Good Old Boat

The sailing magazine for the rest of us!™

March/April 2006
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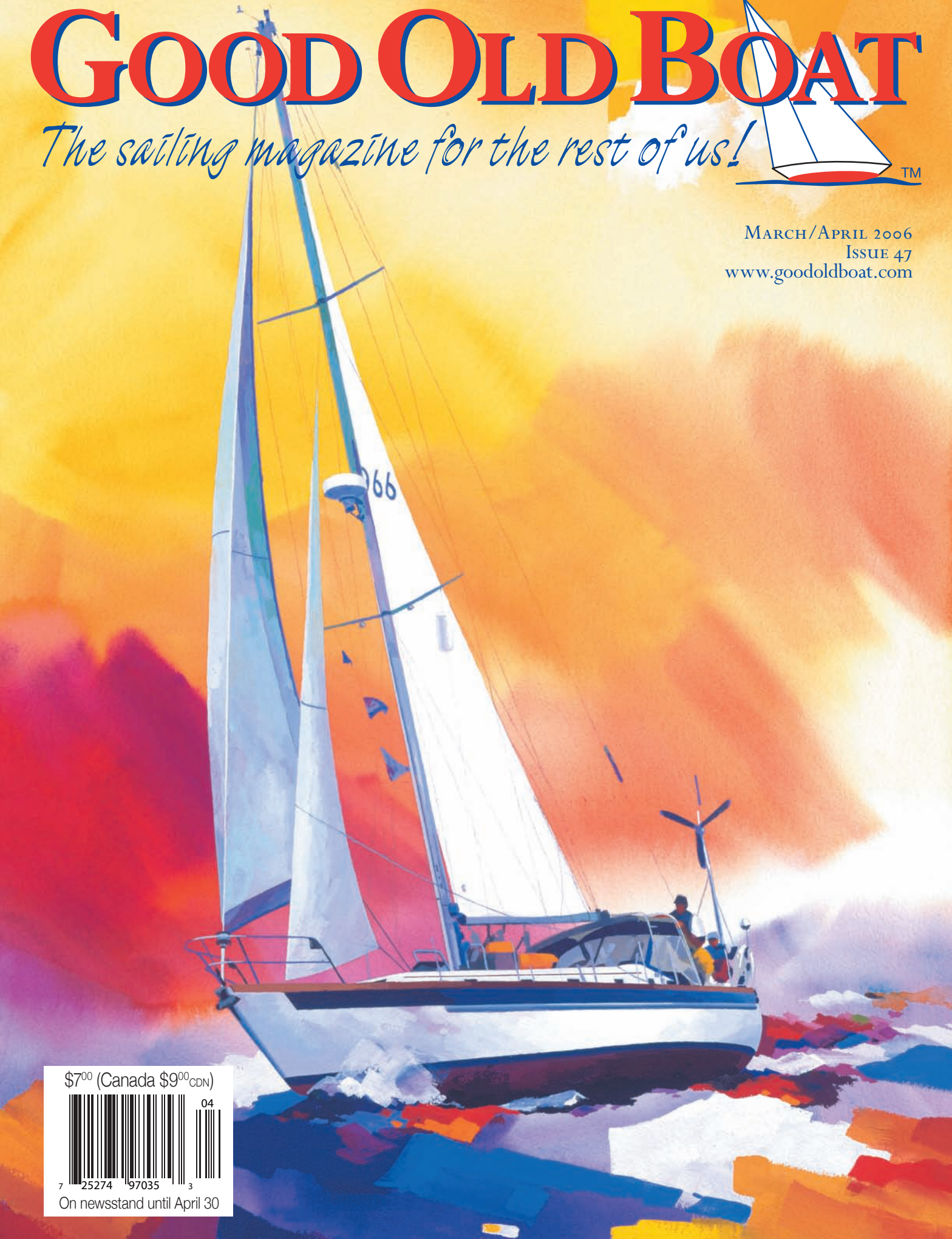

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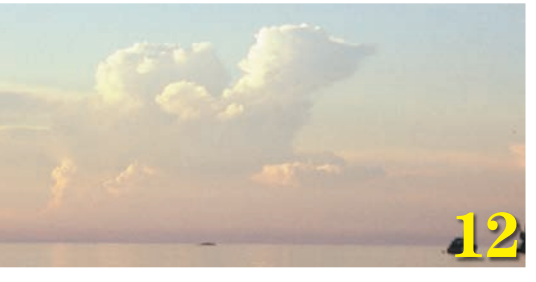
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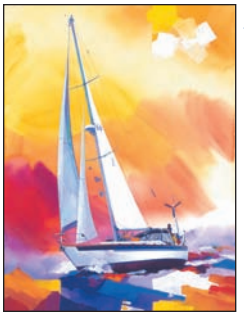

About the cover . . .

Jim DeWitt's powerful paintings pop out of our center spread, Pages 44-45. Wear sunglasses. Our cover features one of his cruising-oriented paintings, Another Day in Paradise. For more, go to <http://www.jimdewitt.com>.

For the love of sailboats

Speaking seriously

Just for fun

What's more

GOOD OLD BOAT

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Our contributors

Theresa Fort (*Growing up afloat*, Page 4) and her husband, Chuck, lived and cruised aboard during most of their two kids' childhood years. Now, with both in college, Theresa returned to school to become a registered nurse. She and Chuck dream of cruising aboard *Coquette*, their Van de Stadt Agulhas 12.5 meter again.

Jennifer Baynes (*A child's delight*, Page 10) is a Milwaukee-based photographer. While finishing the restoration of a 1964 Alberg 35, Jennifer, her husband, and their two sons, Noah and Benjamin, sail their Bristol Corinthian on Lake Michigan.

In school, **Gene Bjerke** (*Thunderstorms*, Page 12; *Apparent wind*, Page 17) drew pictures of sailboats instead of paying attention. He got his first ride on a Snipe in high school. In the last 45 years he has sailed on all sizes of boats, from 8½ to 116 feet. He currently crews on a couple of reproduction 17th-century square-riggers.

Vern Hobbs (*Dealing with bridges*, Page 14) and his wife, Sally, sail a 1974 35-foot Bristol cutter along Florida's Atlantic coast and the Intracoastal Waterway. Their day jobs pay the rent, but Vern's work as a local artist specializing in maritime subjects finances the boat projects.

Bernie Weiss (*Marine radar*, Page 19) is a delivery skipper in Stamford, Connecticut. As Atlantic Yacht Delivery <http://www.AtlanticYachtDelivery.com>, he works along the Eastern Seaboard. During offseason, he teaches navigation. His boat is a Tartan 33 sloop, *The Surprise!*

Simon Hill (*Murphy's Law of boat care*, Page 22) is a Vancouver, British Columbia, sailor and do-it-yourselfer. He has been sailing the West Coast's waters for 15 years, currently cruising aboard *The Point*, a Contessa 26, with his wife, Jenifer, and two children.

Aubrey Millard (*Systems that work*, Page 24) and his wife, Judy, left Toronto in 1998 on an open-ended journey which began with an exploration of the Great Lakes and a trip down the Mississippi on their Ontario 32, *Veleda IV*. They explored the Bahamas, crossed to Europe and the Mediterranean and Black seas, and are currently headed back across the Atlantic.

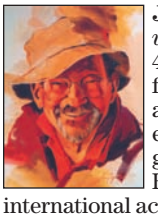
Mark Parker (*Rethinking the head*, Page 28) restored *All Ways*, a 1964 Pearson Triton which he and his wife sailed in Narrangansett Bay. Now they're preparing for life aboard a 2004 Fountain-Pajot Belize 43 catamaran in the Caribbean, beginning in 2008.

Ted Brewer (*Alberg 30*, Page 35) is a contributing editor with *Good Old Boat* and one of North America's best-known yacht designers. He also is the man who designed scores of good old boats…the ones still sailing after all these years.

Gregg Nestor (*Seafarer 30*, Page 36) is a contributing editor with *Good Old Boat*. More than 20 years and four boats ago he discovered sailing and has been an avid "trailersailor" ever since. He and his his wife, Joyce, sail an O'Day 222, *Splash*.

Former newspaper reporter, **Rob Lucey** (*Relics from the past*, Page 40) has just returned to Florida after cruising the Caribbean with his wife, Joanne, aboard their 38-foot Morgan sloop, *Sea Spell*. You can follow their adventures at <http://www.seaspell.net>.

Don Launer (*Galley Stoves 101*, Page 42; *Deciphering an HIN*, Page 70) is a *Good Old Boat* contributing editor. He has held a USCG captain's license for more than 20 years. He built his two-masted schooner, *Delphinus*, from a bare hull and sails it on the East Coast from his home on Barnegat Bay in New Jersey.



Jim DeWitt's (*The vibrant vision of Jim DeWitt*, Page 44) career has never veered from his two loves: sailing and art. He has raced in everything from El Toro dinghies to bluewater yachts. His paintings have earned international acclaim. Visit his website at <http.//www.jimdewitt.com>.

Ed Lawrence (*Two classic Columbias*, Page 46) is a contributing editor with *Good Old Boat*. He writes about boats and offbeat subjects for several national magazines. When he can, Ed sails a San Juan 23.

Alan Lucas (*Pilot rails*, Page 50) is an Australian from New South Wales who has been cruising for 40 years, primarily south of the equator. He's written several Australian cruising guides.

Steve Stoehr (*Surface-mounted ports*, Page 52) built his first sailboat in 1961 from *Mechanics Illustrated* plans, taught himself to sail, and has been sailing, repairing, and upgrading sailboats ever since. He's restoring a freshwater Tartan 30 in Ohio with plans to sail it to Massachusetts via the New York Barge Canal.

Sandy Davis (*Then came* Romance, Page 55) and her husband, Jim, have spent the last 22 years sailing on the Chesapeake Bay. Sandy not only enjoys sailing boats, she has recently discovered the satisfaction of restoring small boats to their former beauty.

Dyke Williams (*Quick and easy: Helping hand*, Page 73) and his wife, Katie, are "downsizing" with the sale of their Little Harbor 37 yawl. On Ontario's Lake of the Woods, they combine wilderness racing, canoe country cruising, and grandparenting.

Bob MacDonnell (*Quick and easy: Bagging fruit flies*, Page 74) left Nova Scotia in 1980 and never returned. He and his wife, Judy, are residents of Vanuatu on their cruising catamaran, *Siddiqi*. Each year during cyclone season they return to Brisbane, Australia.

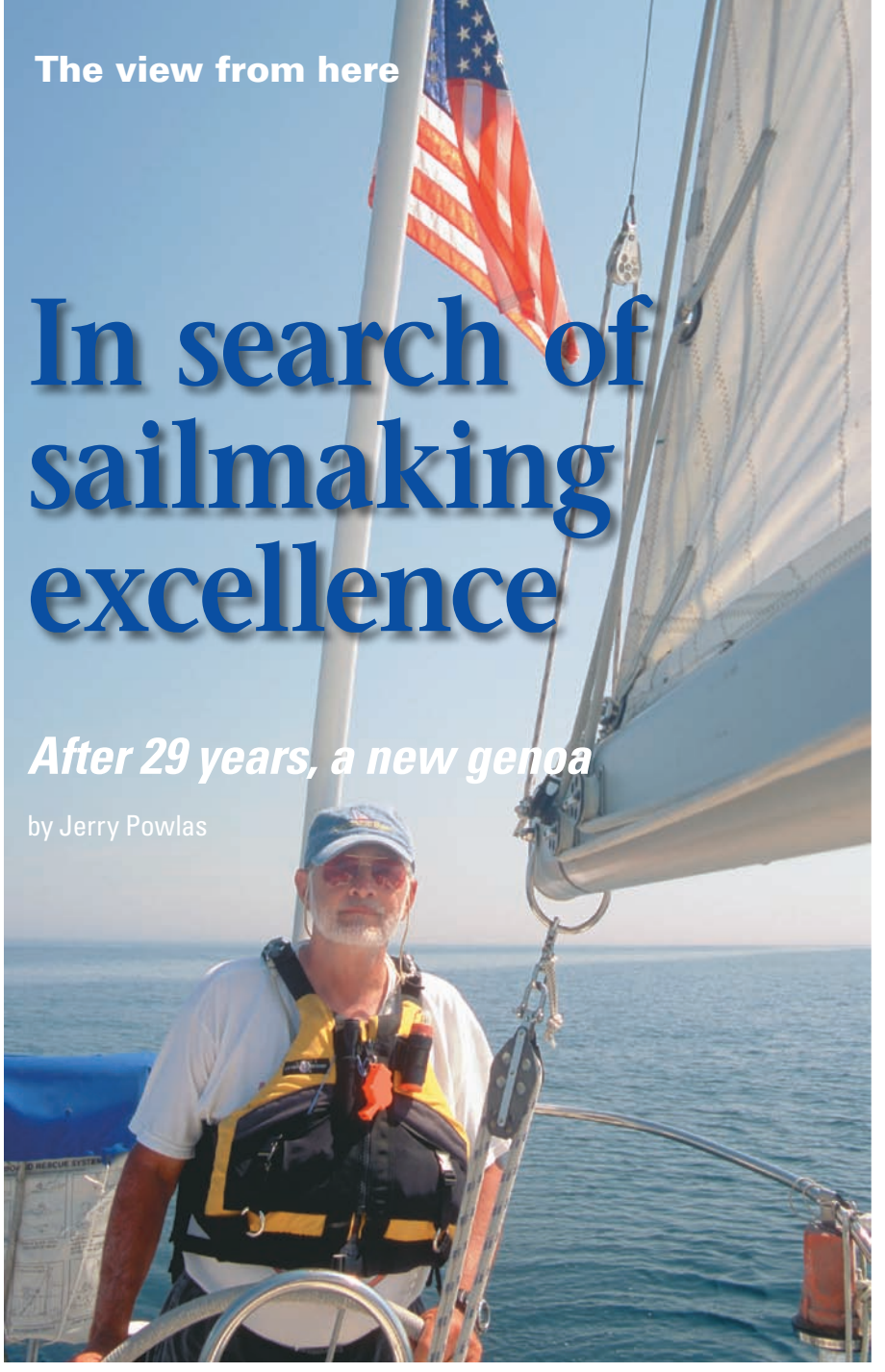
Paul Danicic (*Quick and easy: Regards to Harry*, Page 75), and his family sail western Lake Superior on a 23-year-old Cape Dory 33. He is a USCG captain and the Camp Director of YMCA Camp Menogyn, a wilderness camp for teens. He contributes to other peoples' adventures and sails in remote areas to have his own.

Phillip Reid (*Quick and easy: Repelling no-see-ums, Page 76*) and his wife, Andie, and their Bernese mountain dogs, Tugboat and Steamboat, live in Wilmington, North Carolina, where he writes, teaches, sails, dives, and works on his Pearson 28, *Miss Bohicket*.

Chris Hardenbrook (*Simple solutions: French gloss*, Page 77) has been sailing one thing or another since 1977, when he purchased a Hobie 14. Recently installed as commodore for the Pacific Singlehanded Sailing Association, he can usually be found messing about with *Herald Bird*, his 1972 Cheoy Lee Offshore 27.

Pete Dubler (*Simple solutions: Bilge pump spy*, Page 78) has crewed on offshore deliveries since 1999 and is an ASA-certified instructor. He and his wife, Jill, sail a Pearson 424, *Regina Oceani*, and are planning extensive cruising once their three daughters depart for college.

Joe Moore (*Reflections: Through the gates*, Page 89) started sailing at 18 with the purchase of a Star class sloop. Since then he's built a 20-foot wooden sloop and a 3-meter trimaran. He sails a Newport 28 while restoring a 40-foot Wendal Calkins cutter. A general building contractor, he's also the founder of JDM Boatworks.



In search of sailmaking excellence

After 29 years, a new genoa

by Jerry Powlas

Mystic's 150-percent genoa was made in 1976, as near as I can tell. We've made repairs to it in most of the 14 years we've owned the boat. I even sewed in a foot reef a few years ago. All that attention was worth it. The sail was in service for 29 years. Granted, we carry four headsails, so no one sail has to do all the work. But still, 29 years is a long time. This is particularly so in my case.

I used to buy a new suit of sails every two years when I raced dinghies. That was as often as the class rules allowed. Even though I don't race anymore, I'm still not one to give away a tenth of a knot on a 6-knot boat. Do that very many times and you have a 5-knot boat. The old genny held her place in the inventory because she kept her shape and pulled nearly as well as I'd expect a new sail to pull. But ultraviolet rays finally had their way.

> "I used to buy a new suit of sails every two years when I raced dinghies."

Shopping for sails is interesting. You can shop for price, although I've never done that. You can also shop for various designs, cuts, shapes, and features. I've always looked for sailmakers who respect my skills and experience and make reference to how I use my boat. I also want a sailmaker who knows more about sails than I do. In such matters I'm not actually an easy person to deal with. Some might say I'm *often* not easy to deal with, but even so, sails are a special case. I'd probably choose a sailmaker with more care than I'd choose a surgeon.

> "…sails are a special case. I'd probably choose a sailmaker with more care than I'd choose a surgeon."

The guy I selected this time did it all right. He grilled me about how I intended to use the sail. You can often tell more about people by the questions they ask than the answers they give. Sails today are all designed by computers. He fired up his laptop and worked with draft location and depth. We worried twist into the shape. We called Sailrite, which made our mainsail. They checked their records and gave us the draft location and depth on the main so the new genny could be cut to work well with it.

I gave the sailmaker our venerable old 150 to look at along with 10 pages of instructions about what I wanted in the new sail. He took these with good grace, and I had the sense that he had higher expectations for the new sail than I did. That ain't easy. We will see in the spring.

That is the process of custom sail design and construction. It's not about trying to hang something white in the foretriangle at the lowest possible cost. Instead, it's about balancing a large number of variables to make something that is a nearly perfect compromise.

Growing up afloat

A long-time voyager examines the effects of cruising on kids

by Theresa Fort

WE HAD SAID OUR GOODBYES THE night before, her eyes glistening with love and the anticipation of her next adventure . . . college. Mine were long wet from memories of her growing up. The sail down to St. Mary's College of Maryland had been beautiful. We ghosted along before light winds while Amelia steered *Coquette* like the expert she is. We unloaded all of her worldly possessions by dock cart on the hottest day of the year and moved Amelia into her dorm room (thereby increasing the size of her living area by several hundred percent). I knew she was ready for this next adventure. We had given her all we could.

The next morning the sun warmed my back as I hauled the anchor and Chuck steered us out of the bay. All the new freshmen were still asleep. We watched as the buildings of the college disappeared behind a point of land. Our first-born was off on her own adventure, seeking further knowledge and testing herself. In more ways than one, we had sailed our daughter, Amelia, to the doors of adulthood. We had cruised while she was young and again in her teen years. But this short last sail to her college was bittersweet and full of expectation.

Like most kids who have lived aboard a boat for much of their growing years, our kids (Amelia, now 19, and Alex, now 17) never had a normal life full of neighborhood friends, soccer leagues, peer pressure, or bullies. Instead, they had boat sleepovers, trick-or-treating by dinghy, beach potlucks, and friends from all over the world . . . along with the responsibilities of night watches and course plotting.

How they'll fare

Friends, family, and acquaintances have followed their growing up, curious about how they will fare in the adult world, wondering how cruising has affected their lives. We have been watching as well. Though Amelia has only begun and Alex is at the threshold of his adult life, I can't help but wonder what effect cruising will have on them. Did we do right by them? Should we have delayed our cruising to let them have lives like most children? Have we raised them in such a strange way that they will always be misfits? It makes a parent wonder.

So when I had the chance to interview former cruising kids who are now grown, I took it. Since then I've had the wonderful opportunity of talking to many adults who were once cruising kids. I've asked about their experiences, their current lives, and whether they felt that cruising as children had affected the major choices they made as adults. The few who are included here are representative of many, many others.

I am learning that our own kids

are a lot like those who have cruised before them. Though the former cruising kids may not keep to the water or create lives near or around the sea, they seem to have several things in common. They appear to be doers who create their adult lives from whatever resources they have available to them and stretch themselves to do what they believe is important. And they care. They care about family, the environment, and what happens in the world.

Who are these former cruising kids? One could be the parent next door who spends his off-hours helping kids in the neighborhood as a Scout leader. One could be that explorer you read about in the paper last month who is attempting an arctic adventure. While most of those I talked to live near navigable water, not all do. They have varied interests and job titles.

But they all seem to be living their lives fully and richly. Examples:

- a nuclear equipment operator
- a racing skipper and rigger
- a molecular biologist
- an Australian explorer
- a pastor of Ocean Ministries
- several cruising writers
- a London police officer
- a webmaster of a major sailing/cruising website
- the president of a not-for-profit environmental organization
- college students interested in engineering, marine biology, astrophysics, and computer technology
- a sailing instructor
- several captains and self-professed wanderers
- a marine engineer
- a boat designer

Adults who grew up cruising are not the easiest folks to find, but one contact often led to another and I managed to glean information about dozens of former cruising kids. I talked to each about how their cruising experiences shaped their views of the world, their relationships with their families and friends, their interests in the environment and world happenings, their career and lifestyle choices, and their own child-raising.

Personal growth

There's no doubt that the cruising lifestyle causes intense personal growth. Even cruising adults are forced to face closet skeletons as well as fears and anxieties. We grow stronger through those dark midnight watches and nasty storm clouds gathering. What personal growth do kids experience? The words "responsibility," "self-sufficiency," "resourcefulness," and "inventiveness" were common among those I interviewed.

Clio Smeeton, daughter of Miles and Beryl Smeeton and a cruising kid beginning at 8 years of age, explains, "I think that bluewater sailing, particularly as an only child, gives self-sufficiency and responsibility…something children raised on land miss. Because if, like me, you grow up as an only child on a cruising boat, there is no getting away from it…you have to stand a watch. I stood watches when I was 8 (only during daylight). And when we went to sea again, when I was 14, I stood regular watches, day or night. The other thing is, like mountaineering, everyone works together to sail the boat, and everyone has an important role." Cruising's quiet moments also influenced her: "It made me into a voracious reader, and it gave me the ability to be happy in my own company."

Chris Bray and his sister, Sarah, shown on facing page, formed strong sibling bonds while cruising with their parents. Ever the explorer, Chris has completed a two-person expedition across Canada's Victoria Island unassisted.

Tere Batham's father, Jack Carstarphen, was one of the founders of the Seven Seas Cruising Association, Tere with her family, in top photo. Jack's advice was to have a dream, work to realize it, and make another. After they met in the Caribbean, Tere married Michael Batham, another young cruiser, shown with his family in center photo. The two continue to cruise, bottom photo.

Children are a main part of their parents' lives no matter where they are raised. Kids watch us as we make our paths in the world. As children see their parents live and fulfill dreams, it can be a very powerful experience. Tere Batham, who moved aboard from the hospital after her birth, then continued cruising as a young girl, watched as her parents fulfilled their cruising dream. "Dad (Jack Carstarphen, a founder of Seven Seas Cruising Association) always said that for life to be interesting, 'You must have a dream.' And furthermore, 'When one dream is realized, then you must make another dream.' This attitude, reinforced by the family lifestyle that followed, is never far from my personal sense of self. When I find myself drifting into an uninteresting eddy of my life, I believe that it is time to dream again and set more goals."

Setting good examples

But fulfilling dreams are not all that cruising parents do when they set off to sail. Sometimes they help their children just by being open to opportunities. Michael Batham, now Tere's husband, watched his parents make some unusual choices when they decided to move from England to Vancouver, British Columbia, by sailing aboard their own boat. And he watched them change their plans when new opportunities appeared for them in the Caribbean where they decided to open an offshore hotel in the British Virgin Islands.

"By departing England by sailboat rather than commercial carrier, they made an unusual choice for their day, in 1958. Then, as they bent their plans to the opportunities that arose in the Caribbean and carried those new plans through to a successful conclusion, the realization was instilled in me that by being sensitive to opportunities as they presented themselves, I might get a lot more out of life," Michael says. He met Tere while their families were in the Caribbean, and later they married. Through the years they have kept sailing in their lives and are cruising now. They want to continue for as long as possible.

Family life and relationships

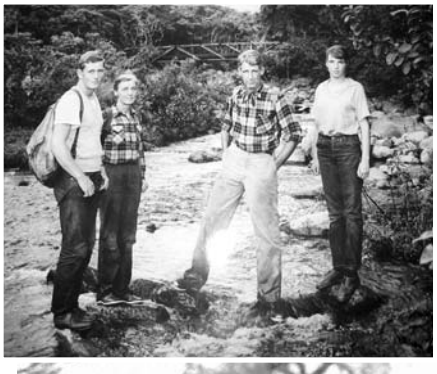
"Compared to those around me, I have a closer relationship with my family, which I am sure has a lot to do with my upbringing. My sister, for example, was also my best (and only constant) friend when sailing, and we remain close today," says Chris Bray, son of cruising writer Aussie Bray. Most of the grown cruising kids I talked to agreed that their relationships with their immediate family members were much closer because of cruising. They learned to work together while sailing; they knew

Doina Cornell, daughter of Jimmy Cornell, cruised with her family for six years beginning at age 7. She is shown here with her brother, Ivan, above left; learning about local cultures, above right; and grown up with her husband and children, above center.

Bruce Schwab, at left, who has gained recent recognition as the first U.S. sailor to complete the Vendée Globe race, has been sailing since he was 5. He is shown on his world circumnavigator, *Ocean Planet*. Bruce cruised with his family from the Chesapeake to California when he was 13. His interest in racing began on that cruise when he discovered yacht club racing in Jamaica while his family's boat was being repaired there.

Craig Myers, at right, the youngest of Herb and Nancy Payson's six children, doesn't cruise these days. But he does believe in the values of self-sufficiency and responsibility learned at sea. He's an active scoutmaster, center of group below, with two grown sons. He wishes all children could spend time immersed in a foreign culture like he did as a child.

Clio Smeeton, the only child of Miles and Beryl Smeeton, shown below with John Guzzwell and her parents, and more recently, at bottom, echoes Craig's sentiments when she says she learned self-sufficiency and responsibility while cruising with her parents. In addition, she learned to be happy in her own company.



how each member "ticked." Spending time together in the close spaces of a boat during bad and good weather, families must learn to talk and enjoy each other's company or their cruising time will be short-lived.

Better relationships

But that's not the only way cruising can affect family relationships. Craig Myers, the youngest of Herb and Nancy Payson's family of six kids, says he never would have known his grandfather if he hadn't gone cruising. It wasn't because his grandfather was aboard with him . . . rather, he and his grandfather became great pen pals. "He was the only one who consistently wrote back," comments Craig. The two shared their adventures.

Craig's were his adventures sailing the South Pacific for seven years. His grandfather's adventures were lived as a child traveling west in a wagon. When Craig came back to the States, before he went into the Navy, he took the short time he had to visit his grandfather. Several months later, when Craig heard about his grandfather's death, he was grateful for the time he had spent with him and for the many letters they had exchanged.

While most of us want to give our kids the same kinds of great experiences we had when we were growing up, former cruising kids aren't always able to do so. Some end up falling in love and making a life with someone who isn't interested in a cruising lifestyle. Others choose to introduce their own kids to sailing but never share the adventure of cruising. In some cases, other forms of independent travel have become a part of their lives with their kids. Each year, grown cruising kid Robin Evans and her family have chosen to explore Europe with their V8-powered trike. For them, it has become a great way to meet people from all walks of life.

Doina Cornell, a cruising kid from age 7 and daughter of author Jimmy Cornell, gives her own children an active outdoor life and shares sailing with her kids through trips aboard her brother's and father's sailboats. And for Craig Myers and his sons, Scouting has become a great way to learn about responsibility and self sufficiency, but Craig wishes all children could spend time immersed in a foreign culture like he did as a child.

Home away from home

One of the advantages of cruising aboard your own boat is that you take

These days Robin Evans, a London police officer, is a land cruiser, exploring Europe on a V8-powered trike with her husband, Andy, and their two children, at top. Robin believes her cross-cultural experiences as a child gave her the cultural understanding she needs as a police officer. Seven-year-old Robin, in front, above, with her family as they are crossing the Atlantic.

Karl Toppler, below, who cruised with his family between the ages of 11 through 15, believes he has a broader, more open-minded view of the world and its many cultures as a result of his experiences.

your home with you when you arrive in a new country. Your boat becomes a haven, a place to relax from the intensity of exploring that new country. While ashore, you can throw yourself into the new culture and live beside locals while doing the everyday errands of life. These experiences — subsistence living beside locals of many countries while cruising in the South Pacific — taught Craig Myers how great the opportunities and resources were in his home country. He believes it would help all children to understand their own culture better if they were to experience the similarities and differences of another culture.

When visiting a foreign country, just getting basic chores done and conversing with locals can be challenging. These experiences can give cruising kids the ability to empathize later in life when they meet foreigners trying to get along in a new country. Robin Evans notes that former cruising kids are "able to see a bigger picture because of [their] experiences." A London police officer for 24 years, Robin comes into contact with many people from other countries on a daily basis. After helping one foreigner feel more comfortable while waiting for his interpreter, she writes, "I believe that my confidence with anybody from anywhere comes from the many different experiences that our parents exposed us to . . . [experiences] that many kids with 'conventional' upbringings often aren't [exposed to]. We know what it's like to live as a foreigner in a foreign country, and I am not intimidated by lack of common verbal language."

Karl Toppler, a graduating senior at Southern Cross University in Australia who cruised aboard with his family for four years, beginning at age 11, sums up what I learned from the others: "I like to think that the time we spent traveling has given me a broader and more open-minded view of the world, different cultures, the environment, and politics."

Environmentally conscious

Cruising fosters a love of the ocean and its inhabitants. It also affected the way these former cruising kids view the environment. Seeing trash in the middle of the ocean on passages gave Craig Myers a strong feeling about how our actions on land affect our entire world. Almost everyone else I interviewed agreed that their experiences cruising made them more environmentally conscious. On the other hand, Clio Smeeton, now president of the Cochrane Ecological Institute (CEI), which was founded by her parents, feels that she became more environmentally aware because her parents were, not just because of cruising. Whaleforce, a long-running project of the CEI, gathers information about cetaceans sighted and recorded by cruising sailors all over the world. Like Clio, many former cruising kids chose careers related to their experiences on the ocean.

Amelia, my oldest child, is studying to become a marine biologist. There is a direct connection with cruising and her love of the ocean environ-

ment. She's not the only one who was directly influenced by cruising.

Sailing since he was 5 years old, Bruce Schwab cruised with his family from the Chesapeake to California when he was 13. The first U.S. sailor to complete the Vendée Globe race in 2004-2005, Bruce has been a professional rigger for 20 years in California. His interest in sailboat performance was sparked by his introduction into yacht club racing in Jamaica while he and his family were dry-docked there repairing their sailboat. He's been interested in sailboat racing ever since.

As a cruising writer and photographer, Tere Batham shares her love of storytelling through her articles in many national and international sailing magazines. Her latest adventures are in her book, *Cruising Japan to New Zealand*. She fondly remembers 6 p.m. watches, listening to her parents tell stories of their own cruising adventures.

popular or cool, I was able to pursue my own interests and develop my own outlook on life," he says.

Education and social aspects

At times, when they've returned to life on land, all cruisers feel like round pegs trying to jam themselves into square holes, but cruising kids have special challenges in social situations. "It was not until we returned home that I realized how much of an impact sailing had had on me," says Chris Bray. "The people around me at school and now at university seem to be heavily blinkered in their view of the world and what they could do with their lives. This is a double-edged sword, though.

"On the one hand, it makes me feel like I can achieve a great deal more in life, and there is just not enough time to do it all, whereas some fellow students have so little direction or drive that they get 'bored' on holidays and can't wait to get back to university just for something to do! On the other hand, the only downside to having such an unusual insight into the world is that I tend to have trouble immersing myself into the 'normal' social setting because I find much of it boring and ultimately pointless, and I'd rather be doing something else."

> "Free from social pressures of what was popular or cool, I was able to pursue my own interests and develop my own outlook on life."
> — Chris Bray

Karl Toppler's studies in engineering may lead him to boatbuilding in the future. "I definitely think growing up on the boat which my father built shaped my mind and thinking to choose materials engineering at the university — I always wanted to do some form of engineering."

Lifestyle choices

Sometimes an adventurous childhood can lead to adventurous lifestyle choices. Chris Bray has been admitted to the prestigious international Explorer's Club and has completed a two-person expedition across Canada's Victoria Island. Not to be confused with Vancouver Island, Victoria Island is north of the Canadian mainland and well inside the Arctic Circle. The ninth largest island on the planet, it remains virtually unexplored.

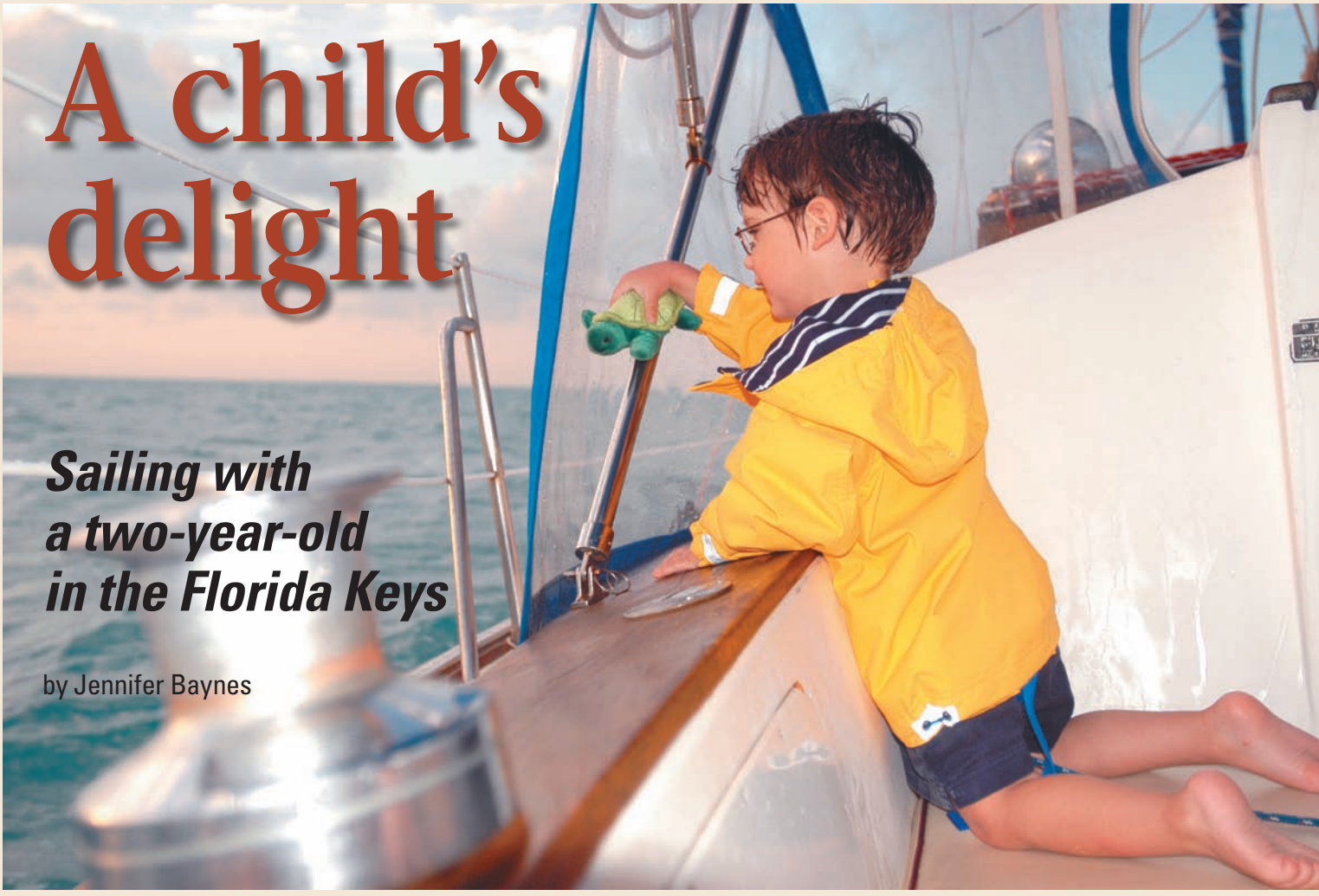
Chris believes cruising removed any sense of confining horizons. "Free from social pressures of what was

Socially, cruising kids may not fit in with peers who have never traveled abroad, but while cruising they learn the fine art of making friends fast — the age of the friend usually doesn't matter. "When you are out cruising, plans can change and cruising friends can separate to go in different directions. You never know when you will meet up again. It's best to move quickly so when you do meet up again you can get to the fun part of just enjoying each other's company," says Amelia, who cruised with us from Alaska to Central America and the Caribbean from age 9.

Continued on Page 59

Amelia Fort and her brother, Alex, at top, shown together exploring in Alaska, cruised with their parents, Chuck and Theresa. The family sailed from Alaska to Central America, the Caribbean, and ultimately the East Coast of the United States. Influenced by her experiences, Amelia is studying to be a marine biologist.

A child's delight



Sailing with a two-year-old in the Florida Keys

by Jennifer Baynes

These days, when Noah is playing with his toy sailboats, he can pick out the boom, the mast, and the keel. Then he points to the deck at the bow and says, "That's where we sit and watch the dolphins."

Our bareboat charter trip to the Florida Keys last spring has influenced our 2½-year-old son in many ways. Five months after the fact he vividly describes the details: the color of the water (green); the members of the dolphin family that played with us one afternoon (particularly the baby and grandma); and the important differences between the water where we anchored ("It's cold and you have to wear your PFD.") and the warm, shallow water on the beach ("The beach water with the slippery green fish."). Noah knows firsthand that ocean water is very salty (so no drinking it!), and baths now receive a sprinkling from the salt shaker so he can float in the tub better.

> "The fish, stars, waves, the sailboat itself — each encounter with a new experience became rich play material."

Some of the imagery floats into our daily conversations in that beautiful way that only toddlers can get away with, such as when we were at the park the other day:

Noah: "What does the sign say?"

Me: "It says, 'No swimming in the pond.' "

Noah: "And, 'Don't let the tarpons nibble your fingers.' "

We live in Milwaukee, Wisconsin, where briny sea creatures are pretty scarce, especially in the city parks. But when we hang our puppet stage in the doorway, the ocean comes alive for us as Mr. Seaturtle, the octopus, the dolphins, and their pinniped pals re-enact some of our heeled-over moments on *Southern Light*.

A little apprehensive

She was a 1982 Morgan 32 with more amenities than we had anticipated. Still, we were a little apprehensive about living aboard for a week with our imaginative-but-intense toddler. After we addressed all the safety concerns, there were still fears such as, "What if he screams all evening in a quiet anchorage?" or my worst fear, "What if we run out of ways to occupy him?"

As spacious as this boat was, there was a finite number of toys and activities we could pack in our luggage. And we didn't know exactly what the storage situation would be on the boat, so we packed spartanly for Noah: a few art supplies, some books, and of course Mr. Seaturtle.

Thankfully, none of our fears were realized. The ocean and its beaches were a wonderland for him (and us), with no lack of interesting ways to occupy him. All children love and

Noah and Mr. Seaturtle learn about cruising, on facing page. Noah, in harness and tether, mans the winch, at left; he swims with his Mom and reads up on the birds of Florida, below.

respond to nature, and Noah is no exception. The fish, stars, waves, the sailboat itself — each encounter with a new experience became rich play material. Plus all the fresh air and sunshine meant early bedtimes and quiet evenings at anchor.

One favorite play reenactment refers to the day the dolphins decided to glide over to our boat to display their awesome gymnastic talents. We were sailing toward Marathon, Florida, when my husband, Joe, spotted them in the distance. Noah and I joined him on deck and watched while at first four or five — and then about 20 — dolphins swam toward us. This breathtaking scene inspired Noah to sing to them, while they somersaulted, spun, flipped, and torpedoed around our boat. Some of them lost interest in us, but the seven or so performers that stayed would dive below out of sight, and then, as if on Noah's singing cue, pop up from the waves, twirl around, then splash back down to their hiding place beneath the boat. To Noah, this seemed like they would come to him only when he sang his special dolphin song. The Performing Troupe cooperated, bursting from the waves when their conductor, Noah, signaled with his song.

> **"…by the end of the day he and Mr. Seaturtle were still wearing big, salty, wet smiles. Noah proved to be the real sailor that day."**

One long day

Our happy, eventful trip did include one long day of beating to windward in 4- to 5-foot waves. The *Southern Light* was due back to her owners the next afternoon, and we were still 15 miles from our intended anchorage. After hours of long tacks with very little forward progress, Joe made the wise decision (over my puritanical, sailors-should-use-sails protests) to start the engine.

The monotony of motoring directly into waves for eight hours really wore us out: sore necks, constant spray, and a nervous impatience to get to our anchorage before dark. But thankfully, Noah didn't pick up on our vibes. Every dousing of the cockpit was hilarious to him ("Look, Daddy's all wet!"), watching the dinghy we were towing leap crazily toward us was endlessly fascinating and funny, and by the end of the day he and Mr. Seaturtle were still wearing big, salty, wet smiles. Noah proved to be the real sailor that day.

This charter was also in some ways a test for our family. We are restoring a 1964 Pearson Alberg 35 sloop with the intention of living aboard and cruising when she's ready. Of course, a week on a sailboat is quite different from living aboard, but we needed a glimpse into that life. It may be a few more years before we, our boat, and our wallets are ready to cut the docklines. Our Alberg hasn't seen water for four years and our little Lake Michigan daysailer, a Bristol Corinthian, is hardly preparation for living and raising a child aboard. Bareboat chartering helps us keep an eye on our dreams.

If bareboat chartering provided Joe and me with a tiny dose of what it's like to live aboard and cruise, it also gave Noah a small taste of Moitessier's poetry, a bit of St. Exupery's vision, and all of the wonder the natural world has to offer.

Thunderstorms

What to expect and how to survive

by Gene Bjerke

THERE WERE ALL THE CLASSIC SIGNS — I was just too inexperienced, or in too much of a hurry, to pay attention to them. After a rainy night, my teenage son, Alan, and I were delivering our Bristol 22, *Dona Dona*, back to her home mooring near Yorktown, Virginia. We spent most of the day under a gray sky, beating into a strong southerly wind down the western shore of Chesapeake Bay. We finally made it to New Point Comfort and looked forward to falling off and making the last leg home on a screaming reach.

My heart sank as we rounded the point. Between us and home lay a squall line, a horizon-to-horizon row of evil, black thunderclouds. They were about seven or eight miles away and heading in our direction.

> "My heart sank as we rounded the point. Between us and home lay a squall line, a horizon-to-horizon row of evil, black thunderclouds."

We immediately put about and headed downwind to the nearest shelter, Horn Harbor, about three miles away. It took less than half an hour to retrace a distance it had taken us about two hours to win. We made it into Horn Harbor and a short distance up the creek before the squall struck. Unable to anchor successfully in the strong wind and torrential rain, we were finally able to tie up at a marina to ride out the storm.

How they develop

Like most violent weather, thunderstorms feed on heat and moisture. Due to local heating or some sort of outside push, a quantity of warm air will rise like a hot-air balloon. As it does, it cools and some of the moisture condenses out as a cloud. This condensation releases heat, which adds to the balloon effect, causing the air to rise higher. Meanwhile, ground-level air moves in to replace the rising air and it, too, rises. As the process continues, a cumulus (from accumulation) cloud forms.

The process may stop there, creating the typical fair-weather cumulus, or continue to build into the towering cumulonimbus cloud that will become a thunderstorm.

As the cumulonimbus cloud builds up into cooler regions, the moisture droplets combine into bigger drops, big enough to start falling as rain or even snow if the upper air is cold enough. By cooling some of the air and by friction, this precipitation creates downdrafts within the cloud. Once this happens, the storm is in its mature phase, marked by the presence of updrafts and downdrafts within it and by precipitation tossed up and down inside the cloud. This is when the storm is most dangerous. The cumulonimbus cloud extends above the freezing level, so some of the precipitation will freeze into hail. All that turbulent water, snow, and ice creates several million volts of static electricity, leading to the lightning and thunder that give the storm its name. A mature thunderstorm may also spin off daughter storms or even tornadoes and waterspouts.

Such a storm usually contains several cells. It can be as much as 15 miles across and will reach altitudes of 40,000 feet or more. At sea level, the effects are strong gusty winds from the downdrafts, usually heavy rain, perhaps hail, and, frequently, lightning.

While this is when the storm is at its most dangerous, it also is the beginning of the end. The strong, colder downdrafts eventually cut off the inflow of air that feeds the updrafts. Deprived of the heat and moisture to feed it, the storm slows down, spreads out, and dies. This is usually when the characteristic anvil top appears, so the presence of an anvil top usually indicates that the worst is over. A mature thunderstorm, while violent and dangerous, rarely lasts much more than an hour (though the dying storm's cold winds may give birth to new daughter storms).

Types of storms

While some areas are more prone to thunderstorms than others and the West Coast is nearly free of storms, they can occur during the sailing season in just about any part of the country. Thunderstorms fall into two general types: the frontal storm and the air-mass thunderstorm.

Thunderstorms can be associated with any frontal system, but they are most common in front of a rapidly advancing cold front. A cold front is not a wall of cold air, but more like a wedge. As this wedge moves forward, it forces the warm air ahead of it to rise. The faster the front is moving, the greater this effect will be. It is this rising warm air that develops into thunderstorms. The result is the squall line.

The rising air forms a string of thunderstorms ahead of the front. How far ahead depends on how fast the front is moving. Typically, squall lines will develop about 100 to 150 miles ahead, but the squall line may precede a very fast-moving front by up to 300 miles. In most sailing areas, squall lines will be oriented in a north-south or northeast-southwest direction. Squall lines are the most dangerous type of thunderstorm. And since the line of thunderstorms may extend for 100 miles or more, you can't sail

The power option

by Jerry Powlas

In my opinion, the best sail plan to have up before and during a thunderstorm is the iron jenny. I know that is not very salty, but I'm convinced it's true. If you have a reliable engine, use it.

Eighty knots of wind will knock down a coastal cruiser under bare poles, let alone storm canvas, unless she can get herself turned head-to-wind. But sails don't draw when they're head-to-wind. They make a lot of noise, shed various-sized parts, and become useless in that kind of wind.

In the half-hour or so before a thunderstorm hits, you have time to reef down to your storm sails. The problem is that the "calm before the storm" may present you with very light winds, and you will be trying to sail in these lulls with storm canvas up. Instead of playing old man and the sea with your expensive sail inventory, take down all sails, start the engine, and make your plans.

If you can reach shelter, go there. If you can't, choose the best place to be when the storm hits and go there. You can't pick your fights in this case, but you can pick where you fight. In any case, your options will be greater with an engine. Your plan should include dealing with wind from every possible direction because, as a thunderstorm passes, the wind will blow from just about every direction.

If you are near shore or among islands, you may be able to position the boat in the lee of an island as the storm passes by going around the island. Don't get too close and get driven ashore. Thunderstorms will quickly raise very high, very steep, seas, which you may need to buck. Anchoring is not a bad plan; the more anchors the better. Be ready to buoy off anchors with a fender and motor away if your anchors drag.

I'd much rather sail than motor, but in thunderstorms the motor is better. It offers more options.

around them. Your best defense is usually to seek shelter immediately unless the shore presents more danger than the storm itself.

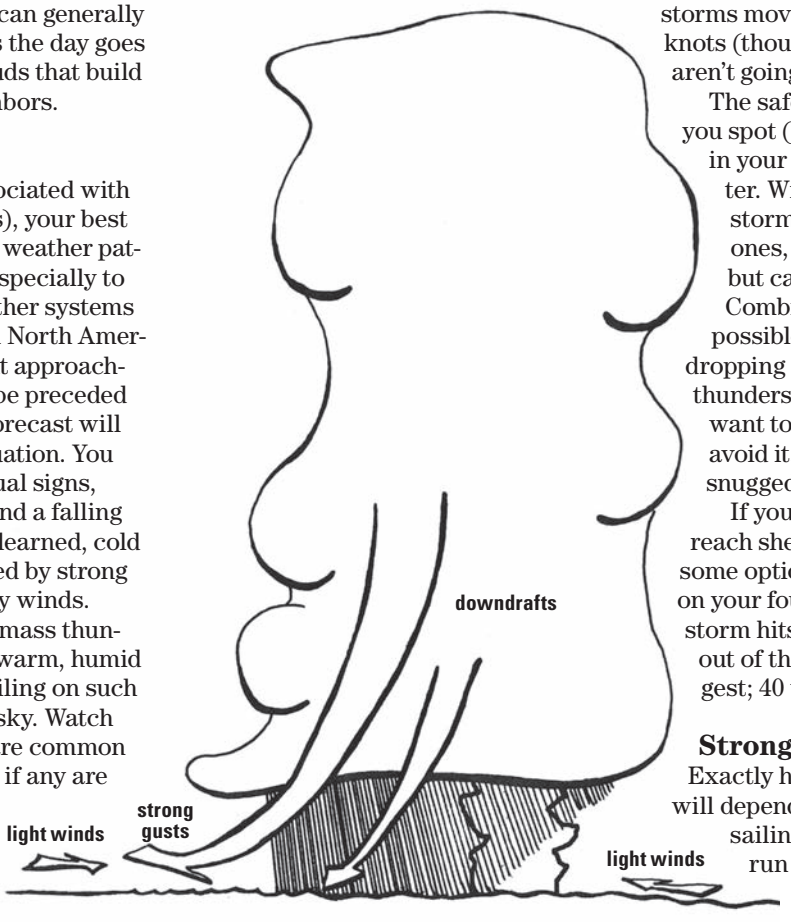
Air-mass thunderstorms, on the other hand, occur individually and locally as a result of rising thermals on a hot, humid day. They often develop and mature over the warmer land and drift out over the water. They usually don't strike much before late afternoon, often just after sunset. You can generally watch them developing as the day goes on. Look for cumulus clouds that build up higher than their neighbors.

Dealing with them

Since squall lines are associated with fronts (usually cold fronts), your best bet is to keep track of the weather patterns over a larger area, especially to the west (since most weather systems move from west to east in North America). If there is a cold front approaching, be aware that it may be preceded by squalls. The weather forecast will be most useful in that situation. You can also watch for the usual signs, such as lowering clouds and a falling barometer. As Alan and I learned, cold fronts usually are preceded by strong southerly or southwesterly winds.

On the other hand, air-mass thunderstorms are typical on warm, humid summer days. If you're sailing on such a day, keep an eye on the sky. Watch the cumulus clouds that are common in those conditions to see if any are growing especially tall. Unless it is very hazy, you can usually spot the thunderheads as they develop. It may also be prudent, especially if the clouds are hidden by a heavy haze, to simply get to shelter by mid-to-late afternoon. If the light "looks funny," something is up.

Once a thunderstorm is fully developed, you can judge its distance from you by counting the seconds between when you see a lightning bolt and when you hear the associated thunder. Divide that number by five; that is the distance in miles to the storm. It is hard to determine the speed and direction of an air-mass thunderstorm unless you watch it for a while. Don't be fooled by surface winds, which often blow toward the growing cumulonimbus. Thunderstorms are moved and steered by winds aloft, which may differ in speed and direction from the surface winds. Typically, thunderstorms move at a speed of about 20 knots (though this can vary), so you aren't going to be able to outrun them.



The safest thing you can do when you spot (or suspect) a thunderstorm in your vicinity is to head for shelter. Wind gusts out of a thunderstorm, especially the first cold ones, are commonly 40 knots but can go as high as 80 knots. Combining that with heavy rain, possible hail, and lightning bolts dropping all around you makes a thundersquall something you don't want to mess with if you can avoid it. Your best defense is to be snugged down in a sheltered area.

If you are caught out and can't reach shelter in time, you still have some options. Reef down and put on your foul-weather gear before the storm hits. Remember, the first wind out of the storm will be the strongest; 40 to 60 knots is not unusual.

Strongest winds

Exactly how you deal with a storm will depend on your boat and your sailing area. You may decide to run off under jib and furled

Continued on Page 72

Dealing with bridges

Bascule bridge

ILLUSTRATIONS BY VERN HOBBS

How to request openings like a pro

by Vern Hobbs

Last winter, our friends Susan and Scott came down to Florida to escape the Lake Erie winter and do a little sailing. I enjoy having other sailors aboard. It provides an opportunity to learn new techniques and to clean up those bad habits that accumulate after I have been doing things "my way" for too long.

After a welcome-aboard coffee we went through our pre-sail checkout: location of safety gear, arrangement of running rigging, and so forth. We ended up at the nav station, where I spread out a chart depicting our local sailing waters. We had planned a simple offshore sail south of Cape Canaveral. I traced our course with my finger and explained, "We motor east, pass under the 401 drawbridge, get sail up just past this jetty…"

"Whoa!" said Scott, "I've never dealt with a drawbridge." I was surprised. Drawbridge openings have been part of my sailing experience from the beginning. I realize now that many experienced sailors have never "opened" a bridge, and a few have confessed to being a bit intimidated at the prospect of doing so.

Planning for bridges

Bridge planning begins with a study of the nautical charts. Bridges identified as "bascule," "swing," or "lift," are all types of opening bridges. The ***bascule*** is the type most often imagined when hearing the term "drawbridge." This design consists of one or more spans hinged at one end while the other end rises in a vertical arc when opening. A ***swing bridge*** pivots at the center as the opening spans move in a horizontal arc, creating two parallel channels. ***Lift bridges*** are the most complex and least common of opening bridges. The spans rise vertically in the same plane supported at each end by tall columns. This type of bridge also has the disadvantage of being height restrictive even when fully open.

The charts will also denote horizontal and vertical clearances beneath the bridge. Horizontal clearance represents the width of the navigable channel at its most restrictive point. Vertical clearance is measured from mean high water to the bottom of the bridge at the center of the channel with the bridge in its closed position. This value, compared to your mast height, determines the need for an opening.

Schedules and curfews

Some bridge operators will open on demand any time, day or night, while others will open only in accordance with an established schedule. Bridge operators may also observe curfews that prohibit opening during periods of heaviest motor traffic. A typical schedule for a bridge on a busy roadway might specify openings on the hour, with no openings between the hours of 6 and 8 a.m. Conversely, some railway

> **I realize now that many experienced sailors have never 'opened' a bridge, and a few have confessed to being a bit intimidated at the prospect.**

bridges remain in the open position until a train approaches. Restrictive schedules and curfews are becoming more common and may represent anything from an annoyance to a hazard if not planned for.

Standards for bridge operations, including schedules, are established in the Code of Federal Regulations, 33 CFR 117. This document may be obtained through the U.S. Government Printing Office or viewed online at: <http://www.uscg.mil/hq/g-o/g-opt/Regulations.htm>.

A much more practical source of bridge information is the *Coast Pilot*. These handy supplements to the nautical charts are published periodically by the National Oceanic and Atmospheric Administration (NOAA) and contain a wealth of information indispensable to the coastal sailor. *Coast Pilots* may be purchased from NOAA Chart Agents, ordered online, or downloaded free of charge on the NOAA website: <http://nauticalcharts.noaa.gov/nsd/cpdownload.htm>.

Temporary changes to bridge schedules are sometimes necessary to accommodate repairs or scheduled maintenance. These are published in *Local Notices to Mariners*. Local notices are no longer distributed in paper form but may be viewed or downloaded from the Coast Guard's nav center website: <http://www.navcen.uscg.gov>. Coast Guard stations also transmit "Securité" broadcasts periodically on VHF Channel 16, detailing hazards to navigation, including bridge irregularities, in their areas.

There are many locally focused, yet unofficial means of determining bridge schedules. Sailors navigating the Atlantic Intracoastal Waterway (ICW) might find the Hampton Yacht Club's website helpful: <http://www.hamptonyc.com>. This site lists schedules for all ICW bridges between Norfolk and Miami. Local boating publications and cruising guides often publish bridge info, and marina operators frequently post the schedules of bridges in their immediate areas.

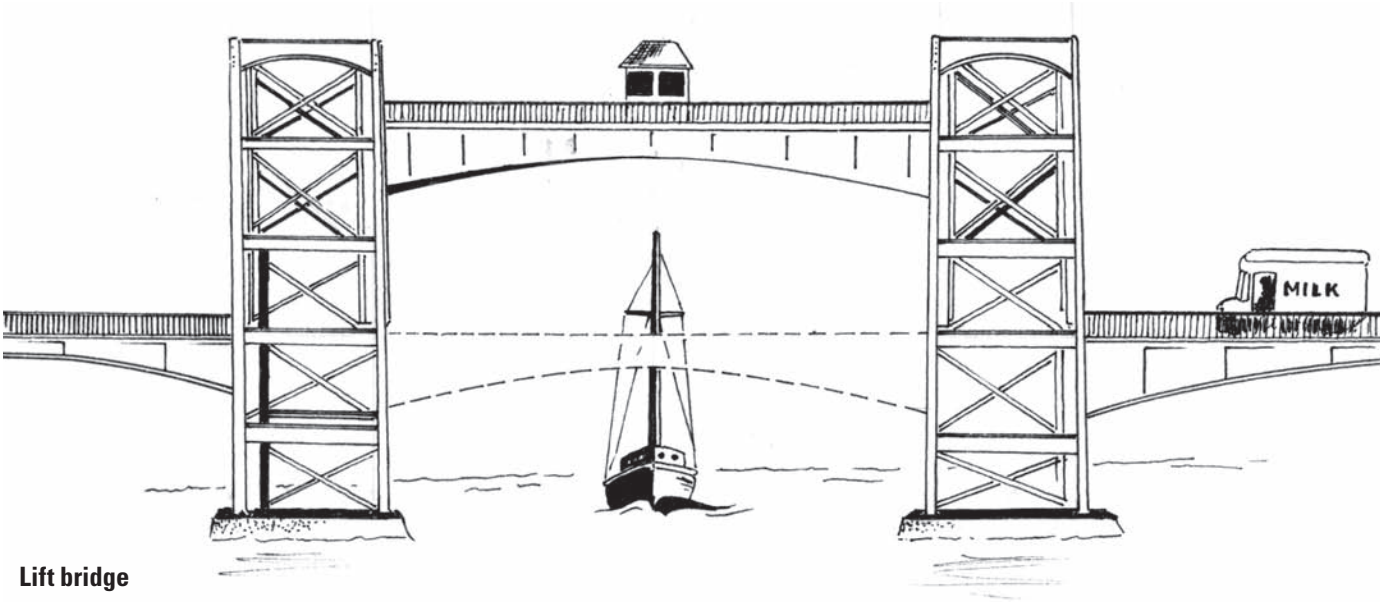
The last, but perhaps most certain, source of schedule and curfew information is the bridge itself. Signs listing schedules, the name of the bridge, and VHF radio channels monitored are commonly posted on bridges.

Thinking ahead

When approaching a bridge, the prudent skipper will assess the situation and prepare the vessel and crew for a safe passage. Here are five steps I use:

1. Note the time and determine if you will be in position and properly prepared to pass in compliance with the schedule. If not, prepare to stand off for the next opening.
2. Evaluate the course and width of the channel as it approaches, passes under, and departs the bridge. Conventional channel markers or buoys typically mark the approach and departure courses. The bridge channel may be defined by similar markers or by the presence of large protective fenders. At night, the lateral limits of the bridge channel are marked with red lights. The overhead spans are marked with one or more steady red lights when closed. These lights switch to steady green when the spans reach the fully open position.
3. Identify other vessels approaching from the same and opposite directions. Consider the navigation right of way rules. Determine if the bridge channel is wide enough to allow passing or if it might be smarter to stand off until other vessels are clear. If in doubt of another mariner's intention, hail the vessel on VHF Channel 16 and ask.
4. Estimate the force and direction of wind and current. Remember that both may be altered and intensified by the bridge structure. Weigh the potential effects of these forces on other boats as well as your own. It is best if auxiliary sailboats navigate bridges under power. Motoring allows for more immediate response to the often-changing conditions under a bridge. If you choose to proceed under sail, your awareness of wind and current beneath the bridge becomes even more critical. Be certain of your abilities and those of your crew and boat.
5. Mentally formulate your plan and share it with your crew. Assign and

Swing bridge



Lift bridge

complete any tasks necessary to prepare the boat for the bridge passage.

Hailing the bridge tender

Mariners approaching an opening bridge are required to signal their intentions, and the bridge operator is required to respond (33 CFR 117). The preferred method is by radiotelephone. Bridge tenders routinely monitor VHF Channels 16 and 13, except in Florida where they monitor channels 16 and 9. Other conventions apply in other regions. Learn what they are for the area you're cruising.

Hail the bridge tender as you would another vessel. State the name of the bridge, your boat's name, and the VHF channel you are using. If you hailed on Channel 16, expect to be directed to another channel in the initial response. After communication is established, state your request in simple terms. The bridge tender will respond that an opening is available or will specify any delay that you should expect. He or she will also include any other information or questions deemed important. Likewise, if you have questions or concerns about the operation, ask. In my experience, bridge tenders are a professional and courteous lot, always ready to assist the transiting mariner. Continue to monitor the appropriate channel until your passage is complete and you are clear of the bridge.

Sailors without radios need not despair; 33 CFR 117 provides for the use of audible and visual signals. To request an opening audibly, sound one long and one short blast as you approach the bridge. If an immediate opening is possible the operator will respond with the same signal. Five short blasts indicate a delay, to be followed by one long and one short when the opening is available.

A white flag, raised and lowered, is the proper visual signal to request a bridge opening. At night, raise and lower a single white, green, or amber light. A response of the same signal indicates an immediate opening. A red flag or horizontally swung red light signals a delay.

Passing under

The bridge tender will stop roadway traffic and sound one long blast to signal the beginning of the opening process. This is your cue to position your boat for passage. If you do not intend to stand off for other vessels, continue toward the bridge at a speed that provides good steerageway but does not produce a significant wake. Be sure that the spans are fully open before proceeding under the bridge.

The helmsman must be alert and ready to correct for the effects of wind, current, and the wakes of other vessels. Everyone on deck should be careful of swinging booms and flailing lines caused by turbulent wind conditions that are common beneath bridges.

When all vessels are clear, the bridge tender will sound five short blasts indicating the spans are about to close. If you are not clear of the bridge, immediately respond with five short blasts. When clear of the bridge and other vessel traffic, resume speed and configuration appropriate to conditions. Switch your radio back to Channel 16 after thanking the bridge tender for the opening.

Conclusion

It is true and a bit sad that opening bridges are going the way of the steam engine and sextant. Transportation departments are replacing them with elevated, fixed bridges that impose no delays on highway or water traffic and are far less expensive to maintain. There are, however, many bascule, swing, and lift bridges still spanning rivers, waterways, and harbor entrances. A prudent sailor should know how to navigate beneath them safely and confidently.

Resources

Publications

Bridge Lighting and Other Signals; USCG, Office of Bridge Administration.

Chapman's Piloting, Seamanship and Small Boat Handling, 62nd Edition; by Elbert S. Maloney.

Navigation Rules, 33 CFR 88.05; U.S. Government Printing Office.

Coast Pilot 5; Edition published Sept. 2004; National Oceanic and Atmospheric Administration.

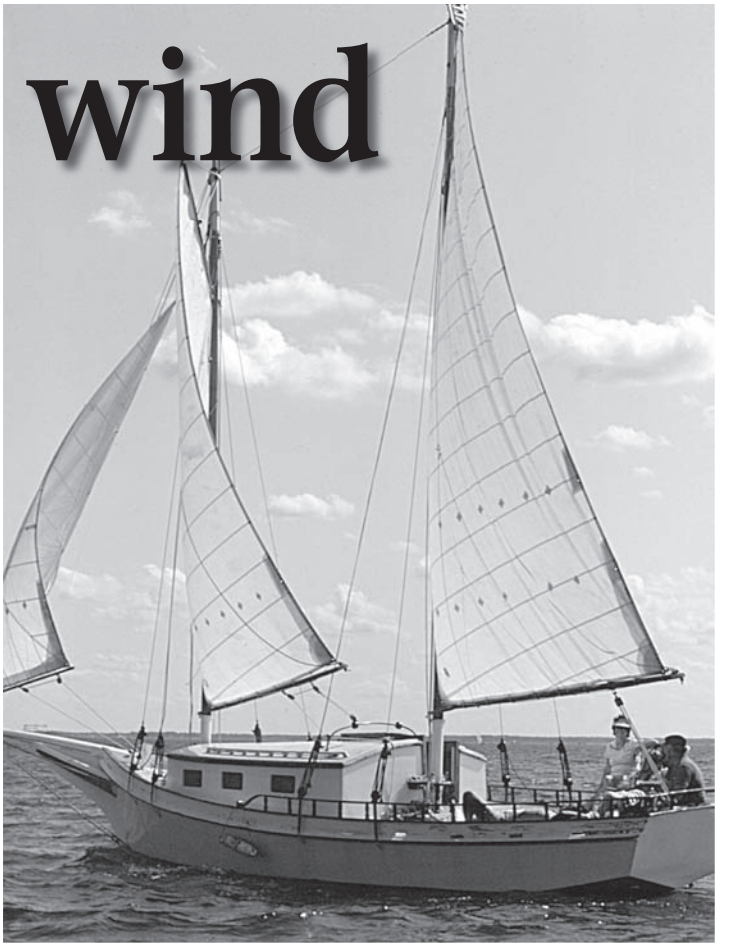
Websites

<http://www.navcen.uscg.gov>
<http://www.uscg.mil>
<http://www.noaa.gov>
<http://www.boatus.com>
<http://www.hamptonyc.com>

Apparent wind

What you see is exactly what you get

by Gene Bjerke



Sail twist is needed because true wind blows faster at the masthead.

WHY DO YOU ALWAYS SEEM TO tack into a header? Why do iceboats always sail to windward, no matter which direction they're going? Why is it that you need a sweater when the sailors of the boat you just met were sitting around in their shirtsleeves? The answer, in each case, is apparent wind.

"Apparent" wind sounds like something that doesn't *really* exist; it just *appears* to. Apparent wind does exist but only on your boat and only when it's moving. It is an invisible, ephemeral, and individual sort of reality, but it is real just the same.

What do you think of when you think of wind? It could be trees swaying or flags whipping smartly on tall flagpoles. To a meteorologist, it's the movement of air from an area of high pressure to one of lower pressure. To a sailor, that is the "true wind."

Imagine a totally calm day with no wind at all. Your boat sits quietly on a perfect reflection of herself. You go aboard and start the engine. As you power away you feel a breeze on your face coming from dead ahead. You know there is no wind; the breeze you feel is just the movement of the boat through the air. But from the point of view of the boat, there is a wind. It's all in your frame of reference. Think of it as the "boat wind": the wind you feel when you're on a moving object.

Now let's go sailing. With a nice (true) wind to provide the motive power, you trim your sails and the boat starts moving. As she gathers speed she also creates some wind of her own, the boat wind. This interacts with the true wind to produce another wind that is neither true wind nor boat wind, but something in between: the apparent wind. Exactly what that consists of depends entirely on the sailing characteristics of your boat. It is your own personal, private wind. No one else has one just like it.

Draw a diagram

A good way to visualize what is happening is to draw a vector diagram. Draw a line to represent the true wind, in any convenient scale and from the proper direction (in the illustrations on Page 18 I use compass directions). Next, add the boat wind, in the same scale and in a direction opposite to the course of the boat (remember that the boat wind is always from dead ahead). Now add the third side of the triangle and you have both the direction and force of the apparent wind. It is possible to do all this mathematically using a calculator with trigonometric functions, but it is simpler and easier to do it graphically.

If you work out a variety of combinations, you will find that the effect of the boat's forward motion is to move the apparent wind forward of the true wind. The true wind will always be fairer (that is, from a direction further aft) than the apparent wind. This is because, as soon as the boat starts moving, you add a forward component, the boat wind.

In addition, if the wind is from forward of the beam, the strength of the boat wind is added to the true wind so the apparent wind will be stronger. If the wind is from aft, the boat's speed will be subtracted from the true wind speed, and apparent wind will be less that the true wind speed.

> **"The true wind will always be fairer (that is, from a direction further aft) than the apparent wind."**

This explains why it is usually warmer running than beating. How strong these differences will be is strictly a function of how fast your boat is moving.

Vector diagrams are all very interesting in the comfort of your home,

but how do you determine the apparent wind in the cockpit with one hand on the tiller and the other holding the mainsheet (or a beverage)? The reason that it is called "apparent" wind is because it is the wind that appears to the senses of the people on the boat. So what the wind indicators on your boat are showing is the apparent wind. This is equally true whether you use bits of yarn in the rigging or some sort of indicator at the masthead. If you use both, you may notice that they don't read the same. Which is right? Both are right, as we shall see shortly.

Only one factor

So much for theory, but is it of any practical use? Most assuredly. If it is really the apparent wind that your boat is sailing in, then the true wind is just one factor in the equation (though usually the most important factor). As noted, when you are going to windward the boat speed causes the apparent wind to be stronger than the true wind. This increase in wind strength is accompanied by an increase in boat speed, which by increasing the boat wind further increases the apparent wind.

It all sounds suspiciously like a perpetual motion machine, but the boat quickly reaches equilibrium and further increases cease. Still, iceboats and some special sailboats (like proas and high-speed catamarans) sail faster than the true wind. The lesson here is not to take your cues on sail trim from the larger, faster boats you may see in your vicinity. Their personal (apparent) wind is different from yours. Trust your own telltales.

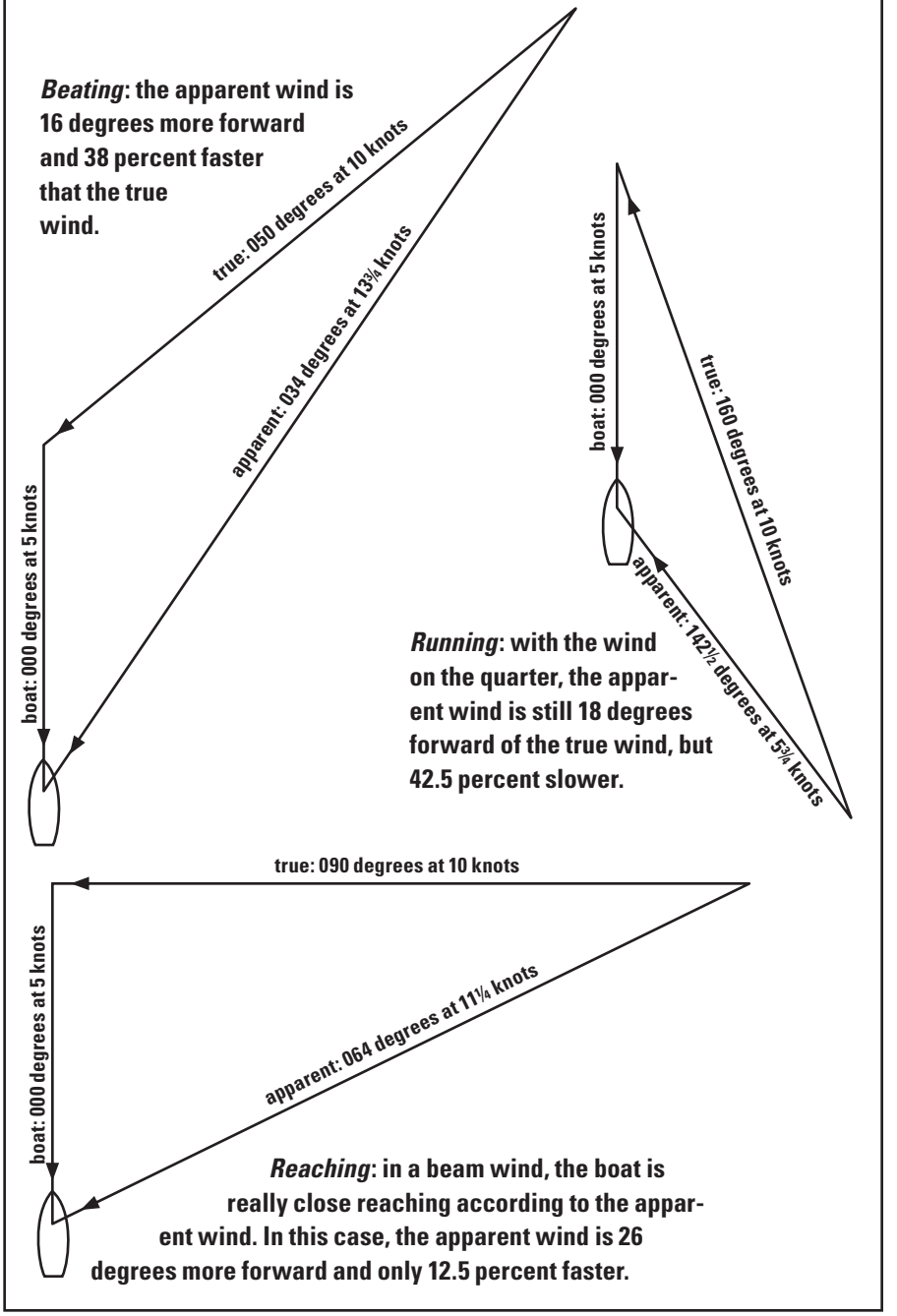
But you don't have to be a faster-than-the-wind speedster to be affected by the fact that your apparent wind is different from the true wind. After a tack, as your boat picks up speed again, the apparent wind moves forward, just as it had already done on the other tack. The effect is to give the appearance of a heading wind shift. So if the wind always seems to head you whenever you tack, take heart. You either have a fast boat, or you are very observant.

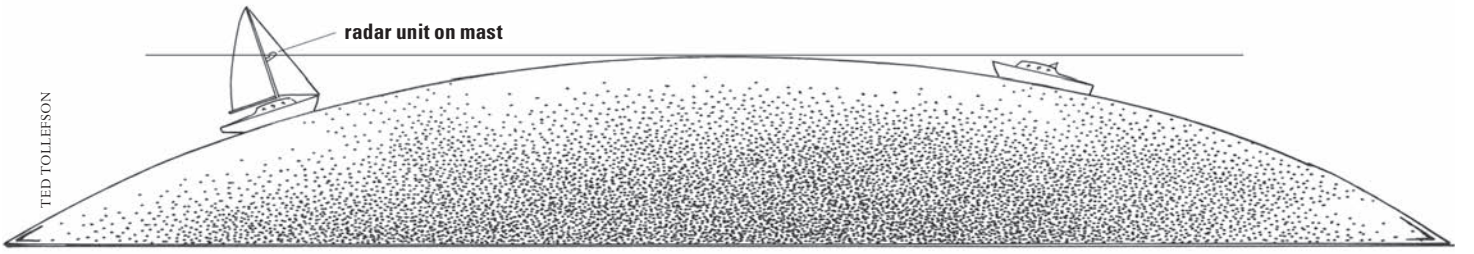
There is something else. Wind is affected by friction with the surface of the sea. The wind at the water's surface is slowed by this drag, but

Continued on Page 72

The diagrams show three basic situations: beating, reaching, and running. In order to simplify comparison, boat speed has been held constant at 5 knots and the true wind speed at 10 knots. This makes it possible to compare how the apparent wind varies in strength and direction depending only on the true wind angle. (Angles given are compass bearings rather than relative bearings. Apparent wind diagrams can be drawn either way.)

Studying the diagrams will reveal that the difference in direction from the true wind decreases in either direction for a maximum value when beam reaching, and the speed varies from a maximum when beating to a minimum when running. If the true wind were dead aft, then the apparent wind would be the same in direction as the true wind and the velocity would be the true wind speed less the boat speed.





TED TOLLEFSON

Marine radar

Is it right for your boat?

by Bernie Weiss

Retrofitting your sailboat? Thinking about upgrading your electronics? Wondering whether you should install one of those expensive new chart-plotting radar units?

Marine radar is a big expense, carries a significant responsibility (see Rule 5, *Navigation Rules of the Road*), and represents another potentially troublesome electronic gadget.

But when the weather closes in, a modern radar in the hands of a competent operator is a remarkable aid to safe navigation and collision avoidance. Its ultimate value to you correlates about 100 percent with your ability to operate the radar unit, interpret radar images, and take appropriate action based on the data displayed on the radar monitor. Becoming a good radar operator makes you a better and more competent sailor.

> **"…when the weather closes in, modern radar in the hands of a competent operator is a remarkable aid to safe navigation."**

How it works

Radar (RAdio Detection And Ranging) technology is about 65 years old. As electronics become more sophisticated, improvements and refinements continue to emerge, but one may assume that today's radar technology — even in small systems designed for boats like yours and mine — is mature and reliable.

Marine radars for recreational vessels contain both the transmission and receiving apparatus in a single unit. The transmitter sends out a constant stream of short-pulse radio waves at about the speed of light (162,000 nautical miles per second). The rotating antenna seeks a response and determines the bearing from which the echo came. The time delay from the transmission of signals to the receipt of the bounced-back echoes is converted to distance. These data are then displayed on the radar monitor as "targets" or "marks" so the bearing and range from your present position can be visualized.

This can be an enormous aid to collision avoidance and navigation during times of restricted visibility, and even when the visibility is excellent.

Range and antenna size

When you buy a radar, do not be impressed by such specifications as its maximum range and power rating. On most recreational boats, the radar is used most frequently in the 2- to 6-mile range, and nearly all marine radars have more than enough power transmission to suit this need.

However, the size of the radar antenna is very important. As marine author Chuck Husick explains it, because boats use the same antenna for both transmission and receipt of the radio signals, "The radar's transmitter energy is carefully focused, much like the light from a well-designed searchlight. However, unlike a searchlight, where the desired pattern of projected light is usually circular, the energy from the radar must illuminate a relatively wide vertical swath to ensure that the target area is well covered as the boat rolls and pitches in the sea. At the same time, as the antenna rotates, a narrow horizontal beam is needed to allow objects close to one another in azimuth to be seen as separate targets and not as a single blob. Typical vertical beam angles are 25 degrees. Horizontal beam angles, which are largely determined by the length of the antenna, range from about 2.4 degrees for the smallest antennas to 0.75 degrees for antennas about 10 feet wide."

A small antenna is better than nothing, Chuck notes, but a wider and longer antenna enhances image discrimination — separating targets close to one another — on the radar monitor display.

Mounting the antenna

Experts advise that a radar antenna should be mounted at least 4 to 5 feet above and at least 6 to 8 feet behind (or forward of) areas where anyone on board will remain in normal position while under way. Intermittent short-

term exposure to microwave energy from the radar is probably harmless, except for persons with cardiac pacemakers (who should always avoid close proximity with radar antennas). Prolonged exposure in the path of radar transmission, for anyone, should be avoided.

A conservative approach is to mount the antenna high enough so the bottom edge of the beam (12.5 degrees below horizontal) just kisses the bow or is higher than that. At the very least, people in the cockpit and people belowdecks should not be in the beam.

On the other hand, although radar is a line-of-sight technology, mounting the antenna more than about 20 to 25 feet above the water will not make a significant contribution to maximum range operation and can degrade the radar's ability to show important targets close to your boat.

Radar beams are line-of-sight transmissions. The distance to the radar horizon, in miles, is about 1.22 times the square root of the height of the radar antenna in feet, so if your antenna is mounted 16 feet (square root is 4) above the waterline, the radar horizon is 4.88 nautical miles distant. If your antenna is 25 feet (square root is 5) above the waterline, the radar horizon is 6.1 nautical miles away, and if it's 36 feet above the waterline (square root of 6), the radar horizon is 7.32 nautical miles away. Obviously, increasing the height of the antenna doesn't gain you much horizon distance, yet the added weight higher aloft may be costly in terms of exaggerating your boat's heeling and pitching motion. In addition, as previously mentioned, adding antenna height may defeat the radar's ability to detect close-in targets during critical close encounters.

Use the calculation

So, in general, to learn the approximate range at which you can detect a target with your radar, use the radar horizon calculation as defined above. For targets beyond the horizon, add the square root of the antenna height on your boat to the square root of the target's height and multiply by 1.22.

Remember that, in addition to the height of your antenna, other factors — the height and size of the target, the reflective surface of the target, and the technology of your particular radar, for example — will influence the quality of the target's echo and image on your monitor.

You may be saying, "But the product literature claims this system is rated for a range of 40 miles." The rated range is determined by the power of the electronics to transmit a pulse to a maximum range then detect and display an echo. The rated range does not account for antenna height, radar horizon, weather, and so on.

More critical than your antenna's height is ensuring that the antenna is mounted on a level platform, especially on a sailing vessel. As radar technicians with Raymarine explain, expanding on Chuck Husick's observations, most systems for recreational craft have a vertical beam width of 25 degrees. This means if you could see the radar beam, you would see 12.5 degrees of beam directed downward toward the water, and 12.5 degrees directed upward, with the center of the beam aimed at the horizon.

Rule 5

Navigation Rules and Regulations

Every vessel shall at all times maintain a proper lookout by sight and hearing as well as by all available means ***[including radar]*** appropriate in the prevailing circumstances and conditions so as to make a full appraisal of the situation and of the risk of collision.

When your boat is heeled in excess of 12.5 degrees the lower portion of the radar beam is directed above the horizon, essentially rendering the radar blind on the high side because the beam is directed above the horizon. Conversely, on the low side, all of the radar energy is directed into the water, resulting in increased sea return (clutter) on that side. From this, you can clearly see the advantage of a self-leveling or gimbaled mount for your radar antenna.

Other boats with radar reflectors in their rigging may be visible to your radar even when their hulls are not, either because they are over the horizon, or because their hulls are poor reflective surfaces. Your own radar reflector should be mounted as high as reasonably possible in order to optimize your image on another vessel's radar.

Power requirements

Newer radar units are energy-efficient, requiring about 4 amps at 12 volts. A well-charged deep-cycle battery should be able to serve this need.

It's nice if the power supply to the radar comes from a battery other than the one used for engine starts. That starter-motor draw may cause voltage drops below 10 volts, which will cause an operating radar to reset. A voltage drop probably will not damage the equipment, but it may cause the loss of data and may change the radar's operating mode. You can also avoid this problem by turning your radar off during engine starts.

Radar displays

Boat size and the installed location of the radar monitor will greatly influence whether you choose a lightweight liquid-crystal display (LCD) or a larger, heavier, high-resolution cathode ray tube (CRT) display.

LCDs are more common in the cockpit because their displays are easier to see in sunlight, they are easily disconnected and stored below, and some are waterproof. CRTs show better definition when located out of direct sunlight. Therefore CRTs are at their best when mounted below. For this reason, however, a CRT radar display may be inaccessible to a short-handed crew at the very time you need it most.

Navigation

For navigation, most mariners set their radars in the "north up" mode so the radar displays correlate with nautical charts and integrated chartplotters. The latest and most versatile radar option is the "course up" mode, which facilitates the use of radar with an integrated GPS receiver. Here the top of the screen correlates with your rhumb line course to a selected waypoint. If the boat's heading drifts off the rhumb line, this will be displayed on the radar monitor as cross-track error (XTE), which is easily corrected. "Course up" mode may also facilitate collision avoidance.

Even without an integrated chartplotter, a position fix is easily obtained by radar. If you and your radar can

positively identify even a single prominent aid to navigation, such as the end of a breakwater, an offshore lighthouse, or a large buoy with a radar reflector or a radar beacon (Racon), that's enough. The range and bearing of that aid will then give you a fix.

Racons, also called radar responders or radar transponder beacons, are receiver/transmitter devices installed on navigation aids such as prominent buoys and lighthouses. Upon receiving your radar pulse, a Racon transmits a unique code back to your radar set. You can match this code to that on your chart or chart-plotter, thus making a positive identification of the navigation aid. For example, in Long Island Sound there are Racons on Stratford Shoals Light (ID code – • – –) and Execution Rocks Light (ID code – • • –). A radar range and bearing to such a mark will fix your position with reasonable accuracy.

Bear in mind that, as displayed on the system's monitor, radar ranges are somewhat more accurate than radar bearings to a navigational aid (or another vessel). Should your radar display be superimposed over a chart-plotter, that's even better. Whereas a GPS chart-plotter will show you what should be there, a radar may show you what actually is there.

One must be cautious because it is difficult to interpret radar echoes accurately. A small, highly reflective, target may appear bigger than a large, poorly reflective, target (on-screen intensity and size are not reliable indicators). Also, water in the air absorbs transmitted radar energy, so rain or heavy fog (as displayed on the radar scope) may obscure a navigational aid or even another vessel.

Collision avoidance

In fog, rain, and other conditions (including darkness) that restrict visibility, most experienced mariners operate their radars in the "head up" mode. This means that the top of the radar display is oriented with the bow of the boat, and targets on the display are shown relative to the boat's heading.

"Head up" mode facilitates collision avoidance because it is easy to glance at the monitor and visualize what's around you, including the targets' relative position and movement. An echo that is moving toward you on a steady bearing represents a serious threat of collision and deserves your immediate attention. If avoidance maneuvers are required, remember that a significant change in your course (60 degrees or more) will be more readily apparent to the other vessel than a speed reduction.

An important point: when visibility is restricted, do not assume the other vessel has seen you or understands Navigation Rule 19, which has been interpreted to mean that there are no "stand-on" vessels (meaning that there are no "privileged" or "right of way" vessels). Every vessel must proceed at a safe speed and safe course, adapting to the prevailing circumstances, taking early action to avoid a close encounter.

Above all — with or without electronic navigation aids such as radar — remember Rule 5 of the Navigation Rules and Regulations, the sense of which is that you must at all times "… maintain a proper lookout."

Other considerations

It is useful — many say legally required — to maintain a serial plot of radar targets that represent a potential close encounter. Many modern radars can do this internally using a feature described as Automatic Radar Plotting Aid (ARPA) or Mini-ARPA. Without such a capability, the captain or radar operator should maintain manual plots of approaching targets, using a maneuvering diagram or at least a sheet of clear acetate draped over the radar display.

Practice this target plotting exercise in conditions of good visibility to develop confidence in your ability to do it when visibility is restricted.

Finally, as reliable as modern recreational radar has become, it is not fail-safe. Do not become wholly dependent upon it. Have backup systems in place: your GPS receiver should be operational, your navigator should be maintaining a DR plot on the chart and in the log, you must post a lookout, and so forth.

In today's modern era, there's no excuse for not knowing your position. Besides, a collision at sea can ruin your day.

Murphy's Laws of Boat Care

Doing your own boatwork, you confront certain immutable truths

by Simon Hill

I am an expert do-it-yourselfer. I make this claim not simply because I've fixed a lot of things on my own and friends' boats, but because I've fouled up innumerable jobs, broken a goodly number of parts and fittings, and lost various expensive tools overboard.

When we work on our own boats — wooden and fiberglass boats, racers and cruisers alike — we confront some hard, distasteful truths. For lack of a better name, I'll call them Murphy's Laws of boat care. (I can think of better names, but they aren't fit for print.) Perhaps you will recognize some of them:

A small "project" undertaken just before your cruising vacation always turns into a big project.

For the purposes of this law, a "project" is anything that involves merely touching a mechanical or structural component of the boat. Starting the engine counts as a small project.

You will always discover the biggest problems at the worst possible times.

Naturally, your engine never throws a connecting rod just as you tie up after the last cruise of the season. No, it's programmed to wait until you're all loaded up and leaving for your three-week cruise in early July.

No matter how many tools you bring down to the dock, you'll always be missing one crucial tool.

If you try to improvise, it will take longer than driving home to get the right tool. If you persist, you'll break some critical part of the boat.

If you drop a tool, it will always a) land in the water, and b) be the most expensive tool aboard.

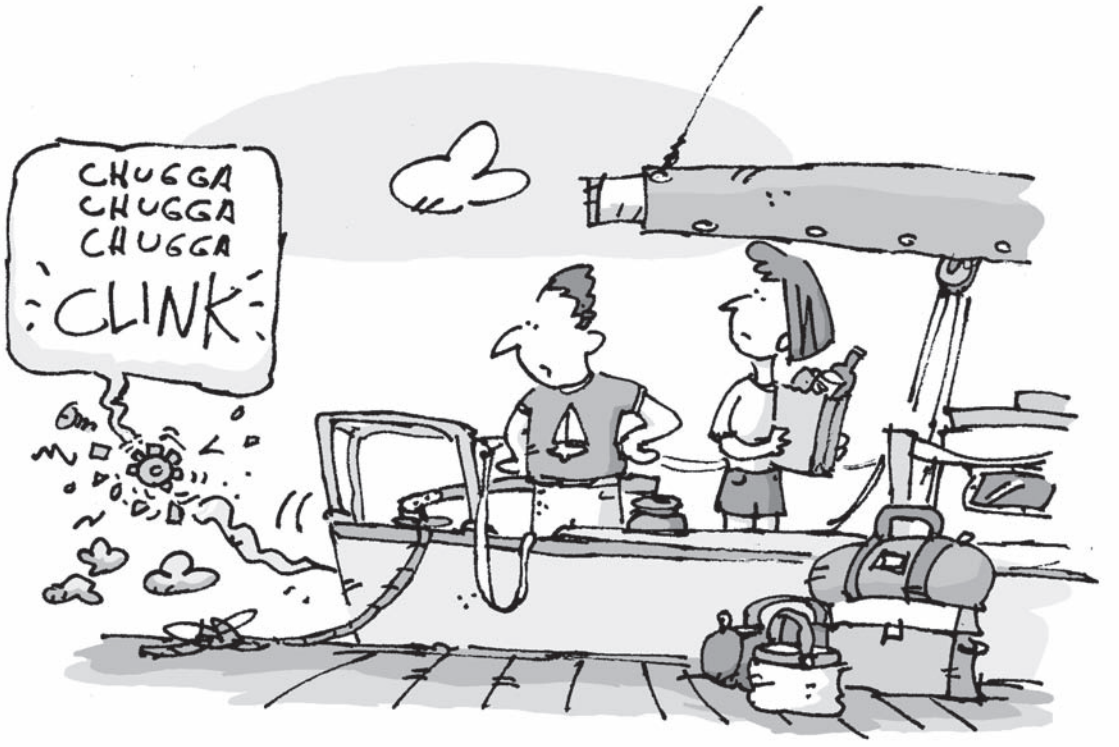
As a do-it-yourselfer, it's very important that you invest in the best tools money can buy, because then you can more easily justify the cost of hiring a diver to recover them when you drop them overboard.

If you buy one can of paint or one tube of caulk (or epoxy, or whatever), it will be enough for 90 percent of the job.

You'll have to go back to the store for a second lot, most of which will harden in the tube before you have any further need for it. If you try to save yourself some aggravation by purchasing two to begin with, it's guaranteed you won't need the second one at all.

The most effective way to repair a ragged hole in the hull, is to stuff a great many $100 bills in the hole.

ILLUSTRATIONS BY TOM PAYNE



When setting off on a vacation, starting the engine counts as a small project.

Caulking is critical to boats because it keeps water out.

It is also very sticky. For typical boatowners who only caulk occasionally, working with the stuff is like being a baby who has only used a spoon a few times. Yes, you will get some caulk where you want it, but you'll also get it on your fingers, face, clothing, and hair. But take heart. After five or six years, most children master the art of using a spoon. Similarly, after five or six years, the caulk will come out of your hair.

On their own, glues and epoxies will cure in one of two ways: A) instantly, turning into a smoking lump in your mixing container, or B) never, remaining forever a sticky, uncured mess on your workpiece.

However, if you first embed your fingers (or better yet, an entire hand) in the glue, the stuff will probably cure correctly. It's body heat that does the trick. Be sure there's a helper around to chisel you free after the glue has set.

Bottom sanding can be done by hand or with a power sander.

By hand, it will take you all day to remove the paint from a very small section of your boat. With a power sander, you can easily grind straight through paint, gelcoat, and fiberglass in about 15 seconds flat, leaving a ragged hole in your boat. When this happens, the most effective way to repair the damage is to stuff a great many $100 bills into the hole.

> **"…you can easily grind straight through paint, gelcoat, and fiberglass in about 15 seconds flat, leaving a ragged hole in your boat."**

It's important to schedule your painting and varnishing to coincide with the most favorable weather.

Here's how this usually works: on the day you've chosen to paint or varnish, it looks like it will rain, so you put off the job. For 10 days in a row you plan the job, postponing whenever ominous clouds appear, then kicking yourself when the clouds disperse. Finally, you get a brilliant, sunny day and start your varnishing, only to get caught in a freak rainstorm.

If a multi-component system breaks, the failed part will be the one that is buried deepest in the boat.

This is because the chances of something breaking are directly proportional to the difficulty of access. However, don't permanently remove all your engine covers to reduce the failure rate because then your propeller will fall off.

A final law, which every boater knows, even those who don't do their own work: your list of things to fix always has one more item on it than you remember.

Furthermore, the list never shrinks because every time you fix something you'll promptly find two more items that urgently need attention. Or you break something. But at least when this happens, you can look in the mirror and say to yourself, "Hey, I'm an expert!"

Veleda IV, **Aubrey and Judy Millard's Ontario 32, cruises the Bosporus Strait on her way into the Black Sea. The Millards have been cruising since 1998.**

Systems that work

Eight years into a cruise, here's what's still operating well

by Aubrey Millard

I wrote an article for *Good Old Boat* (January 2001) about the preparations we made for liveaboard bluewater cruising on *Veleda IV*, our 1978 Ontario 32. I talked about major upgrades we'd made, including a new Yanmar 3GM30 engine; a new dodger/Bimini with a full vinyl and mosquito netting enclosure; a new electrical system including a 100-amp alternator, smart regulator, echo charger, Link 10 battery monitor, 30-amp marine battery charger, wind generator, four 110-amp golf-cart batteries; and complete rewiring from domestic to marine-grade wiring. I also commented on our Dinghy-Tow system, mast steps, radio/tape deck/CD player, and a few other modifications and pieces of equipment we were using.

Time has moved on. Judy and I have been living aboard *Veleda* since July of 1998, when we left Toronto, Ontario, on our open-ended retirement journey. Since then we have sailed 27,000 nautical miles down the Mississippi, through the Bahamas, across the Atlantic, around the United Kingdom, through the rivers and canals of France, and the length of the Mediterranean and eastward to the Canary Islands. We have taken *Veleda* through 27 countries, including 9,305 nautical miles in the Mediterranean and 1,523 nautical miles around the Black Sea.

As I write this, we are in Porto Turistico di Roma, where the Tiber enters the Tyrrhenian Sea. Our plan is to exit the Mediterranean this summer (after cruising Elba, Corsica, and Sardinia), going through the Canal du Midi (instead of Gibraltar) from southern France up to the Bordeaux region on the Bay of Biscay. We will cruise down the Atlantic coasts of Spain and Portugal, over to Madeira, the Canaries, and the Cape Verde Islands before crossing the Atlantic to Barbados in December or January. We anticipate spending a few years in the Caribbean, then perhaps through the Panama Canal and into the Pacific. We trust our good old boat to take us anywhere in the world.

Here's a rundown of what has worked well for us.

Engine and electrical system

We are quite happy with our 1997 Yanmar 3GM30 diesel that replaced our original Yanmar 2QM15 and which now has over 4,250 engine hours on it. Our fuel tank has a capacity of only 28 gallons, and we keep another 30 gallons on deck in plastic jerry cans. We fill the tank only from the jerry cans, using a Baja filter, and we have two Racor fuel filters in line before the engine's own filter to ensure clean fuel in the engine. I use the dinghy to take empty jerry cans to fuel docks. When ashore, I go up the road to a local service station.

Our only problem has been with the water pump and with air getting into the water strainer. We have lowered the strainer below the waterline to ease the pressure and reduce air intake. A squeeze bulb in the fuel line leading from the tank makes it easier to pump fuel through when having to bleed air from the engine. We may have to replace the water pump eventually, as we have rebuilt it twice. Conscientious routine maintenance has kept the engine in good operating order.

We replaced our 100-amp alternator with another in Mallorca in 2001 and suspect the original one was out of alignment, causing wear on belts and bearings. However, we are very happy with the 100-amp heavy-duty alternator that replaced it. Its extra demand on the engine is hardly noticeable.

Efficient charging

Together with the smart regulator, our engine can fully charge our batteries in an hour or so of running once every two or three days at anchor. It is so efficient that I question the need for our wind generator. The 3 or 4 amps it puts out in wind over 10 knots are minimal to our requirements since we still have the Ontario 32's original refrigerator and freezer unit, installed in 1978.

We have it well insulated, but the thermostat seems defective and causes the refrigerator to run for 18 hours out of 24 if we leave it turned on. We have isolated our starting battery, so even if the house bank is drained we can start the engine and charge batteries rapidly. The combination of a 100-amp heavy-duty alternator with a smart regulator works extremely well.

We do not have room for (nor do we want) a generator. We do not have any heavy draw tools or appliances that require it. Instead, we have a 175-watt cigarette lighter plug-in inverter that does well powering the laptop computer and charging batteries for our battery-operated drill, toothbrushes, portable shortwave radio, blender, and handheld VHF.

Our four Trojan golf-cart batteries (combined as a single house bank for a capacity of 440 amp hours) have served us well and are still working with no problems after almost seven years of constant use. However, we have replaced the dedicated 12-volt engine-starting battery twice. The golf-cart batteries are small enough that I was able to build a shelf above the keelbolts. We strap them in on this shelf below the cabin sole.*(**Caution:** Putting batteries in the bilge of a boat is controversial. It is a fairly safe practice if sealed batteries like AGMs or gels are used. These batteries can be immersed in seawater without serious effects. Open vented cell designs, like the golf-cart batteries shown here, will go through more deep cycles than any of the sealed batteries, but if they are immersed in seawater a reaction will occur which will generate chlorine gas. This may be deadly in an enclosed space. **–Ed.**)*

I really enjoy the Link 10 monitor LED readout about my batteries, indicating the amp hours used and remaining, the draw and charge rates from the engine, the 30-amp marine battery charger, or the wind generator. With this device, I can shut off all other current draws, turn on one piece of equipment, and immediately identify its battery draw.

The 1,500-watt industrial transformer we purchased in Horta in 1999 is still working well, delivering 110-volt power into *Veleda* from the 220-volt shore connections in Europe. Another advantage of the transformer is that we do not have to worry about the polarity of the connections.

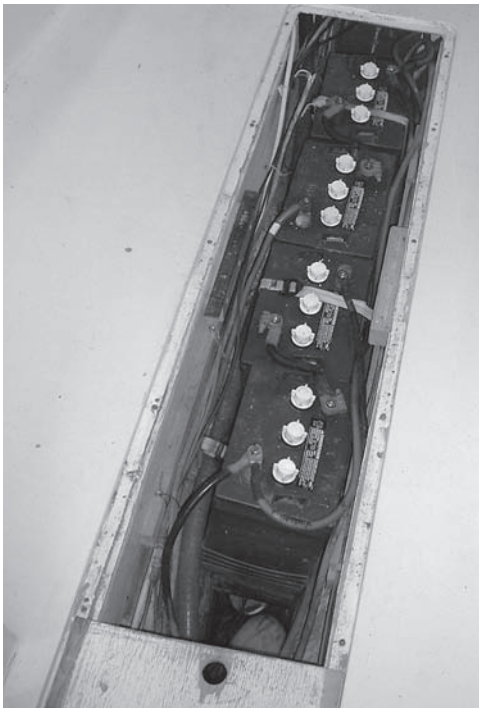
"We trust our good old boat to take us anywhere in the world. Here's a rundown of what has worked well for us."

Dodger/Bimini

The dodger/Bimini made for us in Toronto in 1998 is still working well, although we have replaced several vinyl windows and zippers over the years. We had the full dodger/Bimini with its side curtains up all the way across the Atlantic. I haven't used my foul weather gear for years, as Judy does the wet foredeck work and the cockpit is quite dry. The only other use of the side curtains has been in our winter moorings in London and in Porto Turistico di Roma, where they permitted the cockpit to be used as an additional room for winter marina living. We have rarely needed their mosquito screening. If planning again, given the money and opportunity, I would prefer a hard dodger and possibly a hard Bimini.

Dinghy

We bought a new Zodiac dinghy three years ago and immediately made a cover for the tubes to protect them from UV degradation. The fabric of



The Link 10 battery monitor, top, shows a reading of 12.40 volts. The four golf-cart batteries, above and center, which are combined to serve as a single house bank, are small enough to fit on a shelf above the keelbolts and below the cabin sole.

Aubrey and Judy like the dodger/Bimini combination, at left. Aubrey says he hasn't used his foul weather gear for years, since the cockpit stays dry and Judy does the foredeck work. The Dinghy-Tow, below, continues to get rave reviews from this twosome, who sung its praises in *Good Old Boat* in January 2001. The UV cover for the Zodiac dinghy has added years to the life of the dinghy. Aubrey and Judy also praise the Gale Sail and mast steps, shown on opposite page.

our previous dinghy had been badly deteriorated by UV. We use our dinghy as we would a car ashore, going long distances in it. It is an essential part of our cruising lifestyle. However, if I could have managed and afforded it, I would have purchased a rigid inflatable dinghy, as the fiberglass hulls of the RIBs take to sandy and rocky shores better than inflatable hulls.

We are still very happy with our Dinghy-Tow. Because of it, we can have a heavy powerful 10-hp outboard. If we had to manhandle the motor on and off the dinghy each time we anchored — well, we could never manage such a large engine. The two rigid arms mounted on our stern raise the aft end of the inflatable dinghy with just the bow trailing in the water, creating minimal drag. We leave the engine, fuel tank, life jackets, and so on in the dinghy, ready to go as soon as we lower it into the water.

This came in very handy when we lost our propeller shaft in the Danube River in Romania. We were able to deploy the dinghy in a couple of minutes and use it to take *Veleda* to a dock using a side tow. We carried the dinghy on deck for our Atlantic crossing, but have had it on the stern on the Dinghy-Tow for the past six years, including a stormy crossing of the North Sea and all around the Mediterranean and Black Seas. It is easy to hook up and provides anti-theft security at anchor. I am considering leaving the dinghy on the Dinghy-Tow for our Atlantic crossing when we return to the Caribbean next winter.

Other gear

We are happy with our triangular-shaped mast steps, which provide considerable stability and security, especially when going aloft at sea, as we have done several times. We tie light lines down the outer ends of them to reduce the tendency for the main halyard to catch. We riveted a double set of mast steps near the masthead so we have a firm two-foot platform on which to work at the top. When going aloft, we always wear a safety harness tied to the main or spinnaker halyards. We have a Davis metal radar reflector permanently mounted at the masthead.

We bought a small used PUR watermaker six years ago. It is still working well. It produces about 1½ gallons of fresh, virtually distilled, water per hour. It is used to supplement our shoreside water resources. In some cases shoreside water is accessible only from a water tap inland. Sometimes the shoreside water is brackish or not potable. Then we rely on the water left in our tanks or made by the watermaker. We turn on the watermaker any time we are at sea and have the engine running. We do not have any other filters in our system and have been drinking municipal water all over North America, Europe, Turkey, and the Middle East. A larger output watermaker would be of greater value.

Before we left Toronto we installed a used automobile AM/FM radio/CD/tapedeck which is still working well. It has been most enjoyable, especially since I have stereo speakers in the main cabin and also in the cockpit. I enjoy listening to classical music in the cockpit with the beauty of a golden sunset or a starry night in an isolated anchorage. The tape cassettes take up more space than do the CDs; I would like to be able to record them on CD. The system I have has a CD cartridge that will take 10 CDs at a time.

We do not have an SSB transmitter/receiver, but we do have a good shortwave radio for weather forecasts and BBC radio news.

Sails

We crossed the Atlantic in 1999 with the original 1978 Dacron main and genoa sails. Our 150-percent genoa had foam pads in the luff to keep the sail shape better when partially reefed. This sail was destroyed when our forestay broke in 2001, but we had a 130-percent used genoa to replace it. We are still using the original fully battened main, albeit with a few patches, a reinforced grommet at the tack, and much seam stitching. We like the fully battened main and the luff pads in the genoa. We frequently use the furled genoa as a storm sail. However, last year we bought a Gale Sail made by ATN. It is a storm sail with a reinforced sleeve on the luff which is done up with hanks so it can be hoisted over the furled genoa. We haven't had cause to use it yet, although we have checked its suitability to be hoisted.

The sails may be old, but it is usually the seams that give way as Dacron is a hard-wearing material. It may not

be good for high-tech racing, but it is very acceptable for economical cruising. We have a sail repair kit and can re-stitch seams, replace grommets, and do minor patching by hand.

We are still using the original 1978 spinnaker also. We did not have much experience flying a spinnaker using the spinnaker pole, so we bought an ATN Sails' Tacker, a plastic harness that fits around the furled genoa and permits us to fly the spinnaker as a drifter. ATN also made a snuffer for it, complete with blocks and hoisting lines. It is a very good downwind sail. In heavier weather downwind sailing, we use the genoa supported on one side by a heavy-duty whisker pole (we had a lighter one break on us) and the main out the other side secured with a preventer. Our old sails are still serving us well.

The Ontario 32

Our 1978 Ontario 32 is a well-built fiberglass sloop that either of us can singlehand if necessary. I like *Veleda's* stiffness with 45 percent of her 5-ton weight as lead in the three-quarters keel. She is a dry boat, with her bow riding over the waves and her contoured hull splitting the waves, rather than slapping them. Her stern rises up with overtaking waves. We have never yet had a wave break across our stern, and rarely has *Veleda* buried her bow. The 4½-foot draft was quite valuable in shallow waters of the Bahamas and allows us to travel many bays, canals, and rivers that deeper-draft vessels dare not explore.

I am a bit concerned because we have a spade rudder with no skeg. Even though it has a sturdy 1¾-inch rudder post and the bottom of the rudder is 1½ feet above the keel, it does not have the extra protection a skeg might provide. However, it is a very responsive helm and controls the boat well, even when going astern. The keel-stepped mast is a stable structure that withstood a broken forestay and a full genoa and roller furler flogging in a Force 8 gale while crossing from Barcelona to Mallorca. I fear a deck-stepped mast would have collapsed in similar conditions. We received a back-handed compliment from E&C Marine in Toronto when they had to drill another through-hull for our engine water intake. They complained that the fiberglass in the lower hull was so thick it was hard to drill through.

Dream list

Changes or additions I would make are few. I wish I had bought a Bugel clone anchor when in Turkey, as I have heard high praise for them. Our CQRs are only adequate. As mentioned, I would like a hard dodger and Bimini, a rigid inflatable dinghy, and a larger-output watermaker. A larger fuel tank would be valuable. A modern refrigerator might use less power. However, the main difficulty is simply one of space.

Any boat is a compromise, involving what one would like, what one can afford and manage, and the kind of sailing planned. Many sailboats, when upgraded, can serve well.

> **"…given the money and opportunity, I would prefer a hard dodger and possibly a hard Bimini."**

Summary

We are happy with our planning and with *Veleda*, the upgrades made before we left and the few we have done since. We have not had to spend a great amount of time making or waiting for repairs (other than the roller furling which was destroyed crossing over to Mallorca and four days in Romania while a new propeller shaft was machined for us). We are glad we replaced our 2QM15 Yanmar with our new 3GM30 and 100-amp alternator. Our trouble-free golf-cart batteries, smart regulator, and electrical upgrades have proven most worthwhile.

We are happy with the Dinghy-Tow, mast steps, keel-stepped mast, and old sails that work well and don't owe us anything. We are also glad we replaced our manual windlass with an electric vertical-axis windlass (after deepening the anchor locker). The heavy construction of the modified C&C-design Ontario 32 as a racer/cruiser is very reliable, comfortable, and seaworthy. *Veleda IV* allows us to economically pursue our dream on nothing more than my retirement pension as a high-school teacher.

Rethinking the head

Refining the boat's most important plumbing system

by Mark Parker

We have all had that experience: you complete a project, feel justifiably proud, but as you live with the results you realize that some changes would make it better. Or, maybe you discover that things didn't work out exactly as planned. This is the story of such an adventure.

The November 1999 issue of *Good Old Boat* carried an article on a one-off holding tank that I designed and built. The tank, as detailed in the article, is indeed bulletproof and I have no concerns or regrets about its construction. The plumbing, however, has been quite an adventure. I would like to relate my trials, tribulations, and eventual solutions for others who might be planning to re-plumb a head … whether or not you are building a holding tank as detailed in the original article.

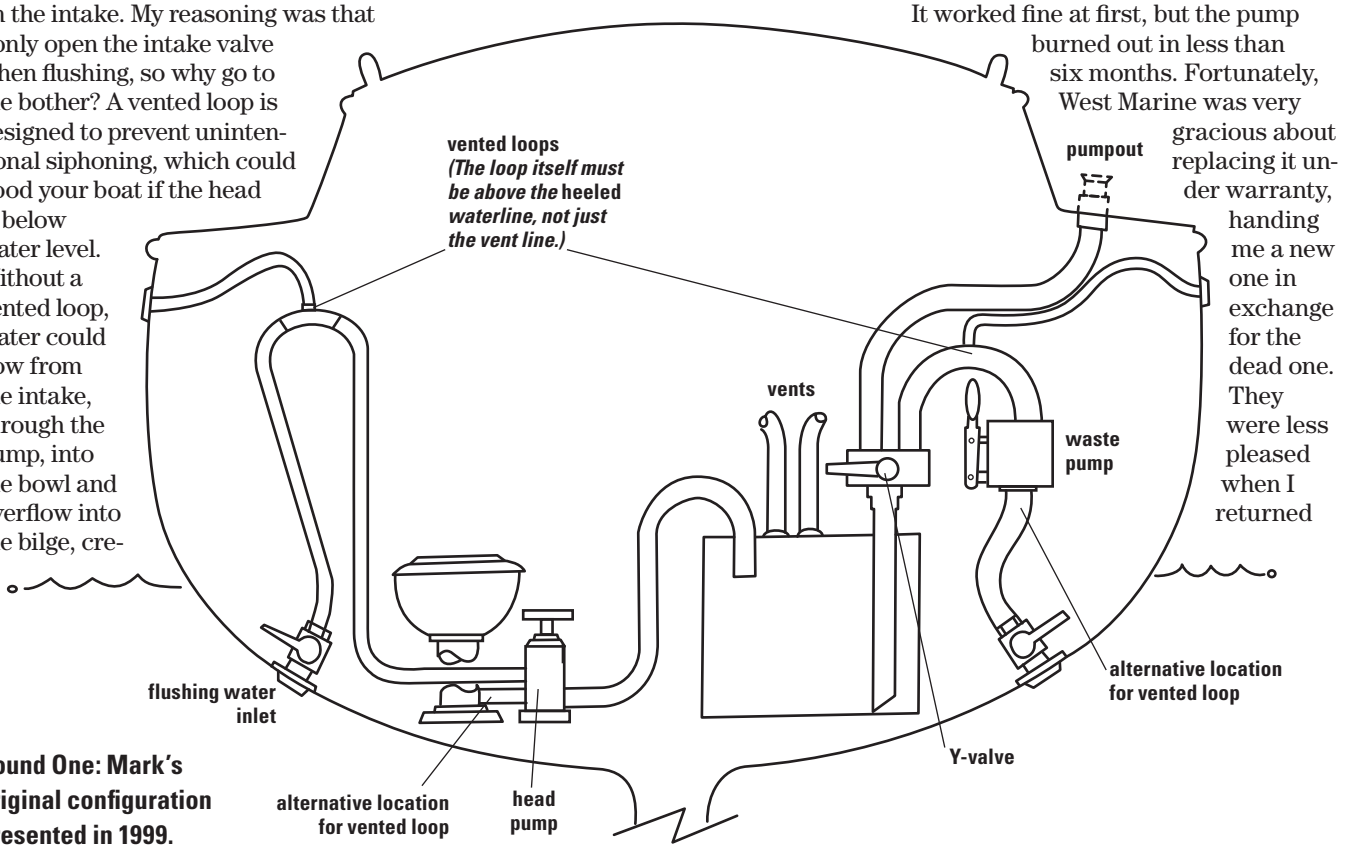
The basic plumbing diagram for my head is shown in the illustration on this page. I must admit at the outset that I never included the vented loop on the intake. My reasoning was that I only open the intake valve when flushing, so why go to the bother? A vented loop is designed to prevent unintentional siphoning, which could flood your boat if the head is below water level. Without a vented loop, water could flow from the intake, through the pump, into the bowl and overflow into the bilge, creating disaster … but only if you leave the intake valve open, which I never do. This has not been a problem.

The output of the head is directed only into the holding tank; there is no Y-valve to allow overboard discharge. This arrangement is much preferred by authorities in no-discharge zones, such as Narragansett Bay where I sail. (But I must say, no one has ever boarded *All Ways* to inspect the plumbing.) The output from the holding tank had a Y-valve to select either a deck-mounted pumpout or an overboard discharge via a Whale Gusher hand pump and a vented loop. (This vented loop I did include, and that is part of the problem.) The head and tank functioned flawlessly. The pumpout worked. No problem. The overboard discharge, however, was a problem from the word "go."

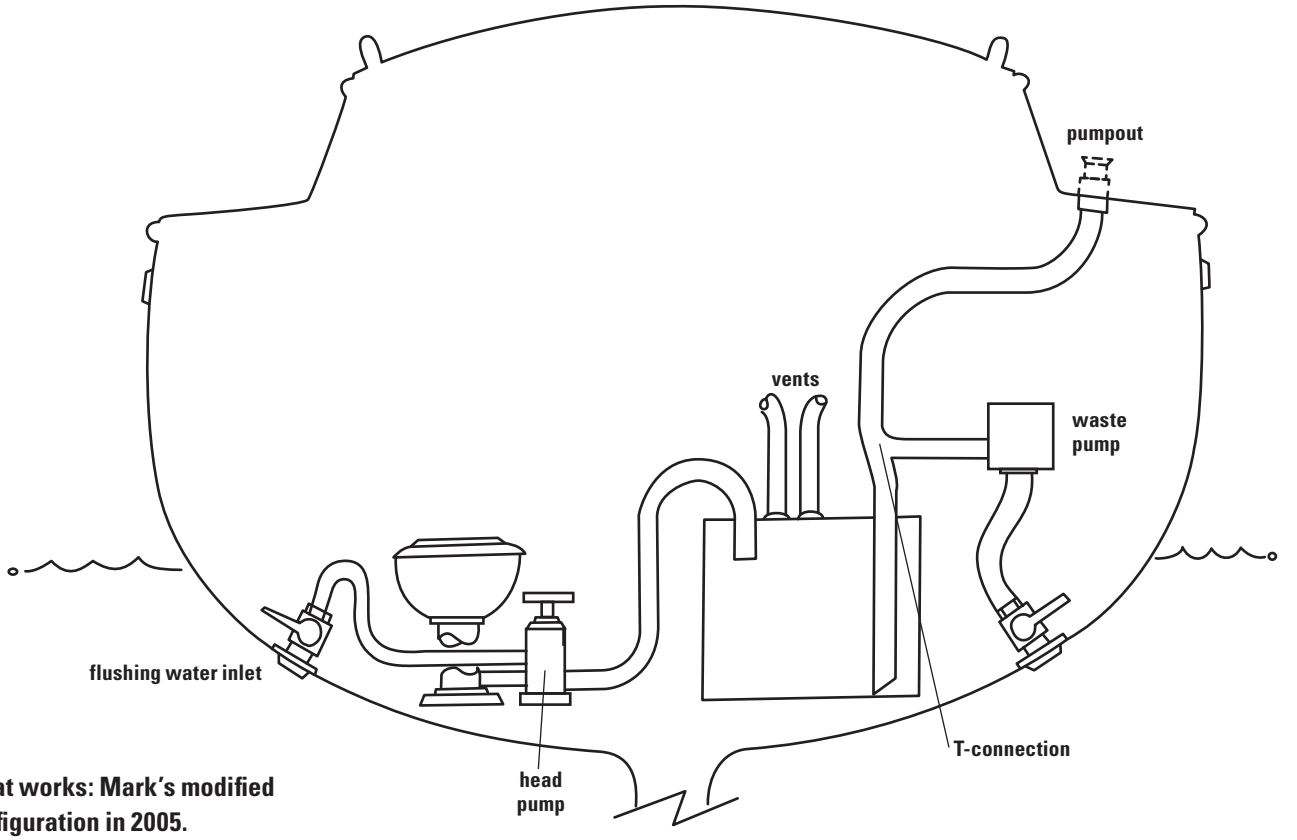
Halfway up

The total distance from the bottom of the holding tank to the top of the vented loop is about 5 feet, with the Y-valve located about halfway up. The pump was located on the downside of the loop as shown in the original diagram. It didn't work. A vented loop allows air to enter when there is a vacuum to prevent siphoning. The pump works by creating a vacuum. It doesn't work on the downhill side of a vented loop – especially when you are asking it to pull a 5-foot head.

OK, so I moved it to the upside. This means it had a pull of about 2½ feet and a push of about the same. It worked, but performance was marginal. Next, I bought a Jabsco macerating pump and installed it in place of the manual Whale. The Jabsco literature said it was good for at least a 5-foot head, so I figured I was all set. Wrong. The pump can push 5 feet, but it does not like the 2½-foot lift when it's dry. It worked fine at first, but the pump burned out in less than six months. Fortunately, West Marine was very gracious about replacing it under warranty, handing me a new one in exchange for the dead one. They were less pleased when I returned



Round One: Mark's original configuration presented in 1999.



What works: Mark's modified configuration in 2005.

in another three months, but still swapped it out for a new one. I decided to rethink the whole situation.

Clearly, the 5-foot lift was a problem, but how could I avoid it? Only by eliminating the vented loop. Should I do that? Yes. The only time I open the 1½-inch discharge through-hull is when I am pumping out overboard so, just like the input, there was no real need for the vented loop. You can't get reverse flow when you have a pump discharging. So the loop goes. What about the Y-valve? Is it necessary? No. With the through-hull closed, the only place the pumpout can draw from is the holding tank. Ditto for the Jabsco when the pumpout is closed.

> **"I would like to relate my trials, tribulations, and eventual solutions for others who might be planning to re-plumb a head …"**

Simple T-fitting

So I threw out everything from the tank discharge fitting and replaced it with a simple T-fitting, with one limb going up to the deck-mounted pumpout fitting and the other down to the Jabsco which is now mounted on the floor behind the head (at about the same level as the bottom of the holding tank).

Now I have a very simple system (strange how that KISS really works!). When we use the head we open the intake valve, pump away, and close the intake valve. To empty the holding tank, we pull up to the pumpout, hook it up, and away it all goes. Alternatively, when offshore we open the discharge through-hull, push the button on the Jabsco, and away it all goes. We close the valve when we are done. No Y-valves, no vented loops, no problems.

This system does depend on operator intelligence to remain safe. If the intake valve is left open, siphoning could occur. This would flood the head and potentially the boat but would be fairly obvious in the process. I have shown each guest on *All Ways* the proper procedure for using the head and have had no problems. The lack of a vented loop on the output could have more serious problems, as reverse siphoning into the tank could go undetected until a lot of water had come aboard. However, my wife and I are the only ones who operate the overboard discharge, and we are very compulsive about the through-hull valve.

Those who are worried by such a system could install a vented loop between the Jabsco and the through-hull. It would still be much simpler than originally presented and since the pump will be pushing, there should be no problem. Theoretically, without a Y-valve, the vented loop might decrease the suction of the pumpout slightly by allowing some air in. I suspect the pumpouts we have used have more than enough suction to handle that small loss.

Since we have made the above changes we have been very happy with our head. I didn't get it quite right the first time (or the second), but now I am very comfortable that we have a reliable system that works well for us. I am also comfortable with the safety issues associated with eliminating the vented loops. If you are contemplating a similar system, you'll need to think through your own situation carefully.

Alberg 30

A classic plastic racer/cruiser with looks to turn your head

by Karen Larson

Magic. We drove east to witness the magic touch, but instead we were treated to a love story. It wasn't a bad tradeoff at all. For several years I have wanted to be aboard when Rolph Townshend skippered *Skybird*, his Alberg 30, to win another race. He's one of the most winning skippers I know. But first, the love story.

Rolph Townshend has been known as Towney most of his life. And most of his life he has been a sailor, growing up as he did on the eastern shore of the Chesapeake. His earliest sails were made with friends, although he admits to — at a very early age — having built himself a boat that resembled a coffin made of scrap plywood. That it disintegrated during its first season was a blessing.

But Towney's sailing friends had Hamptons, 18-foot wooden racing one-designs. Envying these, he wanted his own Hampton, but his parents couldn't spend more than $100 on a sailboat for a young boy. The Hamptons were priced closer to $400. So his first sailboat, at 10 years of age, was an 18-foot Skipjack. By the age of 12, Towney was working a plan that would result in ownership of that coveted Hampton.

"I'd buy a derelict boat for $25 or convince someone to give it to me," he says. "Then I'd repair it in our garage and sell it at a profit. I learned about fixing boats, and ultimately I got my Hampton #500 . . . and later another one, #520."

During the same time that Towney was discovering his talent for messing about in boats, he was supporting the war effort as a young teenager in shop class by building aids for civil-defense spotters. In the process, another skill was born.

Model airplanes

"I was 12 when World War II started in 1941," he recalls. "The schools had shop classes which were asked to build models of German and Japanese planes. Every kid made model Messerschmitts or P-38s which were painted black and used all over the country to train civil-defense spotters."

Towney learned the skills required to carve these models and soon had transferred that interest to carving boats. "Eventually I carved models of all the boats I'd owned," he notes. Later he carved models for friends and then wound up restoring historical museum pieces, such as an 1840 model of a Baltimore clipper, working as a volunteer for the Annapolis Naval Academy. Over the years, building models of boats has been a love affair of sorts. But his ongoing love affair has been with the Alberg 30. Towney was ready, but first Carl Alberg had to design her.

That didn't happen until the early 1960s. The short story is that Kurt Hansen of Whitby Boat Works in Ontario, Canada, commissioned Carl Alberg to design a 30-foot version of his popular Pearson Triton. The kinship is obvious, although some changes were made to the 30-footer, such

as a masthead rig and using cast iron for ballast. The first Alberg 30 was launched in 1962.

So what's a guy to do in the meantime? College, marriage, and a move to Annapolis came along in 1952, when Towney was offered a job with Westinghouse. There was an active Hampton racing fleet in Annapolis, and Towney and his new wife, Jean, did well in these races.

Wanted larger boats

"But we grew a little larger, got a little older, and had children," he smiles. "All the Hampton sailors wanted larger boats with toilets, places to sleep, and room for the kids. But we still wanted a boat we could race." The group members settled on Nat Herreshoff's Fishers Island 23 Knockabout, a daysailer also known as the H23, which is 34 feet on deck and 23 feet on the waterline. Towney describes the gorgeous long overhangs of the Fishers Island as being "like a miniature America's Cup boat from years back."

> "…his ongoing love affair has been with the Alberg 30. Towney was ready, but first Carl Alberg had to design her."

The Hampton sailing friends bought five of the 15 that had been built and sailed them home to Annapolis from Bristol, Rhode Island. "Then we overhauled them and raced them for five years," he says. "But we got tired of maintaining wooden boats. And we couldn't find more than five (which was tough on a racing fleet that wanted to grow). We were making a bit more money by then and began to look for a fiberglass boat roughly the same length. We wanted bunks, a full toilet, a sink, a stove, a V-berth. We were thinking of the Pearson Triton (introduced in 1959) and the Gladiator, and a couple of others."

Drumroll, please. In 1964 an Alberg 30 showed up at an Annapolis boatyard. Towney says, "Jack Martin called me at work and said, 'A really neat boat just arrived. You've gotta' get down there and take a look at it. It may be the boat we're looking for.' Once I'd seen it, I said, 'Jack, that's going to cost an arm and a leg!' "

But it was indeed the boat of their dreams, so these two negotiated with boatyard owner Arnie Gay to give them a discount if they could come up with 10 buyers. The deal was $10,000 each. This order would keep the Whitby Boat Works busy through the coming winter.

Similar group purchase

Unbeknownst to them, another group of 15 sailors in Washington, D.C., also Chesapeake Bay sailors, made a similar group purchase of 15 boats in 1963, so the area was to be blessed with enough of these boats to carry on as a strong one-design class for years to come. As noted in an article by Jay Livingston in *Chesapeake Bay Magazine* in March 2000, "Up to that point, the only one-design racing done on the Chesapeake was on much smaller, non-cruising boats such as Hamptons, Lightnings, and Chesapeake 20s. The Bay had never seen the likes of today's cruising one-design fleets, with waterlines stretching past 40 feet … But it was about to." Towney and fellow "Albergers" in Washington, D.C., and Annapolis were truly at the forefront of something big.

"Now (that we had ordered 10 boats)," Towney recalls, "we had to find eight more buyers … and we had them within a week. We took out loans and did whatever we had to do." Alberg 30 hull #50 arrived around Christmastime. That boat was to be Jack's.

Towney's took a bit longer because he wanted a yellow hull. *Kittiwake*, hull #76, was delivered in June. It was among the last of the 10 ordered. The group members may have bought these boats for one-design racing, but they realized immediately that they also had sweet cruising boats and planned a group cruise to the New York World's Fair that summer. By the time Towney's boat was delivered he had about a week to commission and launch her in order to join the fun. He and his family were not left behind. Of that cruise, he says, "We were racers. We had no instruments, knotmeters, depth finders. We hadn't thought about bad weather or storms. We just went. And we had a wonderful time."

Rolph Townsend, Towney to his friends, top on facing page, is a low-stress skipper who oozes sailing and racing experience from every pore. His rope locker, below on facing page, and *Skybird*, at right, the Alberg 30 he skippered for hundreds of trophies and even more good memories.

Close association

So several decades later the Hampton sailors, who became H23 sailors and then Alberg 30 sailors, continued their close association centered on sailing, racing, and family activities. The roots of perhaps the most active sailboat owners' association anywhere — the Chesapeake Bay Alberg 30 One-Design Association, Inc. — go deep and wide. "We tell people, 'You are not just buying a boat, you are joining a family,' " Towney says. This is true. The organization, still strong after all these years, celebrated its 40th anniversary in 2004, but its roots go back even farther than that, back to a group of Hampton sailors racing around the buoys in 1952. These days, the Alberg 30 Association has approximately 250 members who race, cruise, and party together like one big family.

Somewhere, while Towney's Westinghouse career advanced from quality department manager to manufacturing manager, while three children grew up, and while the sailing continued unabated, Towney and Jean grew apart and divorced. *Kittiwake*, that beloved Alberg 30, was sold so Towney could make a down payment on a run-down house. "I spent four years fixing it up inside and outside," he says. "That was my therapy."

When he met Joan, the woman destined to become his second wife, they had five children and two homes between them. By the time the kids had gone to college, Towney says, he bought a 28-foot Bertram in need of fixing and spent the winter turning this powerboat into a gem. When spring came at last he says, "I couldn't believe how much noise it made . . . and the exhaust smell . . . " When he and Joan took some friends out for cocktails and their own returning wake knocked over the wine glasses, Towney put this boat up for sale. "Joan," he told her soon afterward, "I need one more sailboat." It had to be an Alberg 30.

Went more places

Towney told Joan, "The one I had the most fun with was the Alberg. I went more places, made more friends, and had more fun. It has to be an Alberg 30." There were 12 available at the time. Towney narrowed it down to three. One was yellow, like *Kittiwake* had been, and it was to become his. It was hull #550. He named her *Skybird*, and she became one of the winningest Alberg 30s ever.

The year was 1995. Towney was 66 years old . . . a time when some are having second thoughts about hull maintenance and the work required to sail a boat. Racing a sailboat adds yet another level of effort and risk. Towney went

Continued on Page 34

Alberg 30 interior, above, is traditional Carl Alberg through and through. Towney's models, below from left to right: the 18-foot Hampton, the Alberg 30, and the H23 by Herreshoff.

How she handles

Since we weren't able to race on Towney's Alberg 30 during the (cancelled) Twilight Race last summer, we asked other Alberg 30 sailors to tell us how these boats handle. Their comments say it all (including Towney's comments, which just may give away the secrets to his magic):

Mike Meinhold says: The A30 is good in light air, great upwind in heavy air and waves. Solid construction inspires confidence in a blow. She's quite dry in the worst chop the Chesapeake can throw at her . . . she takes a heel of 20 degrees quite early (10 knots?) and builds slowly up to 30 degrees with wind speed, at which point you're getting overpowered and need to reduce sail . . . I haven't found any tendency to broach. She's easy to control downwind . . . (She offers a) great combination of seaworthiness and safety, sailing pleasure, performance, and cruising accommodation for a family of four.

John Bergquist says: The design appeals to my sensibilities (classic looks, enough wood to look good, but not too much that I'm working on wood all the time, and she is big enough to go somewhere, but small enough for me to handle) . . . In terms of value per dollar, this design is hard to beat. I compared her to the Cal 25, Catalina 27, Pearson 30, Pearson Triton (a very close second and notably also an Alberg design), Pearson 35, various old Tripp CCA Rule designs, Hinckley Pilot 35 (hello, *expensive*!), Westsail 32, Pearson 365, Sabre 34, Ohlson 30, J/35, and some others. The ones toward the end of the list were far too expensive. I would have had to *finance* the acquisition. In the end, with the A30, I got to have my cake and eat it too . . . Is she tender? Initially, yes. More so than more modern designs with deeper keels, harder bilges, and greater beam. But she balances nicely in a big breeze, and I would not call her overly tender in heavy air.

Don Campbell says: The Alberg sails wonderfully well once the smallcraft wind warning is up. I prefer a 135 foresail and full main and, if the wind goes above 25 knots, then just the foresail is fine . . . Light air is a different story. Albergs are heavy-displacement boats. Once moving, they sail wonderfully in light air. It takes concentration by the skipper and crew to make them move, but once moving, then momentum is a great friend. I prefer a 160 or 170 foresail and a full main for these days, weight on the low side, and then it is easy to go ahead . . . Tender? She does get to about the rail and hardens up, as they say. I find that if the decorative line on the hull — about 8 inches below the deck line on the topsides — is at the water, she performs as well as she can . . . Pointing depends on rig tension and sail cut, but 100 degrees on a tack is easy, so never more than 50 degrees off the wind and 45 degrees is often within easy possibilities. Compared with Farr 40s, Albergs don't point, as we found out while watching a Canada's Cup race in Humber Bay, Toronto (Ontario).

Rolph Townshend (Towney) says: Light air? Not very good. If you put lots of crew weight on the low side to hang the sails out, and can keep her on course, she will go, but agonizingly slow. Very susceptible to wave action, especially from motorboats. Heavy air? Great! With the right combination of sails, she is competitive with many other boats. I carry the No. 1 genoa (170-percent) and full main to apparent wind speed of 18 knots. At 19 to 23 knots, the No. 2 genoa and full main (crack off the main with the traveler till the helm balances perfectly). Above 25 knots the No. 2 plus one reef in the main . . . How tender? Pretty tender. With the 170-percent genoa and full main, 12 knots of breeze will put her rail almost in the water. She sails great just like that: rail down. I find that I can have her with the rail under water, a little water running by down the deck, and I don't seem to lose any speed. She just keeps rollin'. But when the cabin windows are in the water, she doesn't go at all . . . For the type of boat she is — full keel, heavy — she points quite well. We can't begin to point with the more modern light-displacement boats, but we can almost point with the Catalina 27s. I try to keep my wind instrument with the apparent wind needle on the 30-degree mark when going upwind. I can do it most of the time if the seas aren't too big . . . Downwind she goes fine. We race downwind with a spinnaker; we cruise wing-and-wing. Racing in a heavy blow, we have seen often that those with spinnakers and those wing-and-wing go very much the same speed. We don't fly the spinnaker when the wind is over 20 knots. We use a whisker pole on the genoa wing-and-wing. We have won many races with that arrangement while others are fighting a spinnaker in a death roll or broaching.

Best point of sail? When asked about the Alberg 30's best point of sail, **Mike Meinhold says**, "Best point of sail beam to broad reach, 15 to 18 knots, 150-percent genoa and full main."

John Bergquist adds, "Points of sail and wind conditions are purely personal preference. My personal favorite is about 110 degrees true with the reacher kite up (I have an asymmetric which is not legal for racing) in about 12 to 15 knots of breeze. You can really get somewhere fast (I have seen the GPS say 7.9) and the boat is just a pleasure to sail this way. I love sitting on the leeward side, even though I can't see the kite luff as well, but I can really hear the water gurgling by the cove stripe 5 feet from my ear. The other thing I love about the Alberg, which distinguishes her from boats like the Cal 25 and the Catalina 27, is that the cockpit is very low. You are really close to the water when you sail this boat, and I feel that it really puts you in communication with that water. It's very easy to gauge your speed without a GPS, because the sound of the water really communicates that to you. Close second on point of sail is going upwind in 8 to 10 knots with the 170 genoa. In this condition the boat is just nearly perfectly balanced. I can usually let go of the tiller and she tracks straight as an arrow if I have the rig set up right."

Towney says, "Best point of sail, I would say is a broad reach. Best wind condition, I would say 15 to 18. Best sailplan, I would say 150-percent genoa and full main in 18 to 20 apparent. I love that combination. Others would say 170-percent genoa and reefed main, but I don't believe it."

Continued on next page

How she handles, Continued from previous page

Jack Walsh sums up his impressions: What's to like about her? Well, for one thing she's a beauty. Classic boat lines. When you look good, you feel good. She is designed to sail well in heavy weather. With all sails up, she can be tender; rolls about 25 degrees with wind 10 to 12 knots, but with the appropriate amount of sails, she would foot well through most heavy weather. She sails well with just the jib, pleasant for singlehandling. She may not point well, but I'll forgive her this.

Towney adds: "Alberg 30s have sailed around the world. Our friends, David and Rene Cooper, sailed their A30 to the Med. After leaving the Azores, they ran into 12 days of gales, night and day. They were wet and tired, but the boat did beautifully under windvane steering … Of course, I have to say that the Alberg 30 is a beautiful boat. We get our picture taken wherever we go. People always comment on her beauty. Other boats sail by us, and the people aboard give us thumbs-up regularly."

Continued from Page 32

right back to racing as if he'd never left the Alberg association. Before long, the man who'd helped found the association, but whose name was recorded only in the archives, began winning more than his fair share of the races.

That's what inspired my interest. I heard rumors about how Towney won the club's high-point trophy. And won it again. Eight times in a row. So far. And the fall racing season Maple Leaf trophy during most of those years. And the trophy for the skipper who attains the best cumulative score in the day point-to-point races for most of those years. Then I read about Towney in the Great Lakes Alberg Association newsletter. He was winning honors in Ontario, team racing in other people's Alberg 30s.

I couldn't stand it anymore. We drove to the Chesapeake hoping to catch Towney in the act of winning a race. Would he be a screamer … or never raise his voice? Would it be his experienced crew of Ken and Roberta Liddick who have been racing with him, Ken in particular, for 10 years? Did Towney have an intuitive knack for racing that can't be defined or quantified? Would it be nothing more than the many years he's spent racing? Or did *Skybird* have wings?

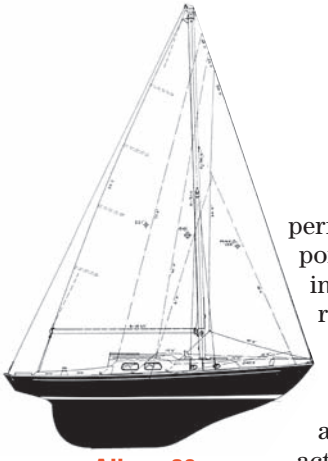
We'll never know for sure. The race we attended was called off due to lack of wind. We had a good time on the course awaiting the start with others and a good time motoring to the race and home again. In the future it will be even harder to catch him at it. Now, at age 76, Towney's cutting back a bit on his heavy racing schedule to just one Wednesday-night race a week plus the minimum six CBYRA races needed to qualify for the season. After showing them how it's done, it looks like he's going to give the other folks in the association a chance at winning the major trophies. It's only fair. But we still don't know what tricks Towney has up his sleeve.

Perhaps that's best. If we knew, I'd include them here, and then they wouldn't be secrets anymore, would they? Secret magic isn't meant to be exposed by someone who buys ink by the barrel. We drove east to witness the magic touch, but instead we were treated to a love story. It wasn't a bad tradeoff at all.

Alberg 30

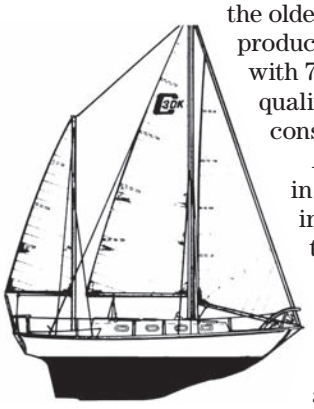
Four very similar 30-footers

by Ted Brewer



Alberg 30

I try to select similar boats for my comparisons, but this time I seem to have selected four peas from the same pod. There certainly are more similarities than differences between them. It's interesting to note that the designs are spread over 21 years from the oldest to the newest, and the oldest design, the Alberg 30, was in production for an incredible 25 years, with 700 built. That says a lot for her qualities, both the design and the construction.

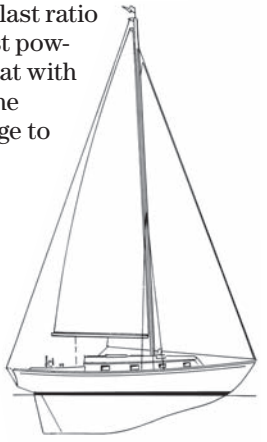


Cape Dory 30

Although the yachts are alike in many ways, they are not alike in appearance. I much prefer the springy sheerline of the Sea Sprite to the flat sheer of the Cape Dory and the low freeboard and long ends of the Alberg 30 to the chunkier appearance of the Pearson. But beauty is in the eye of the beholder and high freeboard does have its advantages.

The table shows their similarities as well as the few areas where one boat stands out from the group. Numbers can be misleading though. The Sea Sprite 30, with a sail area/displacement ratio of 14.6, might seem undercanvassed when compared to the Cape Dory's 15.1 ratio, but both yachts are of the same displacement and the difference in actual sail area is only 12 square feet. It's truly inconsequential in the overall performance picture, particularly considering that the Sea Sprite's mainsail has a much higher aspect ratio.

The Sea Sprite could easily carry another 30 square feet of sail but, regardless, I think she would have the edge in weatherliness. With her slightly greater beam, deeper draft, and higher ballast ratio she appears to stack up as the most powerful of the four boats. Combine that with her taller, more efficient, rig, and the result should be a definite advantage to windward.

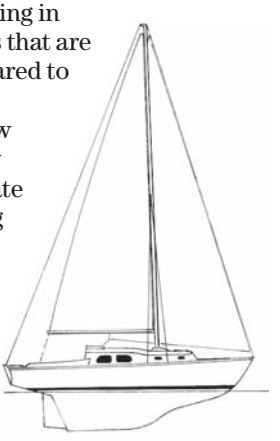


Sea Sprite 30

Light and narrow

However, the boats are so close in their general characteristics that their performance on a reach could be a tossup, although the Alberg 30, being the lightest and narrowest, might show well in the gentler breezes. Even so, none of this group can be considered a performance cruiser by contemporary standards. If you live in the Toronto or Chesapeake regions and are interested in a boat for class racing as well as cruising, the Alberg 30 deserves serious consideration, as both areas have large active fleets.

All four of these 30-footers will have a relatively easy motion in a seaway, due to their combination of husky displacement, narrow beam, and short waterline. Indeed, their motion comfort figures are right up there with the Whitby 42 and similar yachts. That makes them an excellent choice for family cruising in coastal waters, despite accommodations that are rather tight, to say the least, when compared to today's beamy long waterline cruisers.



Pearson Coaster 30

Their heavy displacement and narrow beam also work to create commendably low capsize numbers. This would indicate that these yachts are quite up to making serious bluewater crossings, given good condition, good equipment, and a small, experienced crew. Certainly many well-found yachts this size and smaller have made adventurous voyages, survived storms at sea, and taken their crew to distant harbors.

On older yachts it is essential that an experienced, professional surveyor go over every inch thoroughly, with particular emphasis on hull-to-deck joints, steering gear, chainplates, rig, and machinery. Then, any recommendations made by the surveyor must be followed up before you even *think* about heading offshore to those exotic ports. Bon voyage!

	Alberg 30	Cape Dory 30	Pearson Coaster 30	Sea Sprite 30
LOA	30' 3"	30' 2"	29' 10"	30' 2"
LWL	21' 8"	22' 10"	23' 4"	22' 0"
Beam	8' 9"	9' 0"	9' 4"	9' 6"
Draft	4' 3"	4' 2"	4' 7"	4' 9"
Displacement	9,000 lb	10,000 lb	9,600 lb	10,000 lb
Ballast	3,300 lb	4,000 lb	3,500 lb	4,100 lb
LOA/LWL ratio	1.4	1.32	1.28	1.37
Beam/LWL ratio	0.403	0.394	0.400	0.432
Displ./LWL ratio	395	375	337.5	419
Bal./Displ. ratio	0.37	0.40	0.36	0.41
Sail area	410 sq ft	437 sq ft	424 sq ft	425 sq ft
SA/Displ. ratio	15.2	15.1	15.2	14.6
Capsize number	1.68	1.67	1.76	1.76
Comfort ratio	31.7	32.9	29.8	31.3
Years built	1962–87	1976–86	1966–?	1983–86
Designer	Carl Alberg	Carl Alberg	Bill Shaw	Bill Luders

Boat review

Seafarer 30

This late '70s fast coastal cruiser has a pedigreed design

by Gregg Nestor

The Seafarer 30 was designed by Jim McCurdy and Bodie Rhodes and was sold from 1979 through 1985. This performance-oriented coastal cruiser has an overall length of 29 feet 11½ inches, a waterline length of 25 feet 7 inches, and a beam of 10 feet. It displaces 8,600 pounds with 3,450 pounds of ballast.

The design of the Seafarer 30 can be summed-up in two words: tasteful conservatism. McCurdy and Rhodes have shown great finesse and restraint in carefully blending form and function into the design of this performance cruiser. The boat's profile presents a fine entry, a turtle-shaped forward cabin, pleasing sheer, and an almost plumb stern.

The hull laminate is hand-laid and comprises alternating layers of fiberglass mat and woven roving. At the centerline there's a maximum of 10 layers. This equates to a thickness of ⅝ inch. The deck is balsa-cored and is structurally laminated to the hull and then mechanically fastened with bolts on 4-inch centers. The hull-to-deck joint is an outward-facing flange, which is protected by a black vinyl rubrail and capped with teak.

The Seafarer 30 was available in two keel configurations, a fin keel drawing 4 feet 9 inches (our review boat) and a shoal keel/centerboard version that draws 3 feet 6 inches with a light (7,500-pound) displacement. Both versions utilized the same low-aspect-ratio skeg-mounted rudder. The skeg does not fully extend down the entire length of the rudder and, therefore, does not provide a lower attachment point for the rudder, nor protection for the rudder's heel.

Blenheim, **the Seafarer 30 owned by Richard and Joan Lybeck, gets underway, on facing page. A long view from the bow, at top, shows the forehatch and a second hatch just behind the mast. Next, a view of the teak ribbing on the sliding hatch and the Seafarer 30's spacious cockpit. Wide and curvaceous coamings, at left, provide plenty of room for sheet winches. From bow to stern, the Seafarer offers just enough teak accents, bottom photo, to keep most woodworkers feeling satisfied but not overworked.**

On deck

Except for a pair of 10-inch mooring cleats, their companion chocks, and a chain pipe leading below to a chain locker, the foredeck is clean and uncluttered. In spite of the outboard shrouds, comfortable maneuverability on deck is afforded by the teak-capped molded-in fiberglass toerail, the non-skid decking, and a generous 8 feet of dual teak handrails.

Complementing the large hatch that's located forward on the coachroof is a slightly smaller hatch situated just aft of the mast and flanked by a pair of Dorade vents. Originally, only two of the portlights were of the opening variety. Our review boat was upgraded and now all portlights open. There is sufficient brightwork present to accent the boat, including teak ribbing on the companionway's sliding hatch. Unfortunately, the sliding hatch does not incorporate a seahood. One could easily be added.

A pair of midships cleats and chocks, along with a pair of stern mooring cleats, provide adequate tie-off points when docking. Stainless-steel bow and stern pulpits, a center-line swim ladder, stanchions, and dual lifelines complete the deck hardware.

The cockpit of the Seafarer 30 is 7 feet long. It's protected by coamings that are both high and wide. These not only help to keep the crew dry, they also offer good back support and a place on which to mount sail controls. Our review boat's coamings were each fitted with optional storage "cubbies." These are great for keeping small items confined and close at hand and are a good place to stuff headsail sheets to keep them from cluttering up the cockpit. There's a bridge deck and two large cockpit drains. Aft, port and starboard, are a pair of generous lockers. The starboard one houses the manual bilge pump. Beneath the helmsman's seat is the engine control panel, shorepower receptacle, the emergency tiller connection, and additional stowage. Wheel steering is standard, with throttle and transmission controls close at hand to starboard. Located in the cockpit sole, directly above the fuel tank, is the deck fuel fill.

Belowdecks

The V-berth is 6 feet long and almost 6 feet wide at the widest point. Beneath it and forward is the 42-gallon water tank. Also beneath the V-berth is a stowage locker to starboard and the holding tank to port. Ventilation and illumination are provided by the overhead hatch and a pair of opening portlights. At night, two 12-volt dome lights offer illumination. A folding door separates the V-berth from the head. The head, which spans the hull, contains a stainless-steel sink with vanity and a mirrored hanging locker to starboard; the toilet and a second hanging locker behind are to port.

Our review boat was fitted with a self-contained, recirculating marine toilet. This system uses wastewater, rather than seawater, for flushing and has no provision for overboard dumping. While this system may be loved by the U.S. Coast Guard, it contributes odors to a boat. A pair of opening ports allows for light and cross-ventilation in the head. A second set of folding doors, located between the head and the main cabin, establishes additional privacy and defines the shower area. Shower water drains to the bilge and is sent overboard by the automatic bilge pump.

Following aft are the opposing settee berths of the main cabin. The starboard settee is fixed, while the port one converts to a narrow double. Both measure 6 feet 5 inches long and have stowage beneath and behind. Outboard are covered lockers and overhead, 9 feet of handrail. The drop-leaf table folds up against the port bulkhead and conceals a spirits locker, stowage for glasses, plus additional fiddled shelving. An overhead hatch complements the four opening ports. At night, two 12-volt dome lights illuminate the main cabin. The woodwork is oiled Burmese teak. The sole is teak and holly. Headroom is 6 feet 2 inches.

The galley

Aft and to port is the L-shaped galley with its double stainless-steel sink, pressurized hot and cold water, and a two-burner pressurized alcohol stove. The galley has adequate stowage in the form of drawers, lockers, cubbies, and shelving. To starboard is the 150-pound capacity icebox, which doubles

as a chart table. Our review boat's icebox was converted to 12-volt refrigeration. The compact compressor was cleverly hidden in the outboard locker above the chart table.

Beneath the cockpit seats are a pair of large quarter berths. With this configuration, the boat can conceivably sleep seven. The diesel engine is situated between these berths. Farther aft is the 20-gallon fuel tank and the water heater. Both Yanmar and Westerbeke power plants were used as auxiliaries in Seafarer 30s. Our review boat was equipped with a raw-water-cooled Yanmar 2GM. This 15-hp engine is coupled to a 14-inch, two-bladed prop via a 2:1 reduction gear. It appears to be adequate under normal conditions but may be a bit underpowered in heavy seas.

Removing the companionway steps and the combination engine box cover/fiddled table exposes the engine and stuffing box. Access is excellent. There's a dual-battery electrical system with the fuse panel located above and to the right of the chart table and the battery switch situated at the base of the port quarter berth. All seacocks are bronze.

The rig

The Seafarer was originally available in a standard rig (412 square feet of sail area) or in a racing configuration with 521 square feet of sail area. Both were high-aspect-ratio, masthead-rigged sloops. Our review boat was equipped with the standard rig. Its mast is deck-stepped with a compression post beneath and has a bridge clearance of 40 feet 10 inches. It utilizes a single spreader with single upper and lower shrouds, as well as a backstay.

All halyards are external, lead aft, and terminate at one of the four Lewmar #7 single-speed winches located on the cabintop. There are two winches on either side of the companionway, at the aft edge of the cabin. Each has its own dedicated line stopper and cleat.

A pair of Lewmar #30 two-speed winches are located on the cockpit coamings, along with turning blocks and cleats. Our review boat was fitted with three sets of headsail tracks, a 10-foot section on the sidedeck, a 7-foot section on the toerail, and a short 3-foot track on the cockpit coaming. This allows for a variety of headsail configurations.

The boom of our 1981 review boat is of the roller reefing variety. This feature was dropped in later years and replaced by a standard boom with jiffy reefing. Sheeting is end-boom and connects to a traveler located on the bridge deck.

Under way

The Seafarer is a reasonably fast boat. She is initially tender but stiffens up as she approaches 20 degrees of heel. She has a small high-aspect ratio (3.25:1) main. The outboard location of the shrouds restricts the sheeting angle and the boat's ability to point.

Checklist

As is the case with any boat of this vintage, sound the deck, especially around deck fittings. Delamination of balsa-cored decks is a common problem and, if extensive, can be a dealbreaker. Over the years the original plastic-trimmed portlights can develop leaks and require rebedding. While not so much of a problem as a nuisance, be careful when fueling or checking the fuel level. Having the filler located on the cockpit sole is an invitation for water and debris to find their way into the fuel tank. If equipped with the recirculating marine head, odor problems may be noticeable. Corrective actions include

The cozy interior on *Blenheim*, at left, and the excellent engine access below. *Blenheim* has received a number of modifications over the years: opening ports throughout, storage cubbies in the cockpit coamings, a recirculating marine toilet, and 12-volt refrigeration.

Seafarer history

In the late 1950s and early 1960s, Amsterdam Shipyard, Inc., of Holland produced three Philip Rhodes-designed sailboats for Seafarer Yachts in Huntington, New York. These original, Dutch-built Seafarers were the Swiftsure 33, the Ranger 28, and the Meridian 24.

In approximately 1965, Seafarer ceased all production abroad and relocated it to a new facility in Huntington. At about the same time or soon thereafter, Bill Tripp added two designs to the Seafarer line, a 31-footer and the Seafarer 39. However, during the 1970s, the majority of the designs came from the drawing boards of the design firm of Jim McCurdy and Bodie Rhodes, Phil's son. Even so, Seafarer didn't put all its eggs in one basket. Instead, the company introduced two Sparkman & Stephens-designed models, a 23- and a 48-footer. Additionally, Starling Burgess contributed the Atlantic, a redesigned 31-footer, to the Seafarer line. Seafarer's offerings were a varied lot and, in total, ranged from a 48-foot cruiser down to an 8-foot dinghy. Every model was available in kit form or as a finished product.

Seafarer Yachts ceased production in 1985, having succumbed to the combined pressures of an economic recession, escalating raw-material costs and competition. Relative to other sailboat manufacturers, Seafarer Yachts was not huge nor did they produce large numbers of boats. Unfortunately, there are no surviving records for their 20-year U.S. production history.

Resources

Seafarer Owners website
<http://www.seafareryachts.net>

Seafarer Research Center
<http://www.seafarer-research-center.com/seafarer.html>

replacing the hoses and/or converting to a seawater flush. If the engine is raw-water-cooled, run it under load and monitor the operating temperature. The lead keel is encapsulated. Check out the leading edge and determine if the boat has suffered a severe grounding. Damaged or even repaired fiberglass in this area can mean that water has intruded and can lead to problems.

Summing up

The Seafarer is a conservatively designed performance cruiser. Her looks have staying power. She's a big boat inside with many creature comforts. If she's guilty of one thing, it's being "over-berthed." She'll perform well around the marks on Wednesday night and comfortably carry a family on a weeklong cruise. Remember that Seafarer Yachts went out of business 20 years ago so there's no support other than dedicated Seafarer owners. If you're looking to buy, expect to pay around $17,000 to $24,000.

Seafarer 30

Designer: J. McCurdy and B. Rhodes
LOA: 29 feet 11 inches
LWL: 25 feet 7 inches
Beam: 10 feet 0 inches
Draft: 4 feet 9 inches/3 feet 6 inches
Displ: 8,600 pounds/7,500 pounds
Ballast: 3,450 pounds
Sail area: 486 square feet (521 race)
Headroom: 6 feet 2 inches

Relics from the past

New owner unearths hidden mysteries aboard

by Rob Lucey

"What is this thing?" I ponder, holding up a hotdog-shaped red bulb with a foot-long wire protruding from one end, terminating in a plug that seems to fit nothing aboard our boat. It's not the first mystery I've come across.

When adopting a used boat, new owners often inherit lockers filled with gear. It seems to me that most boaters, having decided to part with their venerable vessels, don't have the heart to sort through all of those spare parts and pieces that have settled into the depths of each nook and cranny over the years. Instead, they generously leave all associated gear to the new owner.

When we took ownership of our 38-foot Morgan sloop, *Sea Spell* (formerly *Jada*, *neé Little Feet*), we were blessed with loads of storage space, compared to my first boat, an Endeavour 32. Sadly, *Sea Spell's* three previous owners had already filled most of her bounteous space. It seems that 25-year-old boats quite literally come with a lot of baggage.

My wife and I quickly realized that if we wanted to stow any of our clothes and toys aboard, we'd have to sort through what was already there.

Much of the gear comprised the obvious items critical to a sailing vessel, such as sails. In addition to the ones in the cockpit sail locker, a couple of extra sails were piled in the shower. Two years later, the shower is still a sail locker. Who needs to bathe indoors when cruising in the tropics? We also found a little-used dodger buried beneath the sails that hadn't been included in the ship's inventory — the first of many bonuses.

Of course, there were also things listed on the inventory that we never did find. Where could they have possibly hidden that 35-pound Danforth? When asked, the immediate past owner admitted it may have been "lost" somewhere in the distant past. This nebulous explanation left me wondering if it might still turn up someday, perhaps tucked away under a settee cushion.

Prospecting below

We dug through our other lockers, spending days sorting things to determine what we'd bought, like prospectors panning for gold nuggets or archaeologists unearthing relics from the past. Some were pleasant discoveries, like spare Autohelms and bilge pumps.

Much of the sifting effort was pure drudgery. It seemed the previous owners had made a game of finding the highest possible number of places in which they could stow nuts, bolts, and other fasteners. We gathered these bits into a container with individual cubbyholes for different types and sizes. Suddenly, when we needed a certain screw or nail for a particular job, we could find it. Without the time spent rummaging for each fastener, projects accelerated.

After emptying the lockers we sorted everything into major categories. We gathered tools in one place (including a hammer from the Morgan yard that we found glassed into a compartment under the stove). Blocks — boy, do we have blocks! — all packed into a tackle box. Plumbing supplies in another. A toxic medley of glues, caulk, and other fixatives in another.

Electronics in another. Expired flares in the expired flare box.

Soon things were starting to look organized, further reducing project times. We even began to open up space to stow our own stuff.

Despite our massive reorganization, we still didn't have a grasp on everything on board. When stocking up with spare parts a year later, we visited our local Perkins mechanic to gather necessary bits for the diesel. He sold us a spare $100 injector and a set of gaskets costing about the same. Of course, we later found a spare injector and the same set of gaskets stowed among our other spare engine parts. Sorting without benefit of either a photographic memory or a complete inventory list can lead to such duplication.

Unidentifiable items

After we'd emptied every crevice and restowed all the identifiable items in logical groupings, we were still left with a small pile of "other" items we couldn't quite figure out. We didn't have a clue what they were. My wife would hold something up now and then. I'd squint and try to visualize what it might be. An engine part? A piece from a pump? No. "That's got to be a gasket for the head," I'd declare triumphantly. But sometimes my imagination fell short.

Down in the sail locker, for example, we found a couple of oddly shaped boards with barrel bolts on them. I stared at them for a while but failed to fathom their possible use. Then one day we had a friend aboard helping us chase down a short-circuit in the shorepower system. I held up one of the boards and casually asked: "Any idea what these might be used for?"

He glanced about and pointed to the gap between the side seats and pilot seat in the cockpit. Of course. The boards fit neatly in place, creating body-length benches for those nights when we want to sleep outside.

But a couple of things still leave me stumped. What is that hotdog-shaped red bulb with the wire dangling out of one end? It may be some kind of specialized diagnostic tool for an electronic component. I keep it buried in the bottom of a locker just in case we ever need it, although we probably won't know if we do.

Maybe the next owner will figure out what it's for.

Enigmatic new world

by John Vigor

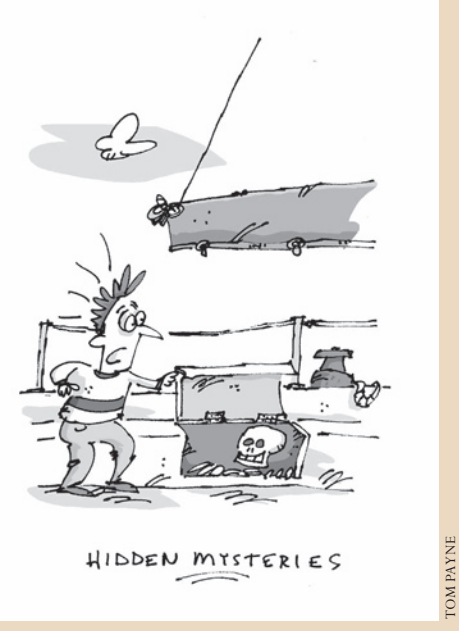
Your newly acquired boat may look perfectly normal on the outside. But as soon as you start lifting hatches, opening lockers, pulling drawers, and peering into the engine compartment, an enigmatic new world will emerge.

It can take you months to discover how all the systems work, where all the seacocks are, and why the masthead light only comes on if you plug in the cabin fan as well.

Boatowners are a meddlesome lot. They can't resist adding or altering things in their constant quest for perfection.

The engine compartment glows eerily with pale LEDs the previous owner failed to explain. They dimly outline a puzzling forest of pipes, wires, and levers. Under a companionway step, a lump of something grows a white fur coat with startling orange spots. Deep in the bilge a loose copper wire terminates in a halo of virulent green fuzz.

A bikini top lies insolently at the foot of the quarterberth and a sticky drawer delivers a crumpled receipt for repairs to bottom blisters you weren't told about. Gradually, one-by-one, you will solve the mysteries. You just need patience.



TOM PAYNE

Tip: Make notes while you sit down with the previous owner and go through everything from stem to stern.

(Excerpted from *Things I Wish I'd Known About Before I Started Sailing*, by John Vigor; Sheridan House publishers. Illustrated by Tom Payne. This and other books can be found at <http://www.goodoldboat.com/bookshelf.html> or by calling 763-420-8923.)

Available fuel choices for cruising sailboats

by Don Launer

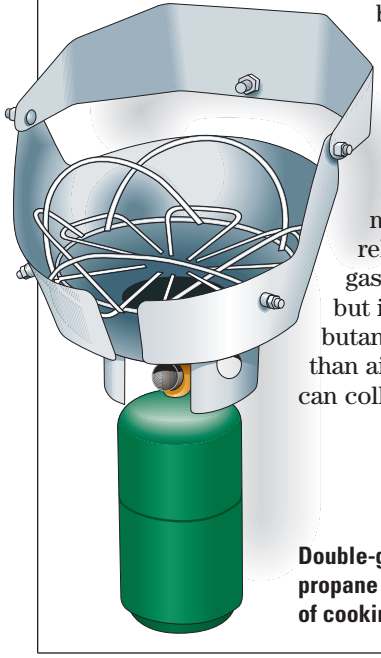
The selection of the best galley stove for use aboard your sailboat depends on the size of the boat, the layout of the galley, and the type and amount of cooking you plan to do. Your selection will also depend on your budget as galley stoves run from $40 to $4,000.

There is a wide variety of galley stoves and fuels: non-pressurized alcohol, pressurized alcohol, small liquefied propane or butane canisters, liquefied propane using large pressure tanks, compressed natural gas, kerosene, diesel, electric, ceramic-glass electric, and microwave. Galley stoves are also available as combinations, such as an alcohol/electric combo or an electric burner/microwave-oven combination.

These stoves come as a simple single-burner or as multi-burners with ovens. A galley stove that is gimbaled has a distinct advantage and is usually mounted facing athwartships so level cooking can occur when the sailboat is heeled. Gimbaled stoves should also have a method for preventing the stove from gimbaling — usually a barrel-bolt. The pivots for a gimbaled stove should be at the level of the bottom of the cooking pan. Fiddles around the edge of the stove-top with adjustable arms that encircle the pots should be high enough to prevent pots from moving. Galley stoves should be corrosion-resistant, preferably made of stainless steel.

Liquefied petroleum gas (LPG)

Most boatowners select LPG for their galley stoves, since these stoves operate much like home stoves and provide about twice the heat of alcohol. LPG can be butane, propane, or a mixture of the two. These gases become liquid under pressure and must be contained in specially designed tanks, with aluminum the preferred tank material. When pressure is released, the liquid becomes a gas that burns hot and clean but is very explosive. Both butane and propane are heavier than air, which means that the gas can collect in the bilge, so the strict safety protocols established by the American Boat and Yacht Council (ABYC) must be observed in the installation and operation of an LPG stove. Gas detectors, or "sniffers," should be part of the installation. LPG is available worldwide, however outside the United States metric adapter fittings are necessary to refill a tank that has American threads. Small camping-style LPG stoves use canisters that are discarded after use. These canisters are usually available in hardware or camping stores. They should be treated like large tanks used for LPG. When not in use, they must not be stored belowdecks.



Double-gimbaled single-burner propane stoves provide 3½ hours of cooking time.

Alcohol

Other than the small, camping-stove-type canister LPG stoves, alcohol stoves are the most inexpensive type of galley stove available, but their heat output is less than compressed natural gas and only about half that of propane and butane. Alcohol vapor is heavier than air, so alcohol — which was once proclaimed the safest of fuels — is now also considered dangerous when improperly or casually used.

Non-pressurized alcohol stoves — those containing a material saturated with alcohol and operating much like a Sterno stove — are much safer than pressurized alcohol models. These non-pressurized stoves require no preheating, which can sometimes be a hazardous operation.

The pressure for pressurized alcohol stoves comes from a tank that has to be pumped up with air. Alcohol is expensive in the United States and very expensive and difficult to obtain elsewhere in the world.

Three-burner propane stoves with ovens have been installed in most medium to large sailboats in recent years.

Layout and illustrations by Ted Tollefson

Compressed natural gas (CNG)

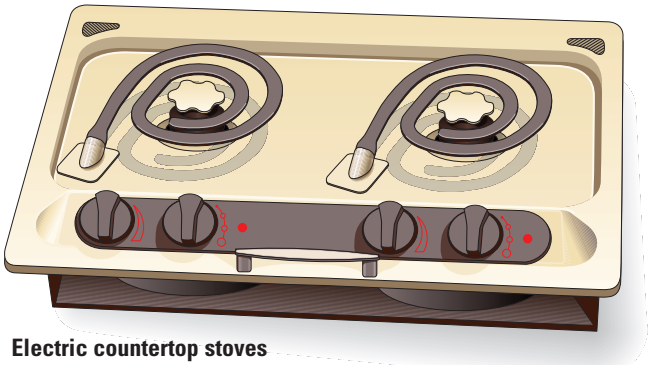
The main advantage of CNG fuel (primarily methane) is safety since this fuel is lighter than air and will not accumulate in the bilge. Nevertheless, one should apply the safety standards of LPG to CNG. The tanks should not be stored in the cabin, although many installations ignore this admonition. As with LPG, ABYC recommendations should be followed in the installation. These tanks are leased, not purchased. When refueling, the empty tank is exchanged for a full one. CNG is more difficult to obtain than LPG and has a higher cost, mostly due to a more limited distribution infrastructure. CNG has lower Btu-per-pound than LPG. In any installation, a CNG tank cannot be substituted for LPG or vice versa.

Kerosene

Though kerosene is universally available and relatively inexpensive, kerosene galley stoves are seldom seen, except aboard some older boats. Pressurized kerosene stoves burn kerosene vapor and have a blue flame similar to an LPG stove. However, just as with pressurized alcohol stoves, the burners must be pre-heated with alcohol to vaporize the kerosene before use. The pressure for kerosene stoves comes from a pressure tank that has to be pumped up with air. In some cases pressure is supplied by a gravity feed.

Electricity

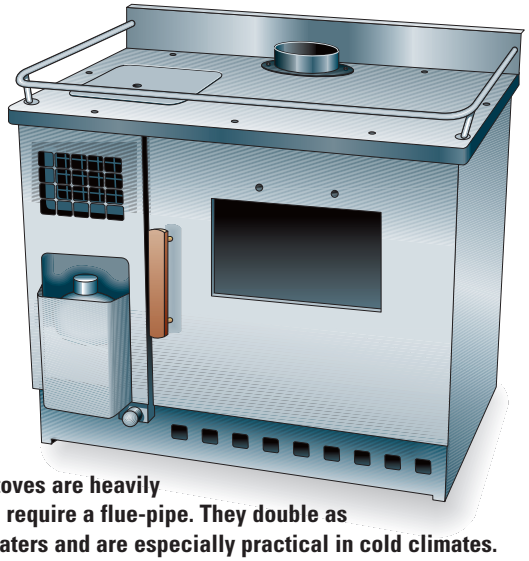
Only sailboats with very high-output generators will have enough power to operate an all-electric galley since the power needed can be in the multiple thousands of watts. On small sailboats, however, a single-burner electric hotplate can be useful in a marina when you're connected to adequate shorepower. For the ultimate in electric cooking tops, ceramic-glass electric galley stoves are also available, as well as 12-volt DC or 120-volt AC microwave ovens.



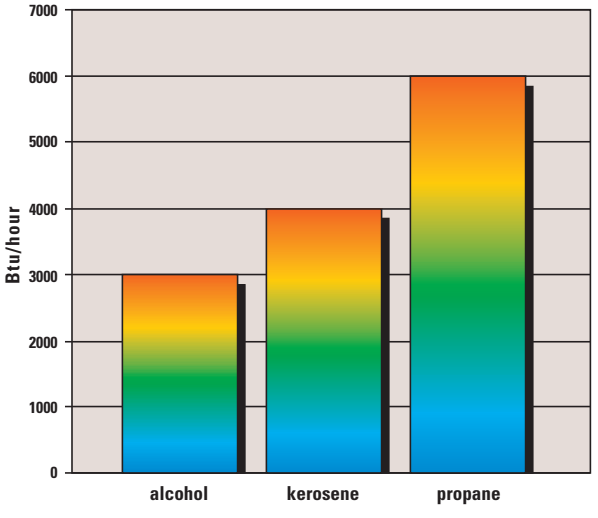
Electric countertop stoves provide dockside cooking for many small sailboats.

Diesel

Diesel stoves are seldom seen on recreational sailboats, except on large boats operating in very cold climates where the stoves double as cabin heaters. Diesel stoves, which are usually quite heavy, provide a very hot flame. In a boat with a diesel engine, the fuel can be supplied from the engine's fuel tanks. Often the fuel is pumped from the engine's tanks into a small overhead tank, using a gravity feed from there to the stove. Pre-heating the burner is necessary, and diesel stoves must be vented through a Charlie Noble on deck.



Diesel stoves are heavily built and require a flue-pipe. They double as cabin heaters and are especially practical in cold climates.



Comparison of the potential heat available from three common galley-stove fuels.

The Vibrant Vision of Jim DeWitt


WINDQUEST

Two classic

Certainly not twins, the 33 and 36

The Columbia 36 has a lovely profile at the dock. Her roomy head, above left on facing page.

Our subjects are two sloops manufactured by the Columbia Yacht Company during its heyday in the 1960s when it was the pre-eminent builder of fiberglass production boats. From a company that first carved a niche in the construction of portable outhouses, Dick Valdes and friends developed the Number One fiberglass boatbuilding company long before the likes of Frank Butler and Roger MacGregor arrived on the scene.

The Columbia 36

Though the boats are not twins, the Columbia 36 and 33 share many characteristics and are easily identifiable as Columbia models.

In profile, the 36-footer is a not-quite-sleek, but still comely, version of a traditional 1960s sailboat with rounded chine and a tall freeboard typical of the era. She'll spray water away from the hull, rather than dousing the cockpit crew.

Her cabintop is a slightly-more-than-one-story affair that mirrors many of her contemporaries, with the aft section elevated just enough to increase headroom in the main saloon but low enough to avoid being unsightly.

A massive single-spreader rig towers overhead. She flies oversized headsails and masthead spinnakers and, for the adventurous, a blooper. The massive rig is supported by double sets of shrouds. In comparison with the 33, she has a more modern underbody with a fin keel and spade rudder.

When you step aboard it takes about four seconds to realize that this is a Bill Crealock design. The tipoff? The cockpit sole, though totally watertight, is easily removed, allowing access to the engine from above, a marvelous arrangement for anyone who is changing filters, belts, and the like. If the opening is large enough it's also a joy for anyone who must remove the engine. Like the other 99.9 percent of sailboats on the water, the engine is also accessible from the foot of the companionway.

Though the 36 is only 8 inches wider at the beam than the 33-footer, her girth is more like that of a middle linebacker than a ballerina, though not unfashionably so. The cabin sides are higher than her little sister's, and there's a big step over the companionway to access the companionway ladder. A "Watch Your Step" sign might be in order. The flip side of that is the prevention of water slopping belowdecks.

No encumbrance

The cockpit is a slender area with 7-foot-long seats that are wide and deep with large aft storage areas. The tiller is located at the aft end of the footwell, so it is not an encumbrance, and the aft deck is large enough for a

Columbias

share characteristics

by Ed Lawrence

sunbather. Storage is in a large cave spanning the stern: 2 feet x 4 feet x 30 inches deep.

The absence of cockpit lockers reduces exterior storage but offers more space in the quarter berths. Speaking of space, moving about is easier than it is on today's boats. The cabin is narrow enough to produce 24-inch-wide sidedecks; it's not necessary to tiptoe from cockpit to the bow, and the foredeck is large.

The space down below is a no-compromise, make-yourself-comfortable area in which to lounge, cook, sleep, or play the ukulele. A C-shaped settee is located to port, the galley with propane stove and stainless-steel sink are to starboard.

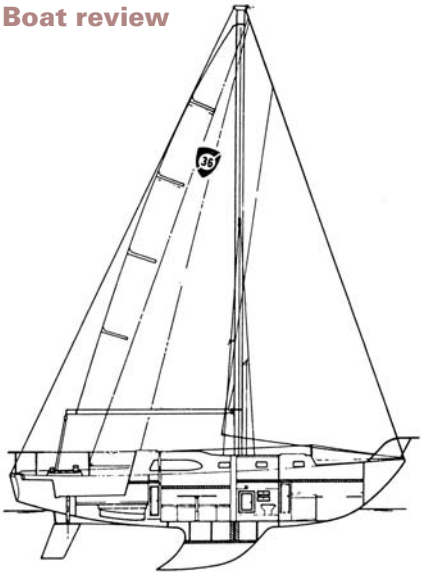
Elongated galley

C- and L-shaped galleys seem to be the rule these days, but there's much to be said for placing the galley — with its stove, sink, and icebox — lengthwise along one side of the cabin. This arrangement was a favored design feature in the narrower boats of the '60s. For one thing, it reduces the intrusion of 27-inch-wide counters in the main saloon and, if properly equipped, still provides the cook with a safe area in which to operate.

This arrangement allows the crew to sit at a proper table measuring 36 x 42 inches, rather than seating two across the aisle. (A note: the cabinets are enclosed by solid wooden doors. When the boat begins rocking sideways, these doors can produce a cacophony of noise. To stop the knocking, insert tiny shims between them.)

The head and nav station are located forward in what serves as a buffer zone between crew and skipper, whose dominion is the forward stateroom. The head is large enough in which to open up the *New York Times* or shower, shave, and attend to other personal matters. Similarly, the nav station is a nicely appointed area

Two views of the interior of the Columbia 33 at right. Both the 36 and the 33 have the long galley on the starboard side and an, otherwise traditional, layout. The 33 gives up space in the head and sacrifices the nav station for a small table.



Columbia 36

Designer: William Crealock
LOA: 35 feet 9 inches
LWL: 28 feet 3 inches
Beam: 10 feet 6 inches
Draft: 5 feet 5 inches
Displacement: 12,000 pounds
Ballast: 5,000 pounds (lead)
Sail area: 557 square feet
Headroom: 4 feet 4 inches

in which the person responsible for piloting the vessel can work. The chart table is a 27-inch square platform surrounded by bookshelves.

Aft, quarter berths on both sides of the hull are 28 inches wide and 7 feet long. They offer a modicum of storage for storage-hogging-but-rarely-needed items such as paper towels and the like.

The Columbia 33

This nifty cruiser has an interior layout similar to that of the Columbia 36. The big difference (because of her earlier design) is her traditional underbody with a full keel, attached rudder, and a centerboard which takes her draft from 3 feet 6 inches to 7 feet. She was designed by Wirth Monroe, a noted Floridian who produced a number of designs that did well on the Southern Ocean Racing Conference (SORC) when, in the 1960s and '70s, that series was considered the major league of amateur sailboat racing. The 33 was designed and built between the years 1963 and 1965, while the 36 was designed and built between 1969 and 1973.

The layouts are similar: a long, slim cockpit that's large enough for the cruising crew, tiller, and scuppers to drain the occasional rogue wave. Seats are 9 feet long and 16 inches deep, with 14-inch backrests, so they provide excellent support on a long reach. Three steps down the companionway provide access to an arrangement that is a cookie-cutter version of the 36 but smaller: settee and table to port, long galley to starboard with a 4-burner stove and sink, 20- x 22-inch working surfaces, and icebox situated in cabinetry below. Cabinets outboard are enclosed by wooden doors. This adds to the ambiance as do bookshelves on both sides of the hull. There's no nav station; a cocktail table is substituted. This can be lowered to produce a kiddie-sized berth.

The trend in modern production boats is to produce dance-floor-sized spaces belowdecks. That's not the case with these older boats, which tend to be narrower than their contemporary counterparts. Nonetheless, settees are 40 inches long, large enough to seat four adults, though the space is reduced by a table. There's plenty of headroom.

As you might expect on a 33-footer, the head is narrow (30 inches wide) and fitted with just a toilet and sink. Since

Columbia 33

Designer: Wirth Monroe
LOA: 33 feet 1 inches
LWL: 24 feet 0 inches
Beam: 9 feet 10 inches
Draft: 3 feet 6 inches to 7 feet 0 inches
Displacement: 11,000 pounds
Ballast: 4,200 pounds
Sail area: 476 square feet
Headroom: 6 feet 5 inches

the sink is located under the deck, those who are brushing their teeth risk banging their heads on the overhang.

One can sleep well

The V-berth is a large double measuring 6 feet on the centerline; at least one of the two occupants should have a good night's sleep. As with boats of this era, the anchor rode is stored in the bow. If a dirty chain comes aboard, the compartment will smell like a beach at low tide.

A history of Columbia Yachts was published in *Good Old Boat* in May 2002. This is the short version. Dick Valdes, who formed Columbia, started his sailing career as a Sea Scout. The skipper of the fleet was an expatriate Dane, named Paul Johnson. Dick helped Paul in the construction of a 35-foot sloop in Paul's back yard, and a career was in the making.

Dick learned to sail by hitching rides on a number of raceboats, including the famous *Santana*, owned by Humphrey Bogart. "Bogie used to warn us that we might hear some blue language during the day and that we

should forget it when we returned to the dock," Dick recalls.

During a stint at UCLA, where he studied engineering and business, Dick built a Viking Senior and became a big man on campus by virtue of sailboat ownership. He left UCLA in 1957 and took a position at the Fiber Resin Company, which was designing tools and epoxy parts for the aircraft industry.

"Joe Thompson, who owned the company, wanted to get into the marine business. Since I was the only person in the company with any experience, he put me in charge," Dick says.

Tough sale

A year later, he and Maurie Therinen formed a company that specialized in the construction of fiberglass parts. "It was a tough sale," he recalls, "because people used to say that if God wanted fiberglass parts, He would have built fiberglass trees." Operating as Glas Laminates, the duo began fabricating outhouses (portable restrooms, as he calls them) and the first patented fiberglass shower stalls and shower pans.

Eventually gravitating toward the boatbuilding business, their first sailboat was the Islander 24. This was followed by the Columbia 29.

Aside from building boats ranging in size from 24 to 50 feet, perhaps their most fortuitous venture was the development of the fiberglass interior. "We were building hulls and decks of fiberglass and marrying them, but we still had carpenters building wood interiors," Dick says. He took a great leap forward, and the world changed.

"That method reduced the labor cost of building an interior by 30 percent," he says, "so we dropped our prices accordingly and commandeered the marketplace."

With some searching, Columbia 33- and 36-footers can be found in the used marketplace, along with their contemporaries, the Cal 40 and Ericson 35. Expect to pay, for either boat, between $18,000 and $30,000, depending upon the condition.

Though the Columbias are more cruise-ready than a Cal 40, they are capable of making 150-mile-a-day passages, the standard when they were built. Given a clean hull and new sails, either boat will perform to her expectations.

En route, the crew will be comfortable, whether lounging in the spacious cockpit or napping belowdecks.

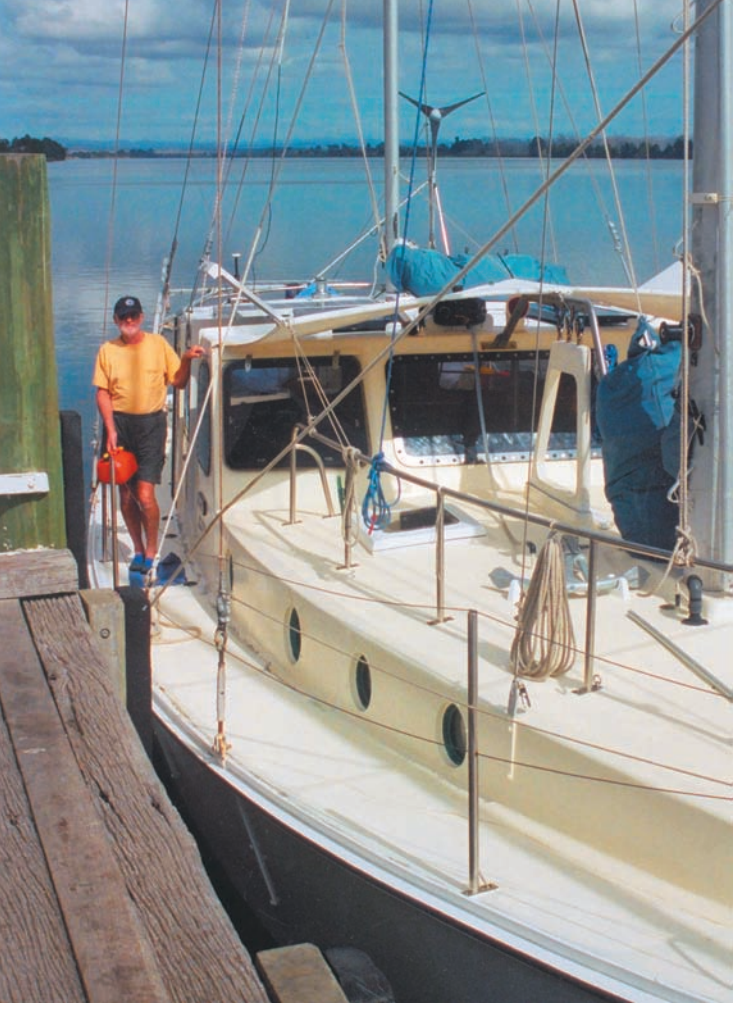
The new corporation

With Dick Valdes' blood flowing in his veins, it was inevitable that Valdes' son, Vince, would attend UCLA and become a boatbuilder. The new Columbia Yacht Corporation was incorporated in September 2001 by Vince and Justin Wallin. Unlike manufacturers who bought the names of defunct organizations and traded on those reputations, this company's ties to its predecessor are for real. The first product introduced was the Columbia 30 in 2004.

As a child, Vince worked with his father in various boatbuilding firms, at boat shows, and as a teacher showing new owners how to sail. In addition to this new venture, he recently completed the restoration of the Columbia 5.5-Meter he has owned since he was 15.

Following graduation from UCLA, he spent 10 years in the world of high-stakes finance as a bond trader. Co-founder Justin Wallin received an MBA at the University of Southern California, after which he became a strategic planner for Fortune 250 firms. In preparing to launch the enterprise, the duo spent six months constructing a business and marketing plan that validated their assumption that a market exists for a sporty, user-friendly, trailerable sailboat. That resulted in an influx of cash from investors, including Dick, who has been involved in the operation since its inception and typically spends Fridays at the plant.

The Columbia 30 is a sportster that manages to bridge what, in many cases, is the broad chasm between conventional production boats (performance cruisers) and purpose-built racers. In addition to collecting more than her fair share of trophies on the racecourse, she offers creature comforts adequate for overnighting.



Pilot rails

A better way to keep the crew on board

by Alan Lucas

Author Alan Lucas aboard *Soleares*. Alan's pilot rail can be seen on the cabintop. This convenient handhold adds safety for those moving about on deck, helps contain sails when they're being furled, and is a great place for tying off any halyards not in use.

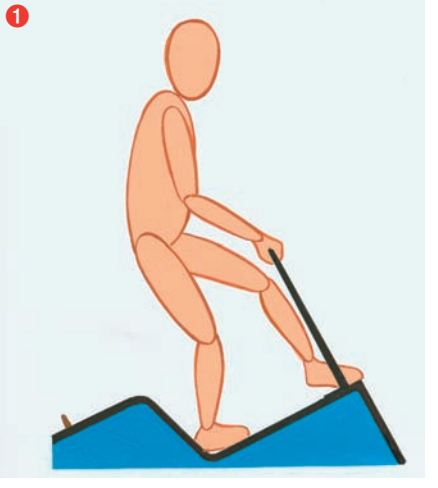
Commercial vessels have a lot to teach their recreational cousins, yet many of their lessons go unheeded. A prime example is cabintop handrail systems. Recreational boats' handrails along the trunk cabin are generally too low to properly complement the dynamics of the human body, forcing us to reach down in such a way that instability, rather than security, can result. Most cabintop handrails on yachts and small motorboats become little more than convenient stowage sites for such items as a rolled awning, a boathook, and the tender's oars, instead of something to wrap your hand around and hang onto for dear life.

Alternative handholds on these vessels, such as shrouds and stanchions, are mostly outboard of the person seeking security when walking around the sidedecks. However, the most secure grip should be inboard. Outboard handholds ❶ are much appreciated at times, but they are containment devices rather than truly useful means of hanging on. The best way to really hang on securely while moving around the deck is to reach inboard ❷, and most cabintop rails tend to defeat this object by being much too low (unless you crawl).

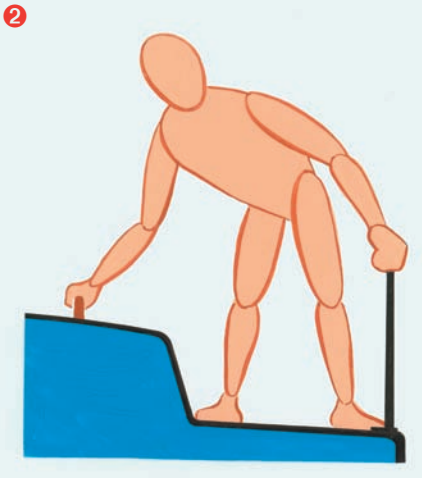
This is where commercial vessels can teach us so much. The next time you see a pilot boat at work, note how the pilot manages to hang on without a lifeline, regardless of sea conditions, yet is clear to leap directly from the sidedeck onto a ship's ladder. The rail he uses (aptly named the pilot rail)❸ is inboard of the sidedeck and, most importantly, is around waist height where it complements the human frame by not obliging him to bend down to hang on. Holding a deck-hugging rail near knee level is an unstable and unsafe position for a person who depends on absolute security while executing vessel transfers. By extension of that simple logic, anything less than a pilot rail on any type of vessel gives little more than a false sense of security.

Compatibility question

Comparing the pilot rail to the standard cabintop version raises the question of its compatibility with a small recreational vessel, especially a sailboat whose boom cannot be raised without too great a loss of sail area. The answer is a compromise between a normal roof-hugging handrail and one so high it interferes with the boom. Anywhere between the two is far superior to one too low, especially if you use it as a storage rack. If it is only high enough to give clear and immediate hand access above the stowed items, then an advantage has been gained. However, a much higher



Outboard handholds are containment devices, perhaps, but they're not useful for hanging on.



Cabintop rails cause sailors to bend over awkwardly (unless they're crawling to the foredeck and back).

> **The answer is a compromise between a normal roof-hugging handrail and one so high it interferes with the boom.**

rail, reaching close to waist level, is the ideal system and is possible on most vessels, especially those of more than 35 feet.

Presuming your vessel lends itself to the fitting of a pilot rail, consider its need for bracing. Generally speaking, the average pilot rail only needs one brace at each end, with its longitudinal curvature adding plenty of rigidity to its overall strength. The governing factors here: curvature of the rail (following the cabin's shape on each side), height of rail, the diameter of tubing used, and stanchion spacing.

In the design and fabrication of a pilot rail, there are no hard-and-fast standards, but the experienced worker in stainless steel will instinctively know sensible tube diameters and stanchion spacing related to length and height of the system. The rail's length will be subject to cabin length; its height will be a factor of cabin height plus the remaining distance between cabintop and a person's waist. The total height is typically around 3 feet 6 inches, but this can be lowered a foot if necessary and still produce a rail that will be infinitely superior to what is on most sailboats.

Spread of sealant

Regardless of precise overall dimensions, stanchion bases should have enough area to accommodate a good spread of sealant between them and the cabintop. Through-bolts are the preferred fasteners on glass and wooden cabintops. These should be complemented with under-deck plywood or solid glass pads of maximum area to spread the stanchion's loading. If an existing traditional, cabin-hugging handrail is being replaced with a pilot rail, then its route can be followed using the doubling that should be already in place.

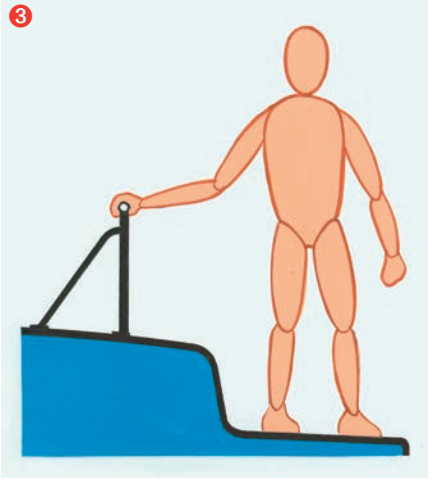
This presumes that the old route is far enough inboard to satisfy another virtue of the system (presuming it is wanted and is possible). This virtue is the way in which a pilot rail can also produce a very secure seating area along the cabin ❹ for those needing to rest while working the foredeck but who are unwilling to return to the cockpit between bursts of exertion. Depending on the distance inboard of the pilot rail, a person can sit on the cabin edge with arms hooked back over the rail, which then becomes a backrest as well as a very firm handhold. It is an ideal place to seat guests in port or fair weather when the cockpit reaches capacity.

Not only does the pilot rail provide security for standing and seated persons, it also acts as a secure cabintop pulpit against which feet can be braced while furling the mainsail in a seaway. ❺ It is true that when returning to the deck it can also trip the unwary, but this is a matter of familiarization and it is, in any case, an accident that should not happen, thanks to yet another advantage of this multipurpose rail.

This advantage is the way in which it can be used as an alternative place to tie off extra halyards when not in use. By tying them around the rail (or perhaps to a small crossbar cleat under the rail on one or more of its stanchions), the halyards are not only handy when needed but, because they are restrained away from the mast, slapping is minimized or eliminated. Because a pilot rail invariably becomes festooned with a number of halyards, they provide secure handholds when climbing over the rails to handle the mainsail.

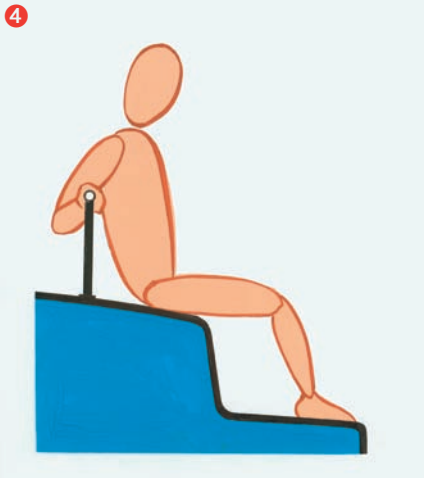
Pilot rails are such an intrinsically safe and secure means of working the deck of a small boat that, once tried, the traditional cabin-hugging grabrail will be abandoned forever. If your sailboat is too small to adapt to the system, consider losing a foot of mainsail. In most cases the loss is more than compensated for by that wonderfully confident feeling of being a real part of the vessel, rather than an irritant she constantly endeavors to reject.

❸



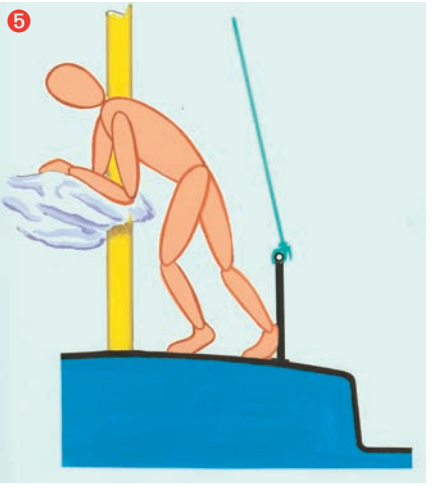
The pilot rail is inboard and waist high so a sailor can reach it without bending. A brace is essential at each end of the rail.

❹



The pilot rail provides a secure backrest and seating area for crewmembers taking a break between foredeck activities.

❺



A pilot rail also offers a foot brace for working on the mainsail in a seaway and a handy attachment point for halyards.

Surface-mounted ports

The leaking portlights on Steve's Tartan 30 were due for replacement.

Leaks from the Tartan's ports had stained the interior teak and corroded the inner frame.

The view from inside once the frames and plastic had been removed.

Old leaking portlights? Here's one solution

by Steve Stoehr

Just about every sailboat over 20 years old has the same basic construction for its fixed portlights. Clear plastic or glass in the window opening was kept in place between frames (usually metal) on the inside and outside of the cabin trunk, all held together with bolts or screws. Liberal applications of caulk were required to seal the whole assembly.

Over time, the seal failed due to aging caulk, different rates of expansion of the components, and hull flexing. Then, invariably, the port began to leak. The whole assembly needed to be disassembled, cleaned, and reassembled with new caulk if the leak was to be stopped. That worked for a while . . . until the whole cycle started over and the settee cushions got soaked once again.

In the 1980s, sailboat manufacturers started using surface-mounted fixed portlights. Clear plastic was fastened directly to the outside of the cabin wall using screws or adhesive caulk and no frames. Flexible caulk or a rubber gasket provided the seal. The clear plastic was free to "float" on the cabin surface and better maintain the seal, despite expansion, contraction, and flexing.

Recent boats have recessed lips molded into the cabin trunk around the window opening so the surface-mounted clear plastic fits flush to the cabin trunk. My previous boat, a 1986 O'Day, had surface-mounted fixed portlights. During 18 years of hard sailing, they never leaked.

Last year I bought a 1976 Tartan 30 to restore. It had the framed fixed portlights. All of these ports leaked and had been leaking long enough to stain the interior teak. I needed a more permanent solution. But, I wondered, are surface-mounted ports "proper" for a quality sailboat? Then I saw a beautiful Hinckley with surface-mounted portlights and made the decision to go ahead.

Allows flexibility

The first step was to design the size and the shape of the new portlights. Surface mounting allows some flexibility. They needed to be large enough to have the strength of storm shutters and plenty of overlap for a reliable seal. I decided on smoked plastic with a stylish rake in the forward

portlight to soften the boxy lines of the Tartan. I made several prototypes out of black construction paper and taped them to the cabin to see how each candidate would look. After I decided on the design I had a local plastics fabricator cut the four portlights out of ⅜-inch acrylic stock and polish the edges for a professional job. The protective paper was left on both sides to make marking the pieces easy.

Finally, I located the positions of and pre-drilled holes for the self-tapping flathead stainless-steel screws that would secure the portlights to the cabintop. They were pre-drilled in the clear plastic to the tap size of the screws. The tap size is usually a drill bit one size smaller than the screw's outside diameter (OD). The portlights were ready for the next step.

Drilling holes

I marked positioning guides next. Then I penciled in the exact vertical and horizontal centers of each portlight and its corresponding opening. Lining up the vertical and horizontal lines positioned each piece perfectly.

To prevent stress cracks from forming in the clear plastic over time, it's important to allow expansion and contraction tolerance around the mounting screws and to accurately center each of the pre-drilled mounting holes in the cabin

> "But, I wondered, are surface-mounted ports 'proper' for a quality sailboat?"

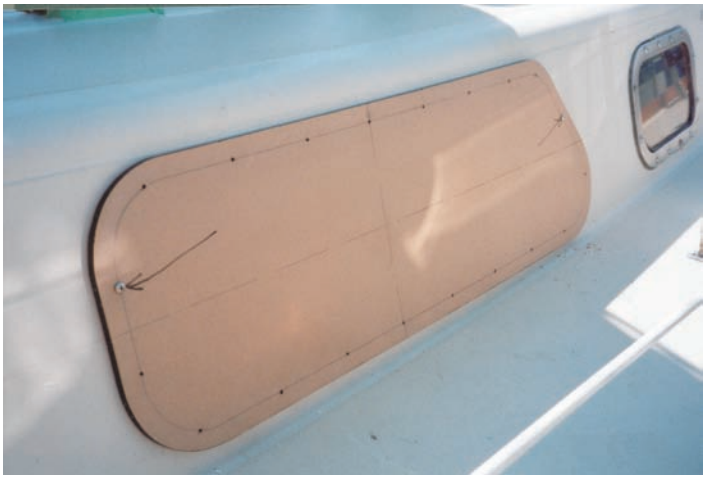
trunk. I waited for a warm, but not hot, summer day to take off the old portlights and mount the new ones. I precisely located each new portlight on the cabintop, using the horizontal and vertical positioning guides and manually holding each in place. Using the two holes marked with arrows as drill guides, I drilled two holes into the cabin at each end of the new portlight, using the tap-size drill bit.

Once the piece was removed, I redrilled each of the two holes marked with an arrow to the exact OD of the mounting screws and temporarily mounted the new portlight using two screws in those marked holes. With the piece securely fastened in place, all the rest of the holes for that portlight could be accurately drilled into the cabin using the piece as a drill guide and using the tap-size drill bit. Finally, I removed each portlight and redrilled each hole in the piece to a size slightly larger than the OD of the screw, allowing for expansion and contraction. I remembered to mark the cabin location of each piece. The new portlights were now ready to be permanently mounted.

Gasket material

I purchased neoprene closed-cell foam-rubber gasket material from a local rubber distributor. A 4-foot square sheet of ⅛-inch-thick material was more than enough for the project and cost less than $20. The rubber material sealed all of the spaces between the smooth clear plastic and the irregular fiberglass while allowing the portlight to "float" on the surface without breaking the seal.

The exterior of the boat with the frames and glass removed.



Steve used the portlight as a drill guide. Note the vertical and horizontal positioning guides. Locating screws are marked with arrows.

The new portlights are positioned over the gasket material and ready to be screwed down.

Steve's Tartan has a new look with her surface-mounted portlights.

I cut out four rubber pieces slightly larger than the portlights and taped these over the window openings. After I removed the protective paper, I placed each portlight over the rubber gasket material and screwed it down, using the predrilled tap-sized holes in the cabintop. A dab of caulk was used with each screw and washer to seal the screw in the portlight and keep it from backing out while allowing for some expansion and contraction around the screws. Lastly, I used a sharp box cutter with break-off tips to cut away the excess rubber gasket material inside and outside. Soapy water makes the rubber easy to cut cleanly.

Interior trim

Since the new portlights were now outside the window opening, I needed to cover the raw edge of the window opening inside the cabin. I reused the original aluminum inner frames after bringing them back to like-new condition using mag wheel cleaner purchased at a local auto supply store. The gap between the inner frame and the inside of the portlight's clear plastic was filled using self-adhesive weather stripping. This hid the raw edge of the window opening nicely.

The acid test

Using a high-pressure hose, I leak-tested the new surface-mounted portlights on a very hot summer day and again on a cold autumn day after a hard sail. There were no leaks whatsoever. Plus, the boat now has a pleasing, more contemporary look. I'm satisfied.

Then came Romance

Rescuing a rare classic: a Cape Dory Typhoon daysailer

by Sandy Davis

Sandy didn't see the bottom of her Cape Dory Typhoon until she was well into her refit project and needed to haul the boat out of the water for fairing and painting. Luckily, the boat was in good shape below the waterline.

I retired in July and, after clearing up a few projects around the house, I began searching for a new summer project. As one who enjoys working with my hands and loves the water, I began thinking about building or restoring a daysailer.

I had previously built a kayak from a Chesapeake Light Craft kit, and I had restored an old 14-foot Hobie Cat. My husband and I have a Ta Chiao 35, but I wanted something that I could take out by myself for an afternoon sail. I had given thought to building a little catboat from one of Dynamite Payson's *Instant Boats* book. I even went as far as to order a book of plans.

One evening in October, as I was scanning the classifieds in the marine section of our local newspaper, this ad caught my attention:

"FREE. 1975 Cape Dory Typhoon for a donation to charity. Call…"

I called. A friendly young man answered and said, "Sure enough, the Cape Dory is free if you are willing to donate $500 to the American Heart Association." He went on to say that the boat had belonged to his dad, who had died 10 years previously.

He initially thought he and his wife would use the boat, but they had other interests and the years slipped by. The boat had been left unused on a lift at a pier at his parent's summer home for at least 10 years, but Hurricane Isabel came along and destroyed the pier and dumped the little boat into the water. As a part of her fury, Isabel had torn a portion of the toerail off and added many scratches and dings to the hull. The owner was pretty certain that no structural damage had been done, but he realized it was time to find a new home for the little boat. He felt that his dad would have liked the idea of the proceeds of the sale going to charity. He mentioned that there were several other people interested in the boat and he would show her on Saturday morning.

Took binoculars

My husband, Jim, and I made a special trip the day before to see if we could get a look at the little Ty before we met her owner. We took our binoculars, since the boat was tied at the end of a pier that was no longer there.

To my surprise, this Typhoon had no cuddy cabin. I thought to myself, "Someone has made a mistake. This can't be a Typhoon." But Jim recognized the Alberg hull. When we were first married, we had owned an early vintage Cape Dory. He knew the lines well.

> "To my surprise, this Typhoon had no cuddy cabin. I thought to myself, 'Someone has made a mistake. This can't be a Typhoon.'"

Knowing how well that boat had sailed and how stable it had been in all kinds of weather, I was sure this would be a fine boat for me to single-hand. She appeared to be a little shabby, but she was floating. I called the owner Friday evening, upped the donation, and begged a little before convincing him that I would take care of his dad's boat and make her look pretty. He agreed to sell her to me.

The next day a friend towed her by water to my community marina. She was filthy from 10 years of neglect: full of moss, mildew, and debris. There were even old duck eggs aboard. I immediately began cleaning her up; I didn't want anyone at our marina complaining about a derelict boat in one of the slips. Out came the bleach cleaner and scrub brushes. Soon the mildew and duck eggs were long gone, and she was white again…a little beaten

Sandy can see herself in the topside finish of the boat, which she named *Romance*. One of three Cape Dory Typhoon models, this daysailer is similar in appearance to the Herreshoff 12½, with coamings made of fiberglass instead of wood. Only 30 of this model were built. An early photo, on facing page.

up, but clean. The teak bench seats cleaned up very nicely too.

Over the next few weeks I started having doubts about whether I really wanted to keep her. She was an open boat and had that strange-looking faux coaming ridge all the way around her deck. I thought she looked like a big bathtub in a pretty hull. I had always liked the looks of the Typhoon with the cuddy cabin and the little portholes. I had to admit, though, that she sailed like a dream . . . almost effortless with her self-tending jib. I convinced myself, "If I can't make her pretty, I'll sell her after I restore her."

New gear

Jim had other ideas. Christmas came and Santa brought her a new main and jib and a brand-new Tohatsu 3½-hp outboard. Now I *had* to make her look good.

Over the winter I plowed through every marine paint chart I could find, looked at pictures of nice-looking small boats on the Internet, and made sketches using various color schemes.

I also inquired of members of the Cape Dory bulletin board whether anyone knew anything about this particular Typhoon design. To my surprise, I received six responses and pictures. I learned that this model is a sought-after boat. My attitude began to change. One of my correspondents sent me an article about this model of the Typhoon daysailer. It seems that there were three deck styles offered on the standard Typhoon hull. Only 30 of this model were produced. It was designed after the Doughdish daysailer, similar in appearance to the Herreshoff 12½ but with fiberglass coamings instead of wood coamings. Armed with this information, I searched the Internet for some examples of Herreshoff daysailers and decided on a color scheme from one of these lovely boats.

In April, I sailed her to a nearby marina to be hauled. This was the first time I had seen what was below the waterline. Her rudder was a little ragged but repairable at the bottom, otherwise she appeared to be in good shape. Jim ripped off the old broken toerail and left the rest to me. I was excited. I had a project.

My first task was to fill in the hundreds of scratches and gouges, evidently made as she was scraped and battered in the violent action of the river during the hurricane. To my good fortune, Read Beigel, a friend who belongs to the Alberg 30 Association, as we do, happened to be working on a hurricane-damaged Alberg on stands next to my Typhoon.

> **"Finally the moment I had waited for arrived: her first coat of paint. I will never forget how excited I was that morning."**

Good advice

He took a break that afternoon and looked over my little Ty and asked me if I would like to learn the best way to get rid of all those abrasions, and smooth out those areas on the hull where the weave was showing. He runs a boat repair business and is very good at boat restoration.

"Yes," I responded quickly. He proceeded to educate me on the correct way to repair and fair a hull. Following his directions over a period of a few weeks, I cleaned and sanded the gelcoat and removed all the old filler from previous repairs. I wiped off the residue with denatured alcohol. Next I applied a thin coat of epoxy with microballoon filler. This was applied over the entire hull with a plastic fid, making sure that the mixture was pressed tightly into all the damaged areas. After it cured I washed the hull with soapy water to remove epoxy blush.

He then introduced me to the "long board sander." I made my own from 3/16-inch plywood cut to a strip 3½ x 20 inches. To this strip I epoxied blocks of scraps 1 x 1 x 3 inches at each end to use as handholds. I purchased two rolls of sticky-back sandpaper, 100 and 220 grit, cut strips to fit my new long board, and was ready to begin the process of fairing the hull.

This turned out to be easier than I expected. The hull was easy to sand.

Following retirement, Sandy was looking for a project when she found her Typhoon. Now that the work is done, she says, "*Romance* continues to receive many compliments on her good looks, and I still get a sense of pride every time I walk down to the marina and see her there, waiting to be enjoyed."

By the end of the second day of sanding — back and forth, then diagonally, slowly sculpting the hull — it began to look very smooth. When I thought I was finished with the sanding, Read showed me an interesting way to check the hull for smoothness by wetting it down with the hose and then checking the reflection for distortions. The reflection was almost perfect, I needed to do very little touchup.

Epoxy waterproofing

The next step was to roll on a thin coat of epoxy over the hull for waterproofing. I used a marine-grade foam roller, hand sanded it smooth after it cured, then applied and sanded the primer. This process went very smoothly and only took a few days. Next I made repairs to her rudder and sanded and painted the bottom a traditional dark red.

Finally the moment I had waited for arrived: her first coat of paint. I will never forget how excited I was that morning. I used the roll and tip application method, using a marine-grade foam roller and tipping with a 4-inch foam brush. I chose Brightside polyurethane enamel for its ease of handling, durability, and high gloss. I added a few ounces of Penetrol, an additive that enhances the flattening of paint and varnish and slows the drying time. This allows the brush strokes to flow into each other. I could barely find a brush stroke in the finish after it dried. I drove home that day exhilarated. My little boat was beginning to look pretty. After three coats she looked dazzling. I could actually see my reflection in her topsides.

My color choices took some planning. I wanted to paint her a dark teal color, but I could not find the color I envisioned on any of the marine paint charts. Since she was such a rare design, I wanted my little boat to be different but with a classic flavor. I ended up buying Brightside dark green and borrowed a half can of dark blue from a friend. I bought a paint bucket and mixed the color I thought I wanted. I then added some white to lighten the shade. Before I knew it, I had almost three quarters of a gallon of paint… a lovely shade of green with a subtle blue tint.

Paint scheme

I painted her deck white with the non-skid areas masked off. Then I painted those areas with a warm beige blend with non-skid filler. I painted her interior a soft beige above the seating to give some definition to this area and to tone down the previous all-white color-scheme, eliminating the "bathtub look."

I masked and painted the bootstripe. This posed a small problem because there was no previous bootstripe to indicate where the waterline was. Luckily that Alberg 30 was right next her. The Alberg 30 hull is so similar that a friend with a good eye for this sort of thing spent several hours that morning going back and forth from the Alberg to my Typhoon, masking the outline for the bootstripe freehand and hoping that the waterline would be correct. It was perfect.

The most important decision I made in the boat's color scheme was for the faux coaming. Since the four- to five-inch fiberglass ridge around her deck was supposed to represent coaming, I decided to paint it the color of teak, giving it the appearance of a wooden coaming. The idea worked. My Typhoon didn't look tubby anymore. She was beginning to look like a little classic.

At last the day came for her to receive her new toerail. Jim had precut the teak to size and scarfed it to fit her 18-foot length, including the curve. With the assistance of a friend, the toerail was caulked and screws countersunk into place. We hammered wooden plugs into the screw holes. After a light sanding, the toerails framed what had become a work of art… a rare adaptation of a sweet little Doughdish-style sailboat.

One of my proudest days in many years was when one of the longtime yard employees told me that when I first had my little boat hauled, several of the guys made comments such as, "I don't know why she wants that piece of 'junk' (word substituted)." He continued, "Now when the guys walk by they stop short when they see your boat, and I hear them say, "Holy 'Cow' " (word substituted). I felt that as a novice in the art of boat restoration, I had won the respect of this small group of men who had been doing boat restoration for many years.

Finally it was time to put her name on the transom along with her numbers and registration sticker. What did I name her? *Romance*, of course. From the moment that broken toerail was removed from her hull, to the moment I proudly tied her up at the slip in our community marina, I found that the romance was there all the time, just waiting to come out.

Growing up afloat,
Continued from Page 9

Very frustrated

The independence and self-reliance that cruising kids learn at sea can both hinder and help them in learning situations. Australian Karl Toppler says his return to school was quite aggravating. "I got very frustrated when I went back to school. The last three years of school the structure was completely different from the correspondence school I did while cruising. Onboard, I could work out my own timetable. I used to do the week's worth of English one day, then move on to, say, math the next day. I couldn't get used to doing one hour of a subject then moving on to the next subject at school; it seemed that no work got done."

Though this independence doesn't always mesh with the public school situation, where learning is overseen and scheduled by teachers, many cruising kids find that it does help them in a more independent learning environment like college. Many of the former cruising kids had done exceptionally well in college.

Favorite memories

Memories are a big part of adult life. They are what help us get through difficult situations. They are a part of us. And these adults definitely have something to look back on:

- "When crossing the Atlantic in 1958, the sight of an old tramp steamer on the horizon was an event. As the day progressed, the tramp came closer and closer until finally she altered course around us. In those days, ships did not sail blindly past. She circled us twice while we exchanged messages by code flag before she went on her way and left us to the solitude of our voyage," says Michael Batham.
- "I remember being mid-ocean with the sea all around, or anchored off a beach and spending all our time in the water," says Doina Cornell.
- "Going through the Panama Canal was one of my favorite experiences. We had another family on board who agreed to be our line-handlers, and everyone was squashed aboard our 30-foot sailboat. It was amazing to watch the huge lock gates open and close, water flooding in or out fast enough to toss our boat around if we weren't careful. Then there were the freighters going through at the same time as us . . . unbelievably huge next to our sailboat home," remembers Amelia Fort.
- "[My memories are] too many to list . . . from start to finish I loved it," says Clio Smeeton.
- "I recall the rush of adrenaline set off by the clothes peg 'snapping' off the thick trolling fishing line out the back of the yacht — signaling we had hooked another spectacular open-ocean fish. The thrill of winding the line in over the stern winch, eyes fixed on the fishing line 'zzzzing-ing' back and forth, pointing almost straight down into the sapphire water, craning my neck to try to catch a first glimpse of the shadowy form in an effort to identify it . . . good fun," remembers Chris Bray.
- "I don't think there can be one favorite memory; it was all so memorable. But being in the middle of the ocean on a bright sunny day with a nice breeze is definitely something I miss," recalls Karl Toppler.

The cruising lifestyle is like no other lifestyle a family could choose. There are large demands as well as large rewards. But, at least in terms of the former cruising kids I interviewed, the challenges of the ocean environment, the immersions into other cultures, the independent learning through changing scenery, the 24/7/12/365 intensity of parental guidance, and the teamwork of family cruising had a constructive influence on their lives. It influenced them to live their lives fully, helping others as well as challenging themselves. I'm certain that our world is a better place because of them.

Former cruising cyberkids

A few Internet sites about or run by former cruising kids:

Chris Bray
<http://chrisbray.net/>; <http://www.1000hourday.com/>
Doina Cornell
<http://noonsite.com/>
Clio Smeeton
<http://www.ceinst.org/>
Bruce Schwab
<http://www.bruceschwab.com/ >; <http://oceanplanet.org/>
Michael and Tere Batham
<http://www.geocities.com/bathamquest/>
Graham Evans (Robin Evans' brother)
<http://www.stowawayenterprises.com/>
Pete Evans (Robin Evans' brother)
<http://petethenomad.com/>

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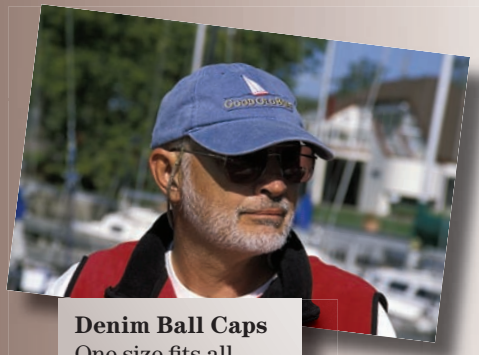

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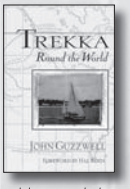

by John Guzzwell

A true voyaging classic. John circumnavigated in his 20-foot yawl, *Trekka*, and sailed with the legendary Smeetons on their first attempt to round Cape Horn. New epilogue recounts recent sailing experiences. Forward by Hal Roth. Photos.

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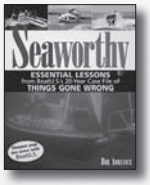

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Pearson Commander 26
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574-848-7044

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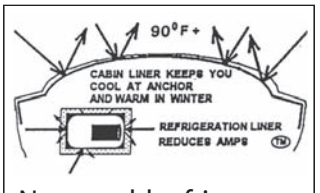

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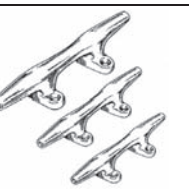

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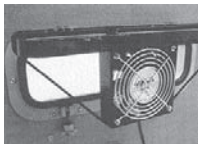

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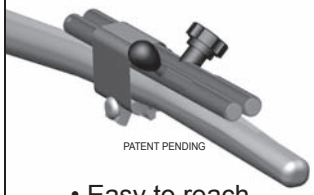

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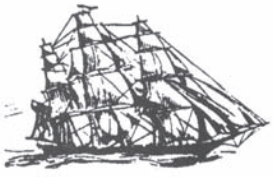

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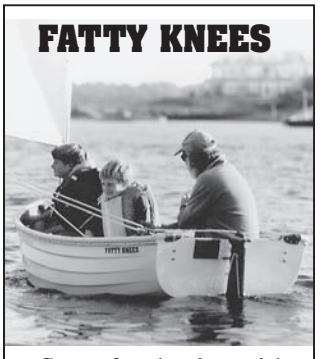

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Deciphering an HIN

How to read your boat's "birth certificate"

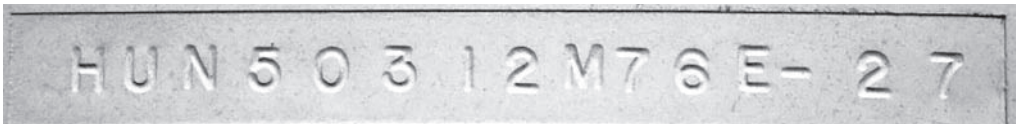
by Don Launer

Unless you have a *really* old boat, you probably have a set of 12 characters embedded on the upper starboard side of your boat's transom. This is your boat's birth certificate, the Hull Identification Number (HIN). It shows the parentage and date of birth of your vessel. This identification is similar to the 17-character automobile identification number that's on the lower left side of any auto dashboard close to the windshield — the Vehicle Identification Number (VIN). All boats that were either manufactured or imported after November 1, 1972, are required by law to have an HIN and — just as you would have a duplicate of your own birth certificate — it's a good idea to record your HIN or a rubbing of it in your records.

The HIN on my schooner, *Delphinus*. THB represents the builder, Ted Hermann Boats. It is hull #31, and uses the pre-1984 straight-year format, with 08 representing August and 80 for 1980.

In addition to manufactured boats, this regulation also applies to backyard boatbuilders. Even though an individual plans to build a boat for his own use, he must obtain the 12-character HIN number from his state's boating agency. In the case of a home-built boat, the first three characters in the HIN, which are the Manufacturer's Identification Code, are composed of the 2-char-

acter state identification followed by "Z" — indicating a home-built boat. Thus, for a home-built boat in Minnesota, the first three characters in the HIN would be "MNZ."



This Hunter sailboat shows the manufacturer's code, HUN, and since the hull is pre-1984, the model-year format was selected. Many manufacturers add additional, optional information to the goverment'mandated HIN. In this case, the -27 included after the 12-character HIN shows that this boat is their 27-foot model.

The 12-character HIN bears no relationship to your state boat registration number, the number you apply to the port and starboard sides of your bow (unless your boat is documented). Instead, the HIN is federally mandated. In spite of the fact that it is a federal number, it must be shown on the state boat-registration certificate.

To read your boat's birth certificate, you have to be able to decipher the format of those 12 characters on the stern. There have been several formats for the HIN over the years, and it's probable that new formats will emerge in the future. From its inception on November 1, 1972, the HIN was designated by one of two formats.

HIN formats

The manufacturer had a choice of using either the model-year format or the straight-year format, both of which identified the month and year of production.

- Characters 1, 2, and 3 of the HIN are the Manufacturer's Identification Code, and are assigned by the federal government.
- Characters 4 through 8 are the alpha-numeric serial number, which is assigned at the discretion of the manufacturer (I, O, or Q cannot be used in this serial number).
- In the model-year format, the 9th character will always be M, indicating the manufacturer is using the model year format. Then characters 10 and 11 indicate the year, and character 12 is a letter indicating a month, starting with August. Thus, if characters 9 through 12 of the HIN were "M80B," the boat was built in September of 1980. Why the lettering of the months in the model year system began with August is incomprehensible.
- In the numerical straight-year format, characters 9 through 12 are simply the month and year of production. Thus, 0879 would indicate August 1979.

New format

Optional, as of January 1, 1984, was a new-format version, simply called new format. This format became mandatory August 1, 1984, replacing the two previous formats.

- In the new format, characters 1, 2, and 3 of the HIN are still the Manufacturer's Identification Code. Sometimes the letters of this manufacturer's code easily identify the manufacturer. In other cases they bear no relationship to the manufacturer's name.
- Characters 4 through 8 are still the alpha-numeric serial number assigned at the discretion of the manufacturer. Some of these manufacturer-assigned characters are laid out very logically, and some defy logic. On a 37-footer, which is hull #51, the number might be 37051; but it also might be a set of characters that only makes sense to the builder.
- Character 9 indicates the month of manufacture or certification. A designates January, B February, and so on through December (a big improvement over the original lettering system that started in August).
- Character 10 is a numeral that indicates the last digit of the year of manufacture or certification.
- Characters 11 and 12 indicate the model year. Thus, 82 would indicate the boat's model year was 1982.
- Some manufacturers also add additional information after the HIN, such as -27, which might indicate that this is their 27-foot model.

After August 1, l984, boat manufacturers were required to display two identical Hull Identification Numbers, one on the outside starboard side of the transom, within two inches of the top of the transom, gunwale, or hull-to-deck joint, whichever is lowest. On boats where this is impossible, such as double-enders, the HIN must be on the starboard side of the hull, within one foot of the stern and within two inches from the top of the hull, gunwale, or deck joint.

The second HIN must be inside the hull in an unexposed location or beneath a fitting or item of hardware.

The HIN characters, both inside and outside the hull, must be no smaller than ¼-inch high, but many manufacturers make them much larger. It is illegal for anyone to alter or remove one of these numbers without written permission of the Commandant of the Coast Guard.

Glitches

Although the HIN provides a great birth certificate for your boat, there are a few hitches in the system:

- One problem is that foreign manufacturers might use a Manufacturer's Code that is not listed in the United States or might use the same letters as an unrelated U.S. manufacturer. Some United States builders have taken it on their own to add "US" to their HIN to establish the country of origin and solve this problem.
- The present 12-character HIN is becoming obsolete and outdated in today's global marketplace. For years the National Association of State Boating Law Administrators has been recommending that the HIN be increased to 17 characters — the same number of characters as your automobile's VIN. This expanded HIN would allow additional important information, such as the country of origin, type of vessel, hull material, length of vessel, propulsion, and fuel type.

For now, the 12-character HIN system will serve you as you trace the lineage of the boat you own or the boat you plan to buy … until the next format change comes along, of course.

Thunderstorms, Continued from Page 13

main. While you will usually be sailing in the strongest winds, running with them lessens the apparent wind on the boat but may keep you in the storm longer. If you don't have running room to leeward, or if you appear to be near the edge of the storm, you may decide to reach across the storm in the hope of getting out of it. Given a choice, there may be some advantage to reaching across an oncoming storm on port tack. While you can meet hail in any part of a thunderstorm, it is more likely (and heavier) in the right rear quadrant of the storm.

If the water is shallow enough you may opt to anchor and ride it out. If you can't avoid a squall line, you may be able to maneuver between two storms, though don't expect an easy ride. Whatever you do, anyone not needed to handle the boat should be sent below. If there is lightning, everyone should stay clear of metal objects, such as masts and rigging.

Keep in mind that thunderstorms, though violent, are relatively short-lived. (This is especially true of the summer-afternoon, air-mass variety.) The excitement is of limited duration, and the weather afterward can be quite different.

After spending a rainy night, Alan and I set out again the next day to complete our delivery. It turned out to be one of our best sails of the season.

Apparent wind, Continued from Page 18

its speed increases with height. Thus the true wind blows faster at the masthead than it does on deck. But boat speed is the same everywhere on the boat. Since the true wind is a larger element at the top of the mast than at the bottom (how much depending on the height of your mast) the wind aloft is not only stronger but also fairer.

This shift in direction happens gradually with increasing height. Thus, for optimal performance the sails should twist off a bit to leeward in their upper sections. However, don't take this too far. The difference is slight. Especially if you have a relatively short mast, the twist should be minimal.

Wind is a powerful motive force that sailors are able to capture for our use and pleasure. Therefore, no matter what seems to be happening elsewhere, trust the wind indicators on your own boat. Your telltales show the particular wind you are sailing in. When it comes to apparent wind, what you see is what you get.

Helping hand

A crafty idea to help singlehanders raise and lower sails

by Dyke Williams

A bungee from boom to tiller steers the boat upwind under power.

One of the chief hassles when sailing alone is raising and lowering sails while maintaining your usual dignity and decorum. And safety. Here's a very sensible (Why didn't *we* think of this?) idea that works like a charm. It was developed by Bill Watson, of Plymouth, Minnesota, aboard his lovely 24-foot Yankee Dolphin, *Icelander*. Bill lived aboard and solo-sailed for five months in the Apostle Islands of Lake Superior. He suggests:

- Motor away from dock and shore. Head into the wind with just enough throttle to maintain steerageway. Get the main ready to hoist with the mainsheet loosened, and hook a bungee cord from the tiller to the boom. (Bill uses a doubled bungee with brass clips on each end and eye straps screwed into tiller and boom.)
- Hoist the main and cleat the halyard. Even as the boat inevitably begins to head off, let's say onto port tack, the mainsail dutifully keeps pointing into the wind (swings to starboard). As it does so, the boom pulls on the bungee, the bungee pulls the tiller to starboard, and that heads the boat back up into the wind. This starts happening the instant the sail is up. Works on both tacks.
- It's like heaving to, but into the wind, and the boat can keep it up indefinitely. The skipper has plenty of time to sweat and coil the main halyard, adjust the outhaul, Cunningham, and so on, and — at his or her leisure — hoist the jib, genoa, staysail, mizzen, and whatever else will fly. Then, unhook the bungee and cut the motor.

When coming back to port, simply motor slowly into the wind, reattach the bungee, free the mainsheet, and begin lowering sails — headsails first, main last. Much hassle is gone. Dignity is maintained. It's fun to sail solo. Nifty!

Bagging fruit flies

It's easy to help these pesky pests on their way

by Bob MacDonnell

Drat those wretched fruit flies! Here's an odd, but quick and effective, way of dispatching them. Keep a plastic bag with a small quantity of cut limes or other citrus fruit in the galley. Leave the top open just a little. Soon you will have fruit flies inside the bag. Quickly snatch the bag shut, run a little salt water into the bag, and shake it up. The fruit flies will drown, whereupon you can set the trap out again and again until the flies are gone.

The bait is citrus fruit, top. Once you've attracted the fruit flies, bottom, drown them and reset your trap.

Regards to Harry

Or how a desperate sailor drilled out a sheared stud

by Paul Danicic

So there we knelt, staring at the bolt head in my hand in horror. What was once a beautiful 5/16-inch x 3-inch bolt was now twisted wreckage. "I didn't realize I was so strong," I said in a feeble attempt at black humor.

I just wanted to replace the thermostat. Instead, the bolt head sheared off. I was angry. The bolt held the thermostat cover on the housing of our middle-aged Universal 30 3-cylinder diesel. The housing was part of the engine casting, so taking it down to the machine shop to be bored out was not an option for my YMCA income. It was pre-spring fitting-out time, which, in Minnesota, goes very quickly; I had two weekends to solve this problem. The boat was three hours away from home. Because of my work, I had a very small window to deliver the boat to its mooring 75 miles up the lonely north shore of Lake Superior.

It was dark and we were both wearing sunglasses. "Hit it," said my trusty nephew, the appropriately named Johnny Bonkers.

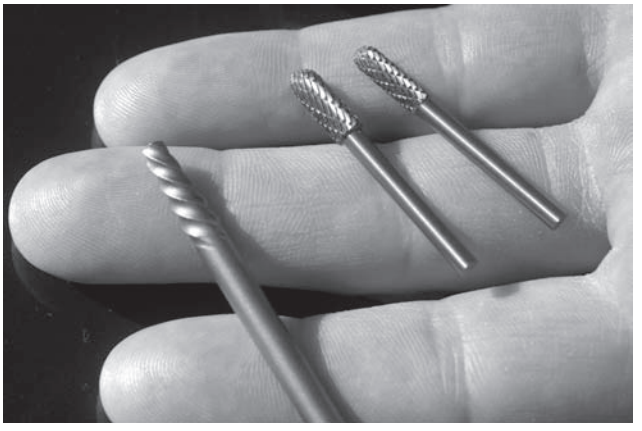
I purchased a hardware store extractor set, comprised of several sizes of very hard metal reverse screws that can bore into the sheared bolt or screw and then twist it out. The next weekend my loyal nephew and I returned to the boat to do this "simple job." Unfortunately, the hardware store extractor promptly broke off after digging into the sheared bolt. I invented several new expletives. My nephew added his own, and we went home like the losing World Cup rugby team.

Harry the savior

After nightmares and half-considered plans to "…never use the motor all summer!" I found Harry. He was the city desk working stiff at a wholesale metal-cutting/drilling supply outfit I found after some *Yellow Pages* detective work. Harry looked rough, fresh from a punch-up, and not really happy to see me.

After hearing my story, though, he straightened up, sucked in his black Harley T-shirted gut and became the helpful man I hoped he could be. He was passionate about cutting and drilling metal. After a few stories about how he sheared his own bolts on his Harley, he showed me the way.

I had originally asked for a diamond drill bit, since someone suggested that it was the only thing that would cut through the hard extractor. It was more than $80. Instead, Harry sold me two carbide-tipped nubs for a total of $10. They were 1-inch long ¼-inch Dremel tool bits with wicked-looking shards on the round head and sides. Harry told me it was a suicide mission and, as his voice became louder and his gestures more animated, he said not to expect the bit to survive its ordeal drilling through the extractor and the bolt. The next weekend, armed with the nubs and Harry's instructions still in my head, my now very loyal nephew and I returned to the job.



Wicked-looking carbide-tipped nubs on a suicide mission did the trick.

I built a two-sided jig out of a 2 x 4 with a rounded area for the electric drill to press against. I was going to bear down hard and needed something to lean on to approximate a drill press. Johnny squirted in the PB Blast (like WD-40) and I drilled away…not stopping…as Harry had recommended. If I were to stop, he counseled, the carbide cutting burrs on the bit would cool and lose their edge. This was a one-shot deal, though I did get two bits. Johnny and I smiled for the first time in weeks as the bit made progress into the extractor.

Almost through

I kept drilling although my arms burned. By the time the first carbide bit burned out, we had definitely made it through the extractor. We took a break and set the last bit into the drill. With a look that only men in dire straits know, we set to drilling out the remaining ¾-inch of bolt. We broke out the bottom and celebrated with a lovely hot cup of tea. After drilling out the remaining sides of the bolt and cleaning the hole, I tapped it for a new 5/16-inch stud and put the whole housing back together. We brought an extra bolt that was one size up, just in case we bored the hole out too much. Harry would have been proud at the amount of anti-seize goop I added. Though the hole we drilled and tapped was very slightly out of plumb, the housing and gasket have not leaked in two seasons.

I would see this method working on several sheared bolt situations around the boat, even stainless bolts. It was a desperate move, but taking the housing to a shop meant removing the head of the motor. I was far too proud and way too cheap to do that. I imagine most true sailors would be too. After all, the wind is free, as they like to point out.

We were not cheap in our toasts to Harry that day.

Repelling no-see-ums

Use these socks on your portlight screens

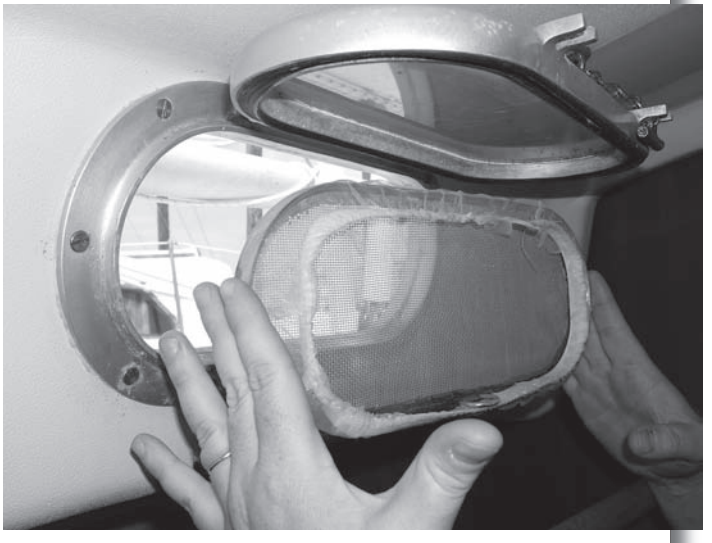
by Phillip Reid

I DREAM OF THEIR MASS EXTERMINATION BUT, ALAS, IT REMAINS A dream — no-see-ums (midges, punkies, sand flies, and sand fleas) are a fact of sailing life on the southeast Atlantic coast and points south. They will find their way through any small opening, including the holes in regular mosquito-gauge screen. Portlights usually come with push-in screens. These are great, but we needed something to keep out the horrid little micro-buggers.

No-see-um-gauge screens are so fine, though, that they restrict airflow considerably. You don't want to use them unless you have to. So they should be easily removable.

The easiest solution turned out to be socks that fit around the existing screens. We just pull out the metal screens, pop the socks around them, and push them back in. The socks are pieces of mesh cut larger than the portlights, with the edges sewn around a piece of elastic.

You can get no-see-um-gauge mesh at outdoor supply places that cater to backpackers, climbers, campers, and kayakers, but if you can't find it, go to the fabric store and get some organza — the fine lacy mesh used to trim prom and wedding dresses. It's dirt-cheap. You can apply the same concept to screen deck ventilators with cylindrical baffles, such as Nicro mushroom and solar vents.



When the no-see-ums are unbearable enough to sacrifice some belowdecks ventilation, add a temporary fine-mesh cover to your port-screen inserts.

French gloss

Classic varnish solves boater's problem

by Chris Hardenbrook

Everything above the toerail on *Herald Bird*, a 1972 Cheoy Lee, is ready for a Le Tonkinois treatment.

Detail of the finished coaming and the unfinished toerail.

With the work done, Chris has a boat to gloat about.

ANY OWNER OF A GOOD OLD BOAT WILL, AT SOME TIME OR another, be confronted with the sight of brightwork that no longer lives up to the name. I was faced with this problem when the two-part "system" applied by my boat's previous owner started to fail. It had begun to cloud and crack even before *Herald Bird* came into my life. After a year it was certain there would be no simple fix: small sheets of the coating could be lifted off with a dull snap.

The only option was to remove it and start over. I won't go into the details of removal, except to say it isn't as hard a task as it might seem at first. Using a heat gun and scraper, keeping focused and resisting impatience are the keys (see Tom Young's article in the May 2005 issue). When down to bare wood I was faced with The Dilemma of Decision or, more exactly, The Dilemma of Indecision. With so many wood finishes, coatings, systems, and treatments out there, which is best for my boat? I found the answer in *Good Old Boat*, and it was a total surprise.

After reading much of the available advice about which varnish to use and how to apply it, I was more confused than ever. What I wanted was a brilliant brightwork finish without the angst of dealing with a temperamental product that had to be applied under exacting environmental variables by a journeyman alchemist to get acceptable results. The more I read, the more inadequate I felt.

Then I found Le Tonkinois (luh-tonk-een-WAH), a classic French varnish that's been around since 1906. It's celebrating a 100th anniversary this year, but is virtually unknown in this country.

Natural product

In contrast to all other varnishes I considered, Le Tonkinois seemed the most environmentally friendly as it is a natural product without additives. The claims for UV- and abrasion-resistance, ease of application (no thinning, wide humidity and temperature tolerance), and low maintenance all proved true in practice. My experience has been 100 percent positive with this product.

Here are the highlights: teak is an oily wood, so after a final sanding with 220-grit sandpaper and a thorough wiping with a tack cloth, I wiped again with a clean rag dampened with acetone. I used an ox-hair brush to apply all coats. Le Tonkinois goes on easily. Work quickly and deliberately, keeping it even and maintaining a wet edge. Don't try to pick out little bugs or rework runs and sags. Allow 24 hours between coats.

Although it is not necessary to sand between coats, I recommend you do so after the first coat and before the last, at a minimum. The stuff is so clear it is hard to see where you have put on wet varnish if you don't lightly wet-sand between coats, and you'll get a flatter and deeper finish if you do. Apply eight to 10 coats. My maintenance schedule is to put on three coats once a year. When finished, relax and be the envy of the marina. (I generated a bit of a buzz around my dock with that "Frog oil in a square can," as one colorful salt likes to call it.)

I've used Le Tonkinois now for three years, and it's everything I hoped for. It makes my wood look spectacular and keeps me sailing in style. Belowdecks I used only four coats and haven't retouched it…yet. Bill Rickman, the U.S. distributor is friendly, knowledgeable, and professional. Contact his company, American Rope & Tar, at <http://www.tarsmell.com> or call 877-965-1800.

Bilge pump spy

An automatic cycle counter for next-to-nothing

by Pete Dubler

Living in Colorado, with my Pearson 424 tied up in New Bern, North Carolina, I sometimes awaken in a cold sweat, wondering if my bilge is full of water and if the pumps will last until I return to *Regina Oceani*. Yet, when I finally step aboard, I find only cobwebs in the bilge. If there had been a leak while I was away, though, how would I have known? Something else to keep me awake.

Under way in heavy seas, though, is another story. Some water always gets into the bilge by and by. The key to happy sailing is to know how much and how often. Too much, too often, requires investigating. But how do you know when to check the bilge? A buzzer wired to the bilge pump is not appreciated by the off-watch crew on passages.

An inexpensive pedometer will count anything — including bilge-pump cycles. Too many cycles should lead the prudent mariner to ask pertinent questions.

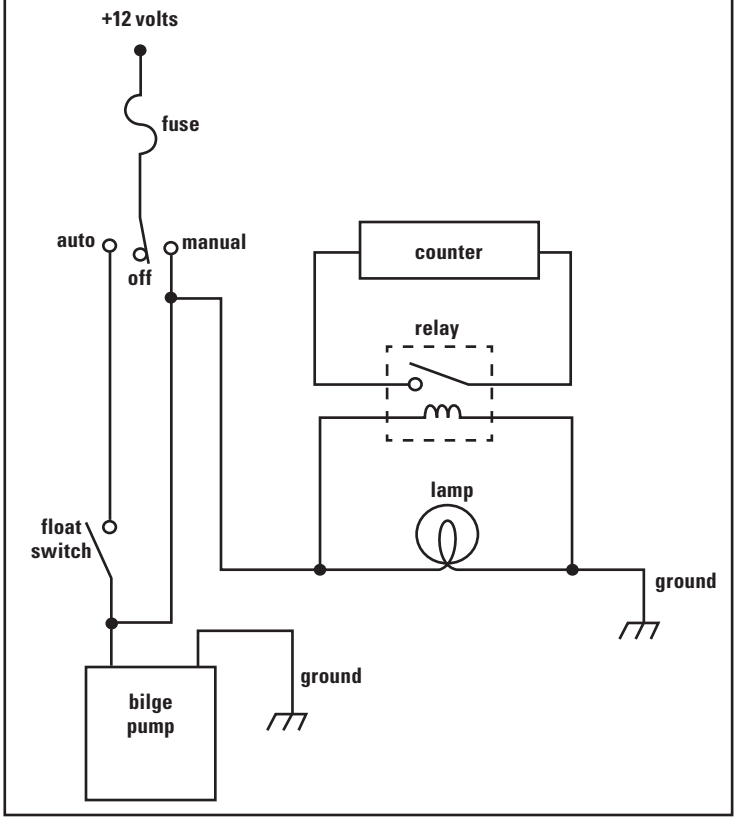
The solution is a bilge-pump cycle counter, checked and reset periodically. A boatowner quickly learns the difference between a normal amount of pump cycles and a problem.

Bilge-pump cycle counters sell for around $70 from popular sources. The buzzer costs less than $5. Hmmm…there had to be a cheaper, quiet solution.

While I was outfitting my boat last summer in Florida, one of the hamburger chains was giving away pedometers with their salads, an image-changing effort, no doubt. The pedometer seemingly offered little utility aboard a sailboat. But, surprisingly, this nifty little digital counter, combined with a 12-volt reed relay from Radio Shack (P/N 275-233) for less than $3, is easily transformed into a bilge-pump cycle counter.

By the time I got to my workbench, I had misplaced the free pedometer, but found one at my local Wal-Mart for less than $4.

Bilge pump circuit with cycle counter



Spring-loaded pendulum

The pedometer registers one's steps by means of a connection made by a spring-loaded pendulum. Each time the round weight at the end of the pendulum strikes the copper wire coil a scant current is conducted and a step is registered. Removing this mechanical part from the pedometer and replacing it with a tiny relay creates the counter.

I removed the circuit board from the case, keeping track of the rubber push buttons and tiny screws, to discover two points where 24-gauge wires could easily be soldered to substitute for the pendulum. Conveniently, removing the pendulum assembly provided a hole through which the wires could be passed.

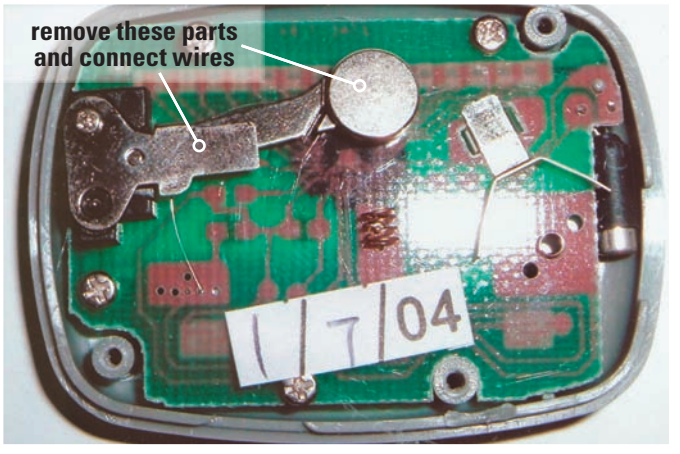
I drilled two very small holes in the back of the pedometer case to allow the relay's switch leads to pass into the case. After quickly soldering slightly larger wires to the coil side of the relay (don't overheat the relay and melt the fine wires of the coil), I used hot glue to attach the relay to the case and secured these wires.

Inside the case, I soldered the surrogate pendulum wires to the relay switch leads. I trimmed these and insulated them with a dab of hot glue.

I mounted the unit on a bulkhead with Velcro to allow for easy battery changing every few years. I cut a slot in the bulkhead to accommodate the relay and the unit mounted nicely. As shown in the schematic, the two relay coil leads connect in parallel to the light on the bilge pump control switch panel or, lacking a light, to the manual pole of the switch and ground (polarity does not matter).

Now when I return to my boat I can see immediately if the bilge pump has cycled at all while I was away. And the counter cost less than a bottle of Sominex.

The back of the circuit board shows the pendulum to be removed, below left. The relay attaches to the back, below.



Mast winch handle

Here's a handier way to keep it in place

by Jerry Powlas

OUR BOAT HAS HALYARD WINCHES TO PORT AND STARBOARD near the base of the mast and another winch on the boom for the outhaul and reefs. It did not take us long to realize that we would rather have a winch handle at the mast waiting for us, rather than having to go forward with one hand occupied holding one. The vinyl pocket I tied to the base of the mast held the handle, but it was no quick-draw holster. The handle would not come out at all unless the pull was pretty much straight up. In calm conditions, this was OK for a standing person. In rough conditions, the crew was wise to sit, rather than stand. In any case, the halyard winches were at deck level and so needed to be operated from a sitting position. Using the vinyl pocket while sitting was awkward.

The solution came in the form of a very interesting product called a Vertical Winch Handle Holder, made by Helm and sold in chandleries. These plastic assemblies can be screwed to a flat surface, and will accept a locking winch handle and hold it safely in place. The handle can be rotated to the storage angle of choice.

We have had two of these in our cockpit for a decade. I knew right away that I wanted one at the base of the mast, but there were two problems. First, there are no flat surfaces on the back of the mast where the handle would need to go so it would not foul sheets in a tack; and, second, I do not like to drill holes in a spar.

I saw a lot of spars fail in my dinghy-racing days. The failures almost always were located where the spar was drilled or where a hole was cut for some fancy piece of rigging. Holes weaken a spar. They are needed to make an extrusion work as a spar, but any extra holes are not welcome. The answer was to mount the winch handle holder to the sail track with toggle nuts.

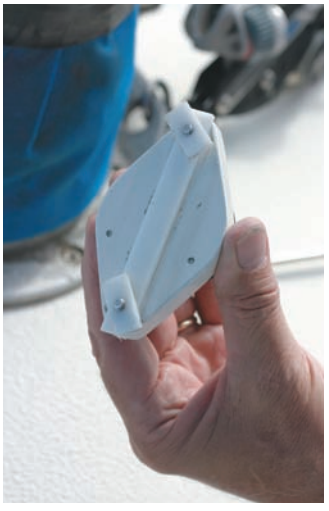
Sail groove magic

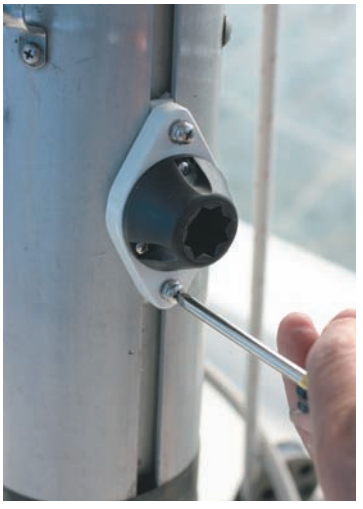
I made the mounting base from African mahogany and polycarbonate. It could be made from other materials. The design is obvious from the pictures. Wood screws mount the holder to the wooden base. A rectangular piece of polycarbonate spans the two machine screws and is sized to be a close slip fit in the sail-track groove. It should be nearly the thickness of the lip of the groove, but a little less. Two smaller rectangular pieces of polycarbonate function as toggle nuts. They were drilled and tapped for machine screws, but the tap drill I used made for a tight fit on the screws rather than a slip fit.

The thickness of these parts should be such that they will fit behind the lip of the sail groove. They must also be long enough so they cannot rotate full circle in that space. Typically they can be the same thickness as the long rectangular piece. The screws will need to be fitted to a custom length unless you are lucky. They need to be long enough to push the toggle nuts behind the lip of the sail track but not so long that they contact the back of the sail track when the screws are fully tightened. This requirement can be met with shims or by cutting down the screws. I was able to use additional nuts under the screw heads to shorten the screws to the proper length.

If you need to cut the screws down, fit nuts on the screws first and cut them with a hack saw. Back the nuts off to reform the threads at the end of the screws and then clean up the ends with a small file.

Installation is interesting. With all the rectangles lined up, they push into the sail groove. Turning the screws will rotate the nuts behind the lips of the sail groove until they contact the outer edges of the inner slot. Then they will hold themselves while you tighten the screws. Removal is the reverse of the process. When the screw is backed out, it first unclamps the nut and then rotates it to align it with the slot. Magic.





Line up the rectangular pieces of polycarbonate for installation. Turn the screws to angle them so the assembly locks in place on the mast, holding the winch handle.

An anchoring tip

Don Launer's article on anchoring (January 2006) was well written and informative, especially the section on chain types. The one item missing was a discussion of the use of a weight on the anchor rode to put more "bend" in the catenary created by the sag in the anchor rode. You can flatten the pull at the bottom by sending a weight about one-half to two-thirds down the nylon rode. Such action decreases the chances of the anchor pulling out once it is set and the sea builds. If you do not want to go to the trouble of sliding a weight down the rode (it is not as easy as it sounds), an alternative to cut down on the pitch of the bow is to lower the second anchor down until it touches bottom and then tie it off. The straight-down pull does wonders to help lessen the up/down motion of the bow and helps lessen the strain on the rode.

C. Henry Depew
Tallahassee, Fla.

Weather torture test

When *The Old Cat* was getting major refinishing a year and a half ago, I did a test just for the fun of it and refinished a small scrap of wood half with Sikkens Cetol Marine Satin, three coats, followed by Sikkens Gloss Overcoat, three coats (right side in the photo). I finished the other half with Minwax's Helmsman Spar Urethane Clear Gloss, seven coats (left side in the photo).

Then I fastened it to the railing of my boat dock's ramp in full sun and weather. The difference after a year and a half (May 2004 until November 2005) with full exposure and no TLC is most remarkable. The Sikkens looks almost like new; the Minwax is very badly weathered and would need to be completely refinished. A top-quality, high-priced, and well-known brand of varnish might have survived better, but the difference is still remarkable.

John Butler
Rogers, Arkansas

The sailing magazine for the rest of us

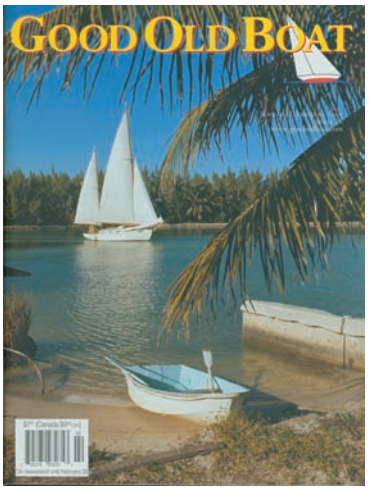
I just renewed my subscription, but I have a small question. What happened to the subtitle, "The sailing magazine for the rest of us"? Just curious.

Chris Crilly
Havelock, Québec

What's missing on your cover?

I absolutely love your magazine and really look forward to its arrival. In fact, after 40 years of sailing and devouring all of the publications, yours and *WoodenBoat* are the only ones I'm renewing. Just received my latest copy and was upset to note the all-important statement, "The sailing magazine for the rest of us" missing from the cover. Why?

Stott Carleton
Edgecomb, Maine



Umm, we forgot!

Remind us never to try to pull anything really tricky or underhanded over on our readers. We'd *never* get away with it! The reason for not carrying our slogan on the cover is because we somehow managed to leave it off and never noticed . . . in spite of the many proofs this magazine goes through.

The fact that several readers missed those catchwords causes us to reflect briefly on our origins. Our original motto was, "Still sailing after all these years!" This is, of course, what all our good old boats are doing, no matter whether they were manufactured in the 1960s, the 1970s, the 1980s, or the 1990s. That motto remained on the cover from the premier issue in mid-1998 until issue Number 16 in January 2001. At that time, several people were very sorry to see it go when the next issue appeared with the statement, "The sailing magazine for the rest of us!" We're glad to learn that at least some readers have grown fond of this newer slogan.

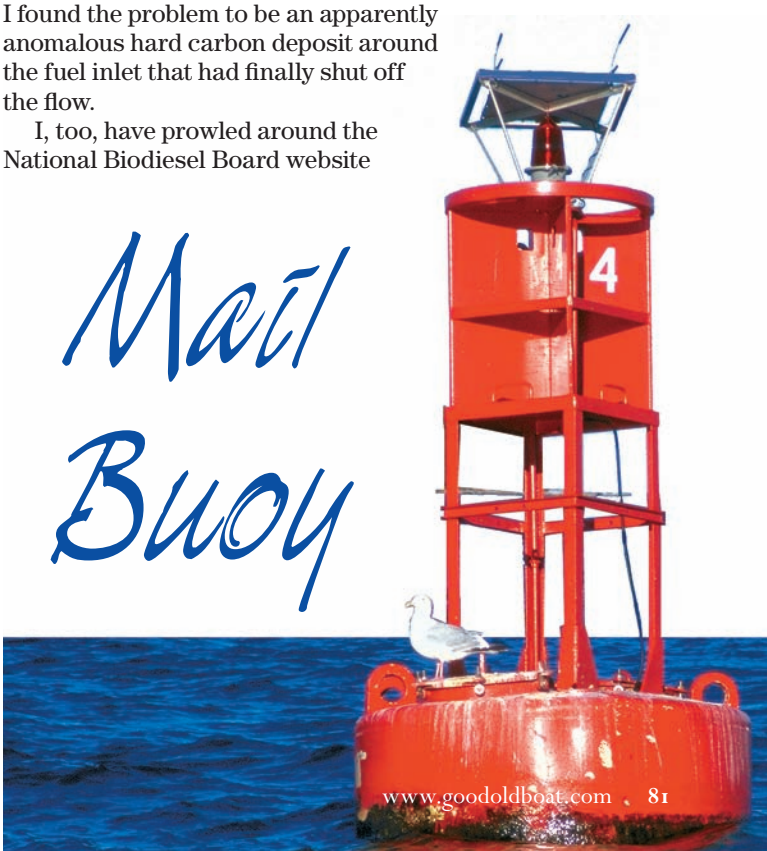
One more thing while we're waxing nostalgic: this fall we'll publish our 50th issue. So soon? Can that be possible?

Editors

Biodiesel issues

I read Stephen Hulsizer's letter in the November 2005 issue with great interest. His experiences were in the back of my mind this week when I disassembled my Wallas 30D diesel furnace to clean it after two seasons of use. The cleaning seemed the first step toward solving a lack of heat output. I found the problem to be an apparently anomalous hard carbon deposit around the fuel inlet that had finally shut off the flow.

I, too, have prowled around the National Biodiesel Board website



Mail Buoy

and read the postings on use of biodiesel in furnaces. We heat our house with oil. During the annual servicing, I have learned that the oil is injected at relatively high pressure (about 100 psi) through a nozzle that generates a fine spray of droplets. In this regard, home furnaces are similar to diesel engines, although the droplets are probably much bigger than those injected into a diesel engine. But then they have a much longer time available for combustion.

In contrast to home furnaces, the combustion process in my Wallas 30D is actually rather similar to Stephen's Sigmar stove. The fuel is injected as a liquid at low pressure by a diaphragm pump. It flows onto a "wick" of woven ceramic fibers which is intended to spread the liquid and aid its evaporation. The vapor mixes with air entering through holes in the wall of the burner and ignites. The combustion air flow is fan-forced in the case of the Wallas 30D vs. natural draft in the case of the Sigmar heaters.

My current hypothesis is that the rapid generation of carbon deposits is associated with the burning of vapors above a liquid, whereas applications that inject the biodiesel blends into the combustion chamber in the form of fine droplets do not suffer from this problem. I think that some models of the Espar marine furnaces also use a spray-injection system. It would be interesting to learn how they perform with biodiesel blends. I'd welcome a response from any *Good Old Boat* readers burning biodiesel in an Espar furnace.

Durkee Richards
Sequim, Wash.

Take a new look at *Practical Sailor*

Practical Sailor, an American sailing institution, has undergone a radical makeover. If you haven't seen it lately, you might want to take another look at this popular newsletter, which tests boat gear. Our earliest copy is dated February 1978. It's Volume 5, Number 2, which suggests that the publication was then in its fifth year. Belvoir Publications has owned the publication since 1975. The sheet size in 1978 was slightly smaller than the size used later, and the title was *The Practical Sailor*. The publication maintained its 2-color look (black with an accent color) until the January 2006 issue which is printed in full color on glossy paper. The new four-color glossy will be printed once a month with twice as many pages, rather than twice a month.

Careful examination of the latest issue suggests that, while the format has changed, the content continues to be a valuable reference point for the sailing industry and recreational sailors. The publication takes no advertising, which allows it to be impartial in its testing of marine equipment. Our best wishes to editor Darrell Nicholson and others at *Practical Sailor*. We hope they continue with the high-quality content *Practical Sailor* is known for.

Editors

FurledSails.com

Here's a sailing startup in the new Internet audio broadcast technology called podcasting (so named after the little iPod players that revolutionized this concept).

The new players in this field are Noel and Christy Davis with FurledSails.com. These two create a weekly podcast, much like a radio program in concept, which focuses on sailing topics with interviews, reports, book reviews, and recipes. Go to their site to hear previous shows, sign up to receive their show downloads each week, or to listen to the current show.

Unlike a radio program, a podcast is something you can listen to at your convenience instead of when the broadcast is scheduled. A condensed audio file (MP3) makes it possible to move these audio broadcasts across the Internet so you can hear them through iTunes on your computer or when you're on the move with the use of an iPod. It's a brave new world. It would appear that sailors are embracing the new technology as it emerges.

Editors

TheSailingChannel.com

We recently learned of a new Internet video project called TheSailingChannel.com. A group of television producers in Annapolis, Maryland, is creating informative sailing videos which can be viewed directly on a computer or downloaded through iTunes for later playback on PCs, Macs, or video iPods.

The initial video productions were a series of 30 vendor interviews taped at the U.S. Sailboat Show in Annapolis in October, 2005. Video segments are two to five minutes long and include web links to the interviewee's website.

Future production plans include maintenance, refit, and upgrade projects . . . sailing and navigation skills . . . and cruising destinations. Take a look and offer your feedback as TheSailingChannel.com gains a foothold in this new Internet technology.

Editors

Good Old Boat podcast

It's not exactly a "podcast" in the radio format, perhaps, but *Good Old Boat* has created a sample MP3 file to download for those who'd like to see what all the fuss is about, particularly since *Good Old Boat* is beginning to offer audiobook content for listening to on a computer or iPod.

Our MP3 file, called "Get off the lake," features editor Karen Larson reading a short piece she wrote in fall 2005 at the conclusion of her sailing season. You can find and download this file at <http://www.goodoldboat.com/audio.html>.

Our audiobooks will also be available here as they are released. We want to make your drives to the boat or commutes to work as enjoyable as possible.

Editors

Accept no substitutes

It's awkward and often in the way in a 30-foot boat that undergoes a conversion from living area to sleeping area and back twice daily. Yet I wouldn't be without my Sport-a-Seat chair. In fact, I have two: one for each boat.

The Sport-a-Seat makes the inadequate seating that was designed around a 30-foot hull shape comfortable. Its tough construction and Sunbrella cover make it incredibly durable as I carry it to the cockpit and sit in it at the dining table and on the settee seats across from it. At bedtime I stow it in the V-berth with the rest of the gear that must vanish for the night as we convert the cabin to a bunkroom. The relaxed

woman in the above photo is a contented Karen appreciating her first cup of coffee in an anchorage. The Sport-a-Seat makes the relaxation complete.

If you're interested in a seat of your own, don't accept any substitutes. Some large companies have seen the great chairs originated by Lynne and Nevin Paradise and knocked them off with cheap overseas labor and inferior parts which don't hold up in the marine environment. The genuine item costs a bit more, but it's worth it. Contact Sport-a-Seat at 800-870-7328 or <http://www.sportaseat.com>. Lynne and Nevin show up at many of the boat shows also.

Karen Larson, Editor

Every single article

I just finished reading the current edition of *Good Old Boat* (January 2006). I didn't realize it, but by the time I finished I found that I had read every article. That is *amazing* for me. I know it's blasphemous for me to state, but I read a number of other sailing magazines. I don't think I have *ever* read *every* article in *any* of them. As a matter of fact, I'm finding that the number of articles in the other pubs that I find of interest declines with almost every issue. I just love *Good Old Boat* and feel very proprietary about it.

Warren Milberg
Annandale, Va.

Back issues come in handy

I've been pulling out all my back issues to help in any research to find the "perfect boat." We've graduated from lake sailing close to home to surfing the 20-knot wind and waves in San Francisco Bay. That has led to tiptoeing out the Golden Gate for a look see/look sea. This, of course, has led to a strong desire for a bulletproof, seaworthy boat that is also quasi-trailerable to continue our exploration of the San Juans and Gulf Islands up north . . . well, the search goes on, so any reviews

aimed in the 25- to 28-foot trailerable pocket cruiser direction would be great. In the meantime, we're taking Lin and Larry Pardey's advice and sailing as much as possible with what we've got. Whatever our next boat turns out to be, it will be rewired, replumbed, and refurbished with lots of help from the many articles in *Good Old Boat*. Thank you so much

John and Virginia Canfield
Comptche, Calif.

Correction

Not long ago we heard from author Bonnie Dahl, who wrote "Solving the meat problem" in the January 2006 issue. Upon the advice of one of the pressure canner companies we had changed the type of utensil used to eliminate air bubbles from canning jars prior to the pressure canning stage.

These days the canning companies (and their legal staffs) suggest using a non-metal utensil, rather than a butter knife, such as Bonnie has been using for 30 years in her own home canning. So we had changed the type of utensil specified to a rubber spatula, having had success with a thin spatula in our own canning projects. (We also have a special-purpose thin plastic spatula which we received in a kit with other pressure cooking supplies.)

Dumbfounded by our editorial change, Bonnie tried a rubber spatula recently in her own canning efforts and found it to be too thick to slide between the side of the jar and the meat packed inside.

Bottom line on canning utensils? Use whichever type of utensil works better for you. Be aware that the canner companies have their own reservations about the use of metal with glass jars since we could possibly chip something. But once informed of their reservations, make your own choice. Bonnie's experience — 30 years spent canning with the help of a butter knife — says that you're likely to do just as well preparing the canning jars with a gently manipulated knife.

Editors

New Hunter 28.5 website

I have recently built and published a website for Hunter 28.5 owners and enthusiasts — <http://www.HunterTwentyEight-Five.com>. This model of sailboat was in production by Hunter Marine from 1985 to 1988. From what I understand, only 250 or so have been produced during these years. The H28.5 is a great little cruiser/racer with a small but proud following.

The site started as a User Group by Clifford Ruckstuhl in 2003 as a place to chat about racing. Eventually this user group grew to 200 members and decided to start a website complete with a forum, picture gallery, article page, etc.

Our website, like yours, is a great place for us Hunter 28.5 owners to hang out and talk shop. It would be great to see our little website blossom.

Steve Prusinski
Escondido, Calif.

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

Best-kept secrets

And we're keeping this one to ourselves

by Karen Larson

In the summer of 2004, the largest U.S. sailing magazine ran a list of the top 10 towns that are perfect for sailors: "Sailville, USA," they called the collective selections. Bayfield, Wisconsin, our home port, headed the list. The list was alphabetical, to be sure, but how *could* they? Our unspoken goal has always been to discourage more sailors from discovering what is becoming a very crowded cruising area.

These magazine editors called the Apostle Islands near Bayfield "the Caribbean of the North." *Arrgh*! I wanted to write a letter to the editor. It was going to focus on the reasons for *NOT* sailing on Lake Superior.

"Wait!" I wanted to shout. "You're wrong! Did you mention the mosquitoes, the biting black flies, or the short (*very* short) sailing season? Take a look at a U.S. map! Did you notice how *far* north this lake is? Did you notice how *cold* the water is (48°F average water temperature in June, according to your article)? Did you see that this water is colder even than the West Coast sailing areas you selected? Did you mention that cold water makes for very cold breezes all summer long? Did you mention that swimming is an activity for the young, foolhardy, or uninformed?"

I fumed. But I didn't write that letter. Why call further attention to a place I'm trying to protect from discovery?

Two months later the same magazine was back at it again. This time the editors selected the top 15 places to take your trailerable boat. (Ever notice how magazines *love* to give readers lists of the Top 7 Reasons to Brush Your Teeth and 12 Hot NEW Ways to Make Chocolate More Appealing? But don't get me started…)

This time Bayfield and the Apostle Islands weren't first (the list wasn't alphabetical, thank goodness). But they were there again. Arrgh, once more!

Another spot

Well, last spring we discovered another beautiful sailing spot in the U.S. but were sworn to secrecy. Unlike the editors of the other magazine, I will not name this beautiful California/Nevada lake. It wasn't in the 2004 lists. Why ruin a good thing just because we were positively delighted by an early spring sail at 6,000 feet surrounded by snow-covered mountains?

Other sailors at the Oakland Strictly Sail show we attended prior to our escape to the mountains told us we were *nuts* to go sailing in the mountains in April. We questioned our own sanity. We wondered whether we'd need a rental car with four-wheel drive just to get to our sailing destination. (We didn't, but the roads had not been clear for long!)

As we arrived in town with our life jackets, foul-weather gear, hats, scarves, gloves, and assorted turtleneck pullovers, we saw skiers heading for the slopes dressed in shorts and T-shirts, a real contrast to the ungainly ski boots they were wearing and the skis and poles slung over their shoulders.

This scene reminded Jerry of an early impression of Minneapolis. Soon after moving there he noticed cross-country skiers skiing on the remaining patches of snow on a golf course while golfers chipped bright orange balls in the melted spots in between. "*Now* I think I *understand* these people," was his only comment.

So there we were last April, sailing on a pristine lake on a lovely warm day. Soon we were in shirtsleeves, surrounded by brilliant white mountains with nary a boat in sight. Divine! Stunning! Marvelous!

This must be one of the most beautiful places on earth in April. What's important is that the folks in Oakland, San Francisco, and Sacramento didn't *know* that. To be sure, this lake will be overrun by powerboats in the summer. The mountains funnel unpredictable and powerful wind gusts. We're told that windstorms can form in minutes. The water there is deep and very cold always.

The California sailors down in the cities know all that. They've been there in the summer when this lake is a boating hotspot. But they weren't there in April when it was perfect. And that's *why* it was as near to paradise as one is likely to get.

Through the gates

Soon a dream of escape will come true

by Joe Moore

I HAVE A LARGE DOG. SHE'S A ROTTWEILER/SHEPHERD MIX: NO TAIL, like a Rott, but looks like a shepherd in the face. At my yard, here in San Diego, doublewide gates stop her from venturing out into the world. With about eight inches under one side of the gate…a perfect little viewing port is at her disposal. I often look out of my small office and see her peering under the gate, sometimes for hours. This makes me think that she's off in another world, daydreaming about whatever dogs dream about: wandering the neighborhood, chasing cats, sniffing all there is to sniff…your typical dog-heaven stuff. Every now and then she lets out a long sigh, resigned to the fact of no escape. But, nonetheless, she stares out under the gate, day after day.

> "I stare at her lines…her deck… and see myself behind the wheel, heading for the endless horizon."

Then I look to my back yard, with the same glazed look of wanderlust, at the 35-year-old wooden cutter I have been restoring for the last two years. A half-faired hull sits on stands waiting patiently. A bright new cabintop gleams in the morning sun as I climb the 12 steps I have climbed countless times. I stare at her lines…her deck…and see myself behind the wheel, heading for the endless horizon.

I see a set of new sails, full and driving me to places I have yet to visit, but will one day. I see her bow slicing the swells as she carries me to lands I have only read about so far. I can feel the warm tropical air and smell the sea, tasting a bit of the adventure that only cruisers can savor. I can feel myself lifted up, my spirit just a little bit more restored, my outlook on life slightly altered once again. I feel renewed as I climb back down the steps, knowing that one day soon, I'll launch this boat and start a new chapter in my life. Soon, very soon, I'll go through those gates.

...look familiar?

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