the Greens and I left the harbor together, and after only a few hours of patrolling in 15-knot westerlies on a sunny afternoon, we saw *Pixie* appear out of a distant fog bank flying poled-out headsails. Bill had no idea that anyone had come this far into the strait to greet him, and as he neared, a broad smile came into view.

By late afternoon, our three boats were sailing east towards Race Rocks, the turning point towards the Victoria waterfront. A cool breeze blew over our sterns and the afternoon sun kept us warm. When the crimson sunset faded, darkness crept over the eastern horizon.

Race Rocks, a small island surrounded by dangerous reefs and marked by an historic lighthouse, is about a half-mile off the Vancouver Island shore. Victoria lies 10 miles beyond. The area is notorious; here, Juan de Fuca Strait broadens into a more open body of water. Race Passage, a narrow channel between the Race Rocks lighthouse and Vancouver Island shore, is known for strong, wildly

ILLUSTRATIONS BY FRITZ SEEGERS.

turbulent tidal currents. And when Race Passage is rocking, the strait outside of Race Rocks is never much calmer.

As we approached in the dark, Race Passage turned, as expected, from a favorable afternoon flood to a 4-knot ebb. We decided to escort Bill outside of Race Rocks, seeking more sea room and hopefully less opposing current. There was no talk of retiring to Sooke Harbour; the clear skies and easing winds were most benign. Thick fog was forecast to form after midnight, but we presumed that we would be at our destination well before then.

John and I discussed towing options should the wind evaporate completely. All three skippers had many years of sailing experience, both coastal and offshore, and the conditions seemed perfect for getting home.

I had a chart plotter and AIS transceiver aboard *Natasha*. Aboard *Sauterelle*, John and Marg were using a chart plotter with an AIS receiver on a cell phone. Aboard *Pixie,* Bill had insufficient battery power to keep any instruments powered up; he hoped he could keep his navigation lights operating—this he communicated to us in a weak, final VHF transmission. Neither *Natasha* nor *Sauterelle* was equipped with radar. *Pixie* had radar, but no power to use it.

At about 8 p.m., the orange glow of a full moon rose above the eastern horizon, a canopy of stars shining overhead. Contrary to the forecast, westerly winds had picked up and were soon steady at 20 knots. Though welcome, the wind was blowing against a 3-knot tidal current, and the results weren't pretty.

I was running *Natasha* hard on a very broad reach, sailing at over 7 knots through the dark, whitecapped water. Yet even when peaking at 9 knots while surfing down some of the larger waves, *Natasha* was covering only 3 to 4 knots over the bottom. My neighbors also surged through the short, steep seas in the darkness, running lights clearly visible.

Ten miles to port, the bright glow of Victoria's city lights beckoned. We were all making a compass course that Bill had relayed just before his VHF died, one that would have us crossing inbound and outbound deep-sea traffic lanes, where vessels are controlled by the Canadian Coast Guard Marine Traffic Services. Despite a nagging concern about encountering freighter traffic, I believed that our small cluster of boats, clearly identifiable because of *Natasha*'s AIS transmitter, wouldn't be at risk in this large body of water.

John and I were unable to communicate with Bill; we were simply following him. And he was aimed for home. *Sauterelle* was just ahead of me to starboard, *Pixie* further ahead and to starboard of *Sauterelle*. Three little boats in echelon.

And then the fog rolled in.

When I saw the lights of Race Rocks disappear astern, I warned John by VHF. I could see Bill in the moonlight on deck removing his foresail poles, presumably to allow more flexibility in maneuvering under sail. Then fog rolled over *Natasha* and everything disappeared, except for the reflected glow of my own nav lights. The air temperature plummeted, and condensation covered my glasses and the chart plotter.

Natasha's sails began slamming in gusts that rose well over 20 knots, and quartering seas began throwing her about. That's when the outhaul on the mainsail snapped, and *Natasha*'s loose-footed main lost all shape against the mast. The boat heeled ponderously under the pressure of the gusts.

I released the mainsheet and turned to port on a broad reach. I was hanging on to the wheel, trying to maintain a compass course as *Natasha* rocketed down ever-steepening seas. The VHF crackled and I heard John calling from *Sauterelle* to say that he had lost sight of *Pixie*. He added that they were in trouble too, that when dousing the foresail, the halyard had let go and the sail was under the boat. With little forward motion, he was trying to get it back aboard.

My immediate fear was of a collision—with *Sauterelle*, or *Pixie*, or a ship. I realized I was experiencing one of the few times in my sailing life when I genuinely feared for my safety. I hauled the wheel further to port onto a beam reach, away from where I thought the other two boats should be, and the mainsail continued to slam against the mast.

From experience sailing these waters, I knew that fog banks typically streamed by in Juan de Fuca Strait and rarely turned the corner towards Victoria. I maintained my course to port, towards the shores near the Victoria waterfront, seeking some protection from the strong wind and high seas and hoping to improve visibility if I could evade the fog bank. I strained to read the bright chart plotter screen through glasses covered in salt spray blowing past the cockpit from the bow. I couldn't slow *Natasha* down; I needed boat speed to escape the current pushing me back towards the reefs of Race Rocks.

After a very tense hour racing through fog as fast as *Natasha* could go, handicapped by her mainsail, I suddenly sailed into clear night air. The entire Victoria waterfront, still over 5 miles away, twinkled. I called *Sauterelle* and told John I

was in the clear. John answered, letting me know that he had fought the sail back on board and was sailing in fog, turning in my direction. Neither of us had seen *Pixie*.

Bill was a seasoned ocean sailor and I believed he would take prudent action, likely steering *Pixie* on the last known compass heading towards the original destination, Cadboro Bay. However, I knew *Pixie* had no navigational aids and, potentially, no navigation lights. Bill would be crossing the traffic lanes blind, depending on deep-sea vessels to locate and avoid him using radar. The AIS on my chart plotter showed traffic in both directions.

As conditions in the clear air moderated, I repaired the outhaul and got the mainsail back under control. Then I hove to and contacted Victoria Marine Traffic Services on VHF to learn whether they could identify *Pixie* on radar. They could!

The operator gave me a position about 5 miles to starboard and said that *Pixie* appeared to be nearly stationary. The operator reported multiple deep-sea vessels nearby that would be using the restricted sea lanes and expressed concern about *Pixie*'s safety. He asked me to contact the Rescue Coordination Center (RCC) by cell phone.

I briefed the operator at the RCC on the situation. When I said that I was headed to *Pixie*'s location to assist, perhaps to tow *Pixie* to safety, I was advised—*firmly*—to turn around and continue to the original destination of Cadboro Bay, not to risk becoming a secondary problem.

Feeling somewhat slighted, I recognized the situation from an outside perspective and started sailing towards Cadboro Bay. The RCC was sending the rescue vessel *Cape Calvert* to the scene and they let me know that *Pixie* was now in the center of the inbound traffic lane. I relayed the information to *Sauterelle* and we agreed to meet in Cadboro Bay.

It seemed like hardly any time had passed when *Cape Calvert* roared by *Natasha*, steaming into the fog bank. When I later heard from the RCC that *Pixie* would be towed to the Canada Customs dock in Victoria Harbour, John and I altered our courses to Victoria. It was just after midnight before *Natasha* and *Sauterelle* were tied up safely in Victoria's Inner Harbour.

In the clear dawn of the following morning, John, Marg, and I reunited with Bill at the Customs dock. While enjoying his first coffee in a month, Bill regaled us with his tale of the night before, of reducing sail and retiring below decks, only to be startled by the deafening blast of a ship's horn and dazzled with white lights as the *Cape Calvert* loomed over his tiny vessel in the fog. At Bill's invitation, a *Cape Calvert* crew member climbed aboard and helped secure a towline for the 10-mile tow to Victoria Harbour, arriving safely before 2 a.m.

Canada Customs officials arrived at the dock and welcomed Bill back into the country—no need for a 14-day COVID-19 isolation period! With *Sauterelle* as escort, I was soon towing *Pixie* in flat water around the Victoria waterfront on our way to the Royal Victoria Yacht Club. Arriving under tow may have been a bit of an anticlimax following a year-long solo circumnavigation, but Bill couldn't have been more pleased.

Bert Vermeer and his wife, Carey, 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.*

Bill Norrie and *Pixie* depart the Royal Victoria Yacht Club in late 2019 to start a yearlong solo circumnavigation.

The Takeaway—BV

What could I have done differently to avoid putting ourselves and rescue services at risk? Having sailed these waters before, I should have been better prepared. This was not a planned event, and perhaps it should have been. I should have developed a worst-case or what-if plan and somehow relayed that to Bill aboard *Pixie*, by hand or throw-bag, before we lost daylight.

Better yet, I could have tossed a handheld VHF radio to him. With that, we could all have turned towards the Victoria waterfront with the arrival of the fog, sailing out of danger. The core of our problems was the inability to communicate with Bill, compounded by the unexpected and adverse conditions.

We knew that fog was predicted and should have given more consideration to stopping at Sooke Harbour to wait for better conditions. The homecoming was eagerly anticipated and certainly colored our decision-making; it was easy to decide that we would be in port before the fog was due. It wasn't a bad decision necessarily, but giving consideration to alternative scenarios would have been prudent.

When the fog enveloped *Natasha*, I should have immediately contacted Victoria Marine Traffic Services or the Canadian Coast Guard to apprise them of the deteriorating situation with *Pixie*. With relayed radar guidance, I may have been able to stay in sight of *Pixie*. But soon afterward, I was struggling with my own safety and that avenue just didn't occur to me. (A big thank-you went out to Canadian Coast Guard services for their professional and timely response.)

I wasn't prepared for the conditions we encountered and should have expected. It was a valuable reminder of the dangers of the sea, even when sailing in local, familiar waters.

Twisting in the Wind

Yawing on the hook can wreak anchorage havoc. Here's how to help prevent it.

BY DREW FRYE

A few years ago, while anchored in the snug little harbor of Oxford, Maryland, I witnessed the most spectacular case of sailing at anchor I had ever seen. If not for the lack of sails and forward progress, the boat appeared to be short tacking up the channel.

Back and forth she went, turning 120 degrees at the end of each swing. The bow would come smoothly about, and she would merrily sail 200 feet in the opposite direction. The folks aboard spent the entire night as a floating metronome, swinging steadily to and fro. While they slept, everyone else in the harbor cringed.

The cause? An oversize dinghy on the bow acted like a small sail, encouraging the bow to turn away from the wind, while a fin keel, shallow underbody, and a nylon rode provided minimal damping.

Unfortunately, it's common to see a boat yawing from side to side at anchor. I say unfortunately, because like pitching (hobby horsing) and surging (fore-aft motion), yawing behavior can reduce the integrity of the anchor set.

In fact, yawing causes problems on three fronts. First, there is increased windage. When the bow swings to the side, the wind and waves strike the boat from the side, increasing the rode tension dramatically when the yaw angle exceeds 30 degrees.

Second, because yawing causes the boat to sail from side to side, the angle of rode tension also shifts, pulling sideways on the anchor. If the anchor is set in mud, for example, even the slightest wiggle can break the suction that builds around the anchor over time. In sandy bottoms, the same wiggle can reduce soil consolidation. Any anchor that shifts when the boat swings is far more likely to eventually fail.

Finally, there is the jolt that happens when the boat reaches the end of a swing. If the rode is nylon rope, the swing follows a semicircle, and load cell measurements tell us that there is no sudden jolt, only a gradual lessening of force as the bow comes into the wind. But with a chain rode, there can be a second peak of forces when the catenary straightens out with increasing load. If this coincides with a moment when the boat is broadside to the wind and perhaps a gust or a wave strikes, there can be a considerable jolt, many times the static rode tension.

In short, yawing is a big deal. In testing, anchors holding a yawing boat failed in as little as 15 knots of wind after having been previously proven to hold in 60 knots at the same location. If your boat yaws more than about 40 degrees total heading angle, getting the boat to sit still will help more than getting a larger anchor.

What can be done to quiet the nervous boat? The root cause of yawing is a center of wind resistance above the water that is forward of the center of lateral resistance underwater; in other words, an imbalance in center of effort above and below the waterline. It's best stopped by correcting the imbalance.

Reducing windage forward and adding windage aft helps. Increasing underwater resistance forward and decreasing water resistance aft also helps. In the interest of experimentation, I ditched my usual bridle, secured the rode to the center hull (a surefire way to make a trimaran sail about), and tested some common methods for reducing yawing.

In side-by-side testing, Drew has found that twin leach, or V-style, riding sails are many times more effective than the traditional single-panel design and far more stable in high winds, when it counts.

Deployed from the rode, a drogue such as this Seabrake GP24L will slow yawing and reduce the effect of pitching on the anchor.

All-Chain Rode

Switching from rope rode to all-chain rode is a good first step to reducing yawing. In light winds, the chain stays relatively motionless on the bottom, and so does the boat on top. As the wind increases, the chain will gradually lift, but even then, the chain encounters resistance as it drags across the bottom.

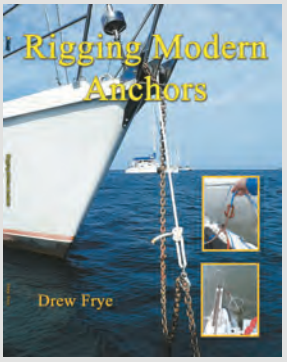
However, in strong conditions the chain will eventually lift off the bottom, and the all-chain rode loses its advantage in countering yawing forces. At this point, to reduce yawing through the full range of wind speeds, you need to take further steps, including changing the rode attachment (adjusting the bridle), reducing windage (adding a riding sail and minimizing deck equipment), or shifting lateral underwater resistance (lifting foils and/or using a hammerlock mooring).

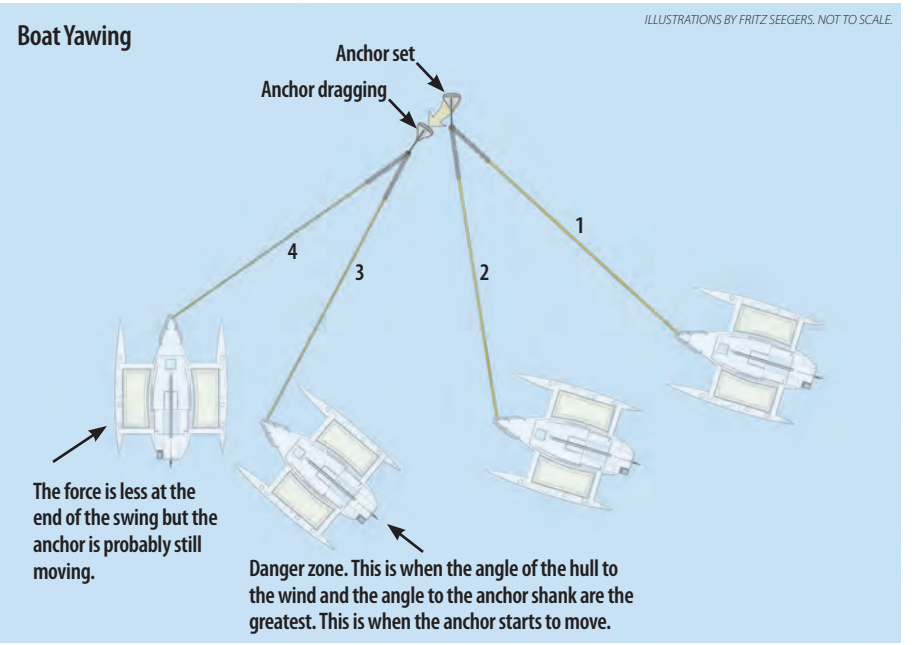
Windage

A dinghy on the foredeck is one example of how sailors add windage in the worst possible place, the exact opposite of a riding sail. The same goes for furled

The Full Skinny—Editors

For a detailed exploration of anchoring, read Drew Frye's *Rigging Modern Anchors*. The book includes clear and comprehensive explanations of all aspects of anchor rigging. No regurgitated salty advice, only things the author could test. Available in print or e-book from Amazon.





The Case for a Dyneema Bridle—DF

Heresy, you say. Anchoring bridles are always made from nylon, to absorb gusts and wave impacts. That is unarguably true if the rode is all-chain, but what if the rode is nylon, and there is already plenty of stretch?

I tested double-braid nylon anchor line, polyester yacht double-braid, and Dyneema bridles on my Corsair F-24 trimaran. In lighter winds, I could discern no difference. But when the wind piped up to 25 knots, the nylon bridle stretched as much as 10 percent under load, particularly if a gust caught it from the side, placing up to 300 pounds of stress on a single leg. Because only one leg stretches when yawing, the attachment angle to the boat changes by as much as 17 degrees and yawing increases. Conversely, a non-stretch bridle keeps attachment angle constant.

I now use a Dyneema bridle on my F-24. It is UV resistant, strong, and lighter and smaller than a polyester bridle, which allows me to leave it permanently rigged, a significant benefit, since crawling out on the narrow bows of a trimaran in waves is a bit tricky.

But how do I attach this bridle to a fiber rope? Easy. I use a sewn Dyneema climbing sling ($8) and tie a Prusik knot around the rode. Then I attach the sling to the bridle using carabiners (non-locking wire gate is fine). As a backup, I always cleat the tail of the rode and secure the bitter end in the anchor well. The hitch will hold a minimum of 1,500 pounds before slipping, safe enough for boats up to 35 feet up to 60 knots. If you have a larger boat or like a belt-and-braces approach, use two slings, making sure the load is evenly distributed between them.

headsails, even worse if they are on a bowsprit. This is true for any windage forward of the center of lateral resistance, which is typically located just aft of the keel and several feet aft of the mast. To inhibit yawing, do all you can to minimize windage forward.

Lift the Rudder (if you can)

This moves the center of underwater resistance forward and reduces rudder banging. If you have one, keep the centerboard down; this moves the center of resistance forward. Keeping the rudder down and lifting the centerboard will makes things much worse.

Kellet

A weight attached to rope rode imparts a catenary that keeps the rode taut. It also drags on the bottom, like chain. This is a particularly useful trick for boats with a rope rode, as it not only reduces yawing but allows them to swing in synchronization with boats using all-chain in crowded harbors.

Hammerlock Mooring

This is an old-school method that is fully relevant to today's nervous boats. Lower a second anchor on 1.25:1 to 1.5:1 scope, preferably of a type that can generate some hold on very short scope (a Bruce or a Lewmar claw is excellent for this because they always dig some, while many others will just skid at ultra-short scope).

For example, a 25-pound claw on 20 feet of line in 10 feet of water (14 feet from the bottom to the deck) is about right for a 35- to 40-foot monohull. It won't set, but it will provide considerable drag as the bow tries to fall off to one side or the other, stopping yawing before it starts. A kellet can also be used in this way, but a second anchor is more effective and may serve other purposes. In fact, a hammerlock mooring is one of the best uses for the typical double-roller bowsprit; anchor from one, hammerlock from the other. Because of the great difference in scope, tangles are avoided, mostly.

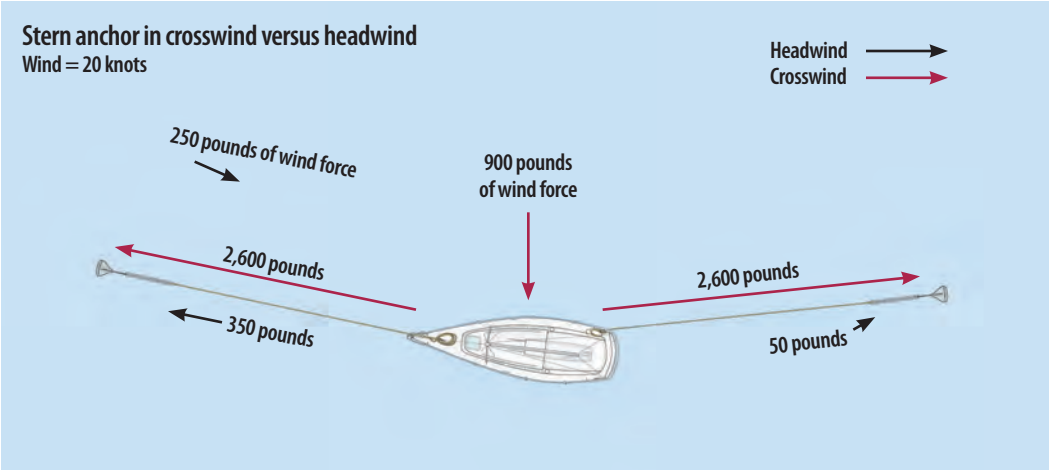
There are downsides. With a reversing tide or in calm winds, the hammerlock mooring can foul the main rode, although this is unusual. Of course, never use a hammerlock mooring where it can cross the rode of another boat; it will snag and probably trip the other anchor, after which things will get very ugly. If the bottom has submerged vegetation or coral, a hammerlock mooring will be destructive. If it works too well, it can pull you out of swing synchronization with other boats in a crowded harbor; in this case, just lift it up until you adjust, and then lower it again.

Bow Drogue

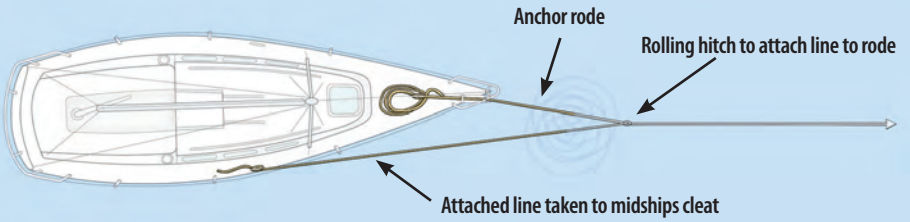
We think of drogues as fabric cones that are trailed behind the boat underway in a gale to reduce speed, improve directional stability, and prevent surfing and broaching. But deployed with short scope from the bow of an anchored boat, a drogue can reduce the speed and range of yawing.

Deploy the drogue with just enough rode (length equal to about three times the freeboard) so that it can pass under the bow during a tack. Weight the tail with just enough chain to keep it in the water, but not so much that it cannot rotate up to the surface when the boat swings.

Cone-shaped fishing drogues work; about 1 inch of diameter for every foot of boat length seems about right. A string of Davis Rocker Stoppers also works. The drogue may also be deployed from the rode, about 10 to 15 feet forward of the bow, where it will also serve to stop vertical movement of the rode (pitching), though



Offset rode. This positions the boat slightly askew to the wind direction.



you must protect the rode against increased chafe.

Bridle

Multihulls represent the extreme case. When moored at the center alone they are very nervous at anchor, the result of wide beam and shallow keels. If a bridle with legs greater than 120 percent of the beam are attached to outboard bows, a multihull will sit very quietly. Curiously, the bridles fitted on many charter cats are shorter than this, which makes them easier to use on mooring balls (it keeps the ball from banging on the hulls when the wind dies), but less effective at reducing yawing at anchor. Monohulls can also benefit, although the improvement is less dramatic.

Offset Rode

A bridle reduces yawing by providing two points of support and preventing tacking. On a multihull, this is accomplished with a wide bridle set across the bow, but on a monohull, this is sometimes better accomplished with a bridle built to favor one side. One way to do this is to attach a line to the centerline rode with a rolling hitch and take that line to a midships cleat, pulling the bow to a 10- to 25-degree angle off the wind.

This approach is often used to reduce rolling caused by waves coming from a different direction than the wind, or to mitigate yawing caused by a slight current that is just off one side of the bow (the bow pointing into the wind). However, if the wind varies enough to cause the boat to tack anyway, the offset rode will make the yawing more violent, so be prepared to adjust or to cast it off.

Multiple Anchors

When yawing is caused by wind gusting from varying directions, the only solution may be two anchors set off the bow in a broad V, called a Bahamian Moor. But there are downsides, including increased complexity, potential for tangles, and swinging out of synchronization with other anchored boats.

The anchors do not share the load most of the time, and each anchor must be able to hold the boat on its own. The inside angle of the V should not exceed about 100 degrees, else the force on the anchors will actually be increased in a cross wind.

Tangles caused by the boat spinning with the tide can be prevented by attaching the second anchor with a short rode that terminates at the main rode 6 to 10 feet in front of the roller. When it is time to go, the twists are easily removed by disconnecting the secondary rode. If the second rode extends into a chain locker, the tangles can be epic.

Stern Anchor

If you really do not believe the wind will change direction, anchoring from bow and stern is a simple answer to the yawing problem. Of course, if there are other boats nearby, they will swing, and you will not. Even worse, if the wind switches to the beam, the loads become enormous, the ride becomes rough, and one of the anchors will certainly drag. For these reasons, this option is only useful in narrow, well-protected waterways.

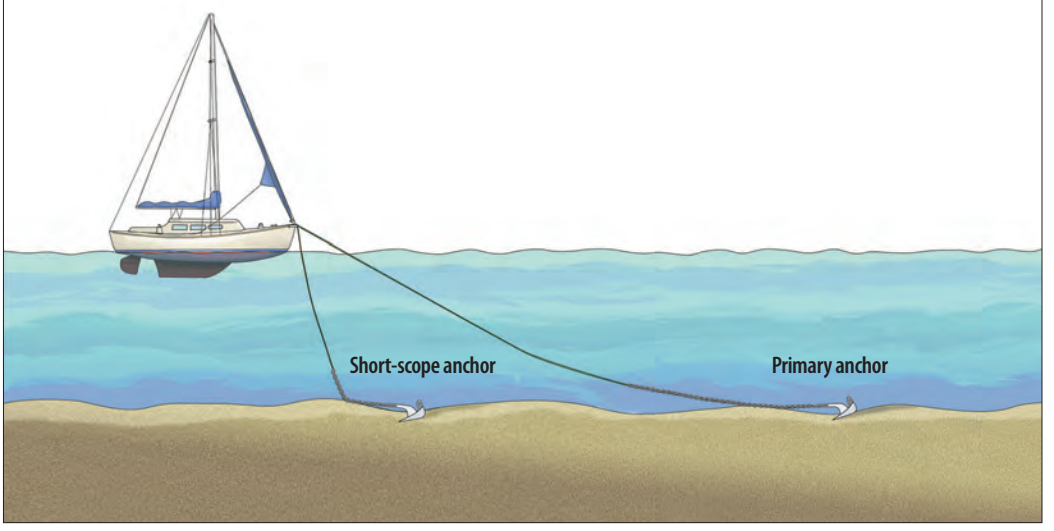
Riding Sails

If the other methods don't work, try a riding sail. Sailrite sells kits to make them. The FinnDelta from Banner Bay Marine is an example that has done well in independent testing. However, a riding sail will add significant windage and must be set very tight in a blow. And, consider that if your yawing boat is a cruising boat with a dodger and a dinghy on davits, windage balance probably isn't the problem.

Sailors will spend fruitless hours arguing over whether a 30-pound or 45-pound anchor is large enough, when in fact, the difference in holding capacity between a boat that sits quietly and one that yaws can be twice that. She needs to sit still.

Drew Frye's bio can be found on page 23.

Hammerlock mooring: The anchor on short scope provides resistance when the boat tries to yaw.



Testing Their Metal

What started as a much-needed refit devolved into a scary search for mangy metal.

BY ED ZACKO

It all began with a corroded ball valve. It was seized, which rendered inoperable the seacock it was a part of. After 14 years of full-time voyaging, our homecoming fun on the Chesapeake Bay was cut short by one important failed valve. We immediately arranged for a haulout ("Battling with Ball Valves" January/February 2018).

Even then, the plan was to quickly replace the valve and carry on. But hang on a minute, what's the hurry? This was an opportunity to take a good hard look around, and we didn't like what we saw. Despite all the love and meticulous maintenance we'd always showered on our beloved *Entr'acte*, she looked... shopworn! Years of African and tropical sands had settled behind the interior woodwork, and her galley reminded us of a kitchen in a restaurant we would avoid. *Entr'acte* looked great from 50 feet away, but if we got up close and realistic, she had turned into one more tired old cruising boat that had gone on far too long.

This boat had always received the best that we could give her...*under the circumstances*. When voyaging afar, no matter how good your intentions, projects can seldom be completed to the same standard they would be at home. As the miles accumulate and the years take their inevitable toll, things get ahead of you. It was time for us to stop and move ashore to do them right.

An array of the corroded fasteners that Ed and Ellen found on *Entr'acte* from stem to stern.

Entr'acte, a Nor'Sea 27, was conceived as a trailerable ocean-capable vessel. We'd built her in our backyard from a bare hull sitting atop a trailer. Fortunately, we remembered where we'd left that trailer 14 years before, tucked away on a Chesapeake Bay farm. A plan took shape: trailer *Entr'acte* back to our Arizona home where we had the facilities to tackle any project that needed tackling.

After a week on the road, we were home, and the first order of business was unloading our boat—quite literally. Our dream to permanently remove 1,000 pounds of excess weight was finally coming to pass.

Every single item that was not permanently attached we removed, catalogued, weighed, and stowed in a cargo trailer. We knew that some items would eventually be reloaded, but most, happily, would not.

Off came the wind and water generators along with all of their respective spares. Next came the spare alternator, voltage regulator(s), spare piston and connecting rod, valves, springs, and enough bilge pump rebuild kits to start our own chandlery. There were spares for the spares of spares and then a few spares for those as well. Seven GPS wiring harnesses, five more for the two autopilots, and enough spare parts to rebuild our Aires vane gear three times over. There were spare chainplates, rigging wire, mast fittings spares, outboard engine spares.

"What's all that in the back of my car?"

"Boat stuff, but the good news is that the forward number two locker is empty."

"So, the bad news is that it's all in *my* car?"

"Yes, but, the good news is that *none* of this is going back and it weighs in at 84 pounds!"

By week's end and after some sorting, we had forever removed 750 pounds from a 27-foot boat, and this was just the beginning. Completely unloaded, we could now see and access everything. Ellen began cleaning while I tackled the boom gallows.

A boom gallows works a lot more than one might expect.

Ed and Ellen refit *Entr'acte* in an expansive new workshop at their 55-and-over community.

Its fastenings experience constant torsion and flexing whether at sea or at anchor. We lean against it while underway, we stand on it, fall against it, and pull on it when boarding. With the boom lashed down in a seaway, the motion of the boat and boom impart constant side loads on the fastenings. Each tug, twist, bend, shock, or stretch constitutes a cycle. These mounting bolts had been cycling constantly over the years, and this simple job was at the top of my to-do-it-right list.

I set a socket and wrench over the center nut, and before I could apply any force at all, the head of the ⅜-inch stainless steel bolt snapped off. Of the four remaining bolts, two were intact while the other two were corroded through. The same thing happened on the starboard side. The bedding compound, now 40 years old, was dried out and mostly nonexistent, a clear explanation for the corroded bolts.

I felt a vague disquiet. *Entr'acte* was sending us an unambiguous message.

When we built her back in the 1970s, we used the finest materials and construction methods then available. Over the years, she has sailed countless miles and has undergone several re-riggings and two complete refits with appropriate surveys that resulted not only in updated gear, but also addressed and corrected a few original sins. This present endeavor was, however, shaping up to be something completely different.

It was time to dig in, and our focus was metal.

For the next several months, Ellen and I worked 12-hour days as though possessed. We started at the stern and moved forward, systematically and completely disassembling our boat. We removed anything that was screwed or bolted down. We looked everywhere for trouble and found it, most of it buried and out of sight.

We exempted the chainplates, rig, and engine from scrutiny because all had been completely redone within the past four years. We spared ourselves the massive project of removing the teak cap rail after conducting an extremely close, inch-by-inch, fastener-by-fastener inspection that showed the cap rail screws, scarf joints, and underlying bedding compound to be completely sound and leak free. We inspected each of the hull-to-deck joint bolts with a magnifying glass, knocked, shook, and twisted. We breathed a sigh of relief to find them as solid as the day they were installed. The hull-to-deck joint itself showed absolutely no sign of shifting or leaking, which, after so many years and miles, was impressive and welcome.

However, this is where the buggy ride ended.

Preparing for the remounting of the gallows frame, I noticed some green coming from a mounting bolt of the bronze portlight immediately adjacent to the gallows frame. A closer inspection

The metal refit began with one of the boat's seacocks, shown here before and after refurbishment.

Bedding compound gone bad after years under a stanchion base, at top left.

Rebedding the portlights required clamps and ingenuity, bottom left.

revealed the beginning of a leak originating from this bolt and the one next to it. The port would have to be reinstalled. I felt the soft "snap" as the first of two of the six silicone bronze mounting bolts broke off. All of the damage was internal and well hidden.

Too many of the fasteners we removed elsewhere were ghastly and gave us chills. Our days became a litany of metal deterioration. Not every fastener was bad and broken, but enough fit that description to warn us that if we replaced only the bad ones, more failures were in our future. So, without further exception, we replaced every fastener and hose clamp.

While building *Entr'acte*, we bought fasteners in boxes of 100. When a job required one box, we bought three. If we needed three boxes, we bought six. We'd stored the excess hardware at home for later use, as a hedge against inflation. Now it was paying off. The current prices of the fasteners we did have to buy stunned us.

Every day we discovered some new evil, deeply hidden, that could have easily, justifiably failed during our most recent ocean crossing, and with likely catastrophic results, such as the loss of the vessel or one of her crew.

A thought occurred to me and I swallowed hard. You've seen these words a hundred times:

"This vessel has been lovingly and meticulously maintained and is turn-key ready to sail anywhere your heart desires!"

It's what I'd have written a month before were we selling *Entr'acte*—and I'd have meant it, sincerely, with complete confidence and without reservation. Yet seeing only the hidden corrosion I'd uncovered so far, knowing there was much more, I'd have been dead wrong attesting to my boat's readiness to put to sea. It was a sobering thought.

The grabrails were a real eye-opener. Each aft cabin rail was through-bolted with three silicone bronze bolts. Only one bolt out of three on each side was intact. My mind flashed back to Fiji where a sudden squall had knocked us flat. As the mast hit the water, I grabbed that handhold in a desperate attempt to haul myself upright. Had that one final bolt let go at that time, I'd have fallen straight through the lifelines and not be writing this article.

The main cabin rails were no better. Each was attached with 13 bolts, and five bolts on each side were broken internally. My theory is that the corrosion resulted from condensation that was trapped for years in a no-oxygen environment, leading to a gradual deterioration. Coupled with constant loading of the fasteners of the stanchions, handrails, and

Over 55 For the Win—EZ

Before our departure in 2002, we had purchased a place in an over-55 retirement community to serve as a stateside base to wait out hurricane season, visit family, or run our "medical 500." Our community hosted numerous clubs, including woodworking, metal, and machine clubs, all chock full of skilled people. While on board *Entr'acte*, we would take measurements and draw up plans for projects that we or friends could complete when we came home.

These clubs were great money-savers for years, but never more so than when we trailered *Entr'acte* home. We had helped form the Sun City West Automotive/Restoration Club, which opened a new, 10,000-square-foot air-conditioned facility where members could service, repair, build, and otherwise play with cars of any vintage. That simple slash in our logo allowed for building and restoring almost anything, even boats!

fittings while underway, this caused work-hardening and eventual failure.

But none of this was apparent until we disassembled everything.

Then there were the stanchions that we rely on to keep us aboard. Cracked bases, visible upon close inspection, indicated that these might have failed under the load of someone falling against them.

Our stainless steel holding tank could best be described by paraphrasing Captain & Tennille: "Rust. Rust will keep us together." I removed the tank only to clean it up with a wire brush, but as the brush whirled around, chunks of the tank fell away, and I knew then that I am not a person who should ever have a metal hull.

The prop shaft was another matter. In the beginning, we used the standard stuffing box and flax packing gland to keep out seawater. When adjusted properly, the gland dripped a scant few drops of seawater per hour into the bilge, and this controlled water flow lubricated and cooled the shaft.

But this gland is also a source of friction, and if tightened too much, severe damage can result. We were at peace with our packing gland until we repowered years ago. The new engine used "improved, softer" motor mounts, and from then on it either leaked too much or the shaft became too hot. I was always fiddling and trying miracle lubricants, but it was never right.

After we noticed a wear spot from those years of friction, we gave up on the packing gland and installed a PYI dripless shaft seal, which mounted well clear of the worn area. The leaking, friction, and heat stopped immediately, and we never looked back. This was a mistake. And so, we were only seeing now that as the years passed, the shaft developed pitting and a small crack in the damaged, worn area.

This refit had taken a decidedly different form from our plan, and we spent many evenings berating ourselves for our gross negligence. Yet, consider that *Entr'acte* has undergone seven professional surveys over the years and passed them all with flying colors. Two of these surveys were unrelenting and brutal. But none of them revealed, or could have revealed, what we found through extensive disassembly.

As bad as much of the original bedding compound appeared—and it was certainly a factor in many of our out-of-sight corrosion issues—the absence of leaks and core deterioration proved that it had done its job quite well. We'd strategically used specific sealants for specific applications, and this was successful, though complex (see sidebar for more on sealants).

What have we learned?

- It's a boat, and being assured of its integrity requires digging into places where no one really wants to go. Regular maintenance is a given, but we must go further and while it's downright inconvenient and time-consuming, it's critical.
- Regardless of quality, no fastening, fitting, wire, glue, or bedding compound lasts forever. We all know these good old boats are tough enough to last lifetimes, but we aren't sailing empty pieces of fiberglass; we're sailing craft assembled with wood and compounds and different types of metals.
- Every fastener on the boat is constantly cycling, even when nobody is aboard, which wears and damages over time. Every time the boat rolls and you brace your foot against a rail, stanchion, or fitting, that imparts one more cycle as the fitting and fastenings absorb the force you impart.
- Grabrails work harder than we think. We stand on those rails, walk on them, use them for foot support

Sealing It Up—Editors

Ed and Ellen used a multitude of sealants when they built *Entr'acte*, from polysulphide such as Sikaflex or Life-Caulk under the waterline to marine-grade silicone and Dolphinite above. Following is Don Casey's indispensable chart of sealants and how to choose them.

To	Fiberglass	Metal	Wood	Teak	Acrylic	Lexan	Marelon	Plastic	Rubber
Fiberglass	U, M, P, S, E	X, P, E, U	P, X, E	P, E	G, S, E	G, S, E	U, P, X, S, E	S	P, X, S, E
Metal	X, P, E, U	S, U, E	P, X, E	P, E	G, S, E	G, S, E	U, P, X, S, E	S	P, X, S, E
Wood	P, X, E	P, X, E	P, S, X, E	P, S, E	S, E	S, E	P, X, E	S	P, E
Teak.	P, E	P, E	P, S, E	P, S, E	S, E	S, E	P, S, E	S	P, E
Acrylic	G, S, E	G, S, E	S, E	S, E	S, E	S, E	S, E	S	S, E
Lexan	G, S, E	G, S, E	S, E	S, E	S, E	S, E	S, E	S	S, E
Marelon	U, P, X, S, E	U, P, X, S, E	P, X, E	P, S, E	S, E	S, E	U, P, X, S, E	S	P, E
Plastic	S	S	S	S	S	S	S	S	S

LEGEND

E—Polyether (3M 4000UV, West Multi-Caulk)
G—Glazing silicone (Dow 795, GE SilPruf)
M—Methacrylate (Plexus MA)
P—Polysulfide (3M 101, BoatLife Life-Calk)
S—Silicone (3M Marine Sealant Silicone, BoatLife Silicone Rubber)
U—Polyurethane (3M 5200, Sikaflex 291)
X—Polyurethane silicone mix (BoatLife Life Seal)

NOTE: The choice among recommended sealants will depend on the desired permanence of the joint and on whether it is above or below the waterline. Polyether sealant (E) is a relatively recent option with as yet unproven long-term performance.

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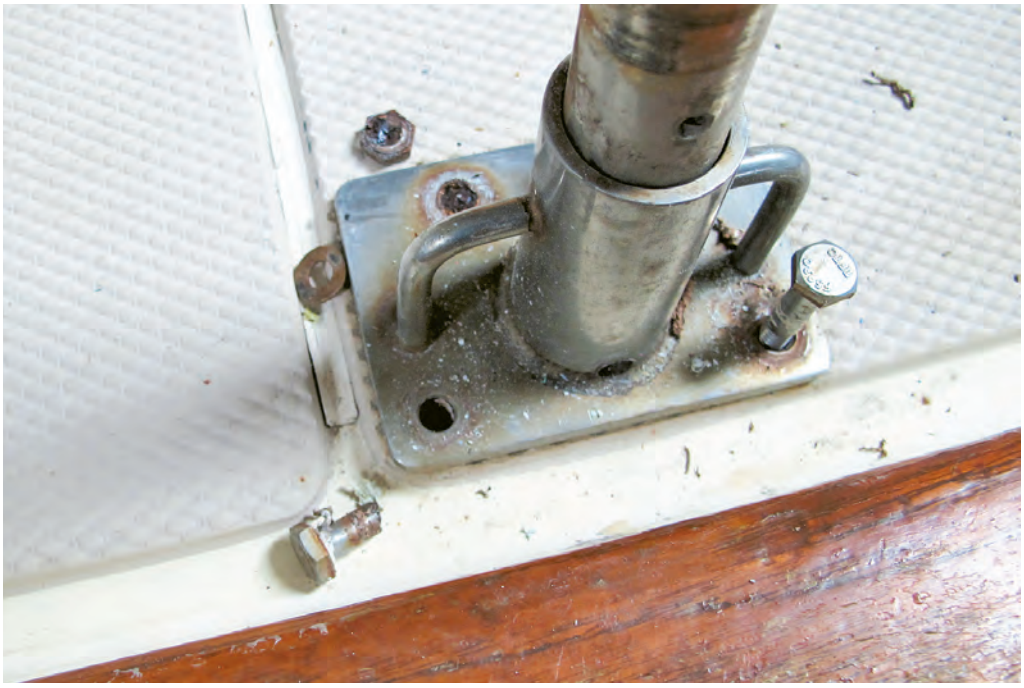

Stanchion bases were especially susceptible to corrosion.

Good Old Boat *Contributing Editor Ed Zacko, and his wife, Ellen, built their Nor'Sea 27,* Entr'acte, *from a bare hull, and since 1980 have made four transatlantic and one transpacific crossing. Ed, the drummer, and Ellen, the violinist, met in the orchestra pit of a Broadway musical. While refitting* Entr'acte, *they have kept up a busy concert schedule in the Southwest U.S. They recently completed their latest project, a children's book,* The Adventures of Mike the Moose: The Boys Find the World.

in a seaway. Dinghies, solar panels, and other gear are tied to them.

- Dock and anchor cleats are similarly abused. Every time the boat moves and is restrained, the cleats and the bolts that secure them are stretching and flexing as they withstand forces. And in a blow, the strains are magnified.
- Make note of which fastenings are being asked to work more than others and target them for closer inspection. Bear in mind that not all fastenings deteriorate at the same rate. Out of 15 bolts taken from the same box, 10 will last for 40 years while five may have to be replaced after five years.
- Metal degrades and weakens for reasons that range from poor quality to friction, wear, flexing, impact, electrolysis, galvanic corrosion, or crevice corrosion.
- Bedding compound deteriorates from age but also from constant attack by cleaning agents and acids that we use to clean our hulls and decks. These chemicals run along the glass, contact a fitting, and dissolve its bedding compound. No harm is done *today* but over time the bedding is eaten away, and the insidious consequent damage begins.
- The absence of a leak is no real indicator of the integrity of a fastener. A leak might give some warning, but trapped condensation lurking deep inside where no one can ever see is far more detrimental and dangerous.

Resources—EZ

- Ultimate Garage: Stainless, non-perforated, original series hose clamps, ultimategarage.com
- Jamestown Distributors: Dolphinite, Life Caulk, silicone, prop shaft, jamestowndistributors.com
- Bolt Depot: High-quality fasteners of all types, boltdepot.com
- IMS: Stainless, brass, and aluminum of all shapes and sizes, industrialmetalsupply.com
- Spartan: High-quality bronze marine fittings, spartanmarine.com
- Apollo: High-quality marine ball valves and seacocks, apollovalves.com
- McMaster-Carr: Vast assortment of metal, plastic, and rubber raw materials, mcmaster.com
- Marine How To: Butyl tape and numerous "how-to" pdf files, marinehowto.com

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Rocking the Boat is in a community where there had been no familiarity with sailing, despite the water's proximity. Today, they have an inspired and robust after-school program in which high school kids learn to swim and sail, and through which they can earn their US Sailing instructor certification.

And while we're on the subject of my The View from Here column, in which I addressed diversity as a pathway to growing sailing, let me briefly tackle another obstacle to growing sailing: perception.

Sailing is accessible, period. As good old boat owners, we know there is a pathway to sailing for nearly any budget; that's a theme on which this publication was founded. But on our Facebook page in early March, a commentator spouted a common misperception about sailing that is yet another obstacle to growing sailing. This person described sailing this way: "It's just physically and mentally challenging, which inherently limits the participants to those who want to engage in a long, steep learning curve." *I think people characterize sailing this way because of a desire to inflate the level of exceptionalism that sailing demands, to stroke their own sense of sailing self by making sailing seem more exclusive, and thus, restrictive. Based on my personal sailing experience and from knowledge gained shoving kids out into the bay for their first successful solo sails, I always describe sailing using words like "fun" and "easy" and "affordable" and "relaxing." Let's all spread those words.*

Sketchy Seamanship to Some

I'm writing about the following quote from Gregg Bruff's article "Sketch it First" that ran over two years ago in your free newsletter, *The Dogwatch*, and that is now available on your website: "In a plastic notebook binder, I keep a sketch I made (at right) of how the mainsheet runs through the blocks *correctly*." Anyone who must resort to a diagram to reeve his mainsheet should never be permitted to cast off unaccompanied by an experienced seaman. And you publish this nonsense? As a tip? A tip to whom?

—**Paul J. Nolan**, SeaTac, Washington

Michael Robertson responds:
Dear Paul, we contacted Mr. Bruff and let him know that under no circumstances is he to again set sail unaccompanied by an experienced seaman—someone like you. Since receiving your letter, I've also been pretty hard on my wife and myself (floggings, limited rations) for all those years and regrettable miles we sailed with a diagram similar to Mr. Bruff's tucked away in the nav station, something we sketched before removing the mainsheet to replace it with new line. In fact, we thought to retrieve that sketch and burn it—to eliminate evidence of our ignorance—but alas we sailed that boat (with the shameful sketch aboard) 7,500 nautical miles across the Pacific, and flying to Australia to do what should be done is ill-advised, what with the pandemic and all. In the meantime, we will cease sailing.

Save the Bird

In the September/October 2020 issue, you published a fun article about the Seagull outboard motor. Two of our young sailing trainers-in-training at the Ottawa New Edinburgh Club pulled an old, rusted-beyond-repair Seagull from the depths of the Ottawa River (at left). It's sitting on our docks and I trip over it from time to time. I would like to share the article with the young guys who recovered the motor, but I seem to have misplaced my copy. Do you have an electronic version of the article that I could share?

By the way, I've owned a 1973 Paceship P23 for many years. Both she and her owner are showing their ages.

—**Mike Hardstaff**, Ottawa, Ontario

Mike, we sent you a copy of the story and we hope it motivates those young men to get the engine running. Based on our careful examination of the photo you sent, the engine they found just needs a bit of spit and polish, a new spark plug, and some fresh fuel. And thank you for an excuse to further highlight John Vigor's excellent story, "One Wing Flapping." The full article is on our website because in February, it earned the author a $500 first-place prize in the annual marine journalism writing contest run by Boating Writers International (BWI). You can find it at goodoldboat.com/seagull-outboard.

—Editors

Love the one You're With, and the Boat You Both Want

Mark Cole's article hit the nail on the head ("Love, Carefully," January/February 2021). When we bought our 2006 Beneteau 423, we had been casually looking for a boat for years, and seriously looking for eight months. At the time we started looking, I really wanted a Valiant 40 or some other traditional, heavily built, oceangoing boat. The first boat we saw, the Beneteau 423, couldn't have been more different than what I wanted. But after going aboard countless boats afterward, I realized I was repeatedly hearing versions of the same sentiment from the Admiral: "Well, that one was nice, but the galley on the Beneteau 423 was nicer." Finally, I realized that I could sail the Beneteau 423 just fine and if the Admiral was happy, then we could proceed. After all those months, and after a bit of negotiation with the seller, we bought the first boat we looked at and have been happily cruising (and maintaining and upgrading) her ever since. Life with a partner is a compromise, so find the boat that you can both be happy on and go for it, sooner rather than later.

—**Hal Wells**, Houston, Texas

A Different Take

It was quite a surprise to open *Good Old Boat* and find myself reading about me, in John Keller's article ("Hard Sell," January/February 2021). There I was, the guy from Texas portrayed as someone with little boat knowledge and cash to burn who—just for the heck of it—travels across the U.S. to look at boats for sale. As always, there are two sides to every story.

I did travel to Virginia to look at Mr. Keller's boat, as well as another Tartan 34c and a Pearson 35. All were in the same area. It is also true that I did not buy Mr. Keller's boat; Mr. Keller's boat was not the boat for me. My boat-buying experience has taught me to be patient and to walk away when there is any doubt if I am looking at the boat for me. From his emails and his article, it is clear he is really annoyed by my walking away.

In short, the boat I visited was not exactly the boat Mr. Keller described. I was not upset by this, it happens, it is part of the journey. Mr. Keller had put time and energy into his Tartan 34c, and he valued his boat accordingly. But in addition to the work that had been done, I saw all that still needed to be done and redone. I weighed this against Mr. Keller's higher-than-typical asking price (from which he did not really want to deviate).

I really liked Mr. Keller and the stories he shared. He graciously offered me a beer while we spoke. When I left, I told him I would be in touch the next morning. That next morning, on my way to another boatyard, I tried calling several times without success. Once home, I emailed. He let me know how displeased he was. He said he thought I never had the intention of buying. He lamented the considerable effort he'd gone to, to get to his boat and that he had put off other potential buyers. Selling a boat often takes time and effort and if Mr. Keller did not want to bother with any of it, he could have hired a broker. For a commission, a broker would have taken care of everything.

I ended up buying the other Tartan 34c I went to see. It belonged to a gentleman who sailed it around Chesapeake Bay. He was the second owner and had taken care of it. The price reflected his understanding of the market. When a survey revealed an issue, he offered to reduce the price. And, despite Mr. Keller's doubts, I did graduate from medical school and law school. Unfortunately, this does not buy me anything when I beat upwind.

—**Adriaan T. Jansse**, MD, JD, San Antonio, Texas

Hail John and Drew

The humorous article on non-skid painting by John Vigor and the sage advice included in the accompanying sidebar by Drew Frye ("Sticking Point," March/April 2021), just made me appreciate *Good Old Boat* even more.

I recently spent more than my spouse knows (she prefers it that way) having my Morgan 382 painted with AwlGrip AwlCraft. A local yard's expert painter did everything except the non-skid surfaces, which I decided to do myself. Thank God you published John's and Drew's article before the spring painting season. I had intended on putting a coat of West System epoxy under Interlux Perfection. Now I know I need to stick with Interlux base coats. Thanks to all for the great DIY warning.

—**Terry Thatcher**, *Adavida*, Portland, Oregon

Anxious Irony

I read with great interest Melissa White's excellent appraisal of anxiety in sailing, particularly because after sailing *Selkie* (a Catalina 25) for seven years, I had become so anxious that I could no longer sail, so I sold her this past summer. In my

ILLUSTRATION BY THOMAS PAYNE

case, it was late-onset anxiety stemming from serious depression I experienced in 2017-2019 and accompanied by PTSD that I had been carrying (unknown) for years. I have experienced everything she described in the article.

I was also struck by an irony of the publication itself. Over the years, *Good Old Boat* has published many horror stories of things going wrong on the water. I became resistant to reading the magazine at one point because of the regular publication of stories of weather disasters, lurking fire hazards, rigging failures, and the like. I am not suggesting that *Good Old Boat* is responsible for my fears, or that the magazine should not run articles about safety on board; those articles are needed. But it brought a chuckle when I realized the very magazine that has been a source of sailing-related anxiety was now running a good story about how healthy fears can turn debilitating.

I'm happy to still be reading *Good Old Boat* and I read it now with an eye towards the future, when I'm looking for a new boat that might better suit my anxieties and allow for a return to great joy under sail.

—**Steven Holmes**, West Hartford, Connecticut

Ha, you're right, Steven! And none of us made that correlation when editing, prepping, and reviewing this article. We sincerely hope Melissa White's article sends you and others further down your path to the point where you can again enjoy sailing and reading about others' sailing misadventures. And to add irony on top of irony, Melissa has another Good Old Boat *article on tap—an anxiety-inducing tale of a near-dismasting that will run in our Learning Experience column!*

—Editors

Kelso Kudos

I meant to write the day I read Deborah Kelso's piece ("A Day in the Life," November/December 2020). Her one-day adventure into the world of professional wooden boat restoration was just the kind of writing at which your magazine excels, something rarely found in other boating periodicals. Deborah shared a day in her life that I think few would write and tell the world about, and few editors would publish. I found it refreshingly courageous and smart. I could relate to her story; I could see myself responding to a similar ad. Yet, it would have taken me six months to figure out I was out of my league. I'm looking forward to more of Deborah's contributions.

—**Rick Ascanio**, Seabrook, New Hampshire

Thank you for the nice words, Rick, we're sure Deborah will appreciate them too. We have a fantastic, longer Deborah Kelso story scheduled for the January/February 2022 issue, about winter liveaboard life on a good old boat. Stay tuned.

—Editors

Asking About Albergs

I thoroughly enjoyed the two Alberg 37 articles in the March/April 2021 issue. I have always admired the class's seven-league-boots reputation. My 1985 Alberg 29 is a scaled-down version that shares many of the same attributes and is the perfect size for this older guy who sails solo on the Great Lakes. One author's comment about feeling "in the wave," rather than bouncing on top of the wave, rings true. My boat reacts phlegmatically like a Victorian dowager (rounds up gently when over-pressed) rather than dramatically broaching, like an angst-filled teenager. And, the oft-repeated remark about how our perception of proper boat lines gets shaped by the time we are 14 years old is so true.

I have one nit to pick. At the end of the Alberg 37 review, the author listed the bronze portlights as a weak point. Educate me, please. My six, heavy, opening, bronze ABI portlights feature thick safety glass and seem to be more rugged than the flimsy fixed aluminum frames and thin clear plastic common on some mid-1970s production sailboats. The four fixed bronze-framed portlights seem to have been kept small to limit the transparent area as a defense against breaking waves.

I remain your obdurately atavistic, loyal reader.

—**Dave Toogood**, Erieau, Ontario

Thank you, Dave. We maybe don't have all the answers for you, but after more discussion with both you and the boat review writer, Robb Lovell, we have more information. First, it seems to be an apples-to-oranges comparison between the Alberg 37 and your Alberg 29. While both boats are Carl Alberg designs built in Ontario, they were built by different companies; Whitby Boat Works built the 37, and Nye Yachts built the 29. From what we've been able to learn, Nye Yachts built boats that featured quality bronze hardware, extensively. The Alberg 37, built by Whitby, seems to have come from the factory with cast-aluminum portlights. We can't comment on the quality of these factory portlights, but Robb Lovell reports that the portlights on the boat he reviewed were not original, but upgrades. It's worth noting that the boat pictured in the review is a sistership of the boat Robb reviewed and her portlights are clearly not cast aluminum, so were perhaps replaced at some point too.

—Editors

Boats for Sale

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 Viking 33/34
1982. C&C built by Ontario Yachts, recent sails, engine rebuild (3GM Yanmar), Awlgrip (Aristo Blue). B&G instruments, Autohelm AP. Summer dockage paid. Steel cradle incl, 3-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

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/Mack Pack cover. WS. Dodger + bimini. Isoteak cockpit surfaces. Custom winter cover, and more. Always freshwater. Shelburne, VT. $8,000.
Joe Nieters
joefreda1@comcast.net

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. $89,700.
James DeSimone
850-939-7241
jdesim2015@gmail.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, 1⅜″ carvel planking, both garboards and 3 planks above. Set of 5 sails including gollywobbler. Bullet-proof 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 negotiable.
Jim De Reynier
860-305-1582
Jimder40@gmail.com

Grampian Classic 31
1983. New old stock. Has never been launched. Includes new mast, sails, rigging, variable pitch propeller, boxes of new best-quality fittings, and a good Mercedes 4-cylinder diesel. Finish her up and take this beauty on her maiden voyage. Peterborough, ON. $20,000 CAD.
Terry Philpot
705-292-9099
terrymarcmarina@gmail.com
terrymarcmarina.com

Islander 37
1968. Hull 109. Bruce King design, freshwater since ’92, sleeps 6; custom V-berth mattress, 6′3″ headroom, mahogany int, Atomic 4, Force 10 stove/broiler, cabin heater, H/C water, 5 sails. Wind, depth, speed, autopilot, Danforth compass. Harken RF, Barient winches, ST main, Hild dodger, Martec folding prop, hull lapstrake-style, deck nonskid, solid fiberglass, no coring. Well maint. Great weekender or passagemaker. Lots of years left in her. WI. Price reduced $10,000.
Kimon Miller
920-624-1950
kmiller@millerpowerandpump.com

Acadia Ketch 33
1968. *Manitou*, classic Winthrop Warner design, Beam 9′9″. One of 3 custom-built in Taiwan, sailed only in freshwater. Well maint. Honduras mahogany planking on oak frames. 35hp Westerbeke diesel. Sails incl spinnaker, main, 2 headsails, stays’l, new mizzen. Bayfield, WI. $32,000.
Kathryn Jensen
612-850-2981
kljensen@uslink.net

QuickStep 24
1989. Ted Brewer-designed lovely cruiser/daysail[illegible] large cockpit w/ cushions[illegible] sleeps 4. Ide[illegible] family or su[illegible]nded days[illegible] 8hp elec. sta[illegible] C[illegible] n[illegible]h, He[illegible] VHF. Includes [illegible]m winte[illegible] boardin[illegible]r, all USCG sa[illegible] stable boat w/lots of character. Ready for the 2021 season. Hull, MA, $8,300.
SOLD
Craig Robinson
781-738-7954
craigtrobinson@comcast.net

Ontario 32
1978. Modified C&C design sloop. ’10 Yanmar 3YM30 diesel, overhauled ’16. 11.5′ beam provides space and headroom of 36- to 38-footer. Bluewater boat that has crossed the Atlantic, sailed the Mediterranean, Black Sea, Caribbean, and West Coast from Alaska to Costa Rica. On the hard in Puerto Penasco, Sea of Cortez, Mexico. Full inventory avail. $19,500.
Aubrey Millard
705-849-3836
svveledaiv@hotmail.com

S2 11.0C
1985. Freshwater only, 2 owners. Hull taken down to gelcoat in ’09, Interprotect barrier coat system (4 coats) applied. 30hp Yanmar, Max-

Prop 3-blade, '18 Garmin 942sx at helm plus new wind, speed, depth. Vessel is documented. Heavy-duty cradle. Much more. Bayfield, WI. $42,000.

Neil Dietsche
612-239-5304
nf.dietsche@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 settee 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.

Ernest Binz
ebinz@earthlink.net

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Comeback

After a long hiatus, the first sail is more than sweet.

BY CRAIG MOODIE

Six a.m.

I tiptoe out of the quiet house, pausing only when I reach the water's edge. Buzzards Bay broadens like the back of a sea god. How can our catboat moored only a hundred yards offshore look so far away?

I blame my nerves, the product of a year of anticipation. My wife's health had commandeered our lives. We'd never missed so much sailing time, our boat for so long on the hard. "I cannot not sail," wrote E.B. White. I learned that, even without a boat, I still could not not sail, which relegated rudders and sails to my imagination.

But now Ellen has made a comeback, and I'm about to make a comeback of my own.

I drop my sailing hat—sailing *lid*, as my father would have called it—and shirt on the small beach and walk into the waves. I dunk in and rise with a gasp.

Will she be shy? I muse as I breaststroke out, our boat at eye level. *Will I remember what to do?*

I pat her flank before I haul myself aboard. Here I am at last, rocking in bliss aboard *Finn*.

I scramble to ready her, then check the sky.

Ignore that rain shower closing in, the sea god says.

As I hoist the sail, a puff scoots *Finn* forward. She comes around, sail shaking, as if to say, "Now that's more like it."

We're off. The mooring ball drops astern, the boat is eager to lean ahead, my body is now warmed from exertion and exhilaration.

I settle into the cockpit. The sense of levitation I longed for returns and *Finn* clucks in gratitude as she clips through the waves.

My goal for this sail is to spot the lighthouse on Wing's Neck.

The puffs stiffen and I sit up to handle the helm. The bay widens before us, empty except for a tug, diesels droning, pushing a barge out by Cleveland Ledge light.

We leave the number 5 can behind. A gust forces *Finn*'s head up.

Turn back? Go on, says the sea god.

We pass Scraggy Neck into the open bay. Then I see it: the lighthouse materializes through a shower, a ghost figure standing watch to the north.

We come about, the cue for the first raindrop to plop onto my head. One, two, three splat on my shoulders, and my skin squirms.

Thunder echoes across the water and my heartbeat reminds me that I'm no fan of sailing in lightning.

The sprinkles turn into a downpour and we race for home, our wake gurgling behind *Finn* on her best point of sail. With the mooring ball finally in sight, I wonder if I can pull the bit of acrobatics necessary to land. A gust gooses us the moment I round up. The sail flails. I lunge onto the foredeck, strain for the mooring line. I nab it, cleat it, and drop the sail.

I hustle to button up the boat before sliding over *Finn*'s coaming and lowering myself into the water. I scull shoreward sea-otter style, eyeing the boat and sky beyond. The rain is sprinkles again. Shafts of sunshine slant through the murk.

On the beach, I pull my shirt over skin bristling with gooseflesh and return my hat to my head...and I stop.

So absorbed in sailing, I'd forgotten to think about how grateful I was to be sailing again. I turn to the broad back of the bay, a place that has given me so much, and I exhale in quiet exultation. Then I doff my hat to Neptune—thank you for returning the sea to me, and me to the sea.

Craig Moodie lives with his wife, Ellen, in Massachusetts. His work includes A Sailor's Valentine and Other Stories *and, under the name John Macfarlane, the middle-grade novel* Stormstruck!, *a Kirkus Best Book.*


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