GOOD OLD BOAT™

presents

Boat Designers

The creators who drew the lines of the good old boats we value today

Profiles of those who most influenced the design of the boats we sail today and their evolution over the years

All articles were published in Good Old Boat magazine between 1998 and 2011.

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Boat Designers

Thank you for purchasing *Boat Designers*, a collection of articles published by *Good Old Boat* about the people who designed our good old sailboats 10, 20, 30, and more years ago. Most of them started down the boat design path due to a love of boats. Many spent a great deal of time in high school doodling sheer lines, keels, and rigs. The vast majority were self-taught or apprenticed at the side of the boatbuilders and designers who came before them. Very few earned a certificate or formal degree as a naval architect.

While learning from those a decade or two older than themselves and then moving on to designs of their own, the individuals profiled here laid a very strong hand on the evolution of our sailboats. In truth, the designers in this book were instrumental in guiding the design of our pleasure sailboats — step by baby step — from the wooden workboats or yore to today's family yacht. Each time they added their own creative design elements the results were tested in real-life situations by racers and cruisers.

Some of our good old boat designers became famous but few became rich. We suspect theirs was a labor of love. No doubt all were occasionally rendered powerless and angry when learning that a design of theirs had been stolen, altered slightly, and built offshore without a cent in payment made to the designer for his original work.

Our boat designers were also forced to deal with market pressures that followed the arbitrary changes made to rating rules. Over time they faced yet another challenge as their ability to draw beautiful boats on paper was replaced by the introduction of computers and the push to create designs using CAD. Adjusting to these new skills was not easy.

Nevertheless, under their pens and computer input devices our boats became faster and easier to sail and maintain. Taken together, the designers we present here were an inspired lot who made sailing for pleasure affordable and available to middle class boat lovers everywhere. They have made our boats what they are today and they have made our favorite pastime what it is today.

At the end of this collection, we added a couple bonus profile articles. We simply couldn't help adding the profiles of Lin and Larry Pardey and Hal and Margaret Roth. These two cruising couples and the good old boats they sailed over the years have also made a significant contribution to voyaging under sail.

Over the years, we've enjoyed editing and publishing these articles and being part of the dialogue that followed. We hope you'll enjoy reading this collection as much as we've enjoyed gathering the articles for you.

The *Good Old Boat* crew

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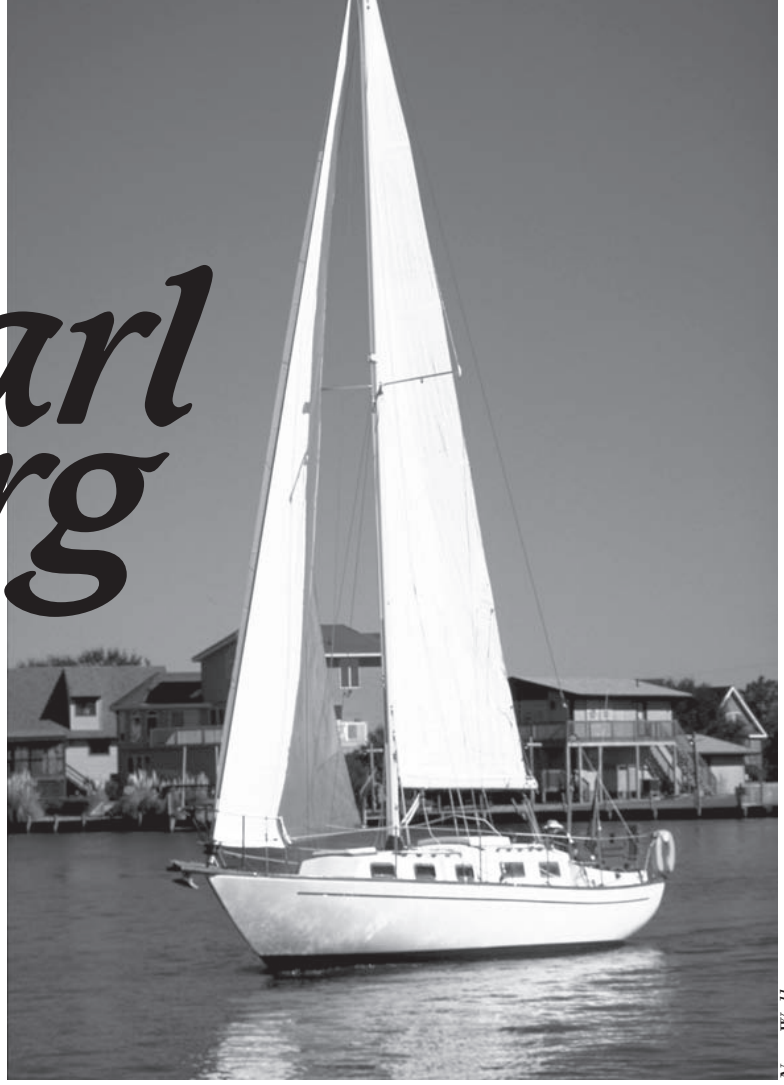
Carl Alberg



Nan Wallace

This pioneer brought many early fiberglass production boats from design board to dockside

by Scott Wallace

Many sailing enthusiasts can immediately spot an Alberg-designed boat. Characterized by a spoon bow, pleasing sheer, moderate overhangs, a distinctive wooden cockpit coaming, and pedestal-mounted winches, Alberg boats convey a traditional and pleasing look. Carl Alberg brought many of the first production fiberglass cruising sailboats from design board to dockside.

In fact, Carl Alberg influenced a whole new generation of sailors. During the 1930s and 1940s he established a solid reputation with his work at the John Alden company. Later with his own company, he designed many mid- to large-size wooden yachts for wealthy clients.

His work from the late 1950s through the time of his death in 1986 was for a whole new market — the middle-income sailor who may have been new to sailing or was perhaps upgrading from smaller daysailers or racers. Carl's legacy for these sailors was a well-found, well-designed, quick cruising sailboat that could provide a safe and exciting family sail without the threat of easy capsize, a boat that would attract admiring looks wherever she went, a boat that any discerning owner would be most proud to own. Carl Arne Alberg may be no longer with us, but his designs live on.

Born April 11, 1901, in Gothenburg, Sweden, he was the son of Alma Larsson and Carl Alberg, a Gothenburg merchant. Carl and his brother often sailed in Gothenburg's harbor with their father. Of his home he said, "The harbor was always filled with ships and boats of all kinds, and when we weren't sailing there, the family usually vacationed on an island off the coast where my father, brother, and I used to race each other in small sailboats."

Perfect bow

Yacht design was on Carl's mind even as a youth. In 1913, four years prior to his admission to college, he wrote of the difficulties of choosing the perfect bow design: "The problem is the eternal one, to eliminate the faults of the two extremes (fineness and fullness) and combine as much as possible their two good points." In 1917, Carl entered the Chalmers Institute of Technology, in Gothenburg, where he studied naval architecture and marine engineering until 1919.

By 1925, Carl had emigrated to the United States and moved to Lynn, Mass., where he found work as a rigger for General Dynamics in nearby Quincy. Andrew Vavolotis, founder of the Cape Dory Yacht Co., and now president of Robinhood Yachts, relates: "Carl worked with the master shipwright, Brorr Tamm, while he was working in Quincy."

Later, Carl worked for the Lawless Boatyard in Neponsett, where he met John Alden, who hired him as a designer after seeing some of his drawings. Carl said: "I enjoyed working with Alden very much. He was a wonderful guy, pleasant, calm, never getting excited, and I learned quite a bit from working with him. His designs were conservative. He concentrated on seaworthiness, comfort, and boats that would sail on their bottoms, and that's pretty much what I've tried to do with my boats."

Carl was responsible for Alden design #583, a schooner built in 1934. In 1937, *Malabar XI*, yawl rigged, a slightly modified 583, was built for John Alden's own use. This boat turned out to be a fast one, coming in second in Class B in the

1937 New London to Gibson Island Race. In 1938, Carl designed *White Wings*, a gorgeous 50-foot sloop built by J. J. Taylor and Sons, of Toronto, for Percy Grant of the Royal Canadian Yacht Club. This was the first Canadian boat to win the coveted Lake Ontario Cup.

A better ketch

Carl also designed John Alden's ketch, *Malabar XII*, which was built in 1939. While many of Alden's earlier *Malabars* were schooner rigged, at this time Alden felt that the "Twelve" was right for a ketch rig since "a ketch of this size can have less sail than a schooner of the same model, and yet be just as fast." In 1941, when asked to recommend a design for long ocean passages, the "Twelve" was Alden's choice.

Immediately after Word War II, Carleton Mitchell bought *Malabar XII*, renaming her *Carib* and cruising her extensively in the West Indies. *Malabar XIII*, design #756, also came from the drawing board of Carl Alberg. This boat represented a compromise by Alden between racing efficiency and ease of handling by a small crew. In 1948, under the ownership of Morgan Butler, *Malabar XIII* won her class in the Newport-Bermuda Race.

Another of Carl Alberg's classic designs in wood for Alden was *Tioga Too*, a 53-foot yawl commissioned by well-known New England sailor Harry E. Noyes, who specifically asked Carl to design her lines and other plans. Built in 1939, *Tioga Too* was known for her graceful sheerline, low cabin trunk, and her long, well-balanced ends. The bow was particularly handsome with its clipper profile and decorated trailboards.

When World War II broke out, Carl temporarily left Alden to work for the U.S. Navy in their Charleston, Mass., naval shipyard. Following the war, he once again designed boats for Alden, including a Hinckley 21.

In 1946, Carl left the John Alden company and set up a design shop for himself at 131 State Street in Boston, Mass. For three years, Carl designed wooden boats, such as the Sea Lion and an Alberg 46-foot ketch, but business slowed down, and Carl returned to the Charleston Naval Shipyard for a six-month period during the Korean War.

There he was offered an opportunity to work for the U.S. Coast Guard, where he became chief marine engineer/architect for 10 years. During this period of his life, Carl focused much of his energy on his Coast Guard work. He was also devoted to his family: wife, Irma; daughter, Corrine; and later his grandson, Kaifser Burril . . . all avid sailors.

Fiberglass transition

Carl made the transition from traditional wooden sailing yachts to fiberglass sailboats in 1958. Everett Pearson, co-founder of Pearson Yachts, remembers, "Tom Potter, who had been working at the American Boat Company, in East Greenwich, R.I., builders of the 23-foot Alberg-designed Sea Sprite, came to us and asked if we would be interested in building a 28-foot Alberg-designed cruising sailboat. This was in the spring of 1958, and we introduced this boat as the Triton at the New York Boat Show in January 1959. Tom Potter convinced us that Carl Alberg was a competent designer with a great deal of experience gained from working with John Alden. His designs were conservative cruising boats, so the conservative cruising sailor would accept them. The first plans we had of the Triton were for wood construction."

Tom Potter was involved in the early days with the Pearson cousins. "Carl worked for John Alden toward the end of John's life," he recalls. "He did designs, many of them magnificent. We found him designing ammunition boxes for the Coast Guard. The Triton got us going . . . he built himself a well-deserved reputation from the boats he designed for us. We must have made thousands of Ensigns. His success with Pearson led to his success at Cape Dory. At Pearson we designed and built the Tritons first. We hoped to sell six, and

In photo at right: Carl Alberg with Cape Dory Yacht Co. founder Andrew Vavolotis. Facing page: an Alberg 29*, Liberty Call, *owned by George Kendall, sails on the Albermarle Sound, Outer Banks, North Carolina.

Carl Alberg's fiberglass designs

- Cape Dory 10
- Pearson Hawk
- Cape Dory Typhoon (daysailer and weekender versions
- Cape Dory Typhoon Senior
- Bristol and Sailstar Corinthian
- South Coast 21
- South Coast 23 (daysailer and four-berth versions)
- Alberg 22
- Cape Dory 22 and 22D
- Pearson Electra and Ensign
- Sea Sprite 23 (see Page 9)
- Kittiwake
- Daystar 24
- Cape Dory 25D and Octavia 25
- Pearson Ariel and Commander
- Cape Dory26 and Octavia 26
- Cape Dory 27
- Bristol 27
- Cape Dory 28
- Odyssey
- Alberg 29
- Alberg 30
- Cape Dory 30
- Cape Dory 31
- Cape Dory 33
- Alberg 35
- Cape Dory 36 and Robinhood 36
- Alberg 37
- Cape Dory 40 and Robinhood 40
- Cape Dory 45 and Robinhood 45

This list, developed by George Dinwiddie, is available in greater detail on the Alberg 30 Web site: <http://www.alberg30.org/CarlAlberg/designs.shtml>. George cautions that this list may be incomplete. If you know of other Alberg designs, please let us know when you're notifying George, and we'll make a note of it in a future Mail Buoy.

we actually sold about 800! That really got us going. I put up the money for the tooling for the Triton . . . after the Triton came the Ariel and its daysailing version, the Commander, as well as the Electra and its daysailing version, the Ensign."

Work with Pearson Yachts was seminal in Carl's career; the popularity of the Triton brought him into the yachting limelight. The Pearson story has been told in an earlier article in *Good Old Boat* (November 1999). The Pearson cousins were planning to build dinghies and powerboats until Tom Potter approached them with the suggestion to have Carl Alberg design them an affordable medium-size fiberglass cruising sailboat. The Triton has been heralded as the first mass-produced fiberglass cruising sailboat. Clint Pearson remembers that in March of 1957 he had 12 men working in his garage boatworks. In June of 1957 Everett joined him, and production took off with the introduction of the Triton.

Frederick Corey

John Danicic

Nan Wallace

***No matter what your point of view, an Alberg boat has distinctive lines and shared characteristics. Clockwise from top left: a Bristol 27*, Watercolors*; a Pearson Electra*, Spindrift*; and a pair of Cape Dory Typhoons*, Moana *and* Hornet.**

A bit stubborn

"Carl's most significant characteristic was a sense of stubbornness in defending his designs and opinions," Everett Pearson remembers. "We asked Carl to reduce his royalties as the volume of business grew, as the Grumman people (who by then owned Pearson Yachts) thought Carl's fees were excessive. He was making three to four times what anyone else in the business was making, and other designers would work for far lower fees. That's why we went to Bill Tripp for the Invicta, and Phil Rhodes for the Vanguard. We later hired Bill Shaw to create our own design team and eliminate paying royalties."

Clint Pearson says of Carl, "He was very easy-going, kind of quiet, with strong ideas . . . he was a good guy to work with." Clint believed his designs provided easily handled boats and rigs: "They won't get you in trouble, plus his boats provided good speed and stability."

Carl designed the 19-foot Bristol Corinthian (*Good Old Boat*, September 2001) as well as the Bristol 27 (March 2001). In addition to his work for Pearson Yachts and Bristol Yachts, Carl Alberg also designed two boats for Whitby Boat Works, an Ontario, Canada, yachtbuilder.

In 1961, a number of yachtsmen from Toronto, Ontario, approached Kurt Hansen of what was then Continental Yacht Sales (later Whitby) looking for a 30-foot fiberglass yacht for club racing. Kurt contacted Carl late in 1961. He developed a design that both thought would sell well in the United States and Canada.

Carl based this design on the heavily built Odyssey boats, and construction started on the first ones in 1962. Another group of 25 from the Chesapeake Bay also was looking for a 30-footer for club racing. When these sailors heard that a Canadian manufacturer of a popular well-built 24-footer was building a 30-footer, they sent members Bud Tomlin and Boyce Beville to Ontario to check it out. Two major groups of buyers, the Great Lakes Toronto-based members and the Chesapeake Bay group, became the first buyers of the new, superbly designed and built Alberg 30. Almost 40 years later, nearly every one of the original Alberg 30s is still enthusiastically raced and cruised. *(More on the Alberg 30 in the November 2000 issue.)* Whitby also built the Alberg 37, a boat designed for offshore cruising.

Carl Alberg's last large and loyal client was Cape Dory Yachts. In 1987, one year after Carl Alberg's death, the Cape Dory catalog offered these Alberg designs: Cape Dory Typhoon Senior, Cape Dory 26, Cape Dory 28, Cape Dory 32, Cape Dory 33, Cape Dory 36, and new for 1987, the Cape Dory Custom 40. *(Several Cape Dory designs are featured in previous issues: 30 in June 1998, Typhoon in November 2000, and the 25D in May 2001.)*

In 1986, after a long and fruitful life, Carl Alberg died in his adopted home, Marblehead, Mass. Bill McGrail, of Marblehead, remembers: "Although I was a member of the Boston Yacht Club with Carl Alberg, I met him only a few times. He was not a man about whom stories were told. He is perhaps best remembered by his work."

Scott and wife, Nan, enjoy camping, canoeing, and sailing in Ontario. They are members of the Rocky Fork Sailing Club, in South Central Ohio where they sail a Bluenose sloop. Their last boat was a Pearson Electra; their first, a Catalina 22, Cat Dancing. *For 15 years they have sailed on the Great Lakes and the sounds of the Outer Banks, North Carolina.*

The completed **Emigrance** *under full sail.*

by Don Launer

Chris Bauer and his boats

German-born sea adventurer settles in Florida

The term Renaissance Man has been used with abandon in recent years, but for boatbuilder Chris Bauer the term is not misapplied. Chris is a scholar, world traveler, wine connoisseur, gourmet chef, opera buff, boat designer, boatbuilder, and sailor. He is, in addition, a linguist who speaks English, German, Spanish, Portuguese, Italian, and French. Chris builds his boats in St. Augustine, Florida, where he lives with his wife, Laurie, and daughter, Kirsten. How Chris and Laurie came to settle in Florida is a fascinating tale.

At age six, German-born Chris emigrated to South America with his family. They lived there for eight years. After he'd completed college, the open road beckoned to Chris, and he began a motorcycle trip through Europe, ending up in Portugal. On the coast of Portugal a Danish-built Baltic-trader, oak on oak, was being converted by a group of Americans into a square-rigger. The converted ship was designed to be a replica of the brig *Pilgrim*, immortalized by Richard Dana in his book, *Two Years Before the Mast*, the book that exposed the brutal life of the common seaman to public view and influenced legislation to correct those harsh conditions. The replica brig, which would be used for charter work in the Caribbean, was also christened *Pilgrim*. Chris recalls that "it was 100 feet on deck and rigged in the traditional manner with wood blocks, deadeyes, and belaying pins.

"Since there was a language problem between the new owners and the shipwrights, and since I was fluent in Portuguese and English, I signed on as interpreter and rigger, working for about eight months rigging the ship until it was ready to sail."

California girl

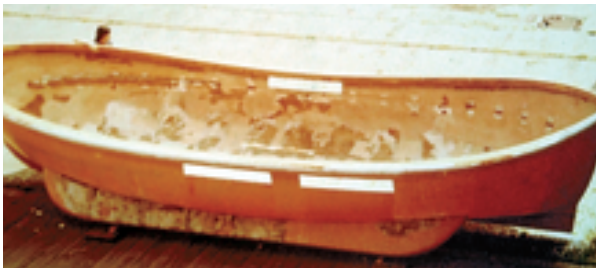
Just before *Pilgrim* was ready to leave for the U.S., a California girl and her younger brother came aboard. They served in dual roles as crew and paying passengers. Laurie had just graduated from college and, at the suggestion of their mother who thought crossing the ocean in a square-rigger would be a memorable and exciting adventure, Laurie and her brother, Dodd, embarked on the square-rigger for the Atlantic crossing. By the time *Pilgrim* arrived in the Caribbean, Chris and Laurie were an "item."

Before leaving Portugal, Chris had met a German industrialist who became enamored of *Pilgrim* and wanted a ship just like it as his personal yacht. So after the Atlantic crossing Chris took on the job of finding a suitable hull that could be modified. In that pursuit he and Laurie flew to Scandinavia. There they found a three-masted schooner, but couldn't locate the owner. Eventually the project fell through and, as a German citizen, Chris decided that it would be an appropriate time to begin his obligatory 15-month tour of duty in the German Navy.

As a Morse code and teletype operator, he was stationed in Wilhelmshaven, on the North Sea. It was in northern Germany, in 1975, that Laurie and Chris were married. The service was performed by Chris' father, a Lutheran minister and Navy chaplain.

"While in Wilhelmshaven, Laurie and I ran across a boatyard where they built small lifeboats for Germany's

tall ships. Although they were constructed of heavy fiberglass, they were made along traditional lines. In the boatyard we found a 28-foot fiberglass lifeboat that the yard was experimenting with, and for a few hundred dollars the boat was ours. For the rest of my navy tour of duty, I used all my spare time designing how our boat could be converted into a safe, small, cruising sailboat, one we could ultimately use to cross the Atlantic Ocean."



The fiberglass lifeboat purchased by Chris and Laurie in northern Germany. They would trasform it into their sailboat,* Emigrance, *which would eventually carry them across the Atlantic.

Construction of *Emigrance*

When his stint in the navy was completed, Chris and Laurie began work in earnest on the planned modifications that would make the little boat their new home. They rented space in an old barn and purchased a versatile power tool with attachments that could convert it into a lathe, table saw, router, joiner, grinder, and bandsaw. With this adaptable implement, they spent more than a year installing a long steel keel, ballasted with concrete and scrap iron. They framed out a deck, which was covered with plywood, and put on several coats of polyurethane paint that had ground cork mixed into it. This thick mixture provided a leak- and skid-proof deck.

They then constructed 16-inch wooden bulwarks, a teak caprail, and a teak cabintrunk that gave them 5 feet 9 inches of headroom below. Their boat was lightning-grounded and had a simple one-battery electrical system. They also constructed an outboard rudder with a tiller. The final stages of construction included a homemade anchor winch, heavy-duty bronze hardware and a long retractable bowsprit. Their completed boat had a 30-inch draft, a 9-foot beam, and was 28 feet on deck with a 27-foot waterline.

Mediterranean, here we come

With the mast, boom, gaff, and bowsprit stored on deck, and with their bicycles and belongings (including the large multiple-use power tool) stored below, but with no rigging, Chris and Laurie began a motoring trip toward the Mediterranean in their newly christened *Emigrance*. Their cruising home was powered by a one-cylinder, 8-hp inboard diesel that, in calm water, could move them at about 3 to 4 knots. The fuel tanks were two 5-gallon jerrycans. Using Europe's extensive network of inland waterways, they traveled from Bremerhaven into Holland and Belgium, then into France, spending a couple of weeks moored at a quay on the Seine River in the center of Paris. From Paris they traveled up the Seine, down the Saône and finally into the Rhône River, which flows south toward the Mediterranean Sea.

"Our trip through France was the quietest and most pleasant time I've ever spent on the water," says Chris. "Since the locks on France's inland waterways didn't operate on weekends, we would moor our boat to a couple of stakes we would drive into the canal bank, take our bicycles off the boat, and go find the local boulangerie (bakery) and boucherie (butcher shop) along with a couple of bottles of wine. Then we enjoyed ourselves while waiting for Monday to come around."

Near the mouth of the Rhône they found a small boatyard near the old walled town of Aigues-Mortes. It was on the west side of the wide Rhône River delta, 60 miles west of Marseilles and just two or three miles from the Mediterranean. It was from this harbor, in 1248, that Louis IX, king of France, assembled 1,500 ships and 35,000 men and embarked on the crusades.

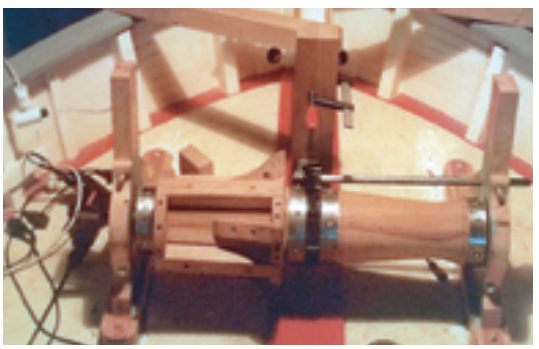
By doing work for the yard two days a week, Chris and Laurie were able to spend the winter there while they rigged their sailboat. The rigging was done in the traditional style, just as the *Pilgrim* had been. The sailplan was that of a gaff-rigged Baltic cutter, with a long bowsprit and a square topsail.

Cruising the Med

Chris had become like a son to the boatyard owner. He wanted Chris and Laurie to stay and even offered Chris the boatyard, but they had a rendezvous with a sailing adventure, so with heavy hearts they bade *au revoir* and sailed out into the Mediterranean Sea on their maiden voyage. This was the first sailing test of their small boat. On the morning of that first memorable day, they headed east along the coast of France.

Chris recalls thinking, "Well, it should work. I think I did everything right." And later in the day he thought, "This boat is not bad at all!" Marseilles was their first stop. From there they hopped from port to port along the Mediterranean coast, discovering that all the planning and work had paid off: their little boat was an able cruiser. They daysailed up the French Cote-d'Azur, to Monaco, the Italian Riviera, Elba, and Corsica, finally returning again to the island of Elba just off the west coast of Italy.

"We spent two years cruising the Mediterranean without ever sailing an overnight passage," says Chris. "During the summer we would daysail the Mediterranean from port to port, and during the winter I would work at local boatyards. We stayed on Elba through the next summer, while



Chris' homemade anchor capstan (at left), showing the remarkable construction and attention to detail that went into the building of* Emigrance. *Work begins on the lifeboat conversion (at right) in a barn in Wilhelmshaven, Germany.

I worked for a charter business, and then we spent our second winter on Elba again. If there were one place I would choose to spend the rest of my life, it would be Elba. It's a perfect universe in microcosm."

By then they had decided that their boat was a completely seaworthy vessel, and they began making plans to sail across the Atlantic to the United States. After two years of cruising the Med — on the first leg of their voyage, between the island of Sardinia and the Balearic Islands off the east coast of Spain — Chris and Laurie had their first overnight passage in *Emigrance*. Although it was a night filled with trepidation, they look back on it as one of the milestones of their sailing careers. Then, with all their belongings on board, they sailed from the Balearic Islands to Gibraltar and finally out into the Atlantic Ocean, traveling down the coast of Morocco and stopping at Casablanca and Safi for their final provisioning before starting the trip to the Canary Islands.

Across the Atlantic

"We stayed in Casablanca about 10 days, and just before leaving I got a weather report from the Casablanca airport," Chris explains, "They said we would have a good wind. I guess it might have been a good wind for planes but maybe *not* for small sailboats. As we started our ocean voyage from the African coast to the Canary Islands, the wind was 30 to 35 knots from directly astern. We rigged our twin headsails wing-and-wing and began four-hour-on and four-hour-off watches, surfing down the faces of huge waves for three days. It required constant attention to the tiller, since we had no autopilot or self-steering."

Kirsten Bauer

Chris and Laurie Bauer in their shop in St. Augustine.

Fatigue probably contributed to a navigational error. Chris recalls: "I was using dead reckoning, and I added the deviation instead of subtracting it, so we were 14 degrees off course, heading for the coast of Africa instead of the Canary Islands. On the fourth day out the wind subsided a little, and we were finally able to put up the mainsail. That day a little bird landed on deck, so I thought we were close to the Canaries, and I fired up the radio direction finder to get a bearing. It was then that I discovered we were closing on the African coast!"

Finally, the exhausted couple saw the huge cliffs and inhospitable coastline of the island of Lanzarote, the easternmost island in the Canary chain, appear dead ahead. They continued past the island of Fuerteventura to Gran Canaria island, where they entered harbor. Once safely ashore they evaluated their tiresome ordeal and decided they would be physically unable to continue to the United States. As they were making plans to ship their boat home and fly back to Europe, large sailboats and racing yachts began limping into the harbor with broken equipment and stories of the terrible storm they had just been

Laurie, in the hatchway of their nearly completed boat.

though — the same weather Chris and Laurie had experienced. As Chris surveyed the docks, where wet mattresses, bedding, and clothes were being laid out to dry and broken spars and blown-out sails were being repaired, he thought, "Well, we didn't think it was *that* bad. It was uncomfortable, but we never had any real trouble. I guess we have a pretty good boat, and we're able to handle things after all."

Two modifications

At the end of December 1981, after three weeks in the Canaries, and with renewed faith and self-confidence, they decided to undertake their 3,000-mile trip across the Atlantic. They made two important modifications: buying an electronic Tillermaster autopilot and changing their watch system from the four-on, four-off to the Swedish 6-4-2. "With only two people on board, these changes made all the difference," Chris recalls. "The two six-hour

Laurie furls sail aboard Emigrance.

watches were at night, so we each had a good night's sleep every night. We left the Canaries, and using celestial navigation, a cheap Casio watch I had bought there, and a shortwave radio to get GMT time signals and weather reports from French radio, we started our voyage. The first week out we were both seasick for the first time. I think it was the result of apprehension and the pressure of the commitment. But once the daily routine became normal, we felt much better.

"The second week out we began thinking, 'This is really nice.' By the third week it was, 'Will we ever get there?' By the fourth week we felt like we were in limbo and would be destined to sail on and on forever. Life on land became something out of our distant past that we could hardly identify with anymore. But soon we began receiving Caribbean AM radio stations, our first confirmation that we were actually where we thought we were.

"Finally, after 31 days, at around two or three in the morning, we saw a glow on the horizon, and our RDF showed Barbados just 10 miles away. We were just a few miles off course: my celestial sun sights worked!

"We had an enormous sense of accomplishment and euphoria. We had sailed across the Atlantic in a tiny little boat we built ourselves. We did it. This is it. *Nothing* is impossible!"

The first project on shore was finding a telephone and calling Laurie's parents. "My mom had no idea we were doing this," Chris says, "My dad never told her."

Island hopping

They soon began island hopping up the Caribbean: English Harbor in Antigua, Puerto Rico, the Bahamas, and finally Fort Lauderdale, on the east coast of Florida. From Fort Lauderdale they began a trip north on the ICW and, while in St. Augustine, they discovered that Laurie was expecting. So in St. Augustine the Bauers swallowed the anchor and began a life ashore. Chris, relying on his boatbuilding skills, founded Bauteck Marine Corporation in 1983, with the intention of building the ideal dinghy. Chris and Laurie built a home in St. Augustine, near their shop, for the family that now included their new daughter, Kirsten. About this time they sold *Emigrance* for the amount it cost to build her and, sadly, never saw or heard about her again. *(If any readers are aware of the boat's past or current whereabouts, we're sure the Bauers would love to hear from you. Contact information is at end of this article.* ***-Ed.****)*

Kirsten Bauer

Chris, in his St. Augustine shop, working on a Bauer-10.

The first boat to be produced by Bauteck Marine was the Bauer-10. Chris conceived this dinghy as the perfect yacht tender. It was a dinghy that could be easily rowed, sailed, or motored. The Bauer-10 was followed in 1988 by the Bauer-8, and in 1996 the Bauer-12 made its debut. All three models were designed by Chris, with the help of a computer-lofting program. "I decided to build small boats because I like the idea of being able to put out a completed boat in a relatively short length of time," explains Chris. "In addition, the initial expense of starting out with a large hull would have been prohibitive for us."

The Bauers' factory is a 5,500-square-foot area that includes a

Chris, in the red shirt, talks to potential customers at the Annapolis Sailboat Show (October 2000).

separate building where the fiberglass layup is executed. The layup building houses modern equipment for keeping airborne pollutants to a minimum as well as an environmentally safe acetone recycling machine. About 55 percent of the 70 to 80 boats built yearly are the Bauer-10s and about 35 percent of the production are Bauer-12s, with the Bauer-8s coming in a distant third. It takes about 20 to 22 man-hours to do the fiberglass work on the 10-footer and, depending on how much wood is stipulated by the owner, the total man-hours for each of these boats is about 32. Seats and wood trim are teak, with some ash used in the tiller laminate for strength. Spruce is also used on the rare occasions when a customer specifies wooden spars. The staff at Bauteck Marine is usually about five. This includes Laurie, who takes care of all of the office work, with occasional help from Kirsten, who is now 17.

All custom-made

"We rarely build boats for inventory, since all our boats are custom made to each owner's specifications," explains Chris. "Usually we just have one boat of each size, which we use for boat shows and demos. About 60 to 70 percent of our boats are sold through boat shows and the rest through dealers or export. Currently we have only four dealers in the United States because most dealers find dinghy sales too time-consuming. Sailboat owners spend just as much time looking over a 10-foot dinghy as they do selecting their 32-footer."

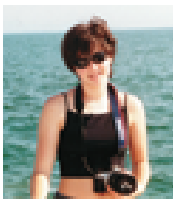
The Bauer hulls are constructed of hand-laid fiberglass and have an interior liner that does triple duty as a hull reinforcement, watertight flotation, and a huge storage compartment. In the Bauer-10, four watertight ports give access to this storage/flotation area that can be home to tools, flashlights, foul weather gear, mooring lines, anchor and rode, and a host of other paraphernalia that makes this little dinghy into a mini-cruiser. The double liner provides so much flotation that it can still be rowed, motored, or sailed when swamped. Whereas, in many so-called top-of-the-line dinghies, seating while sailing is awkward or non-existent, the Bauer liner provides a unique U-shaped stern seat that allows the sailor to sit athwartships for better balance and sail handling. High freeboard, wide beam, full-length keel, high loading capacity, and exceptional stability are designed into these hulls. And since it is a true displacement hull, it can be rowed for miles around a harbor with little effort.

The sailing models have kick-up rudders and kick-up centerboards, not daggerboards, and both the rudder and centerboard have an ingenious internal shockcord arrangement that pulls the rudder or centerboard back down again after it has kicked up. This avoids hanging over the stern trying to push the rudder down. Classic lines and exceptional performance are characteristics of the Bauer boats, which are not only aesthetically pleasing, but completely functional as well.

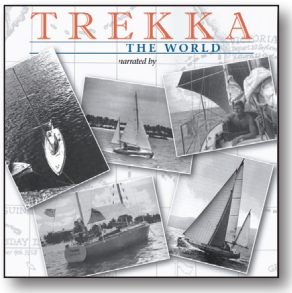
The rigging work that Chris did on the tall ship, *Pilgrim*, and the design and construction of their little *Emigrance* has all come together in a neat little line of dinghies that are built with personal care. It's nice to see a boat designer and builder who has "paid his dues" on the water, knows what is required of a small craft, and has firsthand knowledge of what old man Neptune can throw at us.

For more information on the Bauer boats visit their Web site, <http://www.bauteck.com>, or contact Bauteck Marine Corporation, Inc., 2060 Dobbs Road, St. Augustine, FL 32086; 904-824-8826; toll-free 888-228-8325; fax 904-824-8574; email bauer@aug.com.

Don Launer's photo and bio appear on Page 17. Instead meet photographer Kirsten Bauer, 17, who took several of the recent photographs in this article and is the reason Chris and Laurie wound up settling down in St. Augustine 18 years ago. Kirsten is a senior in high school who hopes to become a journalist.

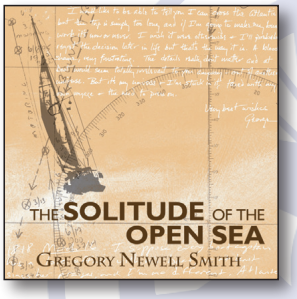


Circumnavigations
and other true sailing tales!



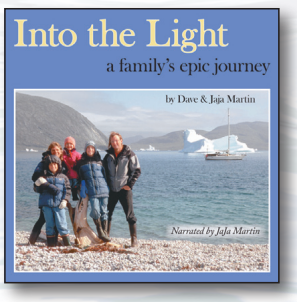
Legendary sailor John Guzzwell narrates the adventures he had while circumnavigating in *Trekka*, the 20-foot yawl he built. This is a must-have release for all who now follow in his wake and those who dream of doing so.

John Guzzwell:
Trekka Round the World



In this series of narrative essays, Greg Newell Smith reflects upon the many adventures he had and discoveries he made during his world circumnavigation. *The Solitude of the Open Sea* takes you to the most unexpected places.

Greg Newell Smith:
The Solitude of the Open Sea

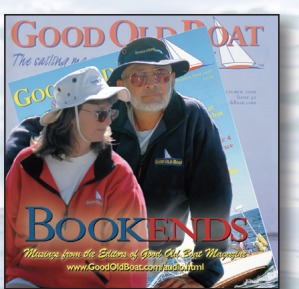


Well-known circumnavigators, Dave and Jaja Martin possess the power to touch your heart and soul. The Martin family's true story of their travels in Iceland and Norway offers an honest look at life aboard in the best and in the worst of times.

Dave and Jaja Martin:
Into the Light

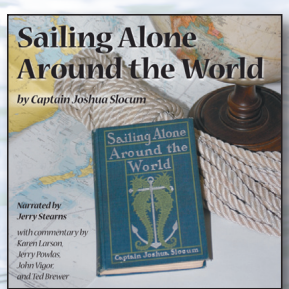
A Year in a Yawl is a true tale of four young men traveling the Great Circle Route of the eastern United States over 100 years ago. Their youthful enthusiasm and resourcefulness make this a powerful and well-told classic.

Russell Doubleday:
A Year in a Yawl



These musings about sailing and boat ownership from the editorial pages of *Good Old Boat* will entertain you whenever you miss being near your sailboat, as well as any time you're aboard or driving to the marina.

Good Old Boat:
Bookends
50 "View from Here" and "Last Tack" columns



In 1895 at the age of 51, Joshua Slocum began a three-year circumnavigation aboard *Spray*. The first man to ever successfully complete a solo circumnavigation, he recounted the adventures he had along the way in this classic tale.

Joshua Slocum:
Sailing Alone Around the World

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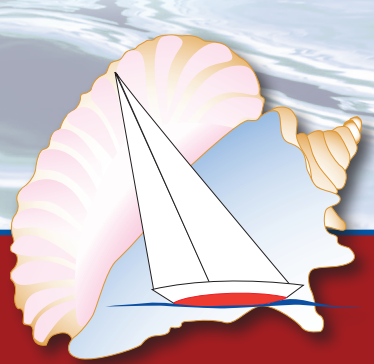


www.AudioSeaStories.com

Ted Brewer
creator of Black Velvet *and*

by John Vigor

In his home office in the foothills of the Cascade Mountains, Edward ("Ted") Brewer mops his brow and shoves back his stool. He is tall and solid. His hair is dark and his sense of humor keen. "It's too hot to work today," he says. "The ink's running."

Ted, one of the country's best-known yacht designers, still draws the old-fashioned way with ink and splines. There are blueprints and papers scattered all over his wide desk, and at one edge there is a row of "ducks" — those traditional lead weights that hold the splines in place while you draw a fair curve.

The walls are knobby with half-models of some of his boats. Pictures of others are framed alongside copies of his impressive professional credentials. And everywhere there is the paraphernalia of the one-person business: the fax, the phone, the file boxes, the letters waiting to be answered. But all that is for another time.

"Let's go into the house," he suggests. "It's cooler." In the few short steps between the office and his house we run into a blast of dry August heat that feels like the Sahara at these high latitudes. It's 85 degrees Fahrenheit and rising in the valley of the mighty Skagit River, 75 miles north of Seattle. The Skagit, the second biggest river after the Columbia on the west coast of the continental 48, is only 150 yards away, but the cool water it draws from melting snows in the rugged Cascades looming high overhead is doing little today to temper the heat.

The office and the house are remote, situated on a dead-end road off rural State Route 20 in northern Washington, miles away from the nearest city and surrounded by farming land given over to fields of nose-high corn scorching at the edges for want of rain.

For a man so well known and respected in the yachting world, Ted lives a quiet life. His home is comfortable but modest. The boat he keeps at La Conner, the nearest saltwater marina, is a 24-foot power cruiser.

If you have a really good old boat, Ted has a word of advice: "Hang on to it. Maintain it as best you can, and look at it as money in the bank — it's an investment that will pay off in the end. Maintain it like new, and you'll never be sorry.

This is the man who worked on the America's Cup boats *American Eagle* and *Weatherly*, boats that won the Olympics, the Gold Cup, and dozens of celebrated ocean races. He's also the man who designed scores of the good old boats still cruising out there.

He likes the peace and quiet now. At age 65, with more than 260 yacht designs under his belt, he feels he's earned a rest. He still keeps designing, though. He can't get totally stopped. He has just finished the lines of a 35-foot keel/centerboard cutter in double-chine aluminum for a California owner, but he's disinclined to take on any work involving a design of more than 50 feet.

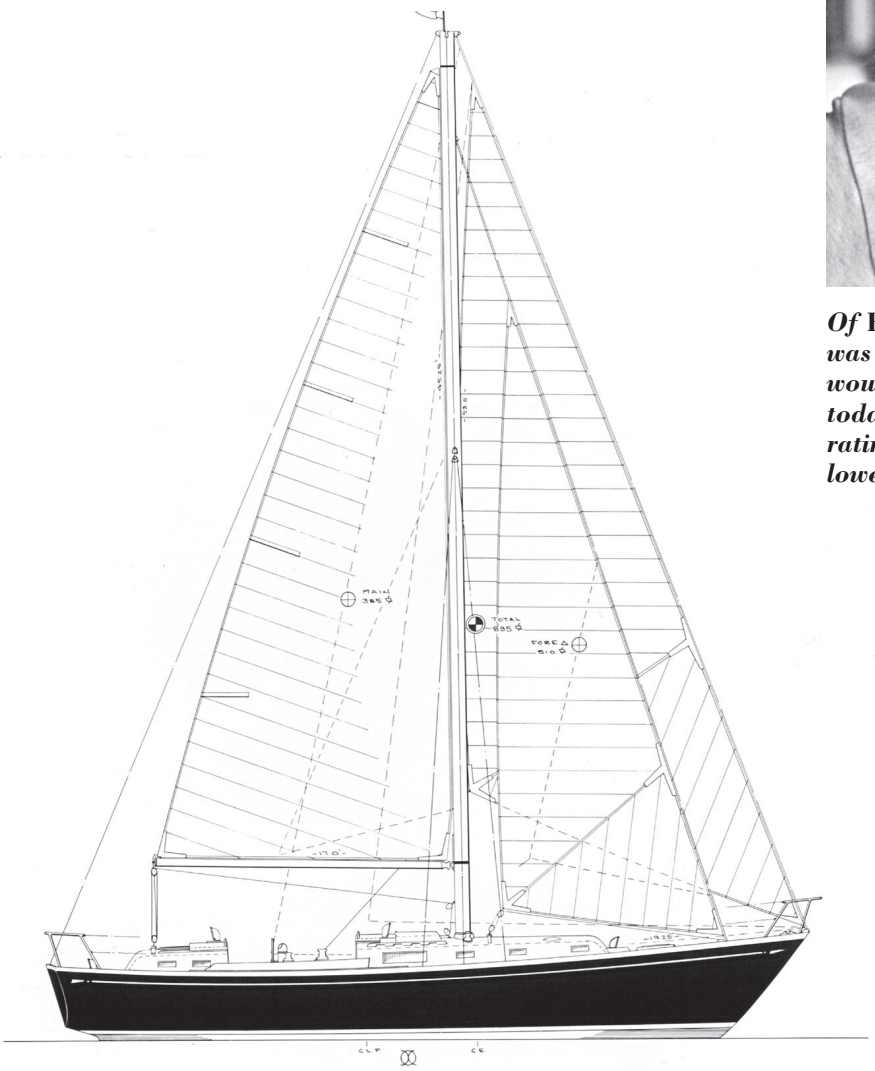
He laughs wryly. "I designed a 100-foot yacht once. Never again. The amount of work is incredible. You have to hire experts to help you. It has all the components of a full-size ship."

The magic of designing, he says, the magic that keeps drawing him back, lies in the lines and the accommodation. But there's no magic in designing the shaft bearings, the ballast, and the chain plates. That's just number-crunching and drudgery.

Now he's working on the plans of a 29-foot powerboat for home builders to construct from plywood or aluminum. It will cruise at 15 to 18 knots with a single diesel or twin outboards. "That kind of plan is always in demand," he notes.

Ted started his working life in the Royal Canadian Army Service Corps, but was advised by a friend to get out as soon as he could because there was little chance of

other miracles



***Of* Black Velvet, *left*, *Ted says*, "*She was done 200 designs ago, but I would not change a great deal even today. The high boom was done for a rating advantage, so I'd probably lower it a foot or so. That's about it.*"**

promotion in such a small army. He made it to lieutenant, however, before joining C&C Yachts (then the Canadian Northern Company) as a yacht broker.

While he was in the army, he had studied yacht design by correspondence from the Westlawn School. His big break came when he heard that Bill Luders Jr., a respected designer from Long Island Sound, needed an assistant designer.

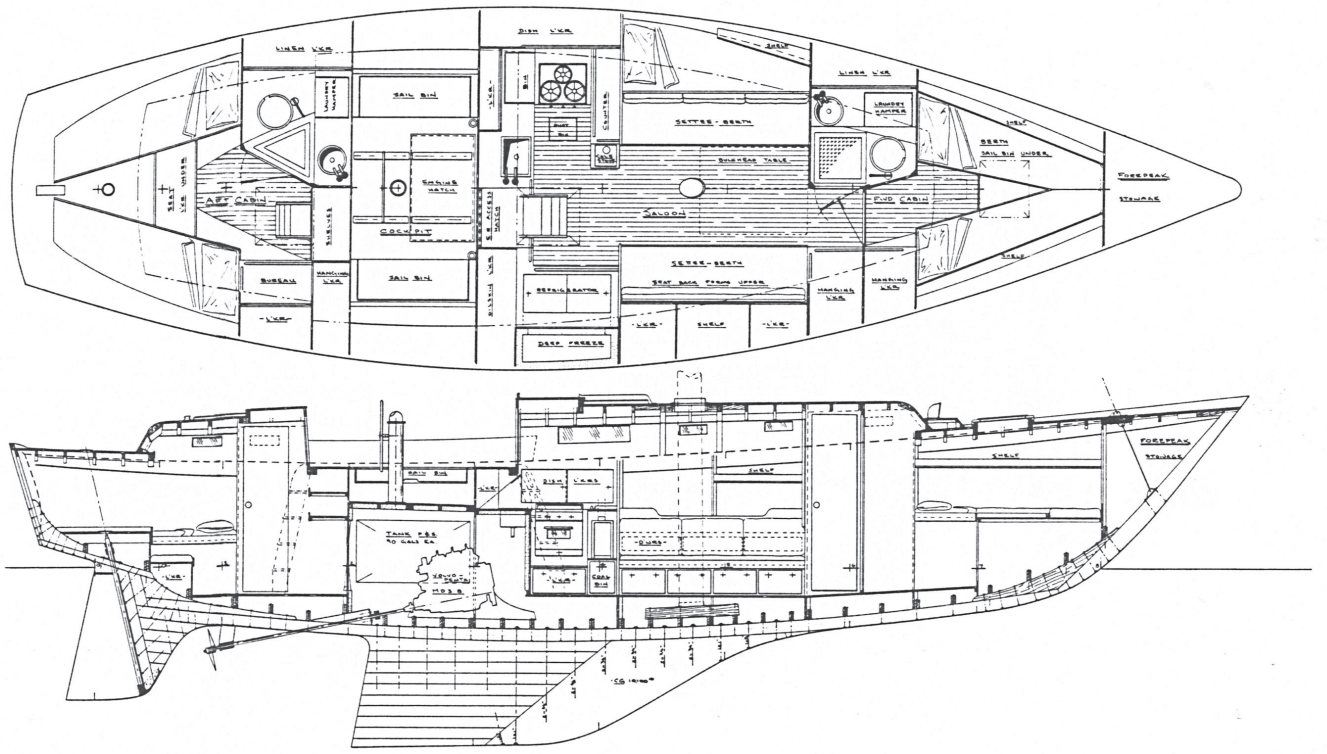
His first job for Luders was to design the plumbing for a ferry. "I hardly knew where to start," he confesses. "But I learned quickly. In fact, I worked for Luders for seven years and learned a lot. And he made me teach myself a lot. Bill Luders was a wonderful sailor, friend, and employer."

In the early 1970s, Ted originated the radius-bilge method of building metal yachts that made construction much easier for amateurs and professionals alike. He first applied it to the Goderich 35 design. And if you're wondering why that name rings bells, it's because it was a Goderich 35 that later sailed all the way around the globe without navigational instruments of any kind, not even a compass.

In 1979 he moved to Washington state, designing all kinds of boats, ranging from small dinghies to the 68-foot schooner *Tree of Life*, which was nominated one of the "100 Greatest Yachts in America" by *Sail* magazine.

But his favorite design remains one of his early ones, *Black Velvet*, which was custom-built with a strip-planked wooden hull in about 1970. *Black Velvet* was a fast boat with a fin keel and a skeg-hung rudder. "She had to be fast to windward," Ted explains. "I designed her for Fred Chevrier to sail on Lake Champlain, and Fred said it was important that she beat well because 'No matter where we go, it's always to windward.' "

The design was such a success it was later produced in GRP and became the Cape North 43, which, among other achievements, won the closely contested Swiftsure Race. But the design didn't end there.



Black Velvet lives on in the highly regarded Whitby 42 cruiser, which is basically the same boat with a full-length keel instead of the fin-and-skeg underbody.

Ted has always known how to make boats sail fast and go to windward well, even cruising boats. From the beginning he favored the fin-keel design, and even when people asked him for cruising boats he'd do his best to persuade them to accept a fin-and-skeg underbody.

In the early days, most people ordering cruising-boat plans wanted full-length keels, and Ted would try to talk them out of it. He would negotiate until he got permission to take at least a little "bite" out of the after end of the keel where it would do most to help maneuverability and cut down on wetted surface drag.

How did he decide on the size of the bite? "I always took the biggest bite I could get away with," he admits. That trademark "Brewer bite" was a compromise that suited the coastal cruisers/club racers very well. It gave them improved windward ability and much better maneuverability in the close quarters of the marinas that were starting to spring up everywhere.

The first of the fiberglass production boats produced in the 1960s and early 1970s were not influenced by the later International Offshore Rule for racers, which favored shallow, beamy boats. But in the late '70s and the '80s, the builders of production family cruisers also demanded more beam because it added greatly to the space down below.

"The French also carried the beam way aft so they could get double staterooms into 30-footers," Ted says.

Are the owners of older boats, those built before the influence of the IOR became so pervasive, at any kind of disadvantage?

"Not at all. They have less beam, and therefore less accommodation. That's all," he says. "Moderate beam, in fact, makes a boat more seaworthy because it is less likely to capsize; and if it is hurled upside down by a large breaking wave, it is likely to recover more quickly than a boat with excessive beam."

If you have a really good old boat, Ted has a word of advice: "Hang on to it. Maintain it as best you can, and look at it as money in the bank — it's an investment that will pay off in the end. Maintain it like new, and you'll never be sorry.

"The Whitby 42 cost $42,000 to

That trademark "Brewer bite" was a compromise that suited the coastal cruisers/club racers very well. It gave them improved windward ability and much better maneuverability in the close quarters of the marinas that were starting to spring up everywhere.

Edward ("Ted") Brewer poses in his office with a picture of one of his early designs, the 53-foot aluminum ketch,* Mystic, *on her way to taking second in Class B in the Trans-Pac. The lines for* Black Velvet, *one of his favorite designs, are at left.

$45,000 in 1972. The last Brewer 42 (basically the same boat) built in Florida in 1990 cost $260,000. You work it out. And here's another example: The Luders 33 was $13,500 brand new. Now used ones sell for $40,000."

He considers the price of new sailboats to be "outrageous." That's mainly because comparatively few new production boats are being built. And the reason is that the good old boats built in the early days of fiberglass seem to be lasting forever.

One of the few problems with older boats, according to Ted, lies with the extensive use of balsa-cored decks to minimize weight and lower the center of gravity. Unless you're very careful, water seeps into the balsa when the deck gets damaged or you drill holes for new fittings. Edge-grain balsa is good at containing the area of dampness, but after a while extensive delamination of the wood and fiberglass can begin from a small patch. *(See Bill Sandifer's article on Page 38.)* But if you take care of your balsa coring and maintain your old cruiser in first-class condition, you'll have a boat that's as good as new.

Ted's own boat, an unconventional 24-foot Nimble Nomad, is one of a series of power and sailing flat-bottomed centerboarders he designed for Nimble Boats in Florida. None of them has any balsa cores. The decks are solid, composed of skins of fiberglass separated by a core of resin mixed with filler. "It can't rot, and you don't need to worry about compressing it when you tighten up on a fastener for a through-deck fitting. It's there forever."

Circumstances dictated Ted's choice of boat. "In the best cruising season, the summer and fall, there's very little wind on Puget Sound. And when there is wind, it seems to curve around every island and come straight at you, so I prefer to sit in the comfort of a cabin and go to windward at 7 knots to get places," says the man who has competed under sail all over the world and taken part in three Trans-Pac races.

One year he and his wife, Betty, cruised north to Sucia Island in the San Juan group in a Nimble 30 yawl, which has become a cult boat. During their cruise they came across a very ugly houseboat. A woman aboard the houseboat took one look at the Nimble and exclaimed: "What a pretty boat!"

Ted was skeptical. "I figured, heck don't get too excited. Anyone going around on a houseboat as ugly as that can't possibly be a judge of beauty."

But then the woman revealed that the houseboat was on charter. "We have a Concordia back East," she added. Ted was greatly mollified. "That suddenly made me very happy, because anyone who owns a Concordia surely knows a pretty boat when she sees one."

When Ted looks back over a lifetime of work and 260 designs, does he spot anything he wishes he'd changed? Would an inch here, an inch there, have made any difference?

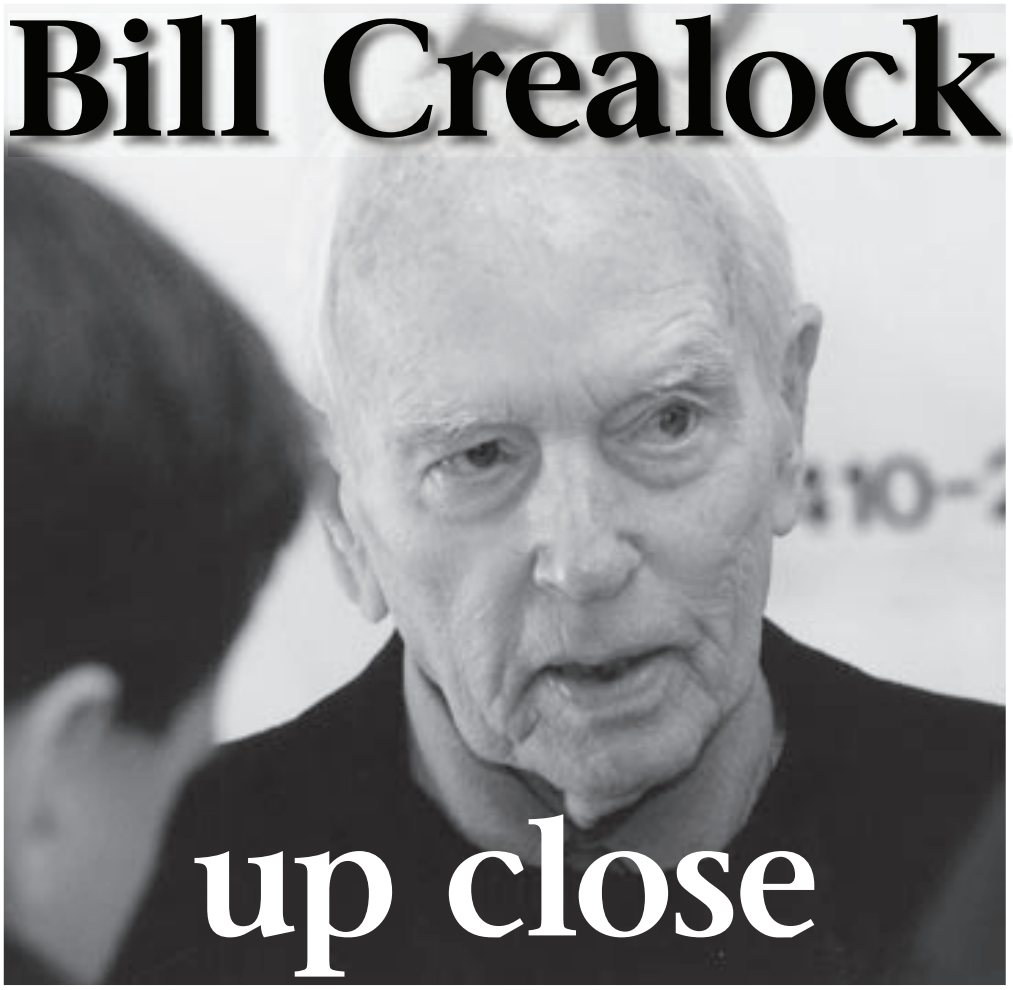
"Not to the underwater hull, not to the performance. But to the stuff above the waterline, yes — to the looks of the boat. I think it happens to every designer. You see a boat or look at a design years later and you say: 'God! Why didn't I give her an inch more spring in the sheerline?' Or 'Why didn't I pull that counter out another couple of inches?' It can make a big difference to the looks of the boat."

When he's not at his drafting table, Ted is either writing books and articles or pursuing his hobbies. He has written three books — *Understanding Yacht Design*, now in its fourth edition; *Cruising Yacht Design*; and *Ted Brewer Explains Sailboat Design*. His passion for sharing the secrets of boat design also reveals itself in the many articles he writes for the yachting press here and abroad.

He is justifiably proud of his G-gauge radio-controlled model railroad setup, in which he has invested "thousands — far too much," and his collection of World War I books, which now numbers about 300 volumes.

But he doesn't get to indulge in his hobbies as much as he'd like because the lure of the drawing board is always there. And you just never know when another miracle like *Black Velvet* might happen.

Bill Crealock



up close

This famed designer of ocean cruisers is the son of a son of a sailor

by Steve Mitchell

Do you ever wonder what goes through a yacht designer's mind while reading a review of one of his boats? If you're Bill Crealock, it's often this: "I'm always pleased," he says with a smile, "when a reviewer says one of my boats must have been designed by someone who spent some time at sea."

There's a reason for this pleasure. Boats have played an important part in three generations of the Crealock family. Bill also spent the better part of his 20s cruising the Atlantic and Pacific oceans at a time when almost no one else was out there. Who better to design a boat for long-range cruising than a man with salt water in his genes, one who had "been there and done that" long before world cruising was fashionable?

> *"The four of us decided the time to retire is in your twenties."*

William Ion Belton Crealock was born in Essex County in the southeast corner of England. What year he won't say. His father and grandfather had both grown up sailing small boats, so it was only natural for him and his brother to do the same.

"From the beginning, as little kids, we were always sailing small boats or making play boats wherever there was water," he says. "I always knew I wanted something to do with the sea when I grew up. I thought about the navy as a career, but those big ships didn't interest me much. My brother chose that as a career. Because I liked drawing boats as a kid, my father suggested that I look into designing. That was the beginning."

In the early 1940s Bill entered Scotland's Glasgow University, which at the time "was the Mecca for people from around the world who wanted to go into ship design and building.

"It made for a fascinating naval architecture class with people from China, Turkey, and Poland, among others. I spent two years there but realized I could never study yacht design there because at that time there was no such thing as a degree in yacht naval architecture."

Bill soon found a small college in Glasgow that offered evening classes in yacht design, but it didn't offer a degree. He took evening classes there and during the day began a five-year apprenticeship in a ship-design office. He spent those five years working on designs for large, steel merchant ships, "which was a little boring," as he puts it. Contrary to working one's way up the ladder of success, Bill found it more to his liking "to work my way down to a firm that designed smaller commercial vessels." It was closer to his true love of yacht design.

Retire early

Then the cruising bug bit Bill in a big way. He found three other young men of like mind, and the four of them decided to take to the sea. He says, "The four of us decided the time to retire is in your twenties. Otherwise, what was the point of working all your life and being too old to go sailing?"

The group sold all their possessions and pooled their money, having just enough to buy a wooden, 40-foot gaff-rigged cutter called *Content*. They set

out from England in the summer of 1948 with no particular destination, figuring they had enough money to last a year. "We thought that by the end of a year we could find a way of earning money en route to keep us going into the Pacific. We also were doing a series of articles for a magazine in England, and that brought in some funds."

For the next two-and-a-half years, the quartet sailed the Atlantic, spending as much time as they pleased wherever they touched port. Says Bill with his typical self-deprecating humor, "The magazine went bankrupt, no doubt as a result of our articles, and it was that money that was to take us across the Pacific. We did have some money waiting in New York from *National Geographic* for photographs of ours they had published, so we went up there."

But it was in New York that the quartet, still close friends, set off in different directions. Two returned home to England and a third stayed in the United States to get married. Bill hadn't had enough of the cruising life and was able to join a couple as crew on their boat, a husky, 69-foot wooden ketch, just before they set off for the South Pacific from Panama. According to Bill, "We went through the Pacific in leisurely fashion and ended up in Tahiti. I finally figured it was time I returned home, so I took passage on a ship to England via France."

Bill later chronicled these voyages in two books called *Vagabonding Under Sail* and *Cloud of Islands*. (*Both are now out of print, but Mark Busta at* Good Old Boat *specializes in finding used and out-of-print books. Just call or email.* –***Ed.***)

He spent a year living aboard a boat in England and returned to the States (as the only passenger aboard a small freighter) to visit the married member of the original quartet who was living in California. Just before he was to return to England, fate again stepped in to set up the next chapter of Bill's life.

Meet in six months

He met a wealthy gentleman who made the following offer: "My doctor tells me I must take off three months from work each year or possibly die."That man wanted to use this time to pursue his hobby of shell-collecting by setting up a foundation to study seashells. He asked Bill to find a suitable vessel, locate an amateur crew, and meet him in the Western Pacific "in six months from this date, and I'll pay all costs with a little extra for pocket money."

Excalibur 26, Bill Crealock's first successful racing design.

Bill found a 105-foot steel schooner, redid the deck and rig, rounded up a crew, and off they went just two hours after the last shroud was in place. They were less than eight hours late for the appointment with their benefactor in the Western Pacific. The group spent a year exploring that part of the world, from New Guinea to Japan. The only misadventure was a huge typhoon off the coast of Japan, in which the ship lost its wooden mainmast. They made it to Japan under jury rig and secured a new metal mast very cheaply because, as luck would have it, the Emperor was a shell-collector. "All very interesting, but a trifle damp," is the way Bill puts it.

Bill returned to California with every intention of heading back to England. But once again, fate intervened: "Someone asked me to do some design work, and one thing led to another. I opened an office in Newport Beach in 1958."

Bill's first designs in California were in wood. "What I did was design boats at night," he says, "and during the day I worked in a boatyard to find out how boats were built in California. When fiberglass came along, I gradually got into designing fiberglass production boats. I didn't specify a lamination schedule in the early days because the builders knew more about that material than I did. Gradually, we all formulated our ideas of what was required, applying engineering to it for stiffness and strength. Even Lloyd's Rules were feeling their way and watching the experience of builders."

His first production fiberglass designs in California were for Columbia Yachts, but his first successful racing design was a 26-footer for Excalibur Yachts. "It was a little different from the other boats of that era," he says. "The keel was a different shape, the lines aft were relatively fine, and it did well in racing. One year on Long Island Sound they called it 'The Year of the Sword' because the Excalibur had done so well."

First in Costa Rica

Bill designed for many of the early West Coast boatbuilders, including Westsail, Clipper Marine, Ericson, Islander, and other smaller companies. He also designed boats for Cabo Rico, which were the first boats built in Costa Rica. "They produce an excellently built go-anywhere cruising boat," he says.

According to Bill, "I was working on a larger design for Excalibur Yachts when they went bankrupt, which was not unusual. The real trouble in those days was that boatbuilding was, for the most part, a backyard business that grew very quickly. It sometimes wasn't very efficient, however."

Alas, as many builders have discovered down through the years, building boats has never been the path to riches, despite the apparent romance of a boat under sail.

Early on, Bill had another collaboration on a design that would help establish his name in yacht-design circles. "In those days [early 1970s] there was no real production cruising boat," he says. "Then a fellow who had been building a wooden 32-footer came and

Pacific Seacraft sailboat designs by Bill Crealock

Model	Production years	Re-introduced	Total Hulls
Dana	1986-1999	2001	256
Pacific Seacraft 31	1987-1999	2002	94
Pilothouse 32	1993-1999		21
Pacific Seacraft 34	1985-present		332
Pacific Seacraft 37	1980-present		369
Pacific Seacraft 40	1995-present		53
Pacific Seacraft 44	1990-present		17

asked me if I thought there would be a market for a fiberglass version of it. I said he just might sell a dozen, and I helped him convert the design to fiberglass. We kept the underwater lines unchanged because it was a William Atkin design based on a Colin Archer boat. I modified the rig, gave it a new interior, and that became the Westsail 32. Eventually they built 700 of them. It was a market no one had suspected."

Continues Bill, "Success for the company came too quickly in a way. *Time* magazine came out with an issue featuring the Westsail 32, and requests for the boat came in from all over the world. The company made the fatal mistake of taking orders at a given price with the boats to be delivered one or two years down the line. When the price of resin shot up in the 1970s, they had financial troubles. But with the success of the 32, they thought it was time to go bigger. I designed a 42 and a 43 for them that proved to be rather successful." But perpetual financial problems led to Westsail's bankruptcy in the late 1970s.

Pacific Seacraft

About this same time, Bill entered a design contest sponsored by a sailing magazine. The 37-footer he submitted "was the only chance I've ever had to design a boat that didn't have to please anyone else but me," he says. His design did not win the contest, but it did garner an honorable mention. This didn't surprise him. "The boat that won was a very modern design for the time, actually a rather hideous boat, I thought. It quickly disappeared."

A company called Cruising Consultants bought Bill's 37-foot design, built the molds and sold 20 boats. "Through no fault of their own, they, too, ran into financial problems," he says. "The molds became available, and Pacific Seacraft bought them. It's what Pacific Seacraft was looking for at the time (in the late '70s). They were a small company just starting up and had built a couple of in-house designs that were nice little boats, but they needed something new. So Pacific Seacraft and I sort of grew up together."

Bill's design, now known as the Pacific Seacraft 37, is in the Sailboat Hall of Fame.

"Time magazine came out with an issue featuring the Westsail 32, and requests for the boat came in from all over the world."

"It's funny how things work out," says Bill. "I never expected that. What was courageous of Pacific Seacraft was that the 37 didn't have as much volume as boats with the same overall length. It compares in volume more to a 35-footer. They went against the marketing practice anyway and built the boat. It's been quite successful."

So why has the 37 been so popular? "People tell me that initially it's the visual impact," says Bill, "and after that it's the boat's sailing ability and balance. I'm keen on the question of balance in a boat, especially at the helm when cruising long distances. Nothing pleases me more than hearing people say their child was able to steer the boat in 20 knots of wind without a problem. People forget about the fatigue factor when cruising."

After the 37, Bill designed the Pacific Seacraft 34. Then came the 24-foot Dana and the 31, both of which lack the canoe stern most often associated with his designs for Pacific Seacraft. On a trip Bill came across a 28-foot, William Garden-designed motorsailer that he thought was a very attractive boat. Back home, he approached Pacific Seacraft about building a pilothouse boat that might appeal to buyers in the Pacific Northwest. The end result was the Pacific Seacraft Pilothouse 32, which was based on the 31. The Pilothouse 32 sold well, but to a different buyer than expected. According to Bill, "where they sold principally wasn't in the rainy Pacific Northwest, but in the sunny southeast. People in Florida really took a liking to them."

The Westsail 32, at right, is an Atkin design modified by Bill Crealock. The Westsail 42, on the left, is Bill's design.

More performance

Next up was something larger to meet the demand for a boat in the 40-foot range. The idea had been kicking around between Bill and Pacific Seacraft for quite a while. The new design proceeded with the emphasis slightly more on performance. Pacific Seacraft wanted to go larger yet and asked Bill to design a 44-footer. It later was followed by a Pilothouse 40. The company also came out with two trawlers (not designed by Bill), expanding the product line to powerboats that sailors could move into as their needs changed.

One of the most well-known Pacific Seacraft owners is Nigel Calder, noted ocean sailor and author. A few years ago Nigel bought a Pacific Seacraft 40 and worked closely with the factory to customize it to his liking.

Says Nigel, "We were looking for a 40-foot boat, and the Pacific Seacraft 40 is the quintessential cruising boat. I knew that any design from Bill Crealock would be beautiful and well-balanced under sail, and this boat certainly is. We all get seasick and I have two slipped disks in my back, so we needed a boat that would take care of us. The boat also has excellent systems and good livability. It's in the little details, and Bill and Pacific Seacraft made no compromises in those details for seaworthiness. There are no curves where you don't need them, leecloths and handholds are in just the right places, pots and pans in the galley won't take off and hit you, and it has the best head I have ever seen on a 40-foot production boat."

As for performance of the 40, Nigel says, "It's a heavy boat aimed at family cruising. It handles those compromises very well. But surprisingly enough,

the boat is a good performer in light air even though the numbers don't reflect that. The underbody is more refined than people give it credit for and gives the boat a good turn of speed.

"Pacific Seacrafts are exceptionally well built," Nigel continues. "Down below the blend of laminates and wood is just about spot on. The kids are teenagers now and able to help sail the boat. So we are selling the 40 and looking at something larger with a longer waterline for more performance since we have more hands for crew."

Few Clipper Marine Quarter-tonners were built.

True gentleman

Don Kohlmann, president of Pacific Seacraft, emphasizes the importance of Bill Crealock to the company, not just as a designer, but also as a person. "Bill is one of life's characters," says Don, "a really good person and a true gentleman. His designs are always creative and interesting. He knows how to design a beautiful boat that performs well, a melding of function and aesthetics. He has a real attention to detail and a fine sense for drawing good lines. He's true to the purpose of the boat and imparts his personality onto each design. Bill is such a fine ambassador for us. He's personable and has a way of grabbing people's imagination."

It's obvious that the relationship of designer to builder is a special one in this case. "It is a symbiotic relationship," says Don. "It's a combination of his designs attracting attention and acclaim and then the reputation of the company in building quality boats." Indeed, *Fortune* magazine twice has recognized Pacific Seacraft as one of the top 100 producers of quality products in the world.

"We always fight the battle of interior volume when compared to some of our competitors," says Don. "It's true that other boats may offer more volume. But Bill's designs with lower freeboard and moderate beam for ultimate stability mean a more seaworthy boat. Plus, Bill can combine all those elements into a beautiful shape."

Nancy Cann, founder and president of Crusader Yachts in Annapolis, Maryland, has been a Pacific Seacraft dealer since 1986. "Pacific Seacrafts have an amazing following," she says. "It's almost a cult thing in some ways because the reputation of the boats is so good. They are purpose-built boats and not market driven, which attracts knowledgeable buyers. People buy them because of their beauty and performance and because these boats hold their value. There are very few boats built to go around the world, and even though most Pacific Seacraft buyers may never use the full potential of their boats, they like knowing that the boat is fully capable of going a lot farther than they ever intend. And if they decide to do some bluewater sailing, they already have the right boat."

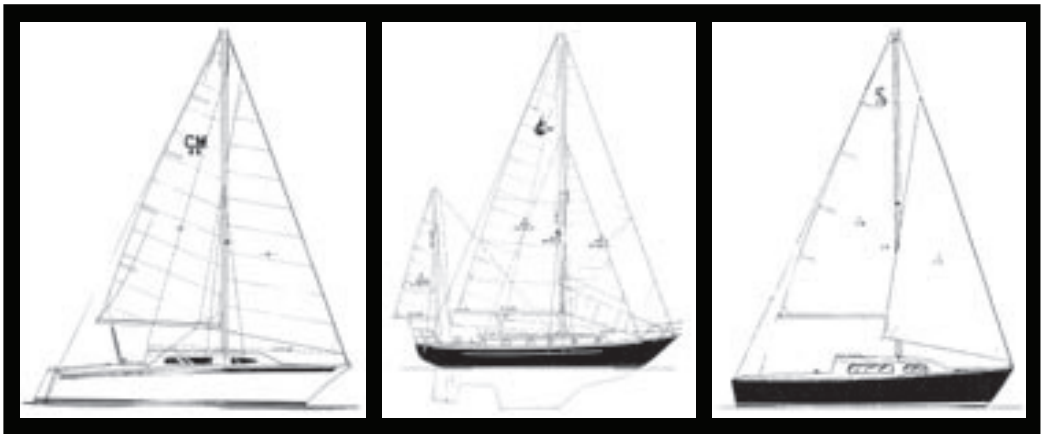
Design philosophy

By now it's clear that Bill Crealock has a design approach honed by years of personal experience on the water and by many years of successful design work. The end result of a Crealock design is always the same — beautiful, well-balanced boats that are extremely seaworthy.

For one thing, he doesn't follow the crowd. "I've tried in most of my boats to be a little bit different," he says. "I'm always working on new ideas. I'm lucky in having worked on a wide variety of boats in addition to cruising sailboats. They range from an 8-foot circular sailboat, which had comfortable seating capacity for six and actually did sail, to a 90-foot brigantine. I've worked with the Mexican navy on a patrol boat, on high-speed powerboats capable of 70 miles per hour, and on low-speed fishing boats. This is all in addition to my cruising sailboats. One of my favorite designs is a 65-foot wooden, gaff-rigged schooner, which is the kind of boat I'd like to go cruising on myself."

Bill also has a keen sense of aesthetics. "I'm perpetually fascinated by things like sheerlines and how an inch or an inch and a half can make such a difference in the look of a boat. I look at something in a magazine and often think that an inch-and-a-half difference in the bow or stern would be just right. For some reason an inch-and-a-half always seems to be the magic number. I get a great deal of pleasure fiddling with sheers in proportion to bows and sterns. Of course, sheer does help a boat stay dry. Probably the most logical thing is a reverse sheer with high shoulders near the forward end because usually when you take green water it's not so much over the stem as over the shoulders of the boat. I used a reverse sheer on a smaller boat but never felt comfortable with it on a larger one. It's a mental thing. I just like the traditional sheer."

Besides balance, Bill also finds that "motion in a seaway is so important, especially on a long cruise. Motion directly affects performance with a small crew." Bill's aim is to produce a shape that "neither cuts straight



Clipper Marine 23 **Pacific Seacraft 37** **San Clemente 23**

through waves, drenching the crew, nor rises to every wavelet, making the crew seasick. There's no doubt that weight is the biggest single factor in comfortable motion, but clearly has to be limited." Some of his boats have narrower beams than other popular boats today, "but if you take the ratio of beam to waterline length, rather than overall length, most are about average," he says. "Yes, fat boats give you more interior volume and a little more initial stability, but if you do ever get rolled by a freak wave, the slightly leaner boat has a better chance of righting itself."

"Bill's design, now known as the Pacific Seacraft 37, is in the Sailboat Hall of Fame."

Always compromises

States Bill, "Almost every feature of a cruising boat is a compromise. The best of them keep close to the middle road. One must remember that speed on a passage is quite different from speed round a racecourse on a weekend afternoon."

When asked why so many of his designs have canoe sterns, Bill says, "People always ask me about that. I don't think there's anything magical about a particular stern, although I do think the canoe has a slight advantage under some conditions. I believe it's important to have plenty of reserve buoyancy, something the pure double-ender tends to lack. As much as I admired the achievements of the Westsail 32, I felt her stern was a little cramped. To a following wave, the canoe stern, or a modest transom stern, offers little to grab onto. But a big, wide sugar-scoop stern seems to beckon to a following sea and could lead to broaching."

Further to the subject of handling in bad weather, Bill says, "When I do a design I start with the stern and not with the bow because in extreme conditions the stern may become the bow. For ocean work I aim at a boat that will take care of its crew in the very worst conditions. Then the other conditions will take care of themselves."

Who are some of his favorite designers? Bill answers with, "The late Laurent Giles, of England, who had such a wonderful sense of proportion, and others whose boats pop up out of the page because their lines seem just right, such as German Frers, Aage Nielsen, Bruce King, John Alden, and Thomas Gillmer

Bill Crealock says

WHILE HE WAS SENDING SOME OF THE ILLUSTRATIONS USED WITH this article, Bill Crealock made insightful comments about his designs. Those comments follow.

Excalibur 26 – The very early days of fiberglass boats; we were all designing fairly light displacement boats. Perhaps her main advantage, apart from some racing success, was that she was very easy to sail and was well- balanced. A salesman said to me, "If we can just get the wife on the helm, I know we have a sale."

San Clemente 23 – One of my favorites. Well built and surprised us by doing well racing on the few occasions when one was campaigned. Not a long production run, due to financial difficulties of the builder.

Columbia 21 and 22 – Same basic hull, the 21 was an open version of the 22. Columbia 36 had some initial racing success but was somewhat heavily built and developed a following as a cruiser.

Westsail 32 – Uncovered a market no one suspected existed in this country. Main problem was convincing people that it was safe to take some small boats across oceans. An older Atkin design, we kept strictly to his lines. Though not designed for efficient windward work, she was surprisingly capable off the wind.

Westsail 42 – Proved to be a very comfortable and well-balanced boat for cruising. Some of the boats were given a very conservative sail plan for those who were still nervous about a larger sail area at sea. With her fuller sail plan, she many times sailed past some of the split underbody cruiser/racers.

Clipper Marine 21 – The first in a long line of trailerable sailboats I did for Clipper Marine, 10 models from 21 to 32 feet. Many thousands sold. Many still around.

Clipper Marine 23 – One version was twin-keel. The keels were very carefully designed. The dealer refused to take delivery of #1 — having had experience with imported twin-keelers. He finally was persuaded to try it out and immediately placed an order. No difference between it and its swing-keel twin in performance.

Bill Crealock at the wheel of a Pacific Seacraft 37, the boat he designed to please himself.

Crealock 37/Pacific Seacraft 37 – The first in the line of Pacific Seacraft boats I did, from 24 to 44 feet. Reportedly behaves well in extreme conditions and is well-balanced. One owner complained that, whereas he could never get his wife to take her trick on the helm in previous boats, now he couldn't get her off the helm. A few yawls were built in the early years but no longer.

Clipper Marine Quarter-tonner – Few were built because it was introduced shortly before the company choked on its own success and folded. Did well racing against other production quarter-tonners.

among others. And not to forget our patron saint, Francis Herreshoff."

Talk to Bill Crealock for more than a few minutes, and it's easy to tell how important the cruising life has been to him. Read his books about his adventures as a young man, and you can still sense that certain faraway look in his eye all these years later.

"Usually when you think about something as being very desirable," says Bill, "when you have it, it's not quite as good as you thought it would be. But for me, the cruising life was even better. It's very seductive, the ultimate freedom, the ultimate story with a surprise on every page. It's a wonderful way of life. It can get you into such wonderful situations. Many people think that ocean sailing is dangerous, but it's coastal cruising that's dangerous — more things to hit.

"I aim at a boat that will take care of its crew in the very worst conditions."

Keeping it simple

"The main thing for us back then was to enjoy our cruising by keeping it simple," he says. "We nearly always were the only boat in the places we went. Even in Gibraltar, the crossroads of the world, we only saw a handful of other boats in those days. That was the golden age of cruising. Even today I still love looking at maps and charts."

Bill's design work now is about evenly split between sail and powerboats. He strives to keep his workload manageable, keeping the office to three people total, including Bill Luther, who has been with him for many years. He prefers to work on his own designs rather than running a larger office and "running around the country bringing work in to keep others busy. That doesn't appeal to me. There are 7,000 of my boats out there, mostly smaller ones, and that means 7,000 owners could call me up at any given time — a terrifying thought."

One of his recent projects was the design of two wooden, 90-foot brigantines for the Los Angeles Maritime Institute. "The institute runs programs to help disadvantaged youngsters," says Bill, "and performs near miracles with some of the youths. I've seen their letters. Naturally the institute is always in need of donations."

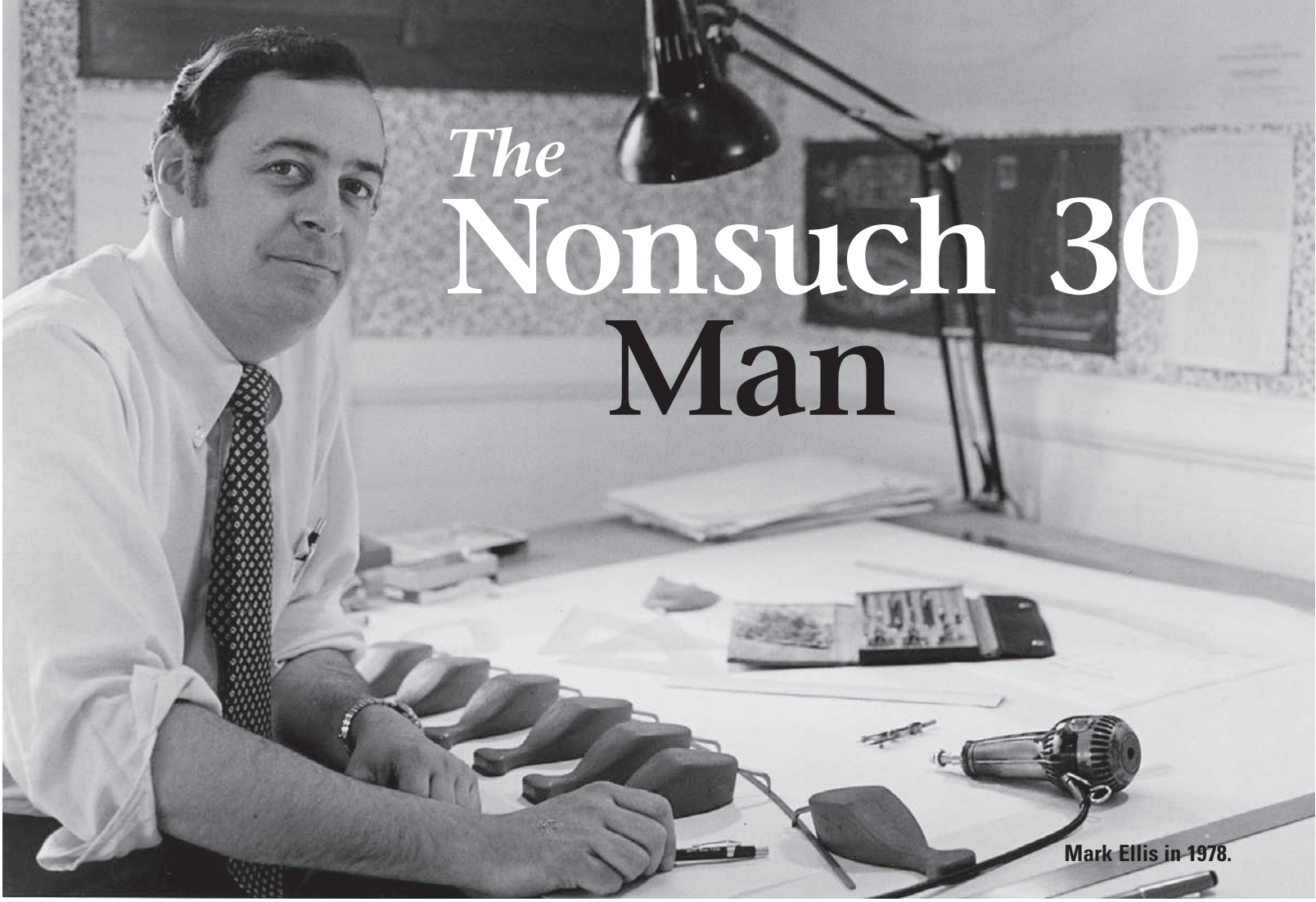
According to Bill, the ships are of "traditional design above the waterline with more modern and quite slippery underbodies. They also were built using traditional construction methods." Both ships have completed their sea trials and are now in service. They also will serve as the official tall ships of the City of Los Angeles.

Bill and Lynne, his wife for more than 30 years, lead very active lives. Lynne is a well-known painter and travels whenever she can with Bill. She also is an experienced sailor, having sailed in the Mediterranean and Caribbean for six years when she was younger and before marrying Bill. "But he and I have never cruised together," she says. "Cruising is a great life. You don't have to change hotels; you take your own things with you. It's a wonderful way to learn about other cultures."

What about retirement plans? States Bill, "My ambition would be to work only five days a week. That would be semi-retirement for me."

Don't count on that too soon. Bill Crealock is having too much fun. After all, he has already retired once.

Bill Crealock and his wife, Lynne, a well-known painter and experienced sailor.



The Nonsuch 30 Man

Mark Ellis in 1978.

Meet Mark Ellis, designer of a most unusual catboat

by Dan Spurr

Mark Ellis, the energetic designer of the Niagara 35, Nonsuch 30, and many other handsome production and custom boats, is a New York Yankee who moved to Canada as a member of George Cuthbertson's court — and stayed.

Perhaps you've seen him at a boat show greeting the public in the cavernous cockpit of the Northeast 400 motorsailer or, some years past, in one of his best-known designs, a Nonsuch catboat. More likely, you saw him flying by with leather briefcase in hand, headed for who-knows-where. Mark doesn't sit still long. Always nattily attired and going to windward at 30 degrees apparent, Mark Ellis short-tacked through an impressive string of design houses in becoming one of Canada's premier yacht designers.

Mark was born February 4, 1945, in Watertown, New York; that's "upstate," not far from the eastern end of Lake Ontario. His father owned a department store in which Mark worked as a boy. This was his first exposure to retail and to business, and the experience still serves him well.

The Ellis family was a sailing family. In 1930, Mark's father had an Atkin yawl designed and built. This was kept and cruised on Lake Ontario. Later the family bought an island on the St. Lawrence River, one of the Thousand Islands. Mark learned to sail there aboard what he calls "an overgrown Lightning" and a small frostbiter.

At the Clayton Yacht Club in Clayton and the Crescent Yacht Club in Chaumont, both in New York, he raced a wickedly fast Dragon-class boat, the 29-foot keelboat sailed with a crew of three. He also taught sailing at both clubs. Spending so much time around boats, it's no wonder he developed an interest in design. Some see the form, some don't. Mark did.

One year off

His first year of college was spent not far away at Syracuse University, followed by a year off when he worked first at Bob Derektor's yard in Mamaroneck, New York, followed by the Minneford yard at nearby City Island. Paul Coble, the famed surveyor, was at the Minneford yard at the time and rotated Mark through "every gang in the yard," beginning with cleaning boat bottoms with "witches' brooms" and progressing up to rigging and planking. The yard had just gotten the contract to build *Constellation* and a big motorsailer for Henry Morgan called *Dajinn*. Soon, Minneford would turn to aluminum construction, but *Dajinn* was wood. "The gang came from the old Nevins yard," Mark says. "I watched one guy sight a plank, run it through the planer two times, and then fit it. They were that good."

After the year was up, it was time to return to college. With the thought of pursuing a degree in naval architecture, he applied to the University of Michigan and was accepted. But the more he learned about the program,

the more Mark realized it involved a lot of marine engineering and big-ship work, when his love was always for smaller boats. So he declined and stayed on the East Coast to take a degree in business administration from Boston University.

While attending school he worked part-time and during summers for C. Raymond Hunt & Associates. At that time, Ray Hunt was in the process of turning over the business to John Deknatel, who moved the office from Padanaram, Massachusetts, to Cambridge. "I was a so-so, self-taught draftsman," Mark says. "I was a reasonable sailor and had run a lot of powerboats, but I didn't know enough to help them much. They helped me a lot more than I helped them."

Looked for work

In 1968, Mark graduated with a bachelor of science degree and began looking for work. "I never answered a newspaper ad," he says. "I just walked in the door and said, 'This is what I can do.' "

The next door he walked through belonged to none other than Philip Rhodes, a well-known yacht designer and marine engineer in New York City.

"Phil's son, Bodie, and Jim McCurdy had just left," Mark remembers, "which left a sort of vacuum that worked out well for me. I was fortunate to work right under Phil."

"I never answered a newspaper ad," he says. "I just walked in the door and said, 'This is what I can do.' "

Rhodes had three boats abuilding in Germany, and 23-year-old Mark was made project manager, where his business acumen helped enormously with accounting, purchasing equipment, and handling overseas shipments. These were no mean projects: two 67-foot ketches and a 98-foot ketch. He made three trips abroad working out details. "The designer is the arbiter between the yard and the owner," he says.

In 1969, his first child, Joe, was born, and he and his wife decided they did not wish to raise him in New York City. So Mark next walked through the doorway of Ted Hood's Little Harbor Boat Yard in Marblehead, Massachusetts. Dieter Empacher and Walter Wales were on the design team. Mark, who had worked drawing powerboats and managing projects, now was assigned to sailing rigs. Under the tutelage of engineer Walter Wales, he also developed accommodation and deck plans for the various heavy, whale-bottom, centerboard boats Hood was having built at the Frans Maas yard in the Netherlands. "Again," he says, "they were nice people, and I learned a lot. I used to race Sundays with Ted on one of his *Robins*, a 52-foot centerboard yawl."

Bright young group

Before coming to Little Harbor, he'd written a query letter to George Cuthbertson at C&C Yachts, where a bunch of bright young designers were churning out dominating racers and popular performance cruisers and George C. was king of the court. A year later, in 1970, he got a call from Cuthbertson asking if he was still looking for work. A sponge who'd soaked up all the information he could in Marblehead, Mark headed west to Oakville, Ontario.

"I knew the area," he says, "and just at that time the amalgamation [of the four founding companies, Belleville Marine Yard, Hinterhoeller Yachts, C&C, and Bruckmann Manufacturing; see *Good Old Boat*, September 2002] was taking place. The company's prospects were looking up. Henri Adriaanse, who'd worked for E. G. Van de Stadt, and I were the only ones who'd worked in an outside design office. The others, like Rob Ball and Rob Mazza, all grew up there.

"It was the hot place to be in the early 1970s. We were working on pretty exciting stuff. Since I was now a rig specialist, I did the rigs, beginning with the C&C 61, *Sorcery*, and then the 43. I did all sorts of general stuff, too, but eventually drifted into the business end. They didn't really have a strong business orientation . . . boats would leave without being paid for, that sort of thing. I began selling boats for the Bruckmann custom boat division and sailing a lot with clients — club races, the SORC, the Bermuda Race. I pushed the whole yachting establishment onto C&C, which was good.

"At C&C," Mark continues, "the development of a new model began with George Cuthbertson's preliminary drawings. He'd then send them to Henri Adriaanse, for the lines, and

Mark Ellis' popular Nonsuch 30, at left, and the Niagara 35, at right.

Rob Ball, who did all the technical stuff. George Cassian did the rigs, decks, and detailed metal pieces, and I was second to Cassian."

Always learning

As he had everywhere else he worked, Mark learned a lot — about yacht design, construction, and sales. But in 1975 it was again time to move on. C&C's decision to open plants in Germany and Rhode Island, at a time when the industry was in one of its periodic downturns, was "more eager than sense," Mark says.

He took the next step in a logical staircase and opened his own company, Mark Ellis Design Ltd. His first commission was the Aurora 40, but it was the second that really put his name in lights, the Nonsuch 30.

This unusual cruising boat was the brainchild of Canadian yachtsman Gordon Fisher, a friend of Mark's who had owned a series of C&Cs, co-skippered *Red Jacket* in her circuit victory, and co-skippered *Manitou* in her winning of the Canada Cup. "Gordon was," Mark says, "a very knowledgeable yachtsman. He wanted to do a fin-keel, spade-rudder catboat."

Gordon, Mark says, was tired of big boat racing and all that went with it — the care and feeding of crews, maintenance, and expense. What he wanted was a simple boat that could be raced singlehanded or perhaps by two people. Fisher wanted a Ljüngstrom or una rig because he didn't want a boom. Mark wanted a wishbone and, after much conversation, eventually convinced Fisher to go with it.

The catboat concept was taken to George Hinterhoeller, who also had left C&C to again start his own boatbuilding company. George was not in favor of the catboat, believing it had no chance of selling. But when Fisher said he not only had orders for four hulls, but would put up the money for the tooling, too, George couldn't lose.

First in the water was the Nonsuch 30, followed by the 26, 22, and 33. In all, more than 1,000 were built, surprising everyone, but none more than George Hinterhoeller. Mark says, "It just took off."

Weird wishbone

Dick Barton, onetime head of the Chesapeake Bay Nonsuch Association and winner of more than 70 club trophies, told *Soundings* some years ago that the wishbone boom was "weird. But I'm not afraid of weird, and I soon found out that it works." Off the wind, the rig becomes self-vanging, which simplifies sail handling.

"His first commission was the Aurora 40, but it was the second that really put his name in lights, the Nonsuch 30."

Jim Eastland, a dealer who eventually sold hundreds of Nonsuchs, says some customers "couldn't abide the look. Sometimes people would get angry at the idea of being offered one of 'these things.' I didn't have too much of an opinion on the boat myself until I started sailing it," he told *Soundings*. "The traditional catboat's weather helm wasn't there, there was no barn-door rudder hanging off the transom, and it went pretty fast. That's when we realized that the boat was something special."

Unlike some other yacht designers, Mark always retains ownership of his designs. "I get paid by the boat," he says, "I never sell the plans." While some designers have difficulty getting royalties paid, Mark says his business background has enabled him to write contracts that protect his interests. "From a business standpoint," he says, "I've put together agreements that have worked very well. Usually I retain some sort of control over the tooling."

His first powerboat design was the Limestone 24 for Fred Eaton, built by Hinterhoeller, which was followed by the Limestone 20 for the Medeiros Boat Works of Oakville, Ontario. Because he'd worked for C. Raymond Hunt & Associates, who pioneered the deep-V hull form, and spent so much time driving powerboats, Mark says he felt more confident about his ability to design a good powerboat than he was of the Nonsuch's cat rig with wishbone. Other builders did 17- and 22-foot versions.

Over the next few years, all but Medeiros went out of business, so Mark recovered the tooling and gave it to Medeiros, who then produced the entire line under the Limestone name. Mark is quick to point out that this was only possible because his contracts with the other builders had provisions concerning his rights to the tooling.

Aboard for the ride

During the last 10 years or so, a number of high-end sailboat builders have started building classy powerboats, many styled after Downeast lobster boats, and Mark Ellis hopped aboard for the ride. The Legacy 40, built by Freedom Yachts in Middletown, Rhode Island, was tooled by Bruckmann in Ontario and later sold to Freedom.

"I was after something that would operate in the mid-teens, plane at 12, and top out at 20 to 21," Mark says. "We developed a hull form that's a deep V forward, and as it comes aft there's a lot of rocker and a large chine flat. That's what makes the boat go. You sort of envision what's going to work. In this business, you go straight from the drawings to the plug to the mold to the boat without

The custom-designed Bruckmann 42 is sure to elicit sighs of appreciation.

testing. The 40 was introduced at the 1994 Newport boat show, and I made Mark Bruckmann launch the boat just before it so we could show that it works. People were telling the man who put up the money for the tooling that a single engine might not be enough power. Of course I knew the boat could handle twin engines, but because these boats appeal to sailors I thought it was important to also offer the economies of a single engine. During sea trials it ran right in the numbers, planing at 12, topping out at 21."

The Legacy 34 was added later, and similar designs are being built by Bruckmann (a 56-footer) and Barrett Holby (the Pilot 19 and 24).

Mark's versatility extends to the motorsailer genre as well. His friend Jim Eastland, a former C&C dealer, presented him with his first motorsailer design commission. "Jim has a good design sense," Mark says. "He came to me with the idea of a motorsailer, saying he really thought there's a place for this. Sailors were dropping out to trawlers, but Jim thought they'd stay with sails if they could still have the trawler comforts. I've always admired the motorsailers of Phil Rhodes and William Hand and thought that with a fin keel we could really improve performance.

Flattened out aft

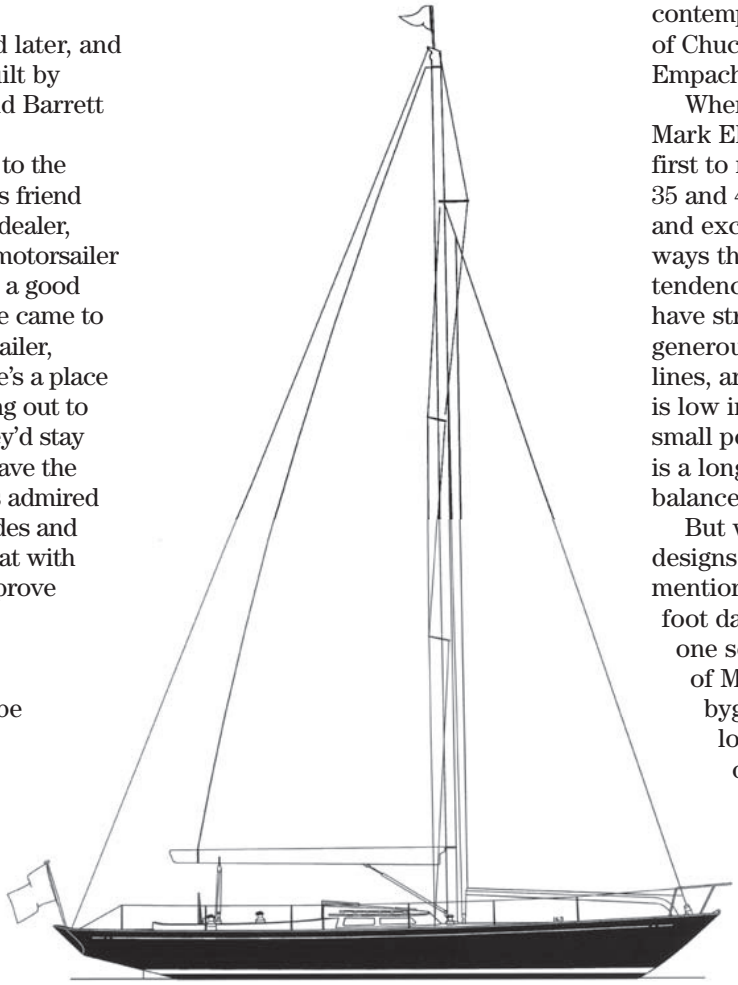
"Originally the boat was to be a 36, but it was stretched to 37½ feet," he adds. "The basic concept of the Northeast 400 was a Nonsuch except that it was flattened out aft so it wouldn't dig in the stern at speed. And we had to make sure that when the boat heeled it would still balance. In flat water it does 10 knots with its 100-horsepower four-banger Yanmar."

The Northeast 37 is built by Cabo Rico in Costa Rica. Mark has visited the yard there and is impressed with the facility and staff. A similar motorsailer design is under construction at Bruckmann Manufacturing in Oakville, the Bruckmann 480.

Design philosophy

When asked to describe his design philosophy, Mark says, "There are

"Unlike some other yacht designers, Mark always retains ownership of his designs. 'I get paid by the boat,' he says, 'I never sell the plans.' "



Sail plan for *Volunteer*, a custom 47-foot sloop.

Resources

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really two sides to it. One is aesthetics, which is very important to me. There's a classic line that lasts; 20 years later it still appeals. I don't like trendy, boxy boats, though I can see the reason behind them, like stretching waterlines, but I've never liked bad aesthetics for no good reason.

"From a performance standpoint," he goes on, "I've done enough racing to like a boat with a nice motion. Balance is key. I could never go along with boats that are odd-shaped and have a cranky motion." Among his contemporaries he admires the work of Chuck Paine, Bob Perry, and Dieter Empacher.

When one runs down the list of Mark Ellis-designed production boats, first to mind may well be the Niagara 35 and 42, both built by Hinterhoeller and excellent cruising boats. In many ways they typify Mark's artistic tendencies and design beliefs. Both have strong, masculine looks with generous freeboard, sweeping sheerlines, and classic ends. The coachroof is low in profile and flat with fairly small portlights. Underwater, the keel is a long cruising fin and the rudder a balanced spade.

But when asked which of his many designs is his favorite, Mark quickly mentions *Volunteer*, the custom 47-foot day sloop built in 1996. In her, one sees a somewhat truer picture of Mark's style, a style from a bygone era when yachts were long and lean with graceful overhangs, low freeboards, and powerful rigs. Not that his other designs, especially those produced as series, are unfaithful to this style, just that commercial enterprises are by necessity closely governed by consumer demands. In *Volunteer*, Mark and owner Fred Eaton were free to express themselves, and what a lovely expression she is!

Mark Ellis lives and works in Oakville, where he manages a successful design office. He enjoys dual citizenship with the U.S. and Canada. An active yachtsman, he enjoys sailing and powerboating, often from his vacation home in the Thousand Islands area.

Doing it right *the* first time

Multihull designer Ian Farrier popularized the concept of trimarans

by Marianne Scott

Photo by Marianne Scott

If not the inventor of the trailerable folding trimaran, Ian Farrier, 56, has done more than any other designer to popularize it, with more than 2,000 boats, both production and home-built.

The wind was blowing only 13 to 14 knots in Canterbury Bight off Timaru on New Zealand's South Island, yet we were ripping along at nearly 10 knots over the turquoise water on an F-9A/F-31, one of multihull designer Ian Farrier's well-known folding trimarans. It's the first time I'd sailed without a heavy lump of lead hanging below me. My host, Ken Wood, who was building Farrier's 36-foot trimarans at his local plant, had parked me on the netting between the main hull and starboard float (or ama as the Polynesians call them). Lying on my stomach, I watched the water flash below me. "Am I in a NASCAR race?" I wondered.

It seemed most natural to experience the thrill of sailing a trimaran during our down-under holiday, because 800 to 1,000 years ago these islands were colonized by skilled sailors who arrived there from Southeast Asia in proas and outrigger canoes. Moreover, Timaru is only a few miles south of the major New Zealand city of Christchurch, where multihull designer Ian Farrier was born in 1947, lived his young years, and grew enamored of boats. And it was particularly the speed of tri's — or "troi's" as Ian calls them in his soft Kiwi accent — which kindled his love of multihulls.

Learning the ropes

Ian learned to sail early. His father was "into powerboats," but when Ian was about 10, the family bought a "bach" — the New Zealand term for cottage — on Charteris Bay, not far from Christchurch. The bach came with a Takapuna-class dinghy, a heavy, gaff-rigged, 14-foot wooden boat. Ian remembers how a neighbor, Harold Smart, showed him and his brother, Peter, the ropes, although the dinghy was rigged with rusty steel wire and "other nightmare stuff."

> *"I was attracted to trimarans because, to some degree, they look like airplanes. I like fast cars, and I like fast boats."*

When Ian's father noted his sons' zeal for sailing, he decided they should build something nimbler — a Cherub, a New Zealand class designed by John Spencer. Plans were purchased and the garage converted into a boat shop. The elder Farrier enlisted a Dutch carpenter named Henk to help the kids on weekends. "Henk showed us how to construct a plywood dinghy," Ian remembers. "We built the frame, mixed the glue, and bent the plywood. That's how I learned the basics of boatbuilding. I couldn't have had a better teacher than that Dutchman."

Ian enjoyed sailing the Cherub, the first boat he could get up again after capsizing. But the 14-footer required a crew of two, so Ian opted to build a 12-foot Zephyr, a cold-molded dinghy resembling a Laser, which he raced in a one-design fleet. "Small monohulls are great fun," says Ian. "I'd rather sail a monohull than a small cat; monohulls are responsive and more comfortable because you can sit in, rather than on, them. I don't like Hobie Cats and other small catamarans because they won't tack, but a dinghy can flick around and tack out."

Life changed significantly for Ian when his father died of a brain tumor

in 1966. New Zealand had death duties, and Ian's mother was forced to sell the bach and downsize the family home to pay the taxes. "I think they took about a third of the assets," Ian says with a wry shrug. "It certainly ended my sailing days in Charteris Bay." All this took place during Ian's second year of mechanical engineering studies at the University of Christchurch. An unhappy student, he found bridge-building tedious, and felt "bored out of my brains."

In retrospect, Ian believes he had a touch of what is now called attention deficit disorder. He struggled to concentrate on lectures. "I could do the work but found it very hard. Even now, if I go to a lecture or a symposium, it just drives me nuts. Fortunately, if I need to learn something, I can get a book and grasp the material with no problem but only on that particular subject. If it covers anything else, I'm not interested. There should be a university for people like me."

His first trimaran

Ian left the university in 1967, raced cars as a hobby, and worked at various jobs until the boatbuilding bug bit again. He dreamed of traveling and began searching for a boat. Around this time he chanced on an article touting trimarans in the popular British magazine, *Practical Boat Owner*, so when a local man advertised an unfinished tri for sale, he investigated. "I was attracted to trimarans because, to some degree, they look like airplanes. I like fast cars, and I like fast boats." He also liked the deck space, shallow draft, and easy handling, so after surveying the unfinished tri, which was on a mooring, he shelled out $700 — a modest purchase, perhaps, but one that transformed his life.

"He teamed up with a mate, saying, 'It's going to be hell today — 45 knots at least — so let's go out there and break the thing.' "

The trimaran was based on a design by Arthur Piver, the California yacht designer who popularized plywood trimarans during the 1960s and whose plans allowed amateurs to build them using lumberyard- and hardware store-grade materials. "Piver put tri's on the map," Ian says. "He sailed one across the Atlantic and to New Zealand. He was also a promoter, putting out tons of publicity about tri's and what they could do. It both irritated and converted a lot of people."

Ian's new boat was only a shell and needed work. He pulled it out of the water, rented space, and spent two years finishing it. To finance the project, he worked as a toolmaker, a skill he acquired quickly. "I've always done well with my hands, so toolmaking came easy. And handy. I fabricated chain plates, rudders, and other pieces in the shop. And I learned to run the machines, lathes, and presses — that became valuable when I designed the folding trimaran, which used lots of metal."

In 1969, having rebuilt his trimaran, it was time to put her to the test in the famous Roaring Forties. The way Ian tells it, his shakedowns would give nightmares to all parents of intrepid, 22-year-old sons. He teamed up with a mate, saying, "It's going to be hell today — 45 knots at least — so let's go out there and break the thing." A southerly "buster" (Kiwi for sudden gale) was forecast. In New Zealand, southerly busters are preceded by strong northwest winds. While the pair was belting along with all sails up, the southerly hit from the opposite direction at 70 knots. The boat flew up in the air and the rig sheared off, which

A brief history of multihulls

No one knows when multihulls were first built, but most people agree the concept originated thousands of years ago in Southeast Asia. The boats were lightweight, fast, stable, capable of carrying cargo, and may have been up to 80 feet long. In its simplest form, the early multihull was probably nothing more than a dugout canoe with an outrigger. Some form of multihull likely carried the first colonizers to Australia, New Zealand, the South Pacific's numerous islands, the Philippines, and Hawaii.

According to some sources, Sir William Petty launched the first western catamaran in Dublin in 1662. King Charles II named the boat, with its twin cylindrical hulls, *The Experiment*.

Fast forward to the 19th century. In 1868, John Mikes built *Nonpareil*, rigged her as a schooner with a tent between the masts, and sailed the 25-foot rubber-hulled trimaran across the Atlantic in an unheard of 51 days. Next came legendary yacht designer Nathaniel Herreshoff, whose 24-foot catamaran, *Amaryllis*, sailed at nearly 20 knots and handily won the New York Yacht Club's Centennial Regatta in 1876. Henceforth, Herreshoff was strictly forbidden to race catamarans at the venerable club.

Woody Brown, who learned about multihulls during his World War II service in the Pacific, was next in line to make multihulls popular. He affiliated with boatbuilder Alfred Kumalae, designer Rudy Choy, and Warren Seaman to found C/S/K Catamarans. In 1947 they launched the 38-foot plywood *Manu Kai*, the world's first modern asymmetrical catamaran. Many others experimented with multihulls, but Arthur Piver is credited with popularizing trimarans after he crossed the Atlantic in his 30-foot *Nimble* in 1960.

Over the next decades, other designers and builders, notably Jim Brown, Lock Crowther, Derek Kelsall, Dick Newick, Prout Marine, Hobie Alter, Bill and Ricky Symons, and Tony Smith, helped to convince a skeptical public that multihulls are just as safe as monohulls. The fact that a cruising catamaran heels just a few degrees and trimarans only about 15, reduces the fear factor for a lot of people. Their expansive decks are appealing also, and the large accommodations of cruising catamarans have made them a favorite of yacht charter companies. Sailboat shows today exhibit an ever-increasing number of multihulls, proof that they are no longer considered unsafe or odd. They are indeed appreciated for their many virtues, foremost of which are speed and size.

History of Farrier trimarans

1973
Ian Farrier invents new trimaran folding system and applies for patents.

1974
The original Trailertri prototype is built and launched in Australia.

With his wife, Alicia, watching, Ian tests the stability of an early Trailertri in the folded position.

1975
Farrier Folding System™ patent granted.

1976
Ian builds the first Trailertri 18.

First 18-foot Brisbane folder Trailertri prototype, with Ian aboard.

1977
Ian builds the first Trailertri 680.

1980
The first production fiberglass Farrier trimaran — the Tramp — built by Haines Hunter.

Haines Hunter production line was building six copies a week.

1983
Trailertri 720 introduced.

1984
Ian moves to the U.S. to set up Corsair Marine and design the F-27.

First F-27 prototype, 1984.

May 1985
The prototype F-27 *Super Fox* is launched.

June 1987
The first ocean crossing by an F-27.

Introduced in 1985, about 450 F-27s were built before it was replaced by the F-28.

April 1989
The Corsair F-27 wins the multihull division of the Newport-to-Ensenada Race.

March 1991
Ian leaves Corsair Marine.

1991
The F-9A becomes the production F-31 under license to Australian builder OSTAC, and is launched in 1992. It wins Australian Sailboat of the Year.

The F-31, in Sydney Australia.

November 1992
The F-31 is licensed to Corsair, but the relationship breaks down again.

January 1993
First F-25A is launched.

The F-25 built in Australia.

April 1994
Corsair is sold to Paul Koch.
The F-31 and F-24 become successful.

February 1995
The F-25C — a high performance epoxy/carbon kit boat — is launched.

January 1996
The F-36 is launched.

Ian considers the F-36 to be his first fully capable offshore yacht.

October 1996
F-31R introduced, featuring a taller rotating carbon fiber wing mast.

February 1997
The first F-28 is launched.

February 1998
An F-28 wins *Sailing World's* 1998 Performance Multihull Sailboat of the Year award.

December 2000
Ian separates again from Corsair Marine.

October 2001
Work begins on the F-33.

January 2003
The F-33 is launched in Australia.

These days, Ian is concentrating on the F-33.

Ian reckons kept them from capsizing.

He disliked the fact that his tri, at slow speed, "wouldn't tack worth a damn."

"Piver had added little winglets to the floats," explains Ian, "but all later trimaran designers added a dagger-board or centerboard to the main hull to improve the ability to point and tack."

Ian's mooring in Littleton Harbour was highly exposed and, if the boat wasn't pointed in the right direction, she'd accelerate right onto the rocks. Nevertheless, it was the speed he found intoxicating. "You become your own worst enemy because you're flying at 20 knots. Everything seems fine until you push it too hard and you pitchpole. You've got to keep yourself back from the edge."

The safety issue

The tales of these foolhardy trials lead naturally to the persistent questions about multihull safety and their alleged inclination for turning turtle. Victoria, British Columbia, veteran multihull racer Nick Banks claims, only partially tongue-in-cheek, that "a monohull is happiest on the bottom, while a multihull is happiest upside-down." Banks also adds that Ian's boats are "wonderful designs, exciting to race, but leave little room for error. Like all multihulls, there's little to counterbalance the load on the sails. The load translates into forward speed, creating massive acceleration. Like a high-powered automobile, you can push it beyond the limits, so if you're racing the boat too hard, it'll 'assume the position.'"

Ian has countered safety questions for decades. His website, <http://www.f-boat.com>, asserts that "all Farrier designs are totally unsinkable, even with all hulls flooded." One can certainly capsize multihulls, he explains, but you have to be doing something "completely stupid." No one should go out with the family, put full sail up — including the spinnaker — and go 25 knots.

"When we raced in Australia," he remembers, "we'd be out in 50 knots, which kicked the boat right up. But I'd never do that with my wife aboard." An F-27, for example, can go 18 to 20 knots before you are pushing it, he states. With the spinnaker, it can do 20 to 25 knots, but you need someone on the sheet to release it when you're nearing the "ragged edge." He cautions that these speeds are only for racing, not cruising. He also believes that multihulls get a bad rap because any accident gets reported in "crash and burn headlines," while monohulls, well, their accidents are taken for granted and ascribed to other causes.

"Even with the growing popularity of cats, he believes that trimarans sail better in all conditions, handle better, and go faster."

Ian also believes that during storms, his trimarans, unlike many monohulls, can lie ahull in most conditions without capsizing. He stipulates that the floats must be sensibly sized and curved down on the sides so they'll keep on surfing. Nor can the boat be overloaded. He recalls that during at least two storms, he took down all sails and allowed his trimaran to drift sideways to the waves. The vessel would crest each wave, then skim down. "If a breaking wave hits the boat, there's a big bang, then the boat shoots off sideways." He refers to Nigel Tetley, whose 40-foot *Victress* was the first trimaran to round Cape Horn. "His sole storm tactic," Ian says, "was to take everything down and go below while the boat slid sideways down the waves."

Having tested his trimaran as far as Auckland, on New Zealand's North Island, and having weathered more storms, Ian decided not to risk going farther offshore. He became a "seagull" — a day worker on the wharves — unloading freighters in Wellington and Napier. Then, in 1970, with a few dollars in his pocket, he joined two others on a 38-foot Woollacott ketch and sailed off to Tonga. Ian quickly learned that a monohull's behavior in a storm isn't necessarily any better than a trimaran's and found the ride "damned uncomfortable." He disliked the weight of the monohull's full keel, her tendency to broach, and most of all, her top speed of only 6.5 knots. "That's what converted me permanently to trimarans," he says.

The Trailertri is born

Ian flew to Sydney, Australia, signed on again as a toolmaker and took a second job selling swimming pools to build up a nest egg. In 1972, he married Alicia Clephane, a nurse whom he'd been courting for some time, and the couple moved to Brisbane. Ian "tried a bunch of jobs like you do when you're young," even selling real estate, while Alicia continued her nursing. Six months later, another trimaran intervened in his life. An ad asked for someone to teach Fred Howard, the new owner of a 30-foot Piver Nimble, to sail his boat. Ian answered the ad and thus gained the opportunity to sail regularly on Brisbane's Morton Bay.

One day he found himself sailing

The F-27 was the first of Ian's Corsair Marine boats. At its introduction, it captured the attention and passion of many a sailor. Approximately 450 have been built.

through a group of monohull trailersailers. He concluded that a trailerable trimaran was unusual enough to be a good bet: it would sail well, it was unique, it was fast, and it was a good business opportunity. Although without formal yacht design training, Ian was fully confident he could design and build what he called the Trailertri. He bought L. Francis Herreshoff's book, *Common Sense of Yacht Design*. "He's a man I like," explains Ian. "Like me, he believed that if it looks right, it's going to be right. Just by looking at it, I can see if something's going to work or break. Afterward, I check it engineering-wise, and 99 percent of the time I'm right."

To make trimarans better able to point and tack, he added a centerboard to his model — an addition made to all his subsequent boats. His next challenge was to map out how the trimaran could be folded to fit onto a trailer. He knew about an English "swing-wing" folding system designed by John Westell but thought it lacked structural integrity. He also rejected the approach Tony Smith was developing for folding his Telstar 26-foot trimaran, because the system folded the floats below the waterline.

So, while sitting in an old armchair, Ian dreamed up new folding systems, discarding many because, in his mind's eye, he could see them flop, bend, or break. After playing around with the geometry, he built a plywood model and was delighted that when he "folded it, it folded." He obtained patent protection for his folding system and built an 18-foot prototype under his house, which, like most Brisbane homes, was built on stilts ("stumps" in Australian). "My wife was very supportive," he recalls. "She worked full-time as a nurse and was paying all the bills."

After testing and retesting his prototypes ("it must be strong, dependable — it must be right"), he teamed up with Brisbane boatbuilder Haines Hunter. Calling his new design the Tramp, about 300 fiberglass copies were built. It won the Australian 1981 Boat of the Year award.

Corsair Marine comes calling

Then, in 1983, John Walton, scion of the Wal-Mart empire, invited Ian to build his boats in the United States. Ian accepted the job, with the stipulation that he could manage the plant.

Six F-33s have been built at Keals Marine in Australia and 25 more are on order.

"He also believes that multihulls get a bad rap because any accident gets reported in 'crash and burn headlines,' while monohulls, well, their accidents are taken for granted and ascribed to other causes."

So he and Alicia, along with their sons, 10-year-old Michael and 6-year-old Stephen, moved to San Diego, with Ian heading up Walton's newly founded Corsair Marine — serving as designer, builder, and marketer. The first F-27, called *Super Fox*, was launched in 1985, and Ian set a record in the Two Men Around the Catalinas Race, beating a 65-foot maxi monohull. Two years later, Mark Robson's *Killer Frog* completed the Transpac, and in 1990, the F-27 was recognized as an official class by the Nippon Ocean Racing Club, the first trimaran to be thus acknowledged.

About 450 F-27s were built and their success established Ian's North American reputation as a quality trimaran designer and builder and solidified the trimaran as a viable part of the sailing scene. It also confirmed Ian's desire to stick with trimaran design (he's only designed one catamaran: the F-41, which has not yet become a production boat). Even with the growing popularity of cats, he believes that trimarans sail better in all conditions, handle better, and go faster. He also cites the ease of their trailerability, thus extending range. And, of course, a foldable trimaran on a trailer "can save you hundreds of dollars a month in moorage fees alone," he says emphatically.

In 1991, Ian and Corsair Marine parted ways. He'd run into the controversies dogging every yacht designer: he wanted to design a certain range of boats and wanted them built to his specifications. "Basically," he says, "we disagreed on where the company should go." Both Ian and the company wanted to develop the F-24, but their views differed on how it should be built. Although Ian could understand the company's position ("they were paying the bills"), both parties wanted to control the company's direction. So Ian got out. As designer Robert Perry says of this familiar conflict, "It's an ongoing war. You do what you can to make the yard conform to your specs, but in the end, the yard always wins."

Ian moved to Seattle and formed Farrier Marine, while Corsair continued production of its version of the F-24. Meanwhile, Ian began working with OSTAC, an Australian boatbuilder which launched a production F-31 the following year. Success Down Under led Ian to take another chance on licensing the F-31 to Corsair for North American production, but new controversies over what Ian calls "Corsair's penchant to redesign" again severed the relationship.

When, in 1994, John Walton sold Corsair to an old friend of Ian's, Australian Paul Koch, Ian resumed working with the firm. The F-24 and F-31 production models sold well — about 200 and 300 copies respectively — and the F-31 won the 1992 Australian Sailboat of the Year award. Ian also designed the F-36, which he considers his first fully capable offshore yacht (despite the fact that many smaller Farriers have crossed oceans), and a

few were built under license in New Zealand. He then created his first catamaran — a 41-footer — of which 38 are being built by amateurs and yards — followed by the F-44, another trimaran. He licensed production of the F-28 to Corsair and the F-25 to MPG Marine. His various models continue to win numerous races and awards for innovative and influential design.

Corsair and Ian divorced again in 2000, disagreeing about quality and design features. Corsair is still building trimarans but no longer under the Farrier name. Although the parting of the ways was loudly announced in various publications, the details are sketchy. Ian doesn't like to discuss the breakups, partly because he wants to avoid legal problems. It seems that Ian doesn't bend easily to compromises in construction, especially when the boat has his name on it.

"Boatbuilders and designers always differ on quality issues," says Ian. "Designers worry because if something fails, it's their neck." He subscribes to the tenets of W. Edwards Deming, the American quality-control engineer whose "doing it right the first time" concepts revolutionized postwar Japanese industrial production. "Even though I'm not a perfectionist to the extreme," says Ian, "building quality is cheaper. The old saw of 'measure twice and cut once' speaks to me. I tend to measure three times and cut once. If you build it right the first time, you don't have to go back and fix it."

New designs keep coming

Today, more than 2,000 Farrier designs are afloat on the world's waters. Their owners tend to be Farrier aficionados. Victoria, British Columbia, sailor Dennis Morgan is a recent convert. After sailing a J/27 for years, he and his wife, Cheryl, bought an F-9A in 2003. "We wanted something bigger," says Morgan. "I wasn't looking for a tri. But then I went for a ride. Terrific! The design detail is amazing. And its trailerability is attractive. We bought it to cruise, not race. But the boat is exciting enough to keep our children — and their friends — interested in sailing with us. It gets us places quickly. To us, the Farrier is the perfect family boat."

Ian and his wife, Alicia, fold an early prototype. Alicia paid the bills while Ian developed his ama folding system and early boats.

"One can certainly capsize multihulls, he explains, but you have to be doing something 'completely stupid.' No one should go out with the family, put full sail up — including the spinnaker — and go 25 knots."

Ian stresses that his boats are always designed as cruisers with places for people to sleep. "I create the maximum livable space inside and then concentrate on the boat's performance. My boats are fast, but they're not racers. Racers are impractical." He sees his legacy as having popularized a folding, trailerable trimaran, a family boat that provides outstanding performance. He also thinks of his F-27 as true proof that trimarans are viable. He's now concentrating on the F-33, of which six have been built at Keals Marine in Australia, with another 25 on order. He travels around the world, an extensive checklist in hand, to supervise the assembly of each new exemplar as it leaves its container. Wryly recalling how often early trimarans were the subject of ridicule, not only in Australia but around the world, he's convinced that few people laugh today when they see triple hulls in the water.

He's hoping to have enough time in 2004 to develop his latest, the F-22. In the meantime, Ian speculates that the time for multihulls is coming. "People sail on a multihull and are amazed how it can do 15 knots with everyone dry and unafraid. I can see them going away, shaking their heads and saying, 'There must be a catch somewhere.'"

For further reading...

For more in-depth discussion on multihulls, both catamarans and trimarans, there are several good books available. Notable among these are Rick White's *Multihull Cruising Fundamentals* (1997), Gavin LeSeuer's *Multihull Seamanship Illustrated* (1997), Kevin Jeffrey's *Sailor's Multihull Guide to the Best Cruising Catamarans & Trimarans* (1997) and Chris White's *The Cruising Multihull* (1996). These are all available at <http://www.goodoldboat.com/bookshelf.html> or by calling 763-420-8923.

In addition, several out-of-print books offer information you might find interesting. These include Thomas Firth Jones' *Multihull Voyaging* (1994), Jim Brown's *The Case for the Cruising Trimaran* (1979), David Palmer's *The Atlantic Challenge: The Story of Trimaran FT* (1977) and Michael McMullen's *Multihull Seamanship* (1976). *Good Old Boat* can help you track down hard-to-find or out-of-print books like these. Just call Mark Busta at 763-420-8923, or email <mark@goodoldboat.com>.

Courtesy of Tiller Publishing

Bill Garden: A memoir

One of Bill's pupils reminisces as the one-time mentor turns 85

by Robert Perry

Dear Editor: *You want me to write a piece on Bill Garden including background biographical information to be published … along with photos of Bill? I'm not sure I can do this. Bill enjoys his privacy like few other people. He once spent 10 minutes explaining to me his philosophy behind avoiding having his picture published. How about I just give you a stream of personal impressions of Bill based upon the time I spent with him when I was a kid?*

I WAS 15 YEARS OLD IN 1960. I WAS IN love with boats. I began buying and collecting boating magazines. I studied the various designs. There was just something about boat designs that intrigued me, especially one powerboat that looked like it was a close cousin to a fishing boat. The design article was titled "Garden Cruiser." Now what the heck is a "garden cruiser?" It can't be a 40-foot boat you cruise around your garden. Eventually I figured it out. Garden designs were a very regular feature in all the magazine design sections. Bill was prolific. I wanted to be a yacht designer, too.

One day I was walking through Seattle's Shilshole Bay Marina, back before they put locks on the gates. I had my sketchbook. I was sketching design and rigging details. I came to a long, light greenish/gray sloop with the name *Oceanus* on the stern. I was struck dumb. This boat was really different! There was *nothing* about this boat that I could relate to the other boats on the dock. It had a long, exaggerated canoe stern. It had an almost featureless, molded-looking cabin trunk that morphed into a pilothouse with a "baseball cap bill" over the windows. There was an aft overhang on the pilothouse that curved exactly the opposite way from what you would expect.

But damn, the entire thing worked together to present a marvelous picture of a sailing yacht, a unique sailing yacht. I'm reminded of that scene in *Close Encounters of the Third Kind* in which Richard Dreyfus looks at the immense pile of mashed potatoes mounded on his plate and mutters, "*This* is important." When I looked at *Oceanus*, I thought, "*This* is important."

Incredibly jealous

I told Jay Spearman, my sailing friend at school, about *Oceanus*. "Oh, that's Bill Garden's boat," he said. "He's a friend of my dad's." I was incredibly jealous that he knew Bill Garden; a family friend, no less.

I kept drawing boats. I kept studying the designs of Bill Garden. I practiced writing in Bill's lettering style. I filled pages with Garden "R's." I could draw little Garden men with carrot noses with my eyes closed. I practiced writing my name with Bill's address. Bill's drafting style became my drafting style, or at least I did the best I could to emulate it while combining it with other styles that I admired. Bill's style was so incredibly strong that it was impossible for me to try to lift techniques from it without being overcome with the guilt of copying.

> *"I asked him how he drew without a T-square. He said, 'If I don't know 90 degrees by now, I might as well quit.' "*

I told Don Miller, my English teacher and the Corinthian Junior Yacht Club sailing instructor, about my admiration for Bill's designs. Always supportive of my efforts, he said, "Why don't you call him and arrange a visit?" I did. It was arranged for a Saturday morning. My dad drove me out to the Seattle locks and dropped me off. This might be hard to believe, but I truly expected Bill Garden to be seated at a drafting table elevated in the middle of a room surrounded by other drafting tables. My 15-year-old imagination had literally put Garden on a pedestal. At that time, Bill must have been 42 years old. He turned 85 this summer. I marvel at the fact that I am older now than Bill was when we met.

Small footbridge

Bill's office in the 1960s was located on Commodore Way, perched on a steep bank on the south side of the Hiram Chittenden locks in Seattle. You walked across a small wooden footbridge to enter the office. The styling of the building was modern and clean. I'm certain Bill designed it. There was a sail loft on the floor beneath Bill's level and a boatyard on the waterfront level. I knocked and was called into the office. There was no one in the tidy reception area. I peeked through the next door. There he was: alone, standing over a drafting table, drawing. He was kind of short and skinny, certainly several inches shorter than I was.

The office was very neat with rolls of drawings here and there and a lot of drawers to hold drawings under the endless drafting table that ringed the room. There were photos of Bill Garden boats lining the wall, all reproduced in

a similar size and arranged in a straight line. Picture windows looked out over Lock Haven Marina and the locks. I had found heaven. I noticed that Bill was not using a T-square. Every drafter used a T-square I thought. I asked him how he drew without a T-square. He said, "If I don't know 90 degrees by now, I might as well quit."

I fumbled with words to express my admiration and gratitude at being able to meet him. His response was gruff and to the point, and while I can't remember his exact words, it was something to the effect of, "I hate flattery." Hurt, I'm sure I blushed. But I was young, and I healed quickly.

He then said, "Call me Bill," and gave me a copy of his spiral-bound design catalog, *100 Yacht and Vessel Designs*. I still have it. It's right here. Always. He was an accommodating and friendly guy. While obviously totally absorbed in his own pursuits, he always had time for me.

Searched the files

I spent that Saturday morning deliriously happy. Bill said I could rummage through his files. I rummaged with a vengeance. I must have taken him some of my own drawings, but for some odd reason I have absolutely no recollection of Bill Garden ever critiquing my work. He stopped working long enough to put together a great roll of extra prints for me to take home. I felt like I had found buried treasure. I even had the framing plan for a small steel ferryboat. Yes!

Bill's general treatment of me became my model for how I tried to relate to the many youngsters who came to visit my office over the years.

That morning Bill asked me if I would like lunch. Are you kidding? Of course! We drove to the diner in

"Bill's general treatment of me became my model for how I tried to relate to the many youngsters who came to visit my office over the years."

Bill's plain Ford sedan. I had bus fare home, 35 cents in my pocket. I held my breath but there it was at the bottom of the first page of the menu, "French Fries.....35¢."

"I'll have the French fries, please. Yep, that's all I eat, French fries." Bill picked up the tab, and I felt stupid and still hungry.

I was soon visiting Bill fairly often on Saturday mornings, hoping to be chosen as his summertime helper. Unfortunately, he had chosen Steve Seaton for several summers in a row. By the time he chose me, I was forced to turn the job down as he didn't pay anything, and I needed to make money for college. I'm baffled now that I did that. I think I was afraid to expose my own meager design skills. I'd look at the sketches Steve had done in Bill's office, and I was convinced I could never do as well. Bill remained elevated in my eyes. (I had originally written "godlike.")

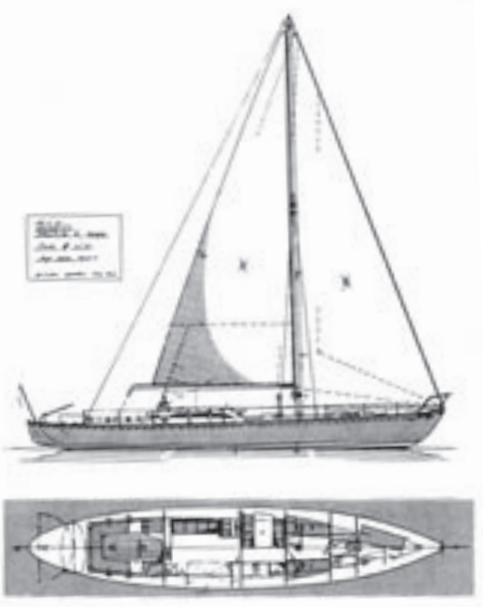
Crewing on *Oceanus*

I crewed for Bill on his 60-foot *Oceanus*, beginning when I was 16. We raced fairly regularly, always with a bunch of clients and cronies on board. Bill needed some young guys to do the hard work. He seemed to have an extremely loyal and eclectic group of friends. They always had a great time enjoying warm friendships. There was Carl Harper, the sailing cowboy, who wore cowboy boots while sailing; and, Ellis Provine, a gentle, kind man with a Scottish tam. There was a covey of salty characters. While Bill steered *Oceanus* standing on a box designed to get his eye level over the top of the pilothouse, his pals would line up on the bench in the back of the deep cockpit, smoke cigars, and pass the flask.

I had no foulweather gear. I was cold and wet all the time but without a doubt the happiest kid in Seattle. I finally splurged and bought navy-blue canvas Sperry Topsiders. I was proud of my yachting shoes.

I walked down to *Oceanus* and climbed aboard for the race. Bill took one look at my shoes and said, "Don't wear those shoes on board. They pick up rocks and scratch the paint." He seemed to wear what I would call après ski boots for sailing. His clothes were almost Eddie Bauer-like in style, but on his gaunt frame they appeared to be two sizes too large. I continued to wear my new shoes. Bill never mentioned them again.

I loved *Oceanus*. It was far from a rocket by today's standards, but in Seattle in its day, we generally had the ability to out-waterline the competition. We regularly had boat-for-boat races with an old 8-Meter. Bill's sails were awful. Still, it was Bill's boat and an aesthetic marvel. One



***Oceanus*, at left and above, the Bill Garden-designed and -owned sloop that first caught young Bob Perry's eye. *Buccaneer*, another Garden design, at right.**

morning I showed up at Vic Frank's boatyard where *Oceanus* was and gave the boat a thorough scrubbing. All 60 feet of it. Bill fussed about with things below as we prepared to motor out to go racing. Ellis Provine said the boat had not been that clean since it was a "puppy." I beamed. Bill said nothing.

Get *Skene's*

My incessant design questions were usually answered with, "Get a copy of *Skenes*." *Skene's Elements of Yacht Design* was the ancient textbook for yacht designers. I did manage, however, to get a few gems of advice out of Bill over the years. In preparation for writing this article, I pulled the load of correspondence we have shared since then and reread most of the letters. His letters to me were always handwritten in a loose scrawl. These gems were full of life and soft, subtle, sage advice.

I asked Bill, "How much lead I should give a sailplan to insure correct helm balance?"

He answered, "Lots. How many boats have you ever sailed with weather helm?"

"Most of them." I answered.

"How many boats have you ever sailed with lee helm?" he asked.

"None, yet," I answered.

"See?" he said.

While scrubbing *Oceanus*, I found a spare key. It was hidden, tucked behind a piece of molding on the cabin trunk back. If the Russians ever dropped the atomic bomb, I had a plan. I was going to hightail it down to the marina and steal *Oceanus*. I'm not kidding.

Bill on everything

I asked Bill one day, "What do I do about rudder flutter?" He responded, "If the rudder has a radiused trailing edge, flatten it. If the rudder has a flat trailing edge, radius it."

One afternoon on his island he spent about two hours drinking tea and lecturing me about all the legal hassles he had experienced over the years. "Never *guarantee* performance in writing," he told me. I'm not sure what his aim was that day. If he was trying to discourage me, it didn't work.

In 1977 I got a letter from Bill dated "Advice Day 1977." He advised me to "trim the whiskers to a good Van Dyke, and you won't lose identity with the kooks; and you will relate better to the people who are spending the money. All unkempt geniuses die broke, plus the fact that they itch and eventually bore their wives." He added, "Yacht designers are like violin players: all supply and no demand."

Bill Garden's Rawson 30 is one of his production designs.

Bill was very "real." I'd sent him a drawing to look at. His letter finally addressed it: "Your ketch looks fine and is a nice drawing. I believe she will trim about 5 inches deep so caution them to keep the W.L. paint high, as shown. The first few years are hard, but you have a good eye and like to draw. So if you can keep from starving to death, the people will eventually come to you. You are in the period that wipes out the competition. Keep me posted."

Other topics addressed in his letters:

"I'd love to have you back here to do all the work, but I'd be back in business then.

"As I see it, the design business will supplement clam digging in the near future. We are headed for a violent reappraisal that will make the 1930s tame.

"Eighty-two percent of everybody in the world are not competent at anything.

"Age 40 isn't bad . . . 67 getting obsolete and ready for knackers. Dropped a piling on my big toe last week. Big hurt. Head cold this week. Mild fever which speeds up productivity."

Hero worship

Bill's letters were always accompanied by sketches and prints. Many of them were hand-colored. Needless to stay, I kept them all. Looking back at these sketches today, I am amazed at the amount of work he put into using the colored pencils to highlight the blueline prints. It takes immense effort to appear that cavalier.

As a kid I had a bad case of hero worship. That doesn't bother me today. Bill Garden was a good hero to have. I spent hours studying the details of his designs. There has never, ever been a yacht designer who showed as full a grasp of aesthetics over such a wide variety of designs. From the minuscule *Bug* to a big fishing boat, to a high-speed powerboat, to a character yacht, Bill's style is immediately recognizable. His drawings are rough, hairy, vague, exact, and expressive beyond words. Every line is exactly appropriate. Much of this drafting and design style came from H. C. Hansen, a Washington state yacht designer, but Bill surpassed Hansen's efforts to such an extent that it's impossible to see this style today as anyone else's.

Bill and his work continue to be a huge influence on my own work, despite the fact that I have matured (I hope) into my own design style. Next to my workstation here today I have a cardboard tube in a drawer. In that tube is a drawing of Bill's. I saw the drawing in his office years ago, and I wanted it. So I called him up.

"Send me that drawing," I said. I was blunt.

"OK, I'll send you a print."

"I don't want a print. I want the original."

"OK. Do you want me to color it?"

"If you like."

I got the drawing. It was carefully "colored in." At the end of a long day, some buddies of mine will occasionally drop by and have a wee Scotch while beating old dead sailing horses and discussing perfect boats. "Hey," I say, "I'll show you something that'll knock your socks off." I pull out the tube, take the drawing out, and unroll it. "There." We silently sip our Scotches and take that salty journey deep into the genius of Bill Garden.

No college degree

Bill was born in Portland but moved to Seattle and attended high school there. He was building boats from an early age. He spent time in the Army and was stationed in the Aleutians. He sketched a lot of boats while in the service. Bill did not go to college, but he managed to get "grandfathered in" for his naval-architect license. Bill drew every kind of boat imaginable.

Bill is about 5 feet 9 inches and very thin, with sharp, hawklike features. A client of mine and a high-school mate of Bill's once told me, "Bill was working at looking like an old salt when he was 19 years old." He has a look to him that tells you quickly he doesn't abide fools or appreciate having his time wasted. Bill has a very distinctive walk with a spring to his step that

gives the impression he's always off to do something important.

I saw Bill about five years ago. We were launching a new 50-footer of mine, and Bill motored by in his launch. Disappointed that he didn't stop, I waved. He waved. I felt bad. The boat needed a contrasting bootstripe, but the owner had opted not to do it. I hoped Bill would not think that was *my* idea. I so badly wanted him to be impressed with my new 50-footer. Everyone else was. But that didn't matter to me.

Oh, well. I *do* have an envelope from him addressed to "Robert H. Perry, N.A." That N.A. after my name, written in his hand, means more to me than any college degree.

If we really want to know who Bill Garden is, I think we are better off looking hard at some of his designs and leaving the man to his privacy. His production designs include the Fast Passage 39, Rawson 30, Bayliner Buccaneer 305, Vagabond 47, Truant 33, and Gulf 32. But, as with most designers, his custom work is far more interesting.

Andy's Boat

One design is called the Spice Island Cutter, but I know it as "Andy's Boat." I knew Andy, and I knew his boat. Andy's Boat did not have the pulled-out clipper bow. Andy's bow was almost plumb, and I liked it better than the clipper version. This design is a perfect example of how Bill could take a totally impractical type of boat and turn it into a boat you would drool over. It's a dream machine. I cruised alongside Andy on several occasions, and I can assure you this boat was slow. Very slow. Still, it was handsome and made you long for a time when things were simpler and you didn't smell polyester resin when you stepped aboard.

The sheerline is perfect. It's strong and rises to a pugnacious bow when you build the plumb stem version. I find the clipper bow too exaggerated, but that's what Bill was good at. While many designers would end their outboard rudders with graceful curves, Bill preferred over the years to keep the lines of the rudder blade straight. The hull form in plan view is almost "cod's head and mackerel tail" with the max beam well forward. This is not the shape of speed. But at the waterline the DWL (designed waterline) in plan is sweet, with some slight concavity at both ends. The sections show a wineglass form with great hollow bilges. You could build your Spice Island Cutter with internal or external ballast. This boat is a true "full-keel" design. It's hard to imagine more wetted surface for this DWL. The D/L (displacement/length ratio) of this design is 493. I don't think I've ever seen a higher D/L.

"His clothes were almost Eddie Bauer-like in style, but on his gaunt frame they appeared to be two sizes too large."

I love the way the rig bends forward, seemingly under the pull of the headstay and its big Yankee jib. There is a "lizard" on the Yankee sheet, the block and tackle assist. There are no winches on this boat. You could rig the topsail to brail up to the mast when not needed. I think you would have to learn to fly your topsail on this boat.

Below, there is a head tucked between the berths forward. The coal-fired fireplace will keep you warm. And you will cook on what appears to be a kerosene stove.

Before sunset, in the harbor, you can pop your head out of the companionway of the Spice Island Cutter, look around the anchorage at the assembled large yachts, and breathe a sigh of relief that you can be satisfied with the simple life.

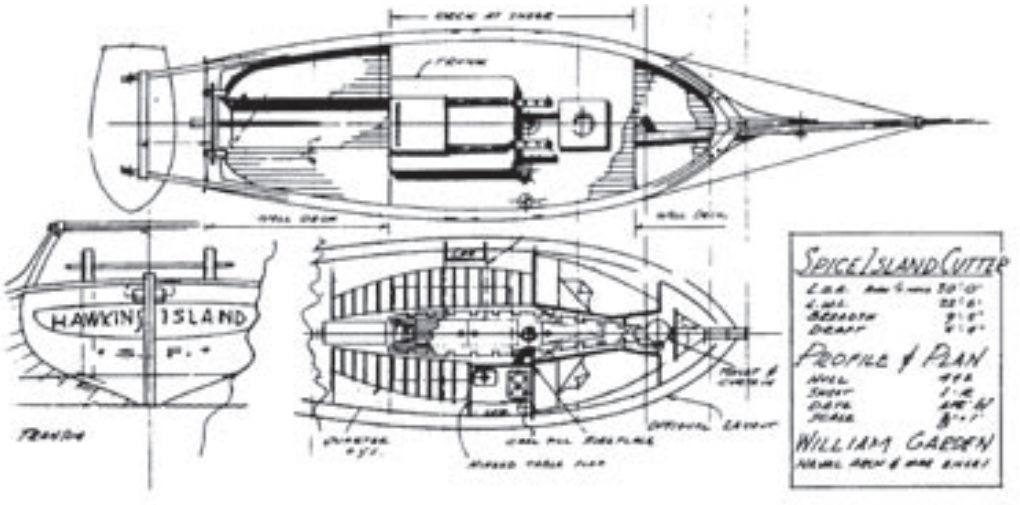
Seal

Seal was in my Garden design catalog. As a kid I would sit and stare at the drawings of *Seal* for hours on end. If things weren't right at home or things weren't right at school, they sure would be right if I just had a Garden *Seal*. You can see lots of *Seal* influence in my own double-enders — Tayana 37, Baba 30 — and so on. *Seal* was their step-grandpa.

This is a design based upon the Norwegian Colin Archer type. It's a very heavy boat with lots of keel and not much rig. If *Seal* were a man, he would have really bushy eyebrows. Bill drew both ketch and cutter rigs. I preferred the ketch as a kid.

The hull lines show broad garboards, but the ballast is external iron. The waterlines show a very symmetrical shape. I think *Seal* would have been a plodder under sail. It's too heavy and under-rigged for any speed. I just love the off-center bowsprit and the unique character of the deck structures.

You can have just as much fun losing yourself in the beauty of Bill's structural drawings as you can the sailplan. His drawings for wooden spar fittings are marvelous and for years have provided a vivid model for my own drafting. Who says the drawing for a spreader bracket can't be art? While they were fun to examine, some builders joked about these drawings, calling them "the funny papers." I still find it hard to tear myself away from the drawings of *Seal*. Boy, if I had a *Seal*, then I'd be happy.



The Spice Island Cutter will forever be known to Bob Perry as "Andy's Boat."

Oceanus

To me, there is no boat that says Bill Garden more than *Oceanus*. At 60 feet LOA and with a 12-foot beam, *Oceanus* is almost a canoe. There is nothing about the shape of this boat that I would call "normal."

The bow is a knuckled thing and quite flared. The stern is a strange thing of beauty. I've never seen another stern quite like it. The extreme aft overhang develops out of sections with a high degree of deadrise that right at the last moment go concave at the tip of that stern profile knuckle. It's exquisitely delicate and would have been hard to build in conventional planking.

But *Oceanus* was cold-molded with triple skins, and that was quite unusual for the time. The deep deadrise is carried right through *Oceanus*' hull. In profile, the fore-and-aft rocker appears bizarre to my eye today. The deepest part of the hull is well forward, and the canoe-body profile goes hollow around station 8.5 to roll down into that lovely exaggerated stern overhang. The trick is not to try to justify the shape of *Oceanus* by today's performance shape standards. Just sit back and wonder at the creative powers of Bill in 1953.

I never understood the rig of *Oceanus*. The mast is way forward, but so is the keel. I think in the early days there may have been a weather-helm issue because the mainsail foot appears to have been shortened. Note how much boom extends beyond the clew of the mainsail. The mainsheet was lead to a "Barney post" in the middle of the cockpit. *Oceanus* did not have a vang. In one blustery race, as we close-reached toward the finish, trying to hold off a gray 8-Meter, a couple of us youngsters clung to the boom like monkeys, trying to pull some of the twist out of the mainsail. With the rig that far forward, Bill pulled the backstay well inboard. That left the stern open to stow a hard dinghy.

I can't be objective about this boat. On the one hand, it's a wacky design. The keel and rudder configuration is unusual. But it's 2003 and Bill drew *Oceanus* in 1953, so you have to look at what else was being built 50 years ago to get a true understanding of what he was doing with *Oceanus*. Bill produced great hand-drawn lines perspectives of *Oceanus* superimposed over the lines of a 12-Meter, probably *Vim*. The horse race would have gone *Vim's* way, but *Oceanus* wins the prize for aesthetics. Leaving my objectivity aside today, I prefer to look at *Oceanus* through the eyes of a 16-year-old boy.

"Like a radical jazz musician, Bill may take you to the fringes of possibilities for any given key signature, but when he's done, the entire piece is tied together perfectly."

On reflection

Several things struck me as I went through my extensive collection of Garden designs for this article. The sheer volume of the work is impressive, even more so when you consider that Bill seldom employed draftsmen. The work you see is Bill's. Don't even *dream* that he ever used a computer.

Then there is the variety of the work. Bill excelled in every conceivable style of boat from craggy-looking workboats to pea-coated pocket cutters, to slicked-back fast power yachts. Each example is a unique vision of Bill's that stands alone in the field.

I'm also impressed with the courage and imagination of Bill's clients. Where are they today? Holed up in their plain white plastic sloops? Bill's clients certainly were never wimpy about bold, soaring sheerlines or proud and prominent bows. Clearly, in many of these designs Bill and his client were far more concerned with the style of the boat than its performance.

There's an old yachting word: "yare." It means "right." When everything about the boat is just perfect, the boat is yare. Bill's boats are yare. Like a radical jazz musician, Bill may take you to the fringes of possibilities for any given key signature, but when he's done, the entire piece is tied together perfectly. Now, juxtapose over this thought the fact that Bill designed the Bayliner Buccaneer 305 and several other boats that to my eye and knowledge of yacht design definitely poke out through the edges of the envelope. It's an enigma. But I think it's just Bill having fun while ignoring the key signature. I've never been able to listen to John Coltrane's *A Love Supreme* all the way through either. Some great artists enjoy making you uncomfortable.

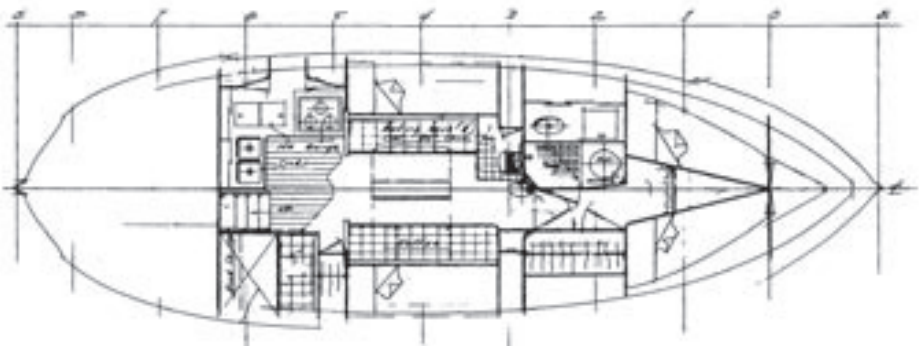
Don't do it

When I told Bill that I had been asked to write this article he said, "No, don't do it. Give the space to a youngster who needs the publicity." I told Bill this wasn't *about* publicity for him. It was about giving his admirers a better glimpse into his world of design. In short, this is about *our* needs, not Bill's.

"OK," he said. "If it will do you some good, then go ahead." He still didn't get it.

He's a fascinating old bird.

Readers interested in seeing more Garden designs may wish to read *Yacht Designs* and *Yacht Designs II*, both by Bill Garden.



Seal **provided inspiration for a teenaged Bob Perry.**

Tom Gillmer and his current boat, a 30-foot version of his Blue Moon design.

The Allied Seawind, *Apogee,* below, leaving Cape Town, South Africa, on the last leg of her circumnavigation. Alan Eddy at the helm.

by Steve Mitchell

Thomas Gillmer

In profile: One of America's most respected cruising boat designers

THE EARLY DAYS OF PRODUCTION FIBERGLASS BOATS WERE AN exciting time based on the accounts of some of those early pioneers. From the well-known story of the Pearson cousins with their 28-foot Triton at the 1959 New York Boat Show, to Ray Greene and his 27-foot Sparkman & Stephens-designed New Horizon, fiberglass boats caught the public's fancy early on. Rather than looking at the new material with skepticism about its strength and longevity, the public welcomed fiberglass.

One boat that helped establish fiberglass as suitable for sailboats was the Allied Seawind, a 30-foot 6-inch ketch designed by Thomas Gillmer in 1961. "It was the first fiberglass boat to sail around the world," Tom says. "The Seawind was very successful sailing offshore." That trait was the common denominator for all of his designs, especially in the early days as the fiberglass production revolution took hold and naval architects began designing for the new material.

Growing up with boats

Thomas C. Gillmer was born in Warren, Ohio, a few miles south of Lake Erie, in 1911. "I first made boat models when I was a kid," he explains. "I had a friend, an older fellow, who was from Down East, somewhere in Nova Scotia. He was a good model builder and helped me with them. Later, he built me a 14-foot sailboat, a nice little lapstrake sloop. I learned to sail that by myself on Lake Erie when my family went to our cottage on the lake every summer. It had to be a boat we could launch from the beach, and that's what I learned to sail on."

Not much choice

Tom's interest in boats led him to attend the U. S. Naval Academy in Annapolis. "At that time you didn't have much choice of what to study at the Academy. You took the standard courses. But they had started a program of electives, and one of those courses was in naval architecture." He took the course and was hooked.

"I can remember when I was a midshipman," he says, "there were a lot of skipjacks based in Annapolis in the winter for oystering. Skipjacks were an important boat then. There were a thousand of them on the bay back in the '30s. Every morning I'd be up, still sleepy, and about that time there'd be a whole line of skipjacks sailing out into the bay. It was a beautiful sight. That sight alone probably had as much impact as anything else on my interest in boats."

Tom graduated in June 1935 and served on cruisers in the Pacific and Mediterranean. During World War II he served at the Academy as a professor of naval architecture, eventually founding the department of naval architecture and marine engineering there. He wrote a book on naval architecture used at the Academy to this day.

"I more or less designed these early cruising boats on the side," he says. "It was a nice occupation."

Allied Seawind 30

The Seawinds

For an established naval architect with many wooden boat designs to his credit, designing boats for the fiberglass revolution was a natural progression. "Certainly all the manufacturers were convinced it was tough stuff," he says. "I was confident it would hold up. After all, the Navy had been building fiberglass boats down in Norfolk during the war. Early on, someone gave me a couple of samples of fiberglass to examine. I gave one of them to my dog to chew on, and he could hardly put a dent in it. He was an Airedale and chewed everything, so I knew it was tough. I was one of the first to design for fiberglass."

Tom was a regular contributor of wooden sailboat designs to a couple of popular boating magazines of the day, *Rudder* and *Yachting*, so his name and work were well known to manufacturers and sailors. "I knew one of the fellows at *Rudder* magazine in particular," says Tom. "He needed designs to publish, and I sent him quite a few. That's how some of the builders connected with me." These were all wooden boats, but he later converted many of these early designs for fiberglass construction.

In 1961, a Delaware attorney named Rex Kaiser commissioned Tom to design a boat for him. Kaiser had the resulting 30-foot ketch built by Lunn Laminates in Glen Cove, N.Y. The following year, Lunn became part of Allied Boat Company when it was founded in Catskill, N.Y. Allied named the 30-foot ketch the Seawind. This was its only model at first. Says Tom, "Allied got their start building the Seawind. It was right behind the Pearson Triton and the Tartan 27." The first Allied Seawind hulls came off the assembly line in 1962.

Good offshore

He continues, "The Seawind has a big sail area for a small boat. It's also a good offshore boat. That's what always has appealed to me the most — designing boats to go offshore. Cruising boats were always more of an interest to me. People could cruise on them and enjoy them. I don't think racing boats are all that comfortable. I had a Seawind myself for sailing around here on the Chesapeake. They

Two views of the Seawind 30 provided by Peter Edwards, secretary of the Allied Seawind Owners' Association. <http://www.webmoxie.net/seawind/index.htm>.

said they sold it to me for a discount," he chuckles, "but it wasn't much of one as far as I could tell."

In 1963, a sailor named Alan Eddy set off from Hampton, Virginia, sailing for the Virgin Islands in a Seawind named *Apogee*. His trip to the islands turned into a five-year circumnavigation, the first ever for a fiberglass boat. In an account written by Alan and published by Allied after the circumnavigation, he stated that when he left for the Virgin Islands "I had never been offshore overnight, or even offshore by myself, or even taken a sight in earnest." Two items on his list of what it takes to complete a circumnavigation are the simple statements "a suitable boat" and "the will to do it." Surprisingly, he does not mention the word "luck" in his list.

Perhaps Alan was confident enough in his Seawind that he didn't think he needed luck. His most harrowing experience was being attacked by whales in the Indian Ocean. He wrote: "I had gone below to fetch a dish towel when I heard a tremendous bang, and *Apogee* shuddered from keel to masthead." What he estimated to be about a dozen whales were swimming next to and under *Apogee*. Whales rammed his boat at least three times, but he sailed on with no apparent damage.

Advertising bonanza

Alan's account of the voyage goes on to extol the virtues of fiberglass construction over the wood and steel construction more common at the time. Certainly his voyage proved that fiberglass boats were up to whatever the sea could hand out. When he returned home, Allied used his trip as an advertising bonanza for the Seawind with the slogan, "She will go around the world if you will." As Tom puts it, "Crossing an ocean is generally harder on the people than on the boat."

Says Dan Spurr, "I don't think anyone was aware of Alan Eddy's circumnavigation until Allied started using it in their advertising. Allied was savvy enough to take advantage of a public relations opportunity, and it was a notable accomplishment. Certainly not every 30-footer could have done it. The Seawind was a good design and strong enough to do it. It belongs in the history books."

Despite its popularity, the accommodations on the Seawind are Spartan. Says Dan, "The Seawind's interior wasn't much larger than a Pearson Triton's. It just wasn't very usable. It had no table, for example. I can see why there was a demand for the Seawind II."

According to Tom, "The Seawind 30 was about the limit of what people could buy in terms of accommodations to fit the boat and price at the time. The Seawind II was all about improving the accommodations and what we thought the market could bear."

Allied produced the Seawind 30 from 1962 until 1974. The Seawind II replaced it in 1975. At 31 feet 7 inches, the Seawind II was only 13 inches longer, but all other dimensions were significantly greater. The waterline length increased from an even 24 feet to 25 feet 6 inches in the new model. Beam increased from 9 feet 3 inches to 10 feet 5 inches, and displacement grew from 12,080 to 14,900 pounds. Sail area increased from 500 to 555 square feet. The standard rig was a masthead ketch with a cutter rig available as a very desirable option.

Out of business

Interestingly, Allied reintroduced the original Seawind in 1978, producing both models until the company went out of business in 1981. Says Dan Smith, a former Seawind 30 owner and unofficial historian of the Allied Boat Company, "Bringing back the Seawind 30 was a bad call as far as I can tell. Someone spent a lot of money rebuilding the molds, and for what?" According to Dan, Allied built a total of 161 Seawind 30s.

The Seawind II continued the tradition of an able sea boat, with many bluewater miles credited to it. In fact, it's difficult to find a boat of her size more suited for the open ocean and extended cruising. Stowage in particular is a strong point for the Seawind II. Allied built 129 Seawind IIs.

"The Seawinds were my most successful designs," says Tom. "They seemed to suit me best, anyway."

Allied, unfortunately, was never noted for the quality of its management team. Despite building many popular cruising boats, including the 35-foot Seabreeze, Luders 33, Princess 36, and Mistress 39, the company was in and out of bankruptcy several times under several different owners. In 1980, the New York Job Development Authority took over running the company. The authority had lent about

Above and at right, Bill Duggan's Southern Cross 31. Bill is commodore of the Southern Cross Owners' Association. <http://www.southern-cross.com/>.

$500,000 to the company in the hopes of saving the jobs of the 50 or so people Allied employed, in part because it was the largest single employer in Catskill. Allied also dropped its dealer network, selling boats directly from the factory to save the 15 percent dealer commission.

When Allied finally succumbed to a murky death in late 1981, it had partially completed the tooling for a new 52-footer designed by David Pedrick. As with most other sailboat manufacturers in financial trouble, it's always "the next boat" the owners think will catch on and save the company. Allied couldn't hang on that long.

Southern Cross 39

Southern Cross boats

By the early 1970s, Clarke Ryder had been making fiberglass industrial parts and boats for nearly a decade. He says, "In 1973 to 1974 I saw the popularity on the West Coast of the Westsail 32 in kit form and thought that we could do the same thing on this coast. I had a portfolio of designs from one of the marine publishing houses with a collection of Tom Gillmer's designs in it, so I was familiar with his work. He had designed a wooden 31-footer called the Aries (a double-ender with Norwegian influences in its outboard rudder and sheerline) that was about two-thirds the weight of the Westsail. It essentially had the same underbody as the Seawind (*unlike the SC39 hull shown above* ***–Ed.***). I got in touch with Tom and decided to build it in fiberglass. I took the first one to the Annapolis Boat Show in 1975 as the Southern Cross 31." The C. E. Ryder Company eventually produced about 150 of that model.

The 31 was followed by the 28, the 35, and the 39. All were available as kits or as factory-completed boats. All were double-enders because, as Clarke puts it, "We decided to keep them that way. If you start changing the designs, you start arguing against your own premise."

"I liked double-enders, as did the Southern Cross folks," says Tom. "It was sold as something new to the public, although of course it wasn't. Canoe sterns had been around for at least a hundred years, particularly in the Mediterranean. People thought they were more seaworthy than transom-stern boats, but I don't think there's a difference. About the only difference is that a transom stern can be noisy under some sea conditions."

"I like ketch rigs," says Tom. "I don't think it makes much difference what size the boat is, although it shouldn't be too small. I could sail all day on my Seawind with just the jib and mizzen."

Says Clarke, "The 31 was the most successful model by all measures. The 35 is a big boat. Its interior volume is probably twice that of the 31. The 28 didn't have enough ballast at first. Tom and I had a little go-round over that one. It was another takeoff from a wooden design of his, and he had to extend the keel or something to add ballast. We never sold that many 39s. We overestimated the number of people who needed a boat that large."

Speedy as well

Southern Cross boats also are known for a turn of speed, something Tom claims not to have been concerned about. "I was trying to achieve a hull form that would go to sea well. I wasn't interested in speed necessarily, although some of my boats are quite fast. Generally, speedy boats are not seaworthy boats. Seaworthy boats are a little slower because you have to give them more sheer to keep them drier in a seaway instead of flattening them out. You can do things to make boats faster, but they are less seaworthy, I think. It's pretty easy to know what goes fast — it's long and narrow without much beam. But it'll be wet at sea. Some designers specialized in fast boats, but not me. I went for something safe and comfortable at sea."

Clarke Ryder entered a Southern Cross 31 in the 1977 Marion to Bermuda Race. "We finished third in class," he says. "The 31 is a fast boat off the wind with the tall rig. Also, I can remember one particular around-the-buoys race in that same boat when we came in first ahead of a Tartan 34. If the wind is right, the 31 will do very well."

Pat Henry chose a Southern Cross 31 for her circumnavigation. She began her journey in 1989, setting sail from Acapulco, Mexico. She completed the trip on May 5, 1997, when she once again anchored in Acapulco.

She writes from her home in Puerto Vallarta, Mexico, "When I began my search for a cruising boat I was not familiar with the Southern Cross line of boats at all. I was focused on a full-keel fiberglass hull with good lines. My budget was tight, which limited my size range, not for original purchase as much as for replacing aging gear. I also had a long list of features/characteristics that were important: good bridge deck, small cockpit, solid bulwarks, sturdy rigging, bronze portholes, and as much cruising gear as possible. When I saw my SC31 for the first time, I knew almost instantly that she was the boat for me. Her graceful, handsome lines just grabbed me, and the survey and test sail made the sale."

Great choice

Pat continues, reflecting on her circumnavigation, "Now I know what a great choice I made. She has proven dependable and seaworthy in pretty heavy conditions (28-foot seas and 60-knot winds for more than a day at a time.) The cockpit provides a sense of security, and the space below is light and roomy. The ventilation is superb. Never a 'boaty odor' belowdecks."

Pat has a degree in architecture and makes her living painting, writing, and making motivational speeches to business groups. Her memoir, *By the Grace of the Sea: A Woman's Solo Odyssey Around the World*, is scheduled for publication this fall by McGraw-Hill. As Clarke Ryder puts it, "Pat Henry is braver than most of us."

Tom Gillmer selects the Southern Cross 35 for special praise. "One owner told me it was the smoothest boat he had ever sailed in the ocean. That's quite a lot to say about a 35-foot boat."

That opinion of the SC35 is seconded by Pat and Colleen DeGroodt, who in 1998 began a circumnavigation in a SC35 cutter named *Simmer*. They write from Cape Town, South Africa, "We find she sails exceptionally well in light air compared to other, similarly sized, cruising boats and holds her own in heavy air. No matter what sails you have, she can be balanced to sail on the windvane easily, thanks to the cutter rig. We definitely like the appearance. We always enjoy looking back at her on anchor as we dinghy away, and other cruisers also comment favorably on her aesthetics.

"The layout below is perfect for a couple, especially offshore (two great sea berths). We particularly like the nav station layout and location. The galley is ideal at anchor and offshore. Bronze opening ports and three deck hatches make it cool below even on the equator. The deck is well laid out for shorthanded sailing, and the cockpit is big and very comfortable. The sidedecks are clean and easy to traverse since the shrouds are inboard."

According to Clarke, the last Southern Cross was produced in 1983, although some kit-built boats were completed by their owners well after that. The C. E. Ryder Company closed its doors in 1990.

Kenner Privateer 35

Privateers

Also early in the fiberglass revolution, Tom Gillmer connected with "a fellow named Kenner down in New Orleans, and I designed a couple of boats for him. He didn't know much about sailboats. He mainly was building houseboats for the river. They looked like boxes."

The first Tom Gillmer design the Kenner Boat Company produced was the Privateer 26, yet another ketch-rigged boat with a cutter option that Tom had originally designed in wood. It was derived from a larger wooden boat he had designed many years earlier called the *Wind and Wave*.

According to a brochure of his designs published in the 1970s, he described the Privateer 26 as "a boat of rather unusual character but conventional structure. Her stem form, which has been rather loosely referred to as a clipper bow, is actually more of the Chesapeake stem form in profile. It is much like that seen on the sailing oyster boats, old bugeyes, and the old pungy schooners of the 19th century." Thus, Tom couldn't resist reaching back to his memories of the skipjacks for design elements for one of his boats. He used the same bow design on at least two other boats.

His other design for Kenner was the Privateer 35, again a ketch-rigged cruiser. That boat was manufactured from 1968 to 1972.

"I like ketch rigs," says Tom. "I don't think it makes much difference what size the boat is, although it shouldn't be too small. I could sail all day on my Seawind with just the jib and mizzen. With the ketch rig you could add sail area, and that translates into more speed. It's also easier to find a sail combination that balances the boat so that she would steer herself, which is good for short-handed sailors. I never liked to sail alone but often did."

Historical designs

As a naval architect at the U.S. Naval Academy in Annapolis, Tom Gillmer developed an interest in the history of ships. He wrote several books on the subject including one titled *A History of Working Watercraft in the Western World.* When the City of Baltimore decided to commission a design for a replica of a Baltimore Clipper as a tourist attraction, Tom Gillmer was the natural choice as architect. He designed the original *Pride of Baltimore* in 1976 to 1977, and thousands of visitors to Baltimore's Inner Harbor watched the ship being built at the water's edge.

When the *Pride* tragically sank off Puerto Rico in a storm in 1986, the public outcry for a new *Pride of Baltimore* resulted in his designing the *Pride of Baltimore II* in 1988. *Pride II* was designed as an oceangoing vessel to meet stringent Coast Guard licensing requirements, something the original *Pride* was not

Neil Pancoast's Privateer 26, at right, Neil is the contact for Privateer sailors: <http://www.privateer26.org>.

At left, Mike Murphy's *Miss Sweet Pea* sails near Massachusetts.

designed to meet. *Pride II* has sailed to all the corners of the earth as a floating ambassador for the citizens of Baltimore and the state of Maryland and, as Tom puts it in his usual understated manner, "She has been most successful."

Tom also designed the *Lady Maryland*, a replica of a Chesapeake Bay pungy schooner workboat owned by the Living Classrooms Foundation in Baltimore. The boat is used as an environmental teaching vessel for students throughout Maryland. The Navy also hired Tom as a consultant to study the condition of the *USS Constitution* to restore that ship for her bicentennial celebration in 1997.

One of his last large historical projects was the design and construction of the *Kalmer Nyckel*, a 139-foot replica of the Dutch pinnace ship that brought the first settlers to Delaware Bay in 1638. The *Kalmer Nyckel* is the Tall Ship of the State of Delaware and is based in Wilmington.

Needing assistance in 1986 as part of the *Pride II* project, Tom hired Iver Franzen as a draftsman. This began a partnership that lasted until Tom formally retired as a naval architect in 2000. Ivar, himself a bluewater sailing veteran with a 500-ton Coast Guard license, also assisted Tom in the *Constitution* and *Kalmer Nyckel* projects in addition to several others of a historical nature. Now a naval architect himself, Ivar says, "when people ask me where I went to school, I tell them I went to the University of Tom Gillmer."

Boats that sail well

Iver helps put Tom's cruising designs into context. "One of the primary concepts he taught me is that you design a proper boat from the outside in, not from the inside out. Tom's a firm believer in designing a properly performing boat and then designing the interior, not designing the interior first and wrapping a boat around it. Today boats sell better if you design them from the inside out. Many boats today are sold sitting at the dock at boat shows. They are commodious below, and people think they will be more comfortable. But that doesn't mean they are actually more comfortable, seaworthy, or dry when at sea. A lot of them aren't."

He continues, "Of course, some of that is due to the period when Tom was designing. In his day, no one tried to cram so much into a boat. It was easier for the Herreshoffs, the Brewers, and the Gillmers to design a properly performing boat because they weren't expected to have all the amenities people expect in new boats today. But also, the newer, high-tech materials today allow for some latitude in the design approach, although the basic theory still holds true."

"Tom's a firm believer in designing a properly performing boat and then designing the interior, not designing the interior first and wrapping a boat around it."

What sets Tom Gillmer's designs apart? According to Ivar, "Tom's boats are straightforward in design. He likes a nice, springy sheer. He wasn't afraid to use a lot of sheer, which was part aesthetics, but also part necessity. More sheer leads to a drier boat. The bow doesn't have to be as narrow so that it won't bury in a wave."

Says Jack Horner, an Annapolis-based naval architect, marine surveyor, and author, "I think when you compare Tom Gillmer to others, you need to compare him to the likes of Alberg, Garden, and Stephens in that they all had a conservative approach in their designs. Tom found a good formula for his production boats and stayed with it. I also don't know of any of his designs that don't perform or handle well. That's to his credit. His overhangs weren't as long as others of his day, meaning his boats have shorter ends for a longer waterline, less hobby horsing, and better boat speed."

Striking feature

When examining all of Tom's designs, one striking feature is their variety. While some of his production boats are similar, as in the Southern Cross line, his stock design portfolio for amateur builders and for one-off designs in wood and fiberglass was quite varied. "I sold quite a few stock designs to amateurs," Tom states. "I had a statement in one of my booklets that amateurs were pretty much on their own. I tried to stay away from a few of them I thought couldn't handle building a boat. I got orders for my plans from all over the world, though. I did have different ideas at different times for my designs. My boats don't all look alike. I liked trying out different ideas."

Ivar adds, "Tom's designs did have a variety of looks through the years. He wasn't afraid to try something different, although some of that is client-driven, of course."

A common thread throughout Tom Gillmer's design career is summed up by Dan Smith this way: "Tom has a firm background in designing many classic boats. He sure does have an eye for a good-looking boat."

Pat Birchard bought Privateer Hull #93 "for a good price," as he puts it, after she'd sunk in her slip. After 14 months of hard work, his *Lady in Red* is a beauty.

Blondie Hasler's legacy

A single-handed pioneer of Folkboats and self-steering

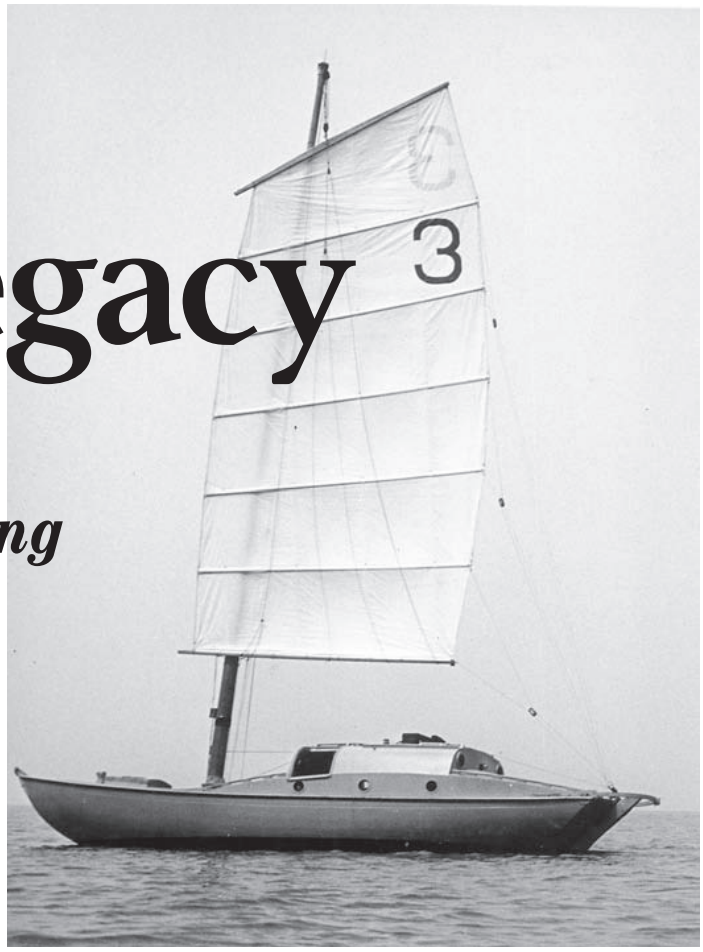


Photo courtesy of Mrs. Bridget Hasler

by Dieter Loibner

THE FOLKBOAT WAS DESIGNED AS A family racer/cruiser, but over the years it has earned an extraordinary reputation for seaworthiness, and many of these slim 25-footers have sailed around the world.

To find out when the Folkboat joined the ranks of bluewater vessels, we need to look back to the early 1950s and to the story of Colonel Herbert George ("Blondie") Hasler, D.S.O., O.B.E., of the British Royal Marines. In addition to his love for extreme ideas, Hasler deserves credit for a number of achievements that have changed single-handed sailing, ocean racing, and the world's perception of Folkboats. To gauge his resolve and bravado it helps to know that he led Operation Frankton, one of the most daring commando actions against the Nazi occupiers of France. In December of 1942, 10 men in five folding kayaks were dropped off by a submarine at the mouth of the Gironde River near Bordeaux. The mission of the "cockleshell heroes," as they later were called, was to paddle 60 miles upriver at night, in order to blow up enemy cargo ships in Bordeaux. Only Hasler and his crew survived after accomplishing the mission. They escaped and made their way across hundreds of miles of enemy territory to Gibraltar.

After his discharge from the military, Hasler became a liveaboard, but he had bolder, more adventurous things in mind than staying put in a marina. In 1953, he contracted the yard of Harry Feltham in Portsmouth to build a carvel-planked Folkboat hull with a special superstructure with three hatches that allowed him to sail single-handed while adjusting the sail trim and course from down below — without ever going on deck.

Hopeless expectation

In the foreword to Phil Weld's book, *Moxie*, Hasler describes the reasons for his choice of boat: "Until 1952 I had always sailed and raced in conventional boats, but I wanted to make long ocean passages and soon came to realize that it was hopeless to expect to be able to raise a crew of congenial friends who could get away for long enough at the right time. I would have to be able to sail single-handed, but I knew from experience that efficient single-handing in conventional boats calls for a nautical athlete with an appetite for continual hard work and exposure. I was nearly 40, lazy by nature, and preferred cunning to brute force. I got myself a new 25-foot Folkboat hull, named her *Jester*, and began with very little money to develop on her three things that I needed: a rig that could be handled at all times without going on deck; an enclosed cockpit with a watchkeeping position that allowed you to face out in the open air whilst protecting your head from rain and spray; and a windvane steering gear that would steer her on all points of sail and which could be adjusted from the cockpit."

The result was a boat that looked like a compromise between a Folkboat, a submarine, and a Chinese junk, but as history proved, it was functional, and Hasler had every reason to call *Jester* "a good joke." She was built from mahogany over oak with heavy scantlings and had no aft cockpit like the original Folkboats. The round hatch amidships was reminiscent of the commander's hatch on the conning tower of a sub. The spray protection Hasler had in mind was provided by a rotating canvas hood that could be folded away. Instead of an internal combustion engine, Hasler opted for a long sweep that he stowed on the foredeck for sculling the boat in calm waters, a concept that North America's most conspicuous cruising couple, Lin and Larry Pardey, repopularized a few decades later.

Dead end

His experiments with a single-hander-friendly rig initially led him into a dead end. His first try was a lapwing. In this configuration, the sail was wrapped around the rotating, unstayed mast and doubled back onto itself for sailing upwind. For downwind legs it could be spread apart to increase sail area, boomed out on two poles in wing-and-wing fashion. To reef it, the sail had to be furled around the mast. It all sounded good on paper but did

Above, *Jester,* the highly modified Folkboat loved and raced by both Blondie Hasler and Mike Richey.

not work well in practice, so Hasler started to look into junk rigs, which had been refined over thousands of years and seemed to fit his needs.

His solution for *Jester* was a balanced Chinese lug rig that had a sail area of 243 square feet, close to the original Folkboat's. This rig had numerous advantages, aside from its simplicity. It automatically depowered in heavy air through the mast's bend and the twist in the upper portion of the sail that spilled pressure. Because a portion of the sail always was forward of the mast, it also counteracted weather helm, a customary problem for long-keel vessels with small or no headsails. Consequently, the steering gear was under much less load. Finally, the sail could be reefed very easily and incrementally, panel by panel, without any effort or the need to tie reeflines. Hasler rigged sheets from the battens down to the deck and simply chose the reduction of sail area by pulling the appropriate line. The sail would slide down along the mast to which it was attached by batten parrels. The excess cloth was caught by lazy-jacks that ran all the way from the yard down to the boom.

Vertical tiller

Hasler's most important legacy lies in the refined steering mechanisms that he developed for *Jester*. For manual steering, he used a whipstaff that was installed forward of the main hatch, so he could stand up, face forward, arms on deck, and direct the boat by pushing the vertical tiller with his knees.

His true act of genius has survived until this day, unbeknownst to thousands of sailors who have come to rely on windvane steering mechanisms. Like *Jester's* rig, this part also saw two stages of evolution. First Hasler favored a trim tab that was attached to the trailing edge of the rudder. The windvane was set to the prevailing wind direction and would change the boat's course if the wind direction changed, keeping it on the same pre-set wind angle. Hasler noted that this system lacked power sailing downwind, where it mattered most. His improvement included a servo mechanism to harness water and wind pressure, which then

"Hasler's most important legacy lies in the refined steering mechanisms that he developed for Jester."

are used to operate the cables of the steering gear. This system was also adaptable to different conditions, sail configurations and hull shapes.

Hasler claimed that on the four Atlantic crossings he would eventually undertake with *Jester*, he steered only 50 miles by hand; he left the rest of the approximately 12,000 miles to his self-steering mechanism. Although many more refinements were to follow over the years by others, Hasler had laid the groundwork for reliable and practical self-steering mechanisms, which have become standard for thousands of single-handers and short-handed cruisers since.

Why does the world know so little about Hasler's contribution? One reason may have been his lackadaisical approach to bureaucracy. He never bothered with patents, loathing the fact that this meant dealing with courts and lawyers.

Race to New York

Now that he had a fine seagoing vessel, still a Folkboat in dimensions, hull shape, and character, he needed to create an event to put it to the test and measure up to others. The year was 1959 and single-handed ocean racing, far from being as popular as it is today, was considered a game for lunatics and suicide candidates. Hasler's idea was a single-handed transatlantic race to New York, but he neither had a club to sponsor it nor an opponent to race against. The solution arrived in the person of Francis Chichester, who had already made a name for himself as a pioneer in single-handed aviation.

Chichester was ready to take on the challenge with his 39-footer, *Gipsy Moth III*, and bet a half crown that he could beat Hasler and *Jester* to New York. Chichester, who suffered from lung cancer and at that time ran a store for nautical supplies in London, pulled a few strings and managed to convince George Everitt, the commodore of the Royal Western Yacht Club in Plymouth, to organize such a race.

The London daily newspaper, *The Observer*, agreed to bring in sponsorship and media coverage and so the OSTAR, the Observer Singlehanded TransAtlantic Race, was born and quickly was dubbed "the most sporty event of the century."

Five boats were entered for the first race. Chichester and Hasler aside, the competitors included Valentine Howells, from Wales, who

Blondie Hasler in 1960, at the time of the first OSTAR, at right. Below, in Scotland in 1985.

Photos courtesy of Mrs. Bridget Hasler

Billy Black photos

Although he did not race to win – just for the fun of it – Mike Richey continued the tradition of singlehanded ocean racing on *Jester*. He's shown here following the race in 1996.

also sailed a Folkboat, *Eira*; David Lewis, a London doctor who was interested in the medical aspects of such a trip, entered *Cardinal Vertue*, a 26-footer; and a Frenchman, Jean Lacombe, showed up with a 21-foot plywood construction, *Cap Horn*.

Early pioneers

Compared to today's racers in carbon-fiber monsters (mono and multihulls) guided by electronics and satellites and competing for line honors in transoceanic races, Hasler and his colleagues were the pioneers rolling west in horse wagons. The amazing thing was that all five boats, inadequate as they may have seemed, finished the race despite having to deal with more than just their fair share of rough weather.

Chichester won his half crown and the race by posting a time of 40 days, followed by Hasler in 48 days. Lacombe came in last, after a whopping 74 days. Howells was beaten up in a ferocious storm that knocked him down so hard that his chronometer broke. He already was without electrical power so he had no light and no means to receive the GMT radio signal for the rest of the trip. Hasler, who sailed a more northerly route than Howells, also came out of a nasty storm that forced him to sail with the Number 4 reef for days on end.

After so much excitement, the OSTAR became an institution and, four years later, Hasler and Chichester were going at it again, this time in a fleet of 15 boats. The finish was moved to Newport, Rhode Island, and the pace was a lot faster. Our two heroes trimmed considerable time off their first crossings in 1960. Chichester finished in 29 days and 23 hours, and got second. Hasler took 37 days and 22 hours, and finished fifth. The big winner, a sensation at the time, was a French sailor, Eric Tabarly, with *Pen Duick II*. His time of 27 days and 3 hours set new standards. It made him an instant hero in France.

New record

Over the years, the event has endured, attracting fleets in excess of 100 boats and spiffy high-tech craft vying for prize money and record times. In 1992, when the race was called Europe Star '92, a German lawyer, Karl Brinkmann, raced a Nordic Folkboat and finished in 37 days and 23 hours, an hour behind Hasler's time in 1964. In the same race, a Bulgarian woman, Petja Christova, set a new unofficial Folkboat transatlantic record with 35 days and 6 hours.

It should be noted that each time Hasler raced *Jester* across the big pond, he also sailed her back on her own keel. After the race in 1964, Hasler made the decision to sell her, but not before he pulled another stunt. Shortly after returning, he brought her up to Scotland's famous lake of Loch Ness for a month of "monster patrols," sponsored by *The Observer*. It was a typical Hasler gig. Although he claimed quite credibly to be a believer in Nessie, the affair was definitely tongue in cheek, mocking the establishment.

Jester's saga was to continue under the aegis of her new owner, Mike Richey, a friend of Hasler's and at the time the director of the Royal Institute of Navigation. Richey sailed her six more times in the single-handed transatlantic race, which he called "a race for every animal in the zoo."

Richey did not race to win. More often than not he finished outside the 50-day time limit or he abandoned the race either to turn back or to head for other destinations. Single-handing was a way of life for him, like it was for Hasler, a way to make the trip count more than the arrival. "You spend a lot of time wishing you were somewhere else," he said in an interview in *WoodenBoat* magazine. "But it is fun, a nice way of life. We spend much time looking for reality. It gives you a sense of reality." Amazingly, Richey still was at it in his 80s, battling the ocean for months on end, confined to the cramped, stripped-out interior of *Jester* that offers sitting headroom only, just like the real Nordic Folkboat.

Rolled, dismasted

Eventually, all things must come to an end, even for a tough little warrior such as *Jester*. In 1986, on her 13th Atlantic crossing, *Jester* was rolled and dismasted 300 miles offshore from Brittany. A freighter picked up Richey's distress signal and plucked

him and the wounded *Jester* from the sea, documented by a photo that had the boat dangling from a crane, bow pointing skyward and the remains of the snapped spar sticking out.

The final act in *Jester's* legendary existence came on July 15, 1988, during the next race, at the position of 38°08' north, 58°43' west, 470 miles out of Halifax. After a series of knockdowns in severe weather, Richey set off his EPIRB. The Coast Guard sent planes to check on him and coach his rescue by the *MS Nilam*, a freighter that diverted course. Richey had second thoughts about this rescue business. Yes, *Jester* was severely damaged, but she was still afloat. However, the forecast was bad and the coast was more than 400 miles to the west, under the given circumstances a week, probably more, of sailing on a wounded craft.

After much agonizing and weighing the options, Richey agreed to abandon *Jester* and transfer to the *Nilam*. After an unsuccessful attempt to tow her hull behind, she was cut loose, and Richey had to watch helplessly as she bobbed in the wake astern and slipped out of sight to meet her fate. *Jester's* disappearance proved to be traumatic for her skipper. For a long time Richey held the belief that he was taking an easy way out by choosing the safe course of action.

"Men personalize their boats like no other artifact. I felt I had failed her, that I should have stayed with the boat," he wrote about his emotions in the aftermath of *Jester's* loss. "Better to pass boldly into that other world in the full glory of some passion than fade and wither dismally with age," he borrowed from James Joyce.

Many fans

But not all was bad. *Jester* was more than any old boat. She was inseparable from the history of the OSTAR and single-handed ocean racing. And she had a large fan base. A trust was formed to finance the building of an exact replica for the next race in 1992, which also commemorated the 500th anniversary of Christopher Columbus' legendary voyage to the new world. Nigel Rowe, who chaired the trust and otherwise was a pivotal figure in the creation of the OSTAR, summarized

Courtesy of Mrs. Bridget Hasler

***Jester* in Plymouth Sound in 1960.**

the reason for such an undertaking succinctly when he said that "*Jester* epitomized that spirit of adventure and courage that characterizes so much of Britain's maritime history."

The new *Jester* was built at Aldeburgh Boatyard in Essex, a shop that specializes in building small keelboats such as Dragons, cold molded and in fiberglass. The lack of detailed construction lines of the original forced the yard to use Folkboat drawings. The new version was cold molded from four diagonal layers of khaya with an outer layer of

> *"You spend a lot of time wishing you were somewhere else, but it is fun, a nice way of life."*

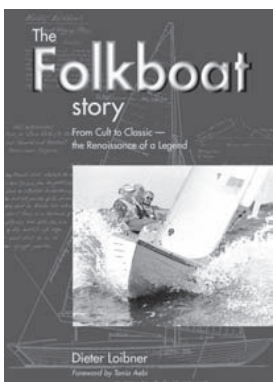
Brazilian mahogany. The frames were laminated, the floors were solid mahogany and the deck consisted of two layers of ¼-inch marine plywood. The overall weight was similar to the original, but weight distribution, due to the light hull construction, was different. The most difficult part, according to the builders, was crafting perfectly fitting mast wedges for the unstayed rig so they wouldn't work themselves loose. Richey also re-created the simple but effective original sail that he came to appreciate on all his previous voyages, joking that *Jester* had the "ideal geriatric rig."

Fast passage

Richey and the new *Jester* participated in the 1992 race and sailed one of their fastest passages, finishing in 45 days and 15 hours and celebrating the skipper's 76th birthday somewhere out in the Atlantic. The boat wintered in Newport, and Richey sailed her back to England the following summer to announce his retirement from that kind of sport, making way for a younger female skipper who, unfortunately, never got the hang of sailing and enjoying *Jester*. So when 1996 rolled around, Richey was at it again. After the race he laid her up in Newport for the winter and sailed back east again the following summer. En route he celebrated his 80th birthday, toasting his late friends and soulmates, Hasler and Chichester, who had shared Richey's passion for the ocean, single-handed racing and a Folkboat's seakeeping abilities.

What was an addict going to do when the 2000 race was about to start? Richey saddled *Jester* once again for his ninth race and the boat's third. This time, however, they did not finish, due to a cooker that blew up, forcing them to divert to the Azores. Knowing there was no chance of making the time limit for that race, the skipper decided to sail back to Plymouth. They arrived at their home port safely after three months at sea, only to find that *Jester's* free mooring had been seized by the authorities. After all those years and miles, what a sad joke. *(Mike Richey wrote about his experiences in the 2000 race in* Cruising World, *February 2002* ***–Ed****.)*

Reprinted from a new book by Dieter Loibner, The Folkboat Story: From



Cult to Classic, the Renaissance of a Legend, *published by Sheridan House. For fans of the Folkboat and all her kin, this book is a treasure.*

Homage *to* Lyle Hess

Lin and Larry Pardey

His designs were few but all became timeless classics

by Marianne Scott

Traditional. Classic. Timeless. Character boats. Boats from the heart. These are just some of the terms the owners of boats designed by Lyle Hess express when describing their vessels. Although many sailors fall in love with their boats — warts and all — those owning Lyle Hess designs seem especially fervent. It matters little if the boat is a Balboa, Montgomery, Nor'Sea, Bristol Channel Cutter, Falmouth Cutter, or a Hess custom design…the owners are suffused with the same ardent devotion. Even his stable dinghy, humorously called Fatty Knees, has created a horde of aficionados.

Lyle died in July 2002 at the age of 90, and what may be most gratifying to him — if he's up on his cloud eyeing his legacy — is that most of his fiberglass designs are still being built and plans for designs in wood are still being sold. Lyle's reputation as an outstanding yacht designer is secure, even though, as fellow designer Robert Perry says, "his overall output was scant."

Lyle loved sailing and building boats and spent most of his life "messing about" in them. His views on how boats should look and be built were influenced by reading such writer/designers as Maurice Griffiths, who edited the British magazine *Yachting Monthly* and wrote the classic tales of cruising, *The Magic of the Swatchways*, *Little Ships and Shoal Waters*, and *Dream Ships*. Lyle's designs thus hark back to the British workboats of yesteryear, including vessels with such delicious names as Itchen Ferry smacks, Falmouth Quay punts, and Bristol Channel pilot cutters.

> *"He began sailing in whatever he could cobble together, using flotsam, metal sheets, bits of two-by-fours, and old barrels."*

Workboat heritage

Although these boats differed in design and function, they shared a stout workboat heritage. In the 19th and early 20th centuries, pilot cutters competed for the job of guiding big sailing ships and motorized freighters into harbor. These cutters would sail far out into the shipping lanes and heave-to, waiting for a ship while braving the winds, waves, and high tidal ranges off the English coast.

To survive the elements and compete effectively, they were heavily built and rigged for singlehanding. Yet they also needed to be swift to reach a potential customer. Most were characterized by long waterlines, hard bilges, and tall rigs capable of pointing high and tacking quickly. After World War I, some were converted into pleasure yachts — like idled fishing boats are finding new uses as family boats today.

The British work- and pilot-boat legacy is clear in Lyle's designs, be they wood or fiberglass. Above all, he believed his sailboats had to be strong, heavy, simple, and "able to claw off any lee shore." But before he developed his career as a designer, he had a long apprenticeship building makeshift skiffs and dinghies while growing up in southern California.

In his autobiography, *Sixty Years a Yacht Designer*, Maurice Griffiths wrote, "What causes a man to take up a certain interest, an unusual hobby or activity perhaps, and become absorbed by it for the rest of his life, has long been debated. Some experience in early childhood, for example, has been

Mark Gearhart

***Godspeed*, Mark Gearhart's handsome Bristol Channel Cutter designed by Lyle Hess, dries her sails after a run down Chesapeake Bay from Annapolis, Maryland, to Reedville, Virginia, at right. Lyle Hess, facing page, inspects the ribs of Lin and Larry Pardey's *Taleisin*, 1983.**

known to set off the spark of interest which might grow into obsession in manhood." For Lyle, that formative experience took place during his early teens.

He did not come from a boating family. The eighth of 12 children, he was born in 1912 in central Idaho. Lyle's mother was a devout Mormon, but his father — who worked in construction — had another god: gold. After economic difficulties sent the family to Long Beach, California, in 1924, he continued to spend summers in Idaho mining his gold claim and searching unsuccessfully for the mother lode. As a teenager, Lyle grew enamored of the Pacific Ocean.

Trial-and-error flotation

To help the family finances and earn pocket money, Lyle hawked newspapers and sold popcorn at boxing fights. In his spare time, he began sailing in whatever he could cobble together, using flotsam, metal sheets, bits of two-by-fours, and old barrels. He and his friends learned about flotation by trial and error, their wet behinds a stimulus to improve their knowledge of what it took to create stability. Help and advice came from two veteran boatbuilders, George Chalker and Bill Whiting, who ran a yard next to the mudbank where Lyle dragged up his small craft. Most of the yachts built at the yard came from Edson Schock's drawing board, a designer who liked small and simple boats. Lyle listened avidly whenever the designer would drop by the boatyard to discuss details.

As Lyle became a good sailor and racer, he was offered opportunities to crew on other people's boats, both teaching the owners to sail and honing his own skills. By the time he turned 16, he'd drawn and built a real boat, a hard-chined 16-footer called *Viajera* that had enough of a cuddy cabin to sleep in. In this little sloop, he ventured as far as Catalina Island, 26 miles to the southwest of Long Beach.

His hands-on training was supplemented by his reading. Besides Maurice Griffiths, he studied the designs of Albert Strange, which were published as a series of 10 articles in *Yachting Monthly* in 1914 and 1915. He learned the mathematics applied to yacht design — weights, centers of gravity, stability calculations — from Dixon Kemp's *Manual of Yacht and Boat Sailing and Architecture*, first published in 1895. But unfortunately for Lyle, by the time he completed high school and was ready to work in the boating field, Black Monday and its subsequent run on the banks led to the Great Depression, and money for yacht building evaporated. He took whatever jobs turned up.

Hired as shipwright

In 1938, Lyle married Jean Seabring, whom he nicknamed "Doodle." World War II led to an explosion in boatbuilding, and Lyle was hired as a shipwright at San Pedro's Harbor Boatbuilding Co., building 138-foot minesweepers and 80-foot Vosper PT boats. Near the end of the war, Lyle and his family lived

Bill Sylvester

The Montgomery 17, a fiberglass boat with molded-in lapstrake detail, is a member of the successful family of trailerable cruising boats. *Endelig*, home port Santa Barbara, California, is ready to roll, at left.

Lin and Larry Pardey

briefly in Eureka, California, where he built fishing boats for the Humboldt Bay Boat Company. They then returned to Southern California where Lyle constructed 168-foot steam tugs.

His desire for designing his own boats became reality when he teamed up with Roy Barteau, a wartime shipyard colleague and expert wood craftsman. They formed the L.A. Yacht Yard in Harbor City in 1946. A 36-foot, 24,000-pound ketch, *Westward Ho*, was their first order. A 44-foot motorsailer, *Lady Elizabeth*, built for famed Hollywood cinematographer Ernest Palmer, came down the ways the following year.

Then, finally, Lyle was offered the opportunity to design something along the lines of the British workboats he'd studied so intently. Hale Field, an amateur designer and frequent boatyard visitor, was searching for a small traditional vessel capable of crossing oceans. Lyle presented Hale with a 28-foot design that Hale found lovely but too expensive, though later the design inspired the fiberglass Bristol Channel Cutter built in series by the Sam L. Morse Co.

Lyle sharpened his pencil and drew a 24-foot cutter with a beautiful sweeping sheer and a traditional bowsprit. Hale approved of this smaller version, and in 1949 *Renegade* slid down the ways. The gaff-rigged cutter measured just under 25 feet, offered 461 square feet of sail area, and resembled British Itchen Ferry workboats, although with a finer bow, a broader beam, and a hollower garboard area.

Slow business

A few other custom designs followed but as wooden boats are a slow business, the yard produced insufficient income to support two families, especially for Lyle and his growing brood of four children. With great reluctance, Lyle sold his half of the L.A. Yacht Yard to Roy Barteau and went into the concrete construction business with his brother, Ray. For about a decade-and-a half, Lyle's boat designing became a sideline.

All that changed when Larry Pardey, a Canadian from Victoria, British Columbia, spotted *Renegade* in Newport Beach and learned that she'd won the Ensenada race in 1954 and 1957 — the smallest overall winner ever. Eager to have his own offshore sailboat, Larry decided to build himself a boat from *Renegade's* plans. He located Lyle, and the two sailors spent many an evening discussing plans and modifications.

"Lyle became a father figure to me," says Larry. "I spent the next three-and-a-half years building *Seraffyn of Victoria*, and Lyle taught me 90 percent of my boatbuilding skills. He helped with the tooling and lofting, loaned me tools, and was remarkably generous with his time…to me and everyone else. He never charged for the advice he gave. He was a design savant but the world's worst businessman."

"People who worked with Lyle Hess developed a deep affection for him. 'A great teacher,' they called him. 'Helpful.' 'Generous.' "

Soon after beginning *Seraffyn*, Larry Pardey met his future wife, Lin. Lyle's relationship with the two revolutionized his life. After the marconi-rigged cutter, *Seraffyn*, was launched in 1968, Lin and Larry spent the next 11 years cruising the world's oceans and writing about their adventures in magazines and then books,

Lin and Larry Pardey

Lyle shares a laugh with Lin Pardey, at top, during a break in *Taleisin's* construction in 1982. Lyle and Larry Pardey, above, aboard *Seraffyn* in 1976. After years of cruising *Seraffyn*, the Pardeys decided they wanted a somewhat larger boat and commissioned Lyle to design *Taleisin*, at right. Just under 30 feet, she's sailing off San Diego in 1984.

stimulating interest in their traditional, engineless boat and spreading Lyle's boatbuilding savvy and philosophy. "It sure didn't hurt that I had a photogenic boat and a photogenic wife," says Larry, grinning.

More Hess

Their second hand-built cutter, *Taleisin*, another Lyle Hess design measuring just under 30 feet and launched in 1983, further enhanced the Pardey and Hess reputations. Larry also introduced Lyle to Richard Arthur, who had a yen to build a fiberglass, trailerable sailboat, one that would be seakindly and yet affordable for the average family. He founded Arthur Marine and started producing Lyle's first fiberglass boat, the Balboa 20, with a swing keel. Dubbed the "Go Fast, Go Anywhere Boat," the model caught on and sold about 3,500.

Buoyed by this success, Lyle was pleased to give up construction and return to boat design, making the 1970s and 1980s his most productive years. During the heady 1970s, Lyle even designed a couple of small catamarans but, although about 100 were manufactured, they couldn't crack the market ruled by Hobie Cats.

The Balboa 26 followed and sold about 1,500 units. An undated price list advertises the Balboa 26 at $5,795, which included tanks, an alcohol stove, and lights — everything else was extra. Lyle also designed the 20-foot Ensenada using a Balboa hull with a new deck, a swing keel, and kick-up rudder, and also the 25-foot LaPaz motorsailer for Coastal Recreation in Costa Mesa (best known for its Aquarius 21 and 23 trailersailers). Jerry Montgomery was another Hess devotee. He commissioned both the Montgomery 17 and 23. In 1980, Jerry added his own design of the Montgomery 15, about which Lyle is reputed to have said, "It was the best boat I never designed."

Next came the full-keel, yet trailerable, Nor'Sea 27, which was built by the Wixom Brothers at their yard, Heritage Marine. Like the Montgomery boats, an unusual feature is the lapstrake molding, replicating in fiberglass the technique of overlapping the bottom edge of one plank with the top edge of the plank below it. About 300 Nor'Sea sailboats exist today. The popularity of this boat was helped along by Wayne Carpenter, who wrote *The Voyage of Kristina* in 1983 and published articles in several sailing magazines about bluewater voyages he made in his Nor'Sea 27 with his wife, two daughters, *and* mother-in-law!

Friendly introduction

Bob Eeg, the owner of a Hess-designed boat, met Lyle at the Long Beach Sailboat Show in 1977 after having read about the new Nor'Sea 27. He fondly recalls his introduction to the designer: "He shook my hand and started telling me about this wonderful transportable cruiser that could take you around the world. He pointed out its stout construction, seakindly canoe stern, and strong lapstrake hull with its cutaway forefoot for ease of tacking when you have to claw off a lee shore. 'This is first of all a sailboat, Bob,' he said. 'It'll get you home safely.' He was a no-frills designer. I was sold."

Lin and Larry Pardey

Lyle enjoys the sitting tub Larry built for Lin, at her insistence, aboard *Taleisin*, during the boat's construction in 1983.

Bob visited Lyle at his home office in Fullerton, where he was warmly welcomed. "He had many drawings on his board, all salty and all impressive," Bob recalls. "He and Doodle invited me for lunch, and we talked about the Nor'Sea 27 and other cruising sailboat designs. Anyone could tell Lyle was proud of his sailboats and that designing them was his bliss. Shortly afterward, I ordered his Nor'Sea 27."

This, however, was not the end of Bob's association with Lyle. When Heritage Marine ceased operations in 1979 (Dean Wixom went sailing in his own product), Sam Morse bought the Nor'Sea 22 molds and tooling and changed its name to the Falmouth Cutter 22. Bob purchased the Nor'Sea 27 molds, moved them to a new factory, and restarted production in April 1980. The Nor'Sea 37, one of Lyle's last designs, is also available from the company, though few have sold. After Jerry Montgomery retired in 1994, Bob also acquired the molds for the three Montgomery boats and started producing them again in 1999. His most recent adaptation is a Montgomery 23 hull with a new deck called the Montgomery 23 Offshore Cutter. The prototype is finished and production will start soon.

Lin and Larry Pardey

A hall-of-fame gathering of sailors in 1979. Members of this group enjoyed time together while presenting seminars during a week-long circumnavigators' convention at Orange Coast College in Costa Mesa, California. From left to right: Larry Pardey, Lyle Hess, Miles Smeeton, Lin Pardey, Ginger Lee Field (center), Dwight Long, John Guzzwell, Maureen Guzzwell, Peggy Slater, and Beryl Smeeton.

Channel Cutter 34

Another old-time boatbuilder, Bryan Gittins, has begun producing a Falmouth Channel Cutter 34 on Vancouver Island. According to Hess protégé Craig Johnsen, this design, completed in 1987, represents the evolutionary culmination of Lyle's cruising cutter series. Bryan recently created molds and built the first fiberglass boat to be launched in Houston, Texas, in spring 2004. A second hull is in the works.

Perhaps Lyle's best-known designs are the Bristol Channel Cutter and the Falmouth Cutter (which, as noted, started out as the Nor'Sea 22), built by the Sam L. Morse Co. Sam Morse hung out his shingle in 1975 in Costa Mesa and approached Lyle for a design. Lyle pulled from his archives the plans for the Bristol Channel Cutter (BCC).

Few boats have been reviewed so often and so favorably. Ferenc Maté included Morse's boats in his 1981 book, *The World's Best Sailboats*, titling the chapter, "One for the Eyes," and opening it with these words: "I might as well start off by telling you that the Bristol Channel Cutter and the Falmouth Cutter are the most beautiful 28- and 22-foot boats in the world." One might think that a boat designed more than half a century ago (then redrawn 25 years later) would no longer merit new ink. But BCC assessments and accolades continue to appear.

In 1999, John Vigor wrote in his book, *Twenty Small Sailboats to Take You Anywhere*, and also in *Good Old Boat* (May 1999), which was reprinting chapters from the book, "The Bristol Channel Cutter is a boat of superlatives. For many dedicated long-distance cruisers, she is, for her size, simply the best of everything: the most comfortable, the most seaworthy, the most traditional, and (naturally) the most expensive. There are some who call the BCC the Rolls Royce of yachts, but they have it the wrong way around. The Rolls Royce is actually the BCC of automobiles…"

Crossing oceans

A 1998 *Blue Water Sailing* article states, "The BCC has been around for nearly a quarter century, crossing oceans and knocking off 150-mile days in the trades, riding out storms with aplomb, and carrying its crew safely and happily to countless backwaters of the world…" A BCC served as cover girl on a 1993 edition of *Sail* magazine. *Practical Sailor* wrote in 1995 that "This is a go-anywhere boat, which like the Alerion, is a piece of furniture that you hope your children will cherish when you pass on."

Bob Eeg

The Nor'Sea 27 shares the molded lapstrake detail with the Montgomery sailboats. Available with aft or center cockpit, the sturdy double-ender is one of the largest trailerable sailboats ever built, though her displacement and draft won't make trailering a casual or frequent occurrence.

BCC owners are equally effusive. Kate Christensen, co-owner of RogueWave, an Annapolis yacht brokerage specializing in BCCs, owns one herself. She sails *Aloha*, which she calls her "true love" and "the apogee of traditional yacht design." Kate emphasizes the boat is suited to both women and men, even those who may be intimidated by sailing. "I appreciate the artistry and integrity of a well-made sailing vessel with traditional lines and seakindly movement, one with a proud and proven history," she explains. "She's a boat I can sail myself and she can go anywhere in the world! That's freedom. I enjoy every aspect of sailing from the romance and tradition to the boats and everything about them…how they work so ingeniously, how they are built, and how they are cared for."

Her husband, Bernie Jakits, is equally impassioned: "Lyle was the king of the long waterline. When you take the tiller, the BCC leaps over the waves. He created timeless designs that incorporated yesterday into today. He packed family values into a boat."

BCCs are still built in the boatsheds Sam Morse put up in the mid-1970s. Today, the company is headed by Sumio Oya, who succeeds first George Hylkema and then Roger Olsen as owners of Morse's original business. Sumio is building BCC hull No. 122. "The BCC, with her nostalgic shape, is perfect," Sumio says. "There's no need to redesign anything. In our high-tech world, there are new things every month. But Hess boats are timeless."

Contact information

Lyle Hess' boat plans can be purchased from his daughter, Linda DeCoux, at Lyle C. Hess Designs, 5911 E. Spring Street #360, Long Beach, CA 90808; fax 562-595-7923.

For current production models and parts, contact:

Bristol Channel Cutter and Falmouth Cutter 22
<http://www.samlmorse.com/>
Fatty Knees
<http://www.fattyknees.com/>
Falmouth Cutter 34
<http://www.channelcutteryachts.com/>
Nor'Sea
<http://www.norseayachts.com/>
Montgomery
<http://www.montgomeryboats.com/>

A Lyle Hess rendezvous will be held September 24 to 26 at Leonard Creek near Solomons Island, Maryland. For more information, contact Kate Christensen at RogueWave Yacht Sales: 410-571-2955, kate@roguewaveyachtsales.com.

Room for four

These factors may also be a drawback. The 28-footer demands the price of a production 42. Sumio has room for only four boats at any one time — he's presently completing a BCC and two Falmouth 22s. And the 9/11 attacks reduced his order list. Nevertheless, he is optimistic. "Although our price is high, so is our quality," Sumio says. "I trust our shipwrights, who've been with us for more than two decades. And Hess' niche-market boats have almost a cult following."

People who worked with Lyle Hess developed a deep affection for him. "A great teacher," they called him. "Helpful." "Generous." Craig Johnsen, who calls himself a "sometime yacht designer" and finished the second BCC hull built, spent two months as an apprentice in Lyle's Fullerton home in 1981. "In his mind, Lyle was always a blue-collar man," says Craig. "When designing, he imagined a young couple who could manage and afford a small, capable boat. He was a self-made man, with his own ideas. At times, he could

be really stubborn. He had lots of practical knowledge about boats up to 40 feet. Above that length, he felt less sure of himself."

Linda DeCoux, Lyle's younger daughter, demystified the origin of the name "Fatty Knees," which was given to Lyle's fiberglass dinghy. It seems Lyle's wife, Doodle, had her granddaughter, Shauna, on her lap after a bath and said to the 3-year-old, "You've got fatty knees." "No, Grandma," responded the tyke quickly, "you've got *really* fatty knees." "It became a family joke," said Linda, "so after that chubby, beamy dinghy was constructed, it naturally was christened Fatty Knees."

The Pardeys were also extremely fond of Lyle. "He loved boats and the people who built them," says Larry. "He had no enemies. But he was on the boating world's edge. Only in the 1970s was he able to earn a livelihood through his designs. He trusted people and signed contracts with a handshake. He was usually cheerful, became a father figure to many, and was just tickled that people wanted to build his boats."

" 'He was usually cheerful, became a father figure to many, and was just tickled that people wanted to build his boats.' "

Hess the chauvinist

Lin adds, "He was a man of his age, though. He could be a chauvinist. He adored me until I had design ideas. When I expressed the view that *Seraffyn* should have double spreaders, Lyle told me, 'Larry and I will talk about the rig.' "

The couple reveals that tragedy also touched Lyle's life. His two sons predeceased him. And during his last decade, macular degeneration robbed him of most of his eyesight, preventing him from designing. In 1990, Doodle suffered a serious stroke that paralyzed her right side.

"Dad was seen by many as a kind of boat magician," says Linda DeCoux. "At home, though, he could be difficult. But my mother truly loved and spoiled him. And it was reciprocal. After her stroke, for the next five years Dad completely reversed roles. Even though he was legally blind, he took complete care of her until her death."

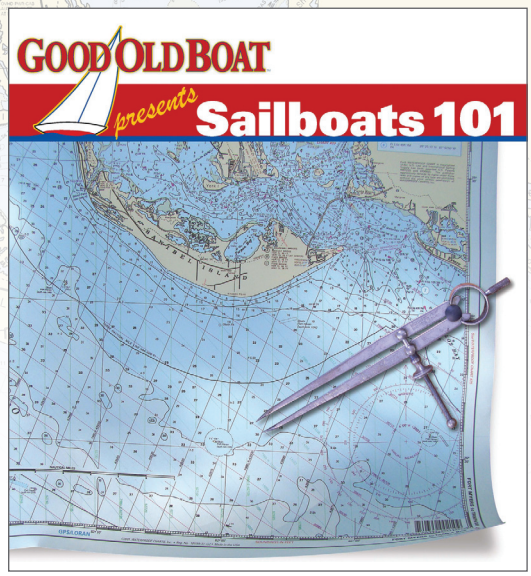
No longer able to drive, Lyle came to love the telephone, a device he once hated as it took him away from the drawing board. "People continued to call him looking for advice, making him still feel needed," says Larry Pardey. "I know why people called. Whenever I spoke with him, even in his last years, he always left me with a little boatbuilding jewel."

John G. Hanna says that "the cardinal rule in good taste in all design, on land or sea, is honesty of purpose." Lyle Hess' approach to boat design reflects that philosophy. He may not have developed a large number of different designs, he may have espoused a blue-collar approach with the goal of making boating accessible to the not-so-rich, but all his boats exhibit good taste. His own sailing adventure and his experience of building every possible kind of boat taught him well: sailboats must be strong and they must have purpose, good looks, sea kindliness, and the inherent ability to get home.

Archive eXtractions

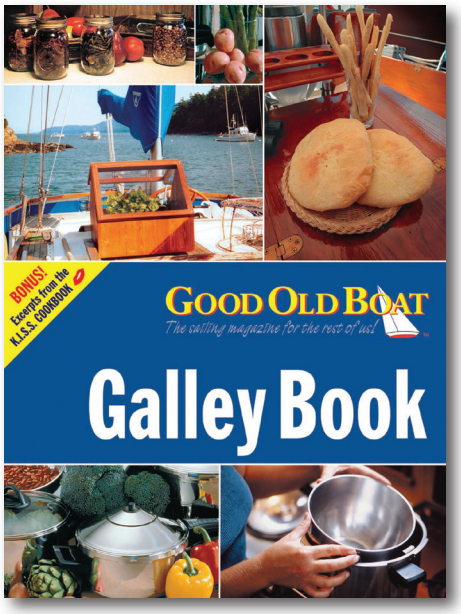
Articles compiled for you from *Good Old Boat* archives

Sailboats 101



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

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



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The World according to

Freedom Yachts founder believes something's amiss in

by Dan Spurr

Garry Hoyt has a passion for sailing, there's no doubt. At Newport Rhode Island's Ida Lewis Yacht Club, to which he belongs, there is, down on the dinghy dock, one of the yellow-hulled Escapes he designed, ready whenever he wants to, well, escape. And up the western shore of Aquidneck Island at the East Passage Yachting Center in Portsmouth, there is an Alerion Express 28 ready to sail at a moment's notice. Sometimes there's an Alerion Cat and Alerion 38 yawl too.

If not a demo sail for a potential buyer, then perhaps an hour spent in solitude. It's a daily routine, like walking the dog. To be enjoyable, nay, even possible, short outings like this have to be easy. Getting underway quickly is paramount. With too many boats, "sailing" and "easy" are mutually exclusive. It's a beef Garry has had with the industry for years. For the last 25 he's been taking his crusade to the street, or the dock you might say, trying to interest John and Jane Doe in the sport. The essence of his sales pitch is to keep it simple, safe, small, and affordable.

Listen in:

We're sitting in Garry and Donna Hoyt's Newport R&D office at the Little Harbor complex in Portsmouth. After brief salutations, he begins the rant.

"There's a whole pool of used boats out there," Garry says, "which is great for the buyer. But in terms of new boats, there's not a lot of vitality in the sailing market. People are turning to powerboats. I think there's a lack of design innovation. Fiberglass is forever so there is an abundant supply of used highly durable objects that are going to be there forever, that don't have the good grace to rust away like cars do. The truth is there hasn't been a lot of progress in hull design. There's nothing wrong with a 20-year-old boat. You Awlgrip it, give it new sails and change the rig a little bit, and you're laughing because the price is much lower than a new boat. That makes it tough to sell a new boat. The market is very tradition-bound, which inhibits progress. I think the problem has to be solved with small boats."

All talk

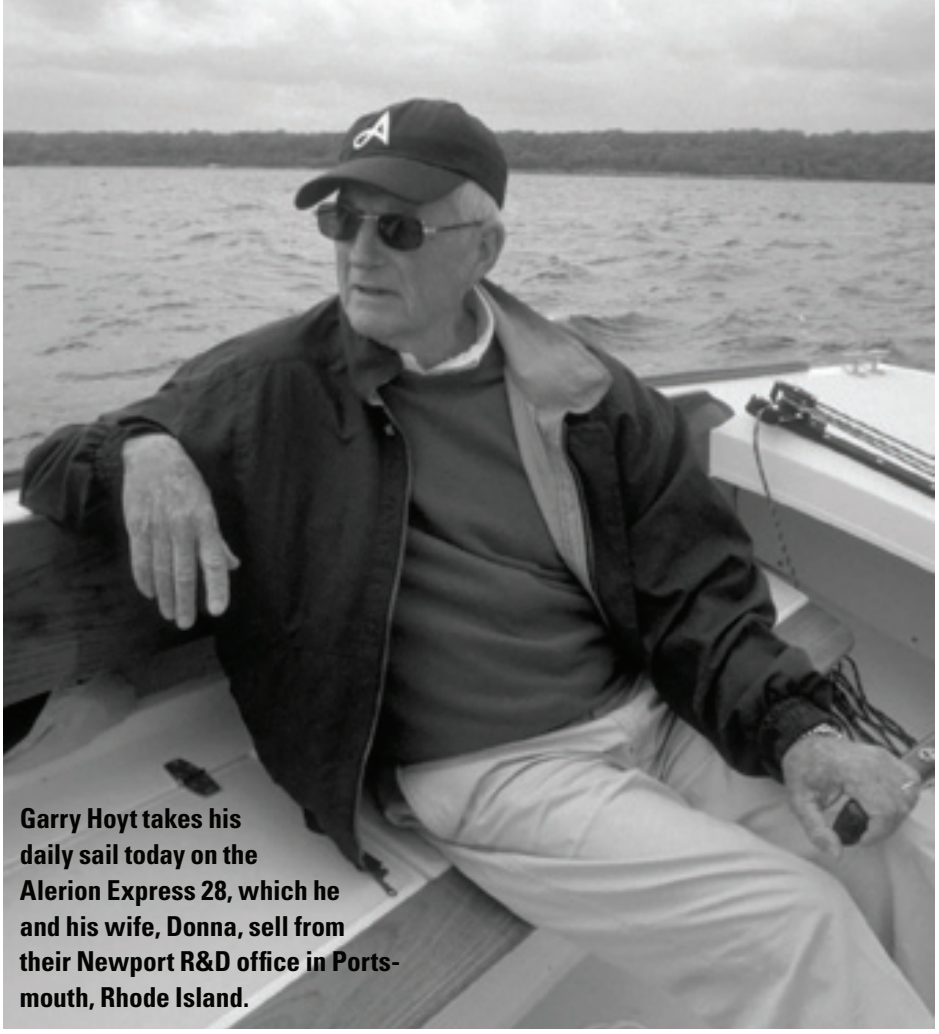
Right now Garry is all talk, but he's also a man who gets down and gets it done. A former marketing executive, writer, talented salesman, and self-taught designer, he backs up his talk with boats. The line of rotomolded polyethylene Escape sailboats he designed for Peter Johnstone is one of the more recent milestones in his long quest to simplify sailing. Like the Expo Solar Sailer, on which he developed the color wheel that helps beginners figure out how to trim the sail for any given wind direction (more on this later).

On the office floor Garry rolls out drawings of his current projects. The first is of a boat called Volare (see illustration on Page 17) that looks to be a cross between the Laser and Sunfish. But each, according to Garry, is flawed. (And he ought to know, being a one-time world champion in the Sunfish.) "Catboats," he says, "suffer from weather helm, which throws the boat out of balance. Anytime you put up a big sail on one side, you've got weather helm. What I've done," he says, pointing to the assemblage of pipes and fittings that support the Volare's sail, "is try to get a clean leading edge on a fully battened sail *(concept drawing shows short battens. –**Ed.**)* using the lateen rig." The advantage of the lateen rig is that some of the sail area is to windward of the mast, improving balance. To test the idea, he worked with John Harris at Chesapeake Light Craft,

The boat that started the Freedom line was the Freedom 40. Garry Hoyt sailed the prototype in the Virgin Islands for a few years, challenging all comers to a race. He put up $5,000, but there were no takers. TPI, builder of all Freedoms when Garry owned the company, began production of the 40 in 1977.

Hoyt

the sailing world



Garry Hoyt takes his daily sail today on the Alerion Express 28, which he and his wife, Donna, sell from their Newport R&D office in Portsmouth, Rhode Island.

makers of high-quality plywood kayak kits, to build a 15-foot prototype.

Planned for plywood

"It certainly is an irony," he says, "that the Sunfish and Optimist, the most popular boats of all time, were both conceived for plywood. Plywood is ideal for flat surfaces . . . and the best surface for planing is a flat bottom."

He's got plans for the Optimist too. It's one of the country's most popular sail trainers for junior sailors. "I feel we need a better boat than the Optimist," he says. "After all, it has a square bow. I've never seen a fish with a square nose. It's just not the right shape. It was dictated by the practicality of the plywood construction, which is excellent for that. But now we have fiberglass. Fiberglass doesn't like flat. It likes curved surfaces."

Garry believes the key to getting new people into sailing is giving them the thrill of singlehanding a small planing boat. Handling sheets for someone else just doesn't do it. But what boat?

"If you're 9 years old you're stuck with the Optimist. Your next jump is up to a Laser, which is almost unmanageable until you're stronger. So what do you do with a 9-year-old girl, who is probably better than the boys? Well, the Optimist is a great boat, and there's great competition, but you can't plane so you've got to go into a (two-person) 420 or something else."

That something else *could* be a boat of his own design he calls the Escape Express, with a square-topped mainsail. "With this you unfurl the sail and you're underway. It's a bridge boat that would give the yacht clubs and their youngsters a singlehanded boat that planes."

That cursed genoa

Garry thought the title of a September 2002 article in *Sailing* magazine should have been "The curse of the genoa jib," rather than "Why the genoa is not a cruising sail." It's a measure of how intensely he feels about the problems caused by genoas, one of the major reasons, he believes, that sailing is more difficult than it need be. Their size makes them difficult to trim; the high headstay tension required to keep them from scalloping puts huge loads on the hull; their size often doesn't match wind strength, requiring cumbersome sail changing (even a genoa on a furler has a limited range of effectiveness); and off the wind their shape is necessarily poor. Garry throws a pile of magazines at me, opening them randomly to photo after photo of genoas luffing and twisting.

"It's on every page," he says with agitation, "but no one sees it. It can be discouraging." He says he'd be satisfied if his legacy was "only for people to put Hoyt Jib Booms on: they'd sail faster, they'd sail easier, and it would be a great thing."

It also would make him a little money to help cover the cost of his prototypes, but more importantly, it would validate his ideas.

Garry advocates rigs with larger mainsails and smaller working jibs. If the boat is designed with this rig in mind, there is minimal loss in speed. The fastest boats in the world, he points out, have small jibs. "And the very fastest," he wrote in *Sailing*, "— iceboats and windsurfers — have no jibs at all!" The patented Jib Boom makes the headsail self-tending, like a club, but it does one important thing the club doesn't, and that is make the sail also self-vanging. "The Jib Boom does for the jib what the vang does for the mainsail," he concludes (see photo on Page 16).

Bob Johnson bought the argument, and now every Island Packet comes factory equipped with a Jib Boom.

Battling traditions

But old habits die hard. Garry knows that; he's spent half his life battling traditions.

The AeroRig inspired Garry to find another and different way to solve the curse of the genoa jib. His variation is called the Hoyt Balanced Rig (see illustration on Page 16).

The AeroRig, developed in the United Kingdom by CarboSpars (now out of business) and built and distributed in the U.S. by Forespar, is essentially one long boom that extends forward and aft of a rotating, free-standing mast so that both the headsail and the mainsail are set on it and can be trimmed by a single sheet.

It's a wonderful idea," says Garry, "but so cumbersome and heavy it almost defeated the purpose. I really liked the AeroRig's balance when I sailed on it. The feel of the helm, the way it jibes softly. You have balanced rudders (where part of the rudder extends forward of the rudderstock to balance and reduce loads), why not a balanced rig?"

As with most things having to do with sailing, Garry saw ways to improve it.

So he said to himself, "What if I take this idea in another direction? What I didn't like about the AeroRig was they rotated the whole rig, which means you need a massive bearing at the mast step. And they have a backstay to get headstay tension. With the Hoyt Balanced Rig the mast is fixed, and the wishbone boom rotates around it."

The wishbone boom, which would be made of carbon fiber, is self-vanging, which means it tensions the leech of the sail automatically. This eliminates the need for a backstay to tension the rig and allows a full-roached, fully-battened mainsail. The wishbone also helps contain the sail when it's dropped, rather like lazy-jacks.

So far Garry hasn't built a prototype or found a builder willing to try it. But he's hopeful.

Hoyt's background

Garry Hoyt was born in Elizabeth, New Jersey, and grew up in Plainfield. His family summered on Barnegat Bay, in Tom's River. He started sailing in a Barnegat Bay Sneakbox and later raced with his brother in the Snipe class. He liked to win. In high school they placed third in the Snipe Nationals. He went to college at Colgate, then on to a business school out west, in Arizona, called Thunderbird. "It was a school for foreign trade, basically," he says.

After college he joined the U.S. Coast Guard. "That was good," he says, "because the Coast Guard gave me a whole lot of management responsibility early. I was executive officer on one 165-foot cutter and got to do all the ship handling there. And on occasion I was skipper of an 83-foot cutter, search and rescue, berthed out of Key West and then out of St. Thomas. And based in San Juan for a while.

"Then I went back to work for an advertising agency, Young & Rubicam, Inc. Earlier I spent a summer in Mexico where I started learning Spanish. Then Young & Rubicam opened an office in San Juan, and I was sent down there. I shifted from being a traffic man to the creative side, so I was a writer and an art director. Subsequently I became the creative director there. Creative director and director of Y&R's office for Latin America. And then director for their offices in the Far East, which included Australia and Japan. Also in charge of Chicago, Detroit, and San Francisco.

"The market is very tradition-bound, which inhibits progress. I think the problem has to be solved with small boats."

"I did a whole lot of traveling back then, but mostly I was in San Juan. I kept a boat, and all the time I was sailing on the weekends. Sailing with another fellow, we got third in the Snipe Worlds. Sailed a Finn in the Mexico Olympics (1968)…got tenth. Third in the Finn North Americans. Then I won the Sunfish World Championships in St. Thomas.

"Then I shifted over to cruising boats because I saw that I couldn't hike very well anymore because I was getting old — creaky back and all those things. So I had big boats — first a 58-foot Alden Schooner. Then a 52-foot Herreshoff ketch called *Mandarin*. Then I developed the Freedom 40."

Origins of the 40

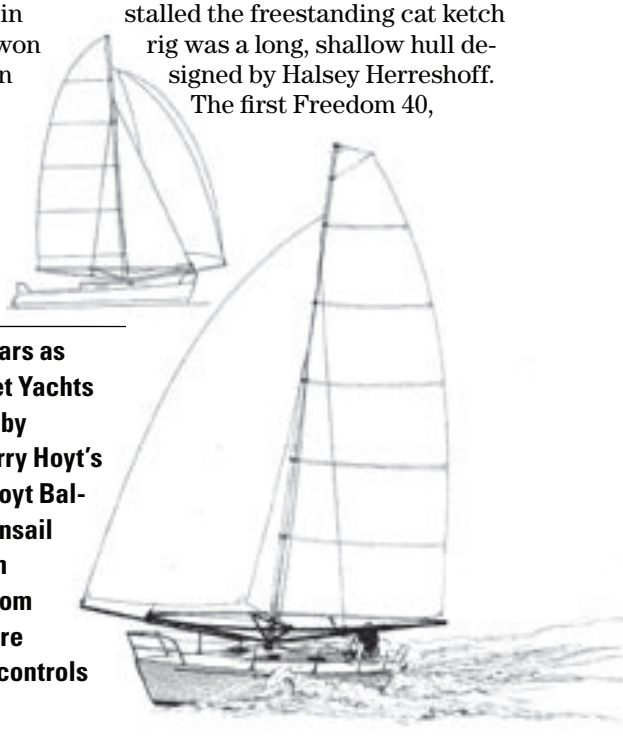
Garry is fairly circumspect about the origins of the boat, perhaps because he's tired of telling the story or perhaps because he's more interested in tomorrow than yesterday. But here it is, in a big nutshell.

Unstayed masts are nothing new. Early American working watercraft, like the New Haven sharpies, and recreational boats, such as the 19th century Barnegat Bay catboats, had no stays holding up their masts. Garry, no doubt, was familiar with these boats. So on an airplane one day, as the story goes, he was looking out the window and studying the wing, thinking to himself, "If this wing can be supported without all those wires and turnbuckles and terminals, why can't one build a sailboat mast without wires?"

The prototype Freedom 40 had big, round, unstayed aluminum spars. Soon Tillotson-Pearson Industries (TPI) found that a better method was winding carbon fiber on a mandrel and setting it in resin. The few early failures were quickly replaced and within a few years they had a reliable product.

To minimize turbulence caused by the large diameter spars, wraparound sails were used, though they were heavy and made reefing problematic.

The platform on which Garry installed the freestanding cat ketch rig was a long, shallow hull designed by Halsey Herreshoff. The first Freedom 40,



The Hoyt Jib Boom, above left, appears as standard equipment on Island Packet Yachts and on the Alerion Express 28s sold by Garry's company, Newport R&D. Garry Hoyt's improvement of the AeroRig is the Hoyt Balanced Rig, at right, in which the mainsail track revolves around the mast. Both systems use a single, continuous boom on which both the mainsail and jib are tacked. Jibes are gentle. One sheet controls both sails.

launched in 1977, had a centerboard. And she had no engine. Garry called an auxiliary engine a "Freudian fixation, a petroleum boo-boo." He fitted the boat with 16-foot sweeps instead. In an early brochure he wrote, "Hell, if you're not careful you might even build a muscle or two. The really nice thing about oars is that you have total control. You can go forward or back, or spin in place — and there is no fuel, no noise, no smell, no hassle, and no cost. And that's freedom, mon!"

Made new start

In 1980, Garry quit the advertising business and decided to make a new start by founding his own boat company. But when the design went into production, engineless boats proved to be a tough sell, and he was forced to offer an engine as an option, though he admonished, "But we don't approve!"

To promote the boat, Garry drew on his advertising savvy and came up with a provocative challenge: he offered $5,000 to anyone who could beat him singlehanded in a 40-foot cruising boat on a triangular course. He knew his Freedom 40 wasn't the fastest boat upwind, but she smoked everyone on a reach. The gambit paid off: no one ever challenged, and he got a lot of publicity.

Unfortunately, at least as far as Garry is concerned, the production version of that first boat differed in several significant ways. People at TPI, which built the Freedom line in Warren, Rhode Island, didn't think a heavy centerboard was such a hot idea, so it was dispensed with in favor of a lighter board and deepening the keel by a foot. And when an engine was added, with a prop in the aperture, the result was a heavier, slower boat. "I made the mistake of listening to the production people," Garry says.

Nevertheless, the concept appealed to enough people that Garry sold 85 in the U.S. and 25 more in England, which was sufficient encouragement to develop a complete line of Freedoms: the 28, 33, 40, and 44 cat ketches and the smaller sloops at 21, 25, 29, and 32 feet. In 1981 a Freedom 44 won the Bermuda One-Two Race as did the F-32 later. A special three-masted Freedom 65, built in the U.K. by Fairways, entered a double-handed transatlantic race in preparation for the BC Challenge round-the-world race. Skippered by Laurel Holland and John Oakley, the boat showed speed on some points of sail, but one of the mast steps came loose, and the crew was forced to depower the boat in order to finish the race with the sticks intact. It was a disappointing conclusion to a campaign that had a lot of people anxious to see how Garry's radical rig would fare over a long passage with varied winds.

" 'Catboats,' he says, 'suffer from weather helm, which throws the boat out of balance. Anytime you put up a big sail on one side, you've got weather helm.' "

Jibless rig

The first of the sloop group was the Freedom 25 rigged with just a mainsail, followed by the 21. Each came with the patented Hoyt Gun Mount, which enabled one to set a spinnaker on a "yard" without leaving the cockpit (see photo on Page 19). Because the sail was attached to the yard at both the tack and clew, one could actually sail the boat in circles without touching the sheets (I did this in Newport Harbor with Garry's son, Jeff, some 20 years ago). The spinnaker will backwind, and if you like you can sail backward or hold the helm over until it fills again on the right side.

Eventually, however, Garry was obliged to admit that without headsails, the boats were slow upwind, so what were called vestigial jibs were added. And to avoid the curse of the genoa (or any headsail) off the wind, he fitted each with one of David Bierig's Camberspars, a a curved aluminum strut that makes the sail self-tacking and self-vanging.

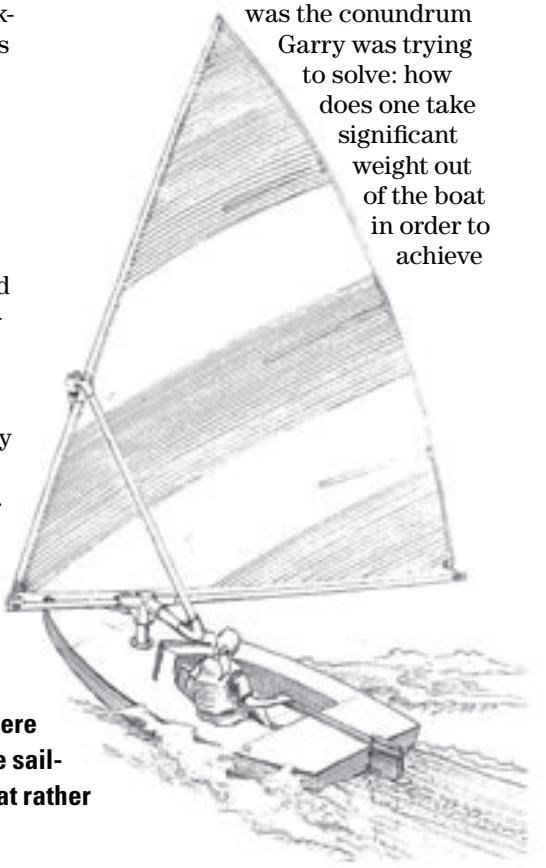
By 1985, Freedom Yachts was in good shape. "The company was pretty successful then," says Garry. "We were up to $9 million in annual sales. Back then that was pretty damn good. At that point I sold it to TPI, who thought they could do it better. But I don't think they did and in any case couldn't make money at it. So they sold to a company which now concentrates on powerboats. That is regrettable because I happen to believe that the free-standing spar has merit. It's never going to run the whole market, but it has a branch that I think has been neglected."

One of the problems, Garry says, was that "they tried to bring Freedom into the middle of the road." But *that*, he notes wryly, "is where you get run over. The big tree trunk of a mast ruined the windward performance, despite good designers (like Gary Mull and David Pedrick). They created a freestanding sloop with no discernible advantage over a regular sloop."

Interesting projects

Following the sale of Freedom, two of Garry's more interesting projects were the Delta 26 and Manta. The Delta 26 featured a mast in the rear, plus the Hoyt Gun Mount for the spinnaker.

The lightweight hull had winglets above the waterline for crew to hike out and help keep the boat sailing level. This was necessary due to the lightly ballasted keel. And here was the conundrum Garry was trying to solve: how does one take significant weight out of the boat in order to achieve



Garry Hoyt, a former world champ in the Sunfish class, seeks to improve on this old and popular design with the Volare's more modern hull form. Because catboats tend to develop severe weather helm, the lateen rig keeps the sail-plan's center of effort closer to the boat rather than far out over the water.

Always willing to experiment, Garry Hoyt designed a rotating oval-shaped rig (built of wood by Goetz Custom Sailboats) to achieve a clean leading edge for the sail, resulting in much less turbulence. The hull was a prototype of the "Escape shape," in which he pulled the chine down to the waterline for improved stability. Salvador Dali might have done the same purely for artistic purposes.

superior performance, yet maintain necessary stability? In the end, the Delta 26 was simply too tender.

But the rig concerned Garry more. "Had I had my self-vanging boom then, the rig would have been a lot better. It would have made the rig manageable off the wind. I penalized that rig with a radical hull with wings. It doesn't pay to look odd."

A somewhat different approach was taken with the Manta, a 30-foot cross between a monohull (with small, lightly ballasted keel) and a multihull, with quasi-amas resting on the water to provide additional stability. The Manta also had an A-frame mast and a large cockpit for entertaining. It was much more stable than the Delta 26, but much to Garry's chagrin, she was far slower than he anticipated. Later he confessed that he'd been seduced by computer-generated performance predictions. "It was a case," he said, "of ignoring instinct and going with the numbers. I'll never do it again."

No commercial success

He adds, "It had wonderful comfort, however, and it had the A-frame mast which I have to believe is a good idea because it offers great security plus a clean leading edge for the main. When you think about it, two furling sails, two clean leading edges — what's wrong with that? But it's not fashionable. It's a marketing handicap. No one wants to spend their money trying to convince people it's a good idea. It does take money — and nerve. Nerve and money are a little short in the sailing world. And probably for good reason. It's not a profitable business. Anyway, we penalized a good concept by an outlandish-looking boat that didn't perform to expectations."

In 1995, with the introduction of the Expo Solar Sailer, Garry began turning to small boats as the key to getting more young people interested in sailing. With a small electric motor and solar panel to keep the battery charged, he hoped that beginners would feel more confident venturing out alone, knowing that if the wind piped up they could simply furl the sails and turn on the motor to get them safely back to the dock. Ted Hood designed the hull, Garry designed the rig, and Everett Pearson built it at TPI.

At the Newport Navy base, Garry conducted a controlled experiment using the Expo Solar Sailer and 30 women. His aim was to determine how quickly he could teach someone to sail. The goal was 90 minutes. Each woman was shown a video and then put in the boat with a set of radiophones to communicate with a coach onshore. They motored out, unfurled the sail, tacked, furled the sail, and returned to shore. Then they did it without the radiophones, sailing a triangle course four times.

Color wheel

"The mainsheet is divided into color sectors," he explained. "If the wind indicator is in the blue sector you trim until the mainsheet jam is in the blue sector. And we had a big red sector that we called the 'no go' zone; that's when you're pointed into the wind. And the duck zone — the jibe zone. We had it all covered.

"They all did it," he says proudly. "They could go home and say, 'I sailed today.'"

"No one wants to spend their money trying to convince people it's a good idea. It does take money — and nerve. Nerve and money are a little short in the sailing world."

But it didn't set the world on fire. "My theory, naive at the time," he says, "was that community sailing people and sailing school people would flock to this idea because we'd proven it could be done quickly. All of a sudden I realized they didn't want to do it quickly because they had a vested financial interest in extending, instead of compressing, the process. So I was trying to make it shorter, and they didn't want to hear that at all. As a matter of fact, they went out of their way to tell me what a lousy idea it was. As I look back on it, I understand it. It's a lot more complex to handle an individual boat than it is to put five students and an instructor on a keel boat. So the idea went nowhere.

"And the boat was pretty expensive — $6,000. Because it had batteries, it was heavy, so you needed a trailer. It was a nice little boat, but perhaps not the best idea. We sold about 100 of them. We still get calls from people who want one. But there's no way the sailing schools are going to buy one. And I suppose if I were running a sailing school, I would have looked at this idea and said, 'Why is this a good idea? Are you trying to put me out of business?'"

Glass pedal boat

About this same time Garry collaborated with Harken Yacht Equipment, makers of sailing hardware, to develop the 9-foot 3-inch Waterbug, a tear-shaped fiberglass pedal boat. It had a space-age look with a cockpit canopy similar to a fighter jet. To get the most speed with the least amount of energy expended, Harken built a two-speed drive unit with 1:3 and 1:4 gear ratios turning a three-bladed propeller.

In 1996 Garry designed the first Escape, the low-cost rotomolded, polyethylene boat with a single sail on a Hoyt Jib Boom and the same color wheel for determining sail trim as was used on the Expo Solar Sailer. ("You should start with a single sail," Gary is convinced. "They would never put a pilot in a twin-engine plane to start off.") Nine- and 11-foot models followed the original 12-footer. Peter Johnstone of the

J-Boat family of Johnstones commissioned the design. At the time, he owned Sunfish-Laser, which he later sold to Vanguard. And once he got Escape established, he sold that to the Leisure Life division of Johnson Worldwide, the conglomerate which, among many other things, makes Old Town canoes and pedal boats <http://www.LLBoats.com>.

As noted, Garry's design energies are absorbed in the Volare and the Escape Express projects plus new rig concepts. Garry and Donna manage Newport R&D, marketing and selling the Alerion line of boats. The first, the Alerion Express 28, is a Carl Schumaker remake of the famous Alerion designed by Nathanael Herreshoff. In the late 1990s TPI expanded the line with the addition of the 19-foot Alerion Cat, the Alerion 20, and Alerion 38 yawl, but only the 28 can be considered a success. TPI stopped building the catboat because they said they weren't making any money on it, but Garry thinks he's found another builder. He'd love to put his Hoyt Balanced Rig on it.

Expensive prototypes

"When trying something radically new," he says, "you have to do a prototype. But prototypes are expensive. And you have to modify the prototype because rarely do you get it right the first time. Who's going to spring for that cost? No builder wants to. An America's Cup effort spends millions to get ½₀th of a knot. You've got four or five syndicates spending $50 million each. They talk about the trickle-down benefits, but c'mon, for the average person the trickle-down is really just a trickle. It kills me to see that much money available for that sort of thing, and there's no money available for small boat development to improve sailing."

"You've got four or five syndicates spending $50 million each. They talk about the trickle-down benefits, but c'mon, for the average person the trickle-down is really just a trickle."

The rant never really stops. Garry has something to say about every aspect of sailing. His energy and motivation are impressive. Spend an hour listening to him, and you come away thinking Garry Hoyt has got it right, and the rest of the world is wrong. He's logical. He's precise. He's well-spoken. He's convincing. But as time wears away, you begin to realize that other points of view are as valid. He knows it; it's just the marketer in him that he can't help.

And his legacy? Surely it will be that he rattled the cage, raged against convention, spoke out against the staid and status quo, that he proposed new and different and often better ways to sail. For Garry, that's what all this reduces to: the simple pleasure of sailing.

"People look at failure and say, 'Well, you failed.' But if you're not failing, you're not trying."

No one will ever accuse Garry Hoyt of not trying. That, and his many successes, will be his legacy.

Garry designed and built the Delta 26 with the mast aft and two stays forward so that both the jib and staysail, set on furlers for convenience, would enjoy clean leading edges. The Gun Mount fitted to the bow pulpit enabled setting spinnaker from the cockpit. The winglets provide outboard seating for the crew where their weight contributes to stability. The boat is featured in his 1986 book, *Ready About!*

Sharp as a laser beam

A keen racer, this Canadian started out as a journalist before teaching himself yacht design

by Marianne Scott

"CHEAT THE NURSING HOME — DIE in your Laser." That catchphrase appears on bumper stickers, Laser trailers, and websites as far away as Sweden. It's only one indication of the loyalty Laser sailors worldwide feel toward their one-design, single-sail boats. To date, 178,000 Lasers have been built, making them the world's most popular singlehanded racing boat. Each year, another 3,000 Lasers are cranked out in factories in the U.S., Chile, Great Britain, Japan, and Australia.

The Laser has been raced in 122 nations. It has spawned clubs, associations, books, and of course endless regattas wherever people can put a sailboat in the water. Many former racers — today's cruisers — learned sail handling on a Laser. In 1991, it became an Olympic class boat, and when 58 Lasers from 58 nations entered the 1996 Atlanta Olympics, it marked the largest number of countries to participate in any Olympic event in any sport.

"It was the first competitive boat I sailed," says British Columbia sailor Jeffrey Eckard, who competed in the 1988 and 1992 Olympics and won gold in the 1991 Pan American Games sailing 470s. "I was in sailing school, 11 years old, and 20 pounds too light, but to me, to be able to sail a Laser was 'gold.' Today, to get my Laser ready, it takes two minutes, and I'm comfortable. You just point the boat. It's natural. Fits like a glove."

The phenomenal success of this centerboard catboat was not something Bruce Kirby foresaw when, in 1969, he doodled a "cartopper" sailboat during a telephone conversation with Ian Bruce, a Montreal product developer and builder of dinghies. Ian represented a client who wanted to manufacture outdoor equipment and asked Bruce Kirby for a small-sailboat concept. Although Ian also warned

Phil Bayne

***Runaway* is a custom 40-footer Bruce Kirby designed in 1980 for himself and partner John Spain. They raced her in the SORC (Southern Ocean Racing Conference) and in the Admiral's Cup and Fastnet race. She won her class in Block Island Race Week in 1980 and the New York Yacht Club June Regatta in 1980 and 1990.**

that getting such a boat into production was a long shot, Bruce took his sketch home and developed in-depth drawings.

Surprisingly, he was not a boat designer by profession. Bruce Kirby, born and raised in Canada's capital, Ottawa, was a professional journalist who had worked for both the *Ottawa Journal* and the *Montreal Star* before being lured to the U.S. to assume the editorship of *One-Design Yachtsman* (a magazine whose ever-changing name tracks the evolving sailing scene — it was rebaptized *One Design and Offshore Yachtsman*, then *Yacht Racing*, then *Yacht Racing/Cruising;* today, it's published as *Sailing World*). He considered himself more of a "hobby" boat designer, albeit one with a lot of sailing experience.

Born to sail

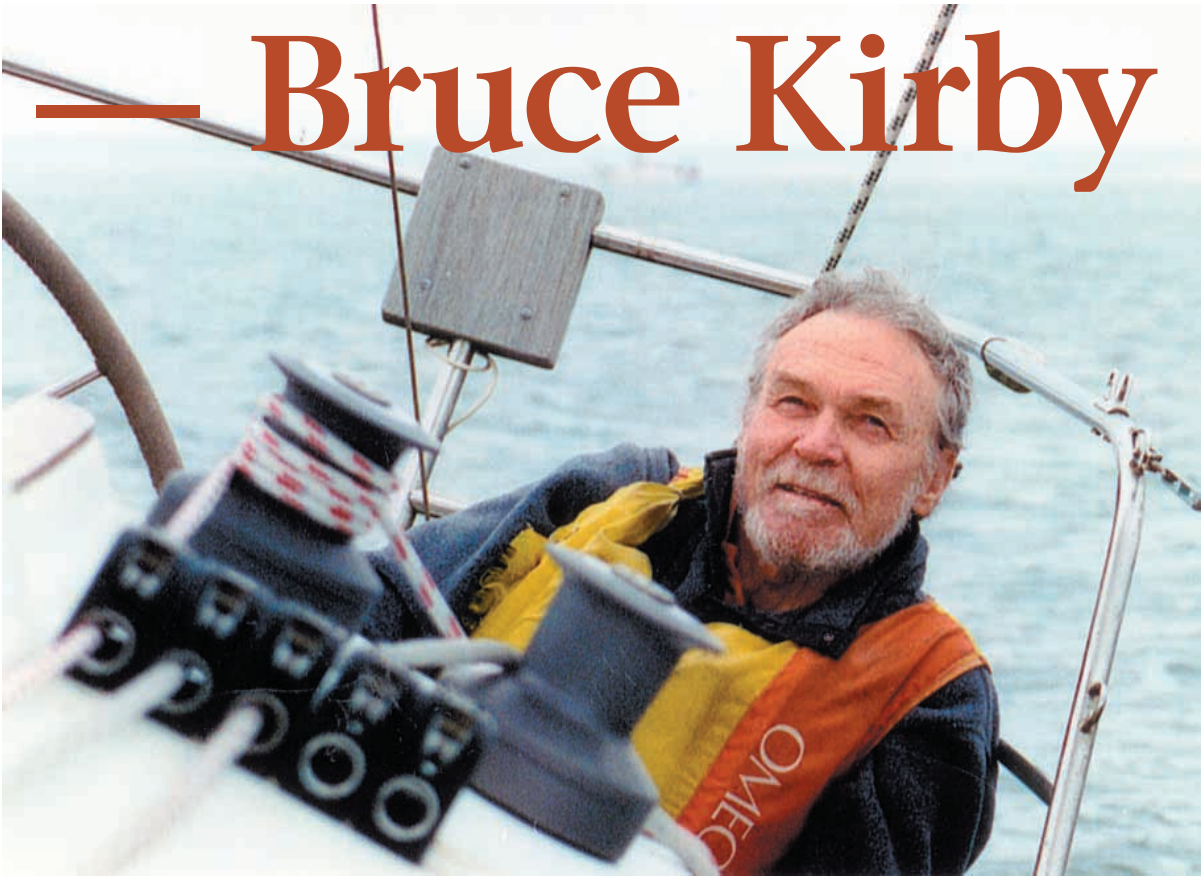
From his earliest memories, boats were part of Bruce Kirby's life. His family were members of the Britannia Yacht Club on the Ottawa River, where his father and two uncles served as commodore. Although the Depression started shortly after Bruce's birth — he was born the year of the great stock market crash of 1929 — he was able to sail with his father and older brother, David, on the family's 24-foot sloop, *Velvet*, although they couldn't afford a new mainsail. In high school, he excelled at history and English, rather than math and science, and often studied old copies of *Yachting* instead of doing his homework.

But he remembers one science teacher who inspired him. "He always told us to aim high," recalls Bruce. "Aim at a star; you'll shoot higher than if you aim at a tree." Bruce also loved sailing dinghies and, having grown to 6 foot 2 inches as a teenager, he easily handled the International 14s in which he competed in Montreal and Toronto. After several wins, he left Canada for the first time and raced in Connecticut, not knowing that one day the state would become his permanent home. In 1948, he tried out for the first post-World War II Olympic Games, racing a Firefly. He lost in the final heats and returned home to finish high school.

By age 20, Bruce was an Ottawa newspaper reporter and worked there for three years until he was invited to join another reporter on a "sail around the world." He accepted almost instantly. "Let's do it," he decided,

Ed Botterell

— Bruce Kirby



Bruce Kirby was a Canadian newspaperman before he began editing sailing magazines and designing boats.

a phrase that could be the leitmotif of his life. He and his friend, who'd inherited money, ended up on a 73-foot ketch in England and sailed in the Mediterranean for a year until family circumstances caused his friend to move back ashore. Bruce returned to Ottawa to say good-bye to his fatally ill father and rejoined the newspaper, to which he'd also contributed while sailing. He met, courted, and eventually married Margo Dancey and jokes that he had a verbal "pre-nup" allowing him to try out for the 1956 Olympics. The singlehanded boat in that contest was the Finn, with Bruce Kirby representing Canada and competing against such well-known names as Paul Elvstrom, who went on to win the gold in Melbourne, Australia, that year. Bruce was eighth out of 25.

His next venture was the prestigious International 14 team race in Cowes, England, and it was this event that determined his career as a yacht designer. Although his team won, he observed that the New Zealanders sailed much faster in heavy winds. He vowed to create a better boat for himself and "eyeballed" a design on shelf paper, dubbing it the "Kirby Mark I International 14." After having the boat built, he won several races in it. He also studied Norman Skene's *Elements of Yacht Design*, which taught him to calculate prismatic coefficients, sail area, and wetted surface ratios. What he learned led to his bringing out the Kirby Mark II International 14. Over the years, he continued to improve the model through six reiterations, all of which became popular in the U.S., Britain, and Canada.

"To date, 178,000 Lasers have been built, making them the world's most popular singlehanded racing boat. Each year, another 3,000 Lasers are cranked out in factories."

Editing, sailing, designing

In 1956, he moved to take a job at the *Montreal Star*. Although responsible for the news desk, he managed to persuade his boss to let him cover the 1962 America's Cup in Newport, Rhode Island. Two years later, he entered the 1964 Olympics in Japan and competed in the Finn class, again returning without a medal. But his name as a designer, racer, and writer had become so well-known he received an offer to take on the editorship of *One-Design Yachtsman*. After he held out for the unheard of salary of $15,000 per year, Bruce and Margo, along with their two young daughters, Janice and Kelly, moved to Chicago in the winter of 1965. He got the magazine to sail properly, enjoyed the editing, and continued racing on Lake Michigan. He entered the world's longest annual freshwater race, the Chicago-Mackinac, an event that caused his magazine to start covering distance racing. He also sailed *Stars*, which led to his competing for Canada in the 1968 Olympics in Mexico. A year later, after Bruce Kirby, his family, and the magazine's operations had moved to Connecticut, he received the auspicious telephone call from Ian Bruce.

It took some doing to get the boat that eventually became known as the Laser into the marketplace. After Bruce drew the lines plan, sailplan, rudder, and centerboard, he sent the drawings off to Ian. As Ian predicted, his outdoor manufacturer didn't follow through, and the sailboat remained a blueprint only. A year later, *Yacht Racing*'s marketing manager proposed a regatta — calling it "The America's Teacup" — for new,

small sailboats that could be launched from a beach and would cost no more than $1,000 for a monohull or $1,200 for a multihull. (Incidentally, Hobie Alter introduced his Hobie Cat at the same regatta.)

Bruce and Ian agreed to enter the regatta with a prototype of the "cartopper," and Ian, who was already manufacturing the Mark III International 14s, produced a pink-and-purple dinghy from the plans. He drove from Montreal and picked up sailmaker Hans Fogh in Toronto on the way to the regatta venue — the Playboy Club at Wisconsin's Lake Geneva. Hans had built the sails without ever having seen the actual boat. Although the "Weekender," as it was originally called, came in first and second during the race's opening day, the mast-sail combination lacked precision. Hans managed to get the use of a colleague's sail loft and re-cut the sails overnight. Performance improved markedly, and the dinghy created quite a buzz at the regatta.

After finally having seen his boat in three dimensions and having tested it on the racecourse, Bruce literally returned to the drawing board. He worked with Ian to improve the hull's stiffness and the helm balance while also adding a movable mast step. By late 1970, the boat's parameters were laid out and have remained intact since then. (The single major adjustment is the "Laser formula," which allows for alternate rigs for people of different weights, thus allowing women and youths to compete.)

The only thing the dinghy lacked was a sexy name. In an article, Bruce wrote that at a yacht club party, a McGill University science student said to Ian Bruce, "'Why don't you call it something modern and scientific, something that would suit the space age and that young people would identify with?' Ian blurted out, 'Something like laser?' When I heard the term, I answered, 'Let's do it.' That's how the new class got its name."

"Bruce and Ian agreed to enter the regatta with a prototype of the 'cartopper' drawings and Ian, who was already manufacturing the Mark III International 14s, produced a pink-and-purple dinghy from the plans."

With two new boats out of the mold — officially the first Lasers — Ian and Bruce went to the New York Boat Show in January 1971. The sailboat was priced at $695. A record 144 were sold, which was more than any other boat in the show's history. The Laser became a status boat for singlehanders, and Ian began mass producing them in Pointe Claire, Quebec. Success spurred Bruce to design more small boats.

Just two years after the Laser's introduction — and although he knew little about measurement rules — he designed an IOR (International Offshore Rule) keelboat, the San Juan 24. More than 1,200 were built, and the racer's popularity was only eclipsed by the introduction of the J/24. San Juan 24 owners' groups still swap information and regularly congregate for regattas.

For about four years, Bruce continued at the helm of *Yacht Racing*, but found that the combination of editing and designing was too time-consuming. Royalties from the Laser and San Juan were sufficient for the family to purchase the spacious home they still occupy today. Located in Rowayton, Connecticut, the house overlooks Long Island Sound and has its own dock. It's a convenient location only 45 miles from New York City in a region where American competitive sailing was born. In 1975, he turned to full-time boat design and has drawn more than 60 different boats over the past quarter century.

The America's Cup

In 1981, the phone rang again. This time the caller was Marvin McDill, the leader of a team of lawyers Bruce calls the "Calgary Group." The lawyers had decided Canada needed an entry into the 1983 America's Cup (the race in which Australia was to wrest away the trophy from the New York Yacht Club after 132 years) and Bruce Kirby should design it. With characteristic enthusiasm ("Let's do it"), Bruce accepted the challenge, believing that his sailing experience, design skills, and intuition derived from decades of looking at how boats sail gave him the confidence to create a competitive 12-Meter for the most prestigious yacht race in the world.

Canada I, as the 12-Meter was called, was built in Ontario. "We made it to the semi-finals," Bruce says. "If you consider our dollar-to-success ratio, we did extremely well. We just didn't have the bucks the others did. And the yacht served again four

A Laser 13, above left, carries a jib and can even carry a small spinnaker. Bruce Kirby designed the Norwalk Island Sharpie, above right, as a shallow-draft family boat. Plans are available to build the boat in lengths from 18 to 31 feet.

years later, when she was refurbished in Victoria as *Canada II*. We had even less money then. I even added a wing keel without tank testing!" Boatbuilder and three-time world-champion Star racer Eric Jespersen served as crew on *Canada I*. He recalls this period with fondness and built a close friendship with Bruce.

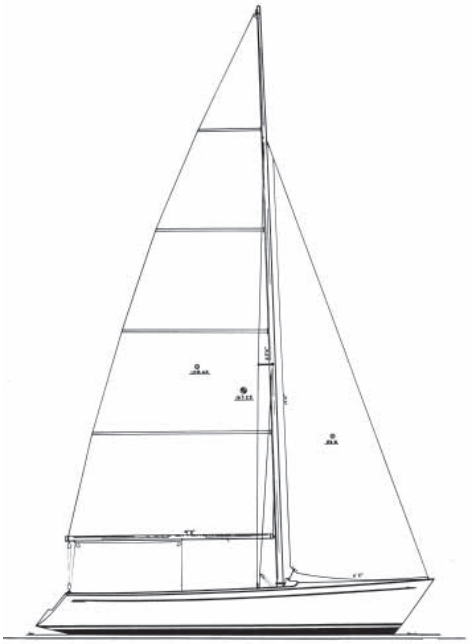
"My boatbuilding background came in handy when I went to the training camp in Florida," Eric remembers. "While working on the keel's trim tab, I noticed the fitting hung down one-quarter inch below the rest of the keel." He knew instantly the tiny protrusion would violate the boat's 12-Meter rule and that the extra draft would be paid for by reduced sail area. "Bruce was alarmed," Eric says, grinning. "The measurer was coming at 0700, so I worked all night to shorten the trim tab and recess the fitting. Fortunately, the boat measured to the millimeter for maximum draft. I saved Bruce's bacon."

His name on a boat

In the late 1970s, Bruce designed a 25-footer for Quebec boatbuilder Dick Steffen, who wanted a fast boat to beat the J/24 on the racecourse. The Kirby 25 did just that. When J/Boats launched its 30-footer, Bruce followed with his Kirby 30, which again passed the J on the racecourse. Both of these boats, of which several hundred were built by Mirage Yachts between 1978 and 1983, maintain good old boat status, have spawned user groups, and continue to compete in one-design races. Bruce also did some custom designs. "Jespersen Boatbuilders constructed my 8-Meter, *Octavia*, and then a 6-Meter for another client," he says.

And he's always liked a challenge. That's what led to his creating a 23-foot pedal-powered boat 15 years ago for an ex-Navy Seal who wanted to cross the Atlantic using his own muscle. The pedals activated the propeller, and the adventurer broke the previous self-propelled record by 12 days.

The Norwalk Island Sharpie, which Bruce says was basically a modernized, flat-bottomed Sharpie made of marine plywood, was another success. Several different companies built the cat-rigged, shallow-draft boat ranging in length from 18 to 31 feet, which is highly suitable for places like the Chesapeake Bay and other shallow waters. "I've also sold between 400 and 500 plans to [home-based] boatbuilders," adds Bruce. The Ideal 18, of which about 300 have been built by Ontario Yachts, is another of his popular yachts used in team racing on Long Island Sound.



In profile, the Ideal 18 keelboat has the lines of a much larger boat. The open transom saves weight. See photo on Page 89.

No retirement

When you hear Bruce's voice over the telephone wires, you'd think he was about 38 instead of a wise 74 years of age, with a gray, "old salts" beard. And 38 is how he feels at heart. He continues to race, design, and write. "You know, Olin Stephens [of Sparkman & Stephens] is 95 and is still taking computer courses. That's something to emulate."

Bruce has attended every America's Cup race for the past 40 years and covered them for various publications. Naturally, he serves on the America's Cup Hall of Fame selection committee. At the dock in front of his house, his personal boat, a Nightwind 35 he designed in 1980 and which is actually called *Nightwind*, gets used at the Wednesday night races. "Ryder Yachts only built 13 of these centerboarders," he says. "But they draw only 2 feet 10 inches, and we cruise ours for a couple of weeks every year. We have two granddaughters, aged seven and five, and we're starting them daysailing on the boat."

For serious racing, he uses his Sonar 23 on Sundays. That's another one-design production boat he developed when his yacht club, the Noroton Yacht Club in Darien, Connecticut, lacked a proper boat for club racing.

The 23-foot Sonar keelboat was a successful club racer as well as a good family boat. Bruce Kirby remains an avid racer, shown here at the helm.

Bruce was asked to design something fast and exciting but also capable of being handled by sailors of all ages, strengths, and skill levels. It also had to be trailerable and safe. Enter the Sonar, with its deep spade rudder and generous keel. It's become an international class boat, and more than 700 have been built and compete in many races including the U.S. Women's Championship, Cowes Week, and the U.S. Junior Championship.

Disabled sailing

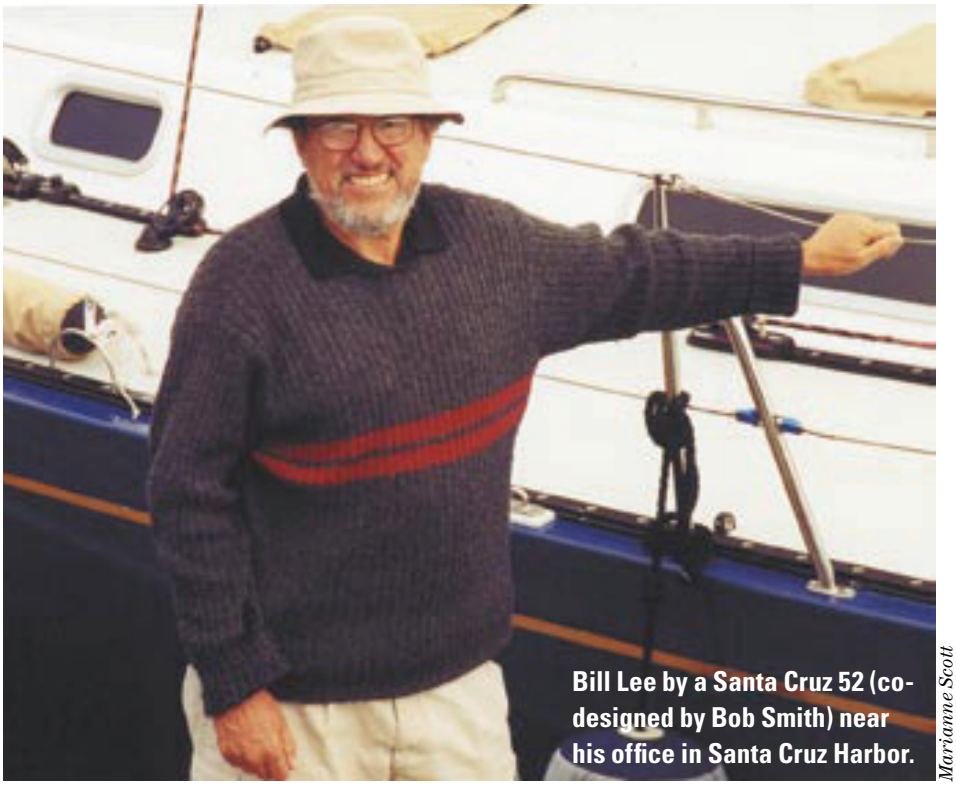
A young friend who'd won junior races was hurt in an automobile accident and lost the use of his legs. Another close friend, Robbie Pierce, adapted the Sonar so it could be used by people with disabilities. "With its 75-percent fractional rig, it moves well in light air, allowing people with disabilities to manage the boat," Bruce says. "Robbie added a transverse seat so sailors can slide to either side of the boat. I'm proud the Sonar was used in the 1996 and 2000 Paralympics and will serve again in 2004."

Surprisingly, Bruce is also involved with boats in which no one can sit. He's developed a passion for radio-controlled Lasers. In the 1990s he collaborated with international champion Jon Elmaleh to produce a patented radio-controlled, one-quarter scale version of the Laser. At just over a yard long, the yacht has a bulb keel, comes as a kit that can snap together in less than five minutes, and requires no life jacket. It's another one-design class, and the racing — both in the U.S. and U.K. — is taken seriously.

Bruce has not confined himself to drawing small racing boats only. In between the International 14 and *Canada I*, perhaps his most loved vessel is the Admiral's Cupper, *Runaway*, a one-off 39-foot cold-molded boat built in 1979. A recent addition is a custom 43-foot cruiser based again on the flat-bottom, shallow-draft Sharpie. Another cruiser, of which several have been built, is the Georgian 34, named after the beautiful bay in Lake Huron. That said, he has no clear favorite design: "I guess my favorite would be the one that most satisfies the client and thus, by sheer numbers, it should be the Laser."

Does one have to be a degreed engineer to be a sailboat designer? Bruce's extraordinary success demonstrates one does not. But what he does advocate is early experience on a sailboat. "You must sail to design," he says with emphasis. "Engineers aren't necessarily good sailors. And look at all those designers without formal design training — Bob Perry, Doug Peterson, Olin Stephens. But you must have the ability to see, to re-create the visual aspect. I foresee many advances in boat design dictated by materials. I might prefer wood, but fiberglass and now carbon fibers and Kevlar offer more flexibility. The new materials will create much higher ballast ratios and change design. But in the end, to design you must combine a good computer background with lots of time on the water while keeping your eye on the sails."

The Ideal 18, another Bruce Kirby design, is a popular team racer, particularly on Long Island Sound.



Bill Lee by a Santa Cruz 52 (co-designed by Bob Smith) near his office in Santa Cruz Harbor.

Marianne Scott

Reducing the black art of design to light weight and long waterline

by Marianne Scott

Bill Lee, wizard of speed

Bill Lee, who introduced ultralights into the sailboat race circuit in the 1970s, calls designing racing sailboats a "black art." Commenting on the collapse of the carbon fiber mast on Team New Zealand during the last America's Cup races in Hauraki Gulf, he says the designers pushed the safety limits past the breaking point.

"How close you can get to safety's edge without failure is always the question," the Hall of Fame designer explains in his Wizard Yachts brokerage office in Santa Cruz, California. "Building light, but strong, is the issue. And building today's carbon parts is trickier than using more traditional materials. The orientation of the carbon fibers, their straightness, the resin mix and cure temperature . . . all these are important. You can experiment with those materials in the lab, but if there's the slightest disconnect in the shop, masts and booms fracture."

In his own designs, which focused on ultralight-displacement boats (ULDBs), Bill believes he always stayed within the structural safety margin. "Few of my boats had failures," he says. His approach to sailing became his motto: "Fast is fun," a philosophy shared by other revolutionary designers like Hobie Alter, who equated his fast catamarans with "fun on the water," and contemporary designers like George Olson and Ron Moore.

" 'How close you can get to safety's edge without failure is always the question . . . Building light, but strong, is the issue.' "

Bill Lee's brokerage is located in a two-story clapboard building on the edge of Santa Cruz Harbor; his two-room office overlooks a conglomeration of sailboat masts, their halyards making their percussive music in the Pacific breeze. As is typical of California, greenery and flowers are profuse. The houses across the street are as jammed together as in an old-fashioned European village, albeit with a wonderful view of the ocean. One house is listed for sale at $1.6 million — an indication of just how desirable Santa Cruz is as a place to live.

Bill is wearing his trademark red socks and has brought his friendly black dog to work. His bike hangs from ceiling hooks, and a massive painting by Jim DeWitt of *Merlin*, Bill's signature yacht, hangs above his untidy desk. Bill is known as an offbeat person as well as an iconoclastic boat designer, with a different cut to his jib, not an easy person to talk with.

Magician's hat

The term "black art" seems to be part of Bill's personal and professional life.

He refers to himself in the third person as the "Wizard" and often appears in a magician's hat and a cape covered in stars. Photos from the past and today depict his bearded visage with thick, horn-rimmed glasses that magnify his eyes into bulging globes. His nonconformist approach to boat design, which disdained the "deformities" imposed by the IOR rule and concentrated instead on creating fast boats, was seen by some as demonic, by others as enchanted.

Yet by breaking the bonds of conventional wisdom and standard design rules, he broadened people's minds on the outside limits of fast boats. As fellow yacht designer Robert Perry says, "Bill just refused to be drawn into the B.S. of letting others tell him what a boat should be."

In 1971, calling his firm Bill Lee Custom Racing Yachts, Bill built his first racer, called *Magic*, a 30-footer cored with balsa and weighing only 2,500 pounds. Bill has described it as "too light" and resembling a longish sailboard. Next, he designed and built a 35-footer, *Witchcraft*, which sailed the South Pacific. After accompanying an owner on a Cal 40 in the 1971 Transpac, he received a commission for a faster boat for the 1973 race. He built two boats, the 40-foot *Panache* and the 35-foot *Chutzpah*, which both entered the next Transpac race. The latter took corrected-time honors in 1973 and 1975.

"Bill's personal favorite, the one that made his name synonymous with dash — some say rash — was **Merlin**, *68 feet long, 12 feet wide, and weighing only 25,000 pounds . . . with speeds topping out at 25 knots."*

But the innovative, long and skinny "sled" that's still Bill's personal favorite, the one that made his name synonymous with dash — some say rash — was *Merlin*, 68 feet long, 12 feet wide, and weighing only 25,000 pounds (about half of other 68s at that time), with speeds topping out at 25 knots. In 1977, he himself tested this radical boat in the first singlehanded race to the Farallon Islands and won it easily. Later that year, the boat he named after the sorcerer of Arthurian legend outsailed every other boat in the 1977 Transpac by completing the race in a record-breaking 8 days, 11 hours, and 1 minute. Bill arrived in Honolulu to tumultuous acclaim and, for the first time, wore his star-covered magician's robes — a most unyachtie outfit.

Aerial photograph

Merlin won the Transpac again in 1981, 1987, and 1995. On Bill's website <http://www.fastisfun.com>, a 1977 aerial photograph shows the yacht running with main, jib, and spinnaker fully deployed but the bow wave nearly submerging the hull and superstructure — a submarine with sails. "Just one boat winning this most competitive race over a 20-year period says a lot," says former Santa Cruz production manager Stewart Waring (now at the Westlawn Institute of Marine Technology). "With *Merlin*, Lee was ahead of his time. And with this pioneering boat he rejuvenated the Transpac."

The boat's success eventually led to Bill's being named "Sailor of the Decade 1977-1987" by *Latitude 38* magazine and his elevation to *Sailing World's* Hall of Fame in 1992. *Merlin* was chartered by a number of racers over the years and remained the boat to beat. It's been sold and altered several times and was for sale at Bill's brokerage for $219,000 when this article went to press.

***Giant Slayer*, a Santa Cruz 27, adds a colorful accent to Mt. Rainier.**

Sean Trew

The fast racing sleds were not Bill's first designs, however. In 1973, a customer walked into his shop (a 200-foot converted chicken coop, which itself grew famous — or notorious — over the next decades) and asked for an IOR Quarter-Tonner like *Chutzpah*, but in a size he could afford. After studying the racing rules, Bill drew the ultralight Santa Cruz 27 with its 24-foot waterline and 8-foot beam. Its slimness and flat, almost dinghy-like, bottom contrasted markedly with the bulbous, beamy IOR boats in vogue at the time. "Racing rules have 'go-slow' factors in them that improve handicaps but reduce speed," says Bill. "I eliminated the go-slow factors."

Under the right conditions, the boat can surf in mid-teen speeds. He liked his 27 so much — as did several of his employees, including yacht designer George Olson — that the idea for a production boat bubbled up, and tooling for this one-design class was created. Constructed of roving, mat, and balsa core, the first hull was aptly called *Vanishing Point* and, although it had a modest 400 square feet of sail area, it could surf in 15 knots of wind. Several owners have singlehanded their 27s from California to Hawaii. Bill calls the 27 a "breakthrough boat, quite conservative, structurally sound, and easy to sail."

Downwind race

Over the next five years, Bill built 145 Santa Cruz 27s. They became especially popular in the 225-mile Santa Cruz-to-Santa Barbara downwind race, which passes Point Sur and Point Conception, two of the roughest spots on the California coast. To survive the challenges, Bill states he designed the boats to be strong, seaworthy, and offshore capable, with a small self-bailing cockpit, low freeboard, small hatch, and functional — albeit Spartan — accommodations below. "I had some very wild and exciting rides on this course in a Santa Cruz 27," says Bill. "We learned the answer to the question, 'How fast can you go in the middle of the night in 35 knots of wind and 15-foot breaking seas?' Well, just wear your safety harness and be sure to take your spinnaker down before Mother Nature does it for you."

This highly successful boat is still racing in three fleets: the Pacific Northwest group in Puget Sound and the California fleets in San Francisco Bay and Santa Cruz. The 2003 National Championships were held at Port Townsend, Washington; the 2004 National Championships will be held in San Francisco in August. And in 1997, the SC 27 was inducted into the American Sailboat Hall of Fame. Interestingly, the boat's base price in 1975 was $8,995; today the prices for used boats listed at the SC 27 National Association's website range from $5,000 to $19,500.

" 'Racing rules have "go-slow" factors in them that improve handicaps but reduce speed,' says Bill. 'I eliminated the go-slow factors.' "

Santa Cruz 27 offspring

The SC 27 also had offspring. Hobie Alter says that before he designed his monohull Hobie 33, his company bought a SC 27 and analyzed the boat to learn how she could go so fast. "Bill did a great job," Hobie says. "We knew this boat was the forerunner of the downhill sled. We raced it against another lightweight design, the Olson 30." On his website, Bill makes a wry comment on the Hobie knockoff. "The Santa Cruz 27 is a much better boat," he writes, "and they should have come to the Wizard in the first place."

Bill's love of the water and boats was not part of family tradition. Both his parents were reared in Idaho, and Bill was born there in 1942 in Coeur d'Alene. He remembers being on a boat on an Idaho lake when he was just a tyke, but his real introduction to boating came when the family, with its four offspring, moved to California after World War II. "My father was in law, and the economic opportunities were just so much better in California," says Bill. "I became interested in boats as soon as I was old enough to notice them. We were in Newport Beach, and next door Costa Mesa was an enclave for boatbuilding: Islanders, Cals, Columbias, and Ericsons were all being constructed there. I was surrounded by boats."

Like many salty characters, teenaged Bill got his weather legs in the Sea Scouts. He recalls that many postwar Navy veterans were more interested in powerboating, but he got into "the dinghy racing business." First to test his mettle were the Lehman 10s, fiberglass catboats designed and built by Barney Lehman in the 1950s.

During this time, Bill also acquired a taste for bigger boats. "I'd go around the docks," he says with a small grin, "and chat people up. Throughout high school I'd get rides on every kind of racing and cruising sailboat. Great experience." After high school, he enrolled at California Polytechnic State University in San Luis Obispo, studying mechanical engineering because "that's what I had a feel for." He graduated in 1965.

During his first job at the Mare Island Naval Shipyard about 20 miles northeast of San Francisco, he built submarine parts. He then performed stress and weight analysis for armored personnel carriers for agriculture and chemical giant FMC Corporation, experience that aided him later in his boat design calculations. He also did a stint working in the food machinery industry. By 1968, he'd moved to Santa Cruz and taken a job with Sylvania. But all along, he "tagged along sailing on other people's boats and participating in the Wednesday night races."

Yacht design career

While racing and hanging around docks, he continually analyzed how boats were built, how they sailed, and what impeded their swiftness. Although he never formally studied yacht design, his mechanical engineering training, combined with reading and discussing design with others obsessed with speed, led naturally to his seeking a career in yacht design. The opportunity came after sailing his first Transpac in 1971, on Art Biehl's Cal 40, *Quasar*. He received the commission to design *Chutzpah*.

Unfortunately, Bill was not aboard that boat. "I came in tenth and missed the best parties," sighs Bill, who's renowned for his enjoyment of social events and their grog rations. "That's why I designed *Merlin*, to get there in time for the parties," he continues, his tongue only partly in cheek. "The Santa Cruz 27s were the way to pay for it. It was good to be in the boatbuilding business, better than, say, filling teeth."

Nevertheless, it wasn't all smooth sailing. Bill had fun building boats, but he had to be a businessman too.

"The government makes it expensive to have employees, and I had to meet payroll for up to 40 people every two weeks. So after keeping *Merlin* for five years, I sold her. She was expensive to maintain. It had turned into a question of the fun-to-dollars ratio." He turned to building other fast boats. From the Santa Cruz 27, he leapt to a 50-footer, of which 27 were built. Fifteen 40-footers were also completed. The Santa Cruz 33 was another, less-successful design. In 1983, Bill began a series of 70-footers that became a racing class. One of the 20 built became a cruiser; the other 19 were dedicated racers, first competing on the California coast, then moving to the Great Lakes with fleets in Chicago and Detroit.

Maximum waterline

In his ads, Bill described his 70-footer in these words: "We took all of the fast things we knew about and blended them as gracefully as possible with the IOR rule — no bumps, no hollows; just maximum waterline, maximum power to carry sail, minimum wetted surface, and instant boat speed. Just add water. Heavy wind, light wind, upwind, and of course downwind, these new flyers easily do a horizon job on what used to be thought of as fast yachts." He added that sailing these sleds will "give you that well-justified feeling of superiority."

" 'We all owe Bill a debt. Any sailor who doesn't revere Bill Lee hasn't done his homework.' "

In 1983, Bill married Lu, whom he'd met on a sailboat. They have an 18-year-old daughter, Hillary.

Throughout the 1980s he continued to build boats and race, and in 1992 he and Bob Smith co-designed the Santa Cruz 52, which turned out to be another triumph and was named *Cruising World* magazine's 1996 Overall Boat of the Year. It was also the first Santa Cruz that combined cruising and racing elements, even including a proper stateroom with berths. Unfortunately, the success of the 52, of which 28 have been built, did not benefit Bill.

The story of what happened to Bill Lee Yachts and why the firm closed its doors remains sketchy. Bill is vague about the event, saying simply that it was time to move on. According to one source, disputes with an owner over the change orders of a Santa Cruz 70 led to nasty lawsuits in 1994. To avoid bankruptcy, Bill closed down his production facility. When an offer to buy the firm came from San Diego resident Paul Ely, Bill sold the plant.

Running a brokerage

With his boatbuilding days evidently behind him, Lee also stopped designing and switched to running a yacht brokerage. Besides selling yachts, he still keeps his oar in the sailing world. His expertise is sought as a judge of new boats for *Cruising World*, in the development of Transpac rules and a level class rule for 86-footers, and as

***Giant Slayer*, a Santa Cruz 27, races in the Gig Harbor Yacht Club Islands Race earlier this year.**

Sean Trew

a consultant for yacht projects. Does he miss designing? He pauses a few seconds and then says, "You know, there've always been more yacht designers than customers. If someone asked me, I might consider designing another boat. It's not that likely. But I still strongly support sailing, and 'fast is fun' continues to be my slogan. But to be out there testing all the time? It's very wet. Very cold. I'm a bit older now.

"I recently spoke to the Cal Poly graduating class and told them how different things are today than when I attended there," he says. "New materials are so exotic and completely change how we run and design things — carbon fiber, for example. Instead of a car as a machine, it's an electronics factory. But I told them there are still lots of opportunities and left them with one idea: 'The world is not out of things to invent.' "

Bob Perry describes Bill Lee with these words: "Honesty, intellect, intuition, and chutzpah in the personality trait sense, not the boat." High praise from Bob, from whom kind words are difficult to earn. Bob recalls meeting Bill in San Francisco and seeing his designer's eye at work. "I was hanging out on a dock at the San Francisco Yacht Club Stag Cruise with Bill and some club luminary. A 40-foot Pacific Seacraft went by: shiny and blue. The luminary said, 'Now there's a beautiful boat.' Bill quietly replied, 'All I see is a boat with no waterline length.' We all owe Bill a debt. Any sailor who doesn't revere Bill Lee hasn't done his homework."

Charley Morgan

Charley Morgan, left, with Paul Benfield, owner of the Tibbets Boatyard. Behind them is a Morgan Out Island 51.

He found the best way to win was to build his own boats

by Dan Spurr

Florida, like California, with its eternally warm weather and friendly skies, is a natural place in which to build boats — and was especially so back in the early days of fiberglass when hulls were cured outdoors using sunlight as the catalyst. A cheap labor pool also was available. Boatbuilders sprang up on both Florida coasts — in Miami and in the Tampa-St. Petersburg area. Many are still there, not on the water where real estate is too expensive but — as in Costa Mesa, California, the Mecca of 1960s fiberglass boatbuilding in this country — inland, back in the dusty, nondescript industrial zones next-door to plumbing and building supplies.

Charles Morgan, born November 17, 1929, in Chicago, now a yacht designer and consultant, hasn't built a sailboat in many years, but during the late 1960s and through the 1970s he was a formidable force in the exploding fiberglass sailboat industry. He was the designer of *Heritage*, a 1970 America's Cup 12-Meter; the designer and builder of *Paper Tiger*, winner of the prestigious Southern Ocean Racing Circuit (SORC); a production boatbuilder of Morgan Yachts; and an independent designer and consultant. He's done it all.

Aeronautical engineer

Charley Morgan grew up on the west coast of Florida messing about in boats and went to college close to home, first to Valencia Junior College in Orlando and then to the University of Tampa, where he planned on being an aeronautical engineer. Following graduation he worked a short time for a telephone company before getting sidetracked by sailing.

"I went queer for boats," he says, explaining why he took a job at Johnson Sails in Tampa and then opened his own loft, Morgan Racing Sails, in 1952 in St. Petersburg.

A colorful, bright, energetic bear of a man, he next taught himself yacht design. His first design and build was called *Brisote*, which is Cuban for squall or fresh breeze. She measured 31 feet 6 inches, had a 22-foot waterline, an 8-foot 6-inch beam, a 5-foot draft, displaced 4,500 pounds, and carried 283 square feet of sail. Charley Morgan and his friend, Charlie Hunt, designed and built her out of plywood with a steel backbone. Initially, she had a Star Boat keel and rudder, a Thistle mainsail, and a modified Penguin sail for a mizzen. Later, Charlie Hunt built a bolt-on fiberglass keel for trailering. Together they entered *Brisote* in the 1957 St. Petersburg-Havana race, but the committee rejected her because she had no engine. Charley protested what he thought was a ridiculous rule and won a reversal. The two went on to take second in class. This success inspired what is probably Charley Morgan's most famous design, the 40-foot *Paper Tiger*, which has a yawl rig like *Brisote*. Charlie Hunt had just shown him an early one-off fiberglass boat called *Rare Aves*, a fixture at the Coral Reef Yacht Club in Miami. After seeing it, Charley decided to give *Paper Tiger* a fiberglass hull too.

Rust, shatter, and rot

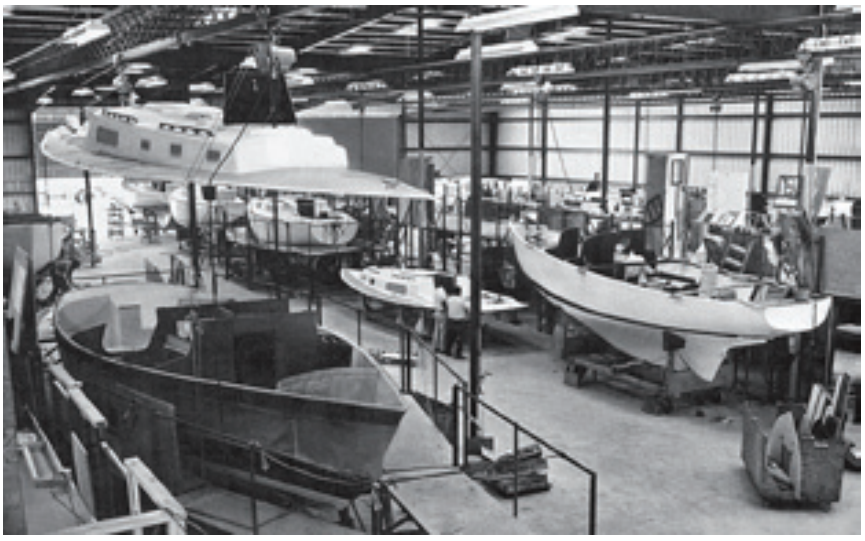
Charley built the hull and deck himself, with help from a young aerospace engineer named John Mills. Charley recalls stopping by the local yacht club one day after finishing work at the shop. "The old savants were sitting in the club, and I came in with resin all over me. One of the guys said, 'I understand it's got a steel backbone, wooden decks, and a fiberglass hull; you know, it's gonna rust, shatter, and rot.' "

Clark Mills, designer of the International Optimist Pram and the Windmill, finished *Paper Tiger* for Jack Powell, for whom Charley had designed her. But at first Clark was skeptical. When Charley showed him the boat, Clark hooked his thumbs in his pockets, chewed on his stogie, cocked his head, and said, "Well darn-it, I've built boats from scratch, kits… you name it. But this is the first time someone's brought me a coat of paint and asked me to build a boat inside it."

History will not forget what that "coat of paint" accomplished. In an un-

The one-off *Rare Aves*, the first fiberglass boat Charley ever saw, inspired him to build *Paper Tiger* out of the same new material. *Rare Aves* still sails today from her home port in the Florida Keys.

and the fiberglass factory



At Morgan Yachts' St. Petersburg, Florida, facility, men worked from scaffolding on boats of all sizes. Note how the decks were moved and positioned from overhead beams.

precedented feat, *Paper Tiger* twice took overall SORC honors in 1961 and 1962.

Charley next designed the 28-foot Tiger Cub and began looking for a builder. The search proved futile, so he did the only logical thing he could — he formed Morgan Yachts and built them himself. They were all essentially one-offs, that is, they were not built from the same reusable mold.

The Tiger Cub later became the Columbia 31, but that didn't happen until after Dick Valdes and Vince Lazzara put Charley's 40-foot Sabre into production as the Columbia 40, a generous move by Vince which was intended to help Charley launch his own business.

Lost the Circuit

The speedy centerboarder had nearly won the 1964 SORC and looked to be a good bet for the general market. "We won the Nassau Race and the Lauderdale Race," Charley lamented years later, "and still lost the Circuit, if that's possible."

Also that year he built what he says was then the world's largest fiberglass sailboat, the 60-foot *Maredea*, whose hull form was tank tested. The result: first place in the St. Petersburg-to-Venice, Florida, race.

In 1965 business was so good the company temporarily stopped taking orders. They were building a wide range of boats, from the $995 Windmill to a $44,900 45-footer. Gross that year was $1.7 million. Unlike a lot of builders, Charley handled finances well, once remarking, "Nothing leaves that driveway out there unless and until it's paid for."

Charley's childhood friend, Bruce Bidwell, joined him that year and together they introduced the Morgan 34, which the ads described as "an immediately successful racer/cruiser and an attractive, beamy, keel-centerboarder, CCA-style yacht . . . for families for whom yachting is a way of life."

The Cruising Club of America (CCA) rule attempted to encourage designs that would be safe, comfortable family cruisers as well as decent performers on the racecourse. Notable features included short waterlines (the long overhangs would immerse when heeled to increase sailing length beyond the measured length), large mainsails and small foretriangles (partly because big multispeed winches hadn't been developed yet). These boats were often yawls because the mizzen staysail was essentially unpenalized by the rating rule. A lot of them were centerboarders because shoal draft was important in Charley's native waters of south Florida.

Smaller wetted surface

In the Morgan 24, the rudder was separated from the keel-centerboard — a major step forward in yacht design. Charley wasn't the first to do this, but the Morgan 24's racing record helped to validate the idea. Not only did the emergence of the fin keel help the boat turn more quickly in prestart maneuvers, it also greatly reduced wetted surface area, which meant less friction and, therefore, faster speeds.

The Morgan 24 is still a good performer by today's standards, with moderate displacement and shoal draft. And — priced around $5,000 — it's a terrific value for anyone looking for a boat in this size range.

Other boats to follow included the Morgan 30, 41, and 45, which later was built as the Starrett & Jenks 45. But it was the development of the Out Island series — 28, 33, 36, 41, and 51 — that gave the company a big burst of business.

Charley's interest in racing never waned, though, and he continued to design and build custom boats. One was *Rage*, which he, with Halsey Herreshoff as navigator, took to second place in the 1968 Newport-to-Bermuda race.

The Out Island series

"The Morgan Out Island 41," Charley says, "was the extension of a long study period, where we tried to create a commodious and comfortable tri-cabin arrangement. In 1970 we finally got it worked out — human engineering and ergonomics. We designed and aimed it at cruisers as well as the charter-boat market. We sought input from a lot of companies big and small, including the Moorings and Jack Van Ost [a dentist who became a successful builder of CSY boats for his charter business].

"The boat was designed to compete with the boats being put out by Gulfstar, which were for a new market that Vince Lazzara [who by now had left Columbia in California and started Gulfstar in Florida] had perceived. Our dealers had requested for a long time a boat without a centerboard that was shoal with lots of room; it didn't need to sail like a rocket. It came out at the Annapolis Boat Show and was an instant sellout. We built, in the first calendar year, over $4 million worth — 120 units. Eventually we built those

Charley Morgan's first boat, *Brisote*. Demonstrating considerable resourcefulness, she had a Star Boat keel and rudder, a Thistle mainsail, and a modified Penguin sail for a mizzen.

***Paper Tiger* was perhaps Charley's most famous design. She won the SORC for two consecutive years, in 1961 and 1962.**

Between 1971 and 1984 more than 1,000 Morgan Out Island 41s were built. Later, after Catalina Yachts acquired some Morgan molds, the 41 was resurrected with minor modifications and sold as the Morgan Classic 41.

boats on two lines, with them coming off the combined lines one a day. They number in excess of 1,000."

In all, Morgan Yachts built more than 40 different production models, beginning with Charley's trademark centerboarders, the Out Islands, the Henry Scheel-designed 45/46 (originally built by another builder as the Scheel 45), and a number of boats designed to the International Offshore Rule (IOR), including the Morgan 33 ¾-Ton and Morgan 36 One-Ton. Sailing Kit Craft made a number of designs available in kit form because, as Charley says, "there were so many people who wanted to get a hold of one of our boats who couldn't afford a finished boat." But along with a handful of other 1970s builders, such as Islander and Columbia, Morgan Yachts dropped the practice because many owner-completed boats were poorly finished, reflecting adversely on the manufacturer.

Retirement day

Charley remembers well the day he retired. It was June 6, 1972, he recalls with certainty. It was easy to see that divorcing himself from the company he'd created was a watershed in his career . . . and life. He'd merged the company into Beatrice Foods four years earlier (1968) and had stayed on as chairman of Morgan Yacht Corporation. But for Charley, like many people, working for a large corporation was difficult after he had been in business for himself.

Later, Beatrice Foods sold Morgan Yachts to Thor Industries. Subsequently, in 1984 it was passed along to Frank Butler and Catalina Yachts, which continued to build the Morgan 38 and the Out Island 41 (Classic 41) for a number of years before finally putting them to bed.

Of Morgan Yachts' many accomplishments, one that makes Charley positively beam is the boats he built for Disney World long before it got into the cruise business. "There was a time we built the largest fiberglass boats in the world," he said. "Morgan

"The Morgan 24 is still a good performer by today's standards, with moderate displacement and shoal draft. And — priced around $5,000 — it's a terrific value for anyone looking for a boat in this size range."

Yachts designed and built the principal original watercraft for Disney World, a whole fleet of them, the largest of which is around 120 feet — submarines, the jungle cruise boats, the steam launches. In all, more than a hundred. It's exciting the way you can completely create out of glass something that looks like wood; on the submarines we faked the scales and rivets. We created an incredible theatrical appearance for Disney."

Charley also designed motor yachts such as the West Indian 36, a hovercraft, and *Heritage*, the last wooden American 12-Meter (*France II* was the last in wood among all nations). Alas, *Heritage* lost to *Intrepid* in the 1970 defender trials.

Way of measuring

Cindy Goebels, reporting in *Southwinds* magazine, said Charley explained his interest in the America's Cup thus: "It's all just another way of measuring yourself. Competitive men always want to know how big they are in relation to others, how they can perform. Dollars are a way of keeping score. There may be other means in a more mature society. Why this? Well, there's damn little you can justify outside of wanting to keep on breathing." Charley Morgan was always a good interview, seldom mincing words.

Morgan Yachts' St. Petersburg facilities were considered modern and first-class. "We maintained a laboratory and did a lot of outside testing," Charley says. "We were using balsa cores from the beginning. Later I was a great proponent of Airex. Then came Divinycell, Klegecell, carbon fibers, Kevlar, and the utilization of high-modulus materials. Way back in 1965 and 1966 we were researching work done in the aircraft and aerospace industry. But those materials had no place in yacht building in those days because lightness was not the keynote; the economic issues were more important . . . and the ability to have readily available resources."

Charley likes to talk about how the advent of fiberglass changed the face of American boating. "You didn't have to be an extremely wealthy person to think about owning a boat," he says. "The concept of the non-wasting as-

set. You could treat 'em and deal 'em like automobiles. You had an orderly market and the burgeoning charter boat and used-boat market. It just altered completely the brokerage firms. Back in the days after the end of World War II, you could count on your fingers the brokerage firms: S&S, Northrop & Johnson. Bang, bang, in one fell swoop, the tides changed and ripped over us.

Morgan 41

Dramatic change

"The thing that kept coming through to me was the dramatic change that was made by fiberglass and the huge opportunity given to the American boater.

"Look at the Ensenada Race — all the ones going down to Mexico — huge clusters of boats! In the Great Lakes, the Mackinac Race had a few entries before the war, but bang! At the end of the war they started getting some fiberglass boats on the scene — my word! — you're looking at 100-boat fleets or better. It made a major change for Americans who wanted to become part of sailing and yachting. Our ad used to say, 'The past decade's most exciting new construction medium.' How prophetic those words were.

"What sort of disturbs me these days is when they tag the sailing boat people as elitist. I like to say that they're really more dedicated and enthusiastic about their sport and therefore have organized it more so it has the appearance of elitism.

"The only boats I've seen break up are some racing boats that were really lightly built, crossing the Stream or something. I've traced a few of those stories about boats splitting in two — bull! I'm sure there are some examples, but the truth is that fiberglass is marvelous."

And of the strength and longevity of fiberglass?

"I hate to tell you how quickly a wooden boat goes down. We crossed the finish line down in Sarasota after getting chewed up in a nor'wester at the crack of dawn. We could see the committee boat in the murk, saw her lights and the farewell marker at Sarasota Pass. We went zooming by, struck the chute and mizzen staysail, jibed over, cranked up the engine, cleaned up the forward deck and started banging through the slop up toward the pass. Dawn had come. I looked up and yelled, 'Hey, look! There's some spreaders sticking up out of the water.' The committee boat broke its line, blew up on the bar, popped like a cantaloupe, and went straight to the bottom. Pieces floating; heads bobbing around and lifejackets. She went down that fast. You kidding me?

"Yet I saw a whole night when [the fiberglass sailboat] *Inferno* sat over on the bricks at Lucaya [Grand Bahama] banging and slamming and screaming and moaning on those bricks. My heart was going out to that boat…the sea bursting over her. Three days later I saw her hauled out at Spencer's in Palm Beach, and I went over and got up inside the boat, looked at the keel — gnawed up a little bit. Not bad!"

Another company

Guys like Charley Morgan are never really retired, even though they sometimes think they are. In 1975 he started yet another boatbuilding company, the Heritage Yacht Corporation. Perhaps anticipating the trend toward power, this time he built both fiberglass sailboats and trawler motoryachts. That venture wasn't as financially successful, however, and he was forced to seek protection from creditors under Chapter 11 of the federal bankruptcy code. Subsequently, in the early '80s he served for a short time on staff at Chris-Craft, while the remaining assets of Heritage went to Catalina, which had also bought Morgan Yachts from Thor Industries.

Today, Charley keeps a design studio in his home. Recent projects include two long-range motoryachts, one steel, the other aluminum, by Topper Hermanson. But, he says, new design commissions have fallen off considerably since 9/11. He says, "I'd love to do a full-powered steel auxiliary for the right person. Totally self-suf-

Morgan 22

Morgan 38

Morgan 41

ficient with watermakers, air-conditioning, whatever they want." Like a lot of other people in the industry, he sees his aging followers taking an interest in the comforts of motoryachts, but not all want to go to sea without some sort of stick overhead.

To fill his time, Charley is teaching himself painting, taking after, in a reverse sort of way, his son and daughter, who are both artists.

And, of course, he still finds time for sailing. He was active in the local Star fleet until his wife became ill six years ago; he nursed her until her death in February 2001.

But, he says, he'll do his yacht club's Mexico race this year, and there's always the Morgan Invasion, a rendezvous for owners, in which he participates.

Last October, the 19th annual Invasion was held at the Treasure Island Tennis and Yacht Club in Treasure Island, Florida. The event coincided with Charley's 75th birthday. More than 100 boats participated. Nothing makes a designer or builder happier than seeing his boats still going strong and his owners happy. One of his favorites, *Paper Tiger*, recently resurfaced in the West Indies. "You can see her on my website <http://www.charleymorgan.com>," he says with pride. "And she's till honkin'."

So, too, one might add, is Charley Morgan.

For further reading ...

This article is a revised version of information included in *Heart of Glass: Fiberglass Boats and the Men Who Made Them*, by Dan Spurr, available at <http://www.goodoldboat.com/bookshelf.html> or by calling 763-420-8923.

Gary Mull *in retrospect*

In English or engineering, this talented yacht designer loved a sweet line

by Steve Henkel

Billy Black

Gary Mull's Freedom 45.

One day in 1985, a yacht designer, the late Gary Mull, wandered into the Connecticut office of Sailor *magazine, where author Steve Henkel worked as editor-at-large. Whether he came hoping for some coverage of his work (successful naval architects are often good self-promoters) or just wanting to visit, Steve doesn't recall. But presently Gary and Steve found themselves facing each other across a table in the office. Steve clicked on a tape recorder, and Gary began talking about himself.*

Afterward, the tape was transcribed, and Steve began to put Gary's words into some semblance of order for publication. Before Steve could finish, however, the magazine ran into financial problems and folded. The interview was packed away and forgotten.

Recently, while browsing among his old manuscripts, Steve, now retired and living in Florida, came across a copy of the interview. Gary Mull died of cancer in July 1994 at the age of 55. "After rereading the record of our conversation," Steve says, "it seemed appropriate to make an effort to get his story published, as a sort of minor testimonial to his well-lived life."

By any measure, Gary Mull was a successful designer. His credits include the Santana 22, 27, and 37; the Ranger 22, 23, 26, 29, 32, 33, and the SORC-winning Ranger 37; the Newport 30 and 33; the Kalik 44; the Freedom Independence, 28, 30, 36, 42, 45; a variety of winning raceboats from the Half-Tonner *Hotflash*, built by the Gougeon Brothers in 1976, to Two-Tonners like *Carrot* (1976), to the 12-Meter *USA*; the Capri 22, which he designed with Catalina's Frank Butler in 1983 (more than 800 sold); and custom designs including the light-displacement speedster *Improbable*, the 6-Meter match racers *St. Francis IV, V, and VI; Ranger*, built by Goetz Custom Yachts and raced by Ted Turner in the 1979 6-Meter Worlds; and the maxi-boat, *Sorcery*. His boats were built in numerous other countries, including Australia, New Zealand, Italy, Taiwan, Turkey, and Yugoslavia. He also served as chairman of the International Technical Committee of the Offshore Racing Council, the group that administered the IOR (International Offshore Rule).

Another measure of a designer is the number and record of people who apprentice under him and then go forth on their own. Over the years, Gary Mull trained many others who established their own enviable portfolios, among them Carl Schumacher, best known for his Express series. Other well-known yacht designers include Jim Antrim and Ron Holland.

Besides being a good designer, Gary Mull was characterized as "one of the best storytellers of all time."

Bay Area boat boy

It isn't easy to make a living as a sailboat designer, and most aspirants to such a calling find other sources of income to support their chosen lifestyle. But Gary — after a number of false starts — made it big as a full-time designer. He was born in the small California town of Beaumont, which he was fond of describing as "right next to Banning . . . and that's not too far from Ukipa." Later, his family moved to the San Francisco Bay area, where he lived the rest of his life. As a teenager growing up in the 1950s, he discovered his vocation when he joined the Sea Scouts.

"I have a good friend named Wayne Love," Gary said, "and he and I, as far as I know, were the only two guys in our group who wound up doing what we wanted to do. Wayne wanted to be a cowboy, and he *is* a cowboy — a real honest-to-God John Wayne, spurs-and-a-buckle-the-size-of-a-hubcap cowboy. And I wanted to be in boats.

"Wayne was in the Sea Scouts, and one day he said, 'Do you want to go on

a cruise?' I said, 'Yeah, great, what's a cruise?' It turned out to be on the Sea Scout 'ship,' they called it, which was a 26-foot whaleboat. The cruise consisted of rowing the whaleboat against the flood tide about 12 or 15 miles, beaching the boat and having lunch, and then rowing back against the ebb tide. I came back with a sunburn and blisters all over my hands, but discovered that I really liked boats, I mean *really* liked boats." As he grew up, Gary began racing on other people's boats and took jobs as a paid hand setting up boats and crewing.

English major

In college, however, Gary started out as an English major, because he wanted to be a poet. "I had a lot of fun," he said, "and it serves me well. I enjoy the language. It frustrates some of the people who work for me because I try very hard to use the word that means what I am trying to say — and I always try to say what I mean. Many people are pretty loose with the language. I hear a lot of people say 'it is exactly the same except that . . . ' and it can't be '*exactly* the same *except* that . . . ' "

Gary went for a year to Pomona College, a liberal arts college in Southern California. "Then I had the choice of going to school the next year, or going on the Tahiti race," he said. "When you're 17, which would you pick?"

So he raced to Tahiti. On his return he went to Oakland City College for a short while. He "did English for a little bit," and then he signed on to help bring *Good News* (a well-known ocean racer of the time) back to the States from Bermuda. After that, he applied for a transfer to the University of California at Berkeley. He had all the credits, and making the switch, he figured, would be no problem.

"Then," he explained, "at Berkeley, I met an old girlfriend of mine from Pomona College, who now was an English teacher at a Berkeley high school. Her view was that, if you are going to be a poet, you have only a few options. You either have to come from a wealthy family, marry a wealthy wife, or get some real job to support yourself while you are dealing with your poetry. The most common job for would-be poets is as an English teacher in a high school. There are a lot of frustrated poets teaching grammar to kids who don't want to learn it.

***Genesis II,* a 1971 Gary Mull-designed Ranger 26 owned by Richard Dinardo, at her mooring on Long Island Sound in Guilford, Conn.**

Teaching problems

"Then she began teaching at Berkeley High and telling me of all the problems of teaching. I asked her if she wanted to go out to dinner, and she said she couldn't because she had to grade a bunch of papers. I said, 'I'll help you grade the papers, and then we'll go to dinner. I'll grade for spelling and punctuation, and you can grade for content.' So she gave me a red pencil, and I started whittling away. These kids were juniors in high school, and they had never *heard* of punctuation. There was an occasional period, and commas were not in evidence; their spelling was freestyle, I guess you'd call it.

"She looked over and said, 'My God, what are you doing?' I said, 'Are these kids Americans? Are they boat people or something?' She said, 'You can't grade this one badly because he happens to be black, and if you grade him down I'll get a visit from his mother and father and the NAACP. You can't grade this one down because he happens to be white, and if he is graded down I'll get a visit from his mother and father and the minister saying, 'How come my white kid is getting graded down?' One other kid couldn't get bad grades because he was a football player, and another girl couldn't get bad grades because she was supposed to go to some hotsy-totsy women's college. My friend said she'd never been so frustrated in her life. She was, at this point, actually crying, and that sort of soured me on the teaching process, at least for high school."

Instead of teaching, Gary decided to shift into engineering at Berkeley. He signed up to take a qualification test, given during the summer, to get into the College of Engineering. All summer long he expected a letter from Berkeley to arrive advising him when he was supposed to take the engineering test. But the letter never came. "Finally," he said, "I went up to Cal (UC Berkeley) and told them I hadn't gotten the notice.

What name?

" 'Well, what's your name?' I was asked by an official.

" 'Mull.' They got out my file.

" 'Well, what do you want to take the engineering test for?'

" 'Because I want to study engineering.'

" 'But you are down here as an English Lit major.'

" 'No, no, I *was* an English Lit major; I transferred into engineering.'

" 'No, no, no. Here it says your intended major is English.'

"And there it was on the form: 'ENG.'

"I said, 'No, that's engineering, that's the abbreviation for engineering.'

"The official said, 'Not here. The abbreviation at the University of California is ENGIN, and the abbreviation for English is ENG.'

"Well, I had been taught that you never abbreviate the word English if you can avoid it, or you do ENGL. But Cal had its own abbreviations. Without the qualification test you can't get in the College of Engineering. So I was essentially stuck in English Lit for my third year." A linguistic purist, hoist by his own petard!

Eventually, he earned his mechanical engineering degree with an option in naval architecture. "I did all sorts of stuff by the time I finally got out of Cal," he said, "which was at a pretty late date. I went to school for a year, went to Tahiti for a year. I worked as a sailmaker for a year. I went back to school. I was in the Coast Guard. I got married."

The real stuff

He worked at Lockheed Shipbuilding as a consultant for a while and ran the engineering department of a shipyard for about four years. He got to know the commercial — what he called "the real" — naval architecture. "At the time," he said, "I sometimes wondered why I had to learn how to design general cargo ships and tankers and that kind of stuff, but even that has served me well since then."

Then he raced to Honolulu on the celebrated 33-foot ultralight S&S-designed *Spirit*, which he was in charge of setting up. After the race, with a small crew that included his new wife, he brought *Spirit* back to San Francisco. "The boat had no engine," he said. "We sailed her back."

When the couple got back to the mainland, they had no home, and Gary had no job. In fact, he hadn't interviewed for any jobs. So he and his wife stayed with her parents for a while. He remembered his father-in-law repeatedly asking about his plans.

"He'd say, 'Well, when are you starting work?' And I would say, 'Well, I don't really know.'

Designer Gary Mull

"'Don't you have to call and let them know you are back?'

"Well, it's a little bit more complicated than that because I don't have anyone to call. I'm going to have to start looking for a job.

"'You didn't *interview* before you left?'

"I'm sure he was thinking: 'Here is this lout that my daughter is married to, an absolute ne'er-do-well.' "

Antenna project

Finally Gary started working for a company in San Francisco that had a contract to redesign the antenna array on a couple of carriers for the U.S. Navy. Not long after, "the boss walks up to me one day and he says, 'Well . . . err, umm . . . err, umm, I don't know how to tell you this . . . umm, err, umm . . . I have to let you go.'

"I had only worked there three weeks. I said, 'Jeez, Bill, what did I do wrong?' And he said, 'No, no, no, your work is fine, but we lost the Navy contract, and last hired, first fired.' He felt so embarrassed he gave me three months' severance pay."

Gary used some of that severance pay to fly east. He interviewed with a number of yacht design firms, including the prestigious Sparkman & Stephens, where he was offered a job. He worked there for several years, and then his father-in-law suddenly died, leaving a family business. Gary and his wife drove back to California to try to help save the business, but by the time they returned to the West Coast, other family members had sold the business.

Gary again had no job and only "20 cents-worth of savings." But the company that he had worked for redesigning antenna arrays for the Navy rehired him right away, farming him out as an engineer to Lockheed Shipbuilding in Seattle.

While he was in Seattle, Gary's mother sent him a newspaper clipping of an engineering firm's ad looking for a naval architect down in the Bay Area. He responded, and as Gary explained it, "We sat down and the manager asked me my general background, where I went to school, and what I had been doing, and then I asked what the job would be. He said, 'Well, right now we just got the contract to do a 12-inch, self-propelled, suction-cutter dredge for the state of Bahar, India.'

"I said, 'A what?' And he said, 'A dredge.' And I said, 'Gee, I'm afraid you've got the wrong guy, I don't know *anything* about dredges. I don't even know how they work.'"

Thinking there would be no job offer, Gary went back to Seattle. About a week later he got a call, asking when he could start. Gary answered, "I think you must have me mixed up. I'm about six feet tall, I'm the guy who doesn't know *anything* about dredges."

The manager's response was, "Yes, and you are the *only* one who admitted it."

They negotiated a deal, and he worked there for a couple of years.

Sailboat commission

In those days, Gary spent time with a bunch of sailors who got together in Oakland for lunch on Fridays to talk about boats. There, in 1965, he met the owner of the W. D. Schock Company, a pioneer in cored construction, based in Santa Ana.

This is how Gary described the ensuing events: "Bill Schock kept saying, 'What would you do if you were going to draw a boat that would be faster than a Cal 20?' That was the real yardstick boat at that time. We were sketching on the backs of napkins, as we do.

"Right after that lunch, I had to fly to New York, and when I came back, there were all these messages on the desk, 'Call Bill Schock; Call Bill Schock,' so I called and said 'What do you need?' And he said 'Where the hell are the drawings?' I said, 'What drawings?' He said, 'You said you were going to design a boat for me.' I said, 'No, you said you were going to call

me if you wanted me to.' And he said, 'Well, I called.' I said, 'Oh!' And that got me started designing sailboats. The first one was the Santana 22."

It was a very successful first design, and W. D. Schock sold several hundred. Then Gary designed the Santana 27 in 1966. Before long both the Santana 22 and the 27 started cutting into the sales of the big competition, the Cal 20 and the Cal 25 and 28.

The Ranger story

As a result, Jensen Marine, builders of the Cal line at that time, saw both a problem and an opportunity. Jack Jensen already had a mutually exclusive agreement with Bill Lapworth, designer of the Cal 20 and others in that line, which stipulated that Lapworth couldn't design for anyone else and Jensen Marine couldn't build anything but Lapworth boats. So in 1967 Jensen started a new company, Ranger Yachts, with the same sort of exclusive arrangement with Gary.

For a while, things went swimmingly. Gary designed a broad line of Rangers: In chronological order the Ranger 26 (1969), 33 (1970), 29 (1970), 23 (1971), 37 (1972), and the 32 (1973). The Ranger 23 was used in the movie *Dove*, the story of Robin Lee Graham's single-handed circumnavigation (the real boat Graham started out on was a Lapworth 24). The Ranger 37, *Munequita*, won the 1973 Southern Ocean Racing Circuit. And the number of hulls coming from each model mold was substantial. For example, 460 Ranger 33s were built before production was discontinued in 1978.

But as so often happens in the boating business, the scent of roses was not to last. As Gary explained with some bitterness, "They started getting aberrations because the corporate lawyers decided to run the boat business. What happened was that in 1973 Bangor Punta bought Jensen Marine and Ranger Yachts, and a new group of guys took over Bangor Punta. They were basically all attorneys — and I don't have any more against attorneys than most people have against attorneys, for the same reasons — but, anyway, they decided that they would begin to pull the corporate strings. They decided to change the corporate structure, and in so doing they committed suicide."

"… it has to have an airy, bright, pleasant interior so that you don't feel like you are going to jail when you go down below."

Markets covered

Under the original concept, said Gary, Bangor Punta had "O'Day boats, which essentially covered the low-ticket end of the market. They had Cal boats with an overlap at the bottom end that covered the medium-ticket end of the market. And they had Ranger Yachts, with some overlap, covering the high-ticket segment of the market. They had the market covered like a blanket."

Then management decided to change the structure. "I don't know what it's called," Gary said, "from horizontal to vertical (integration) or from vertical to horizontal, maybe on the diagonal, I don't know. But in any case they decided they would have one guy be director of the marine field in order to unify marketing."

That started some infighting. "O'Day wanted to improve their quality and build bigger boats," Gary said. "They wanted to encroach on the marketplace of the other two guys. They put a guy in Ranger who wanted to cut the costs at Ranger to get down to the low-ticket end. They began to mix up where the hell they were, and who they were, and where they were going."

It was a turning point in the designer's career. "That was a very bad thing for me because I had an exclusive contract with Ranger," Gary said. "I couldn't design for other production companies. I had cut myself off from the entire rest of the marketplace."

He had a bitter dispute with Bangor Punta's top brass, which ended with the termination of his contract and separation from the company.

"I was invited back to Greenwich, Connecticut, by the then-president of Bangor Punta to resign the contract," he said. "It was a formality, at least according to them on the telephone. When I got to the office, having flown across the whole damn continent, to talk to this SOB, he kept me waiting in his outer office with a paper cup of coffee for almost an hour, and I knew something was up . . . unless he was having a fire in his office.

Royal throne

"Finally, I was ushered into his office, and he had one of these swivel chairs that King Henry wouldn't be better off in, and he began telling me how they were sure it didn't matter who designed the boats — it was all a matter of marketing. He leaned back in his corporate throne and said, 'As a matter of fact, if I had a bit more time I'd take a shot at it myself.' I said, 'Well that's like saying that if I had more time, I'd handle my own legal work,' and he sort of came down from the swivel chair and said, 'Well, you have to realize now that the law is a pretty specific profession.'

"I said, 'I went to school for four years and studied naval architecture, I know as much about naval architecture as you know about law; as a matter of fact, I probably know *more* about law than you know about naval architecture. He was quite insulted that his profession of law was anywhere near the same wavelength as this *hobby* of boat design. He then told me that I was earning too much money. I was on a straight percentage of the boats sold, not the boats built, but the boats sold. The more boats they sold, the more money I earned; the fewer boats they sold, the less money I earned. It was essentially on a performance basis.

"He told me I was earning too much money, and I said, 'The reason I am earning too much money is because you are selling a lot of boats, and you're making a lot of money. How the hell can you possibly complain?' He said, 'Well, for a boat designer to make this much money is just ridiculous.' And I said, 'For a boat designer to make as much money as I do *is* ridiculous, but I know how much you make out of this company, and if what *I* make is ridiculous, there is no word to describe what *you* are making.' At this point, he said, 'Take it or leave it; we'll give you half of what we have been giving you,' and I said, 'F— you.'

Justice after all

"It was like going from a good business to no business in one day,"

Gary said. "But in the end, Bangor Punta's marine business went in the toilet, too, so maybe there is some justice after all. I had always had my own business designing production boats, so I just kept designing production boats, and I have been doing that ever since."

Bangor Punta moved the Cal division to Florida in 1981 and decided to pull the plug on Ranger. In 1983, Bangor Punta decided to get out of the sailboat business altogether and sold Cal and O'Day to Lear Siegler.

Gary's contract with Bangor Punta had given him some control over the Ranger molds, and he had a client who wanted to buy the molds for the Ranger 29, 33, and 37. A deal was struck but, according to Gary, Bangor Punta reneged and destroyed them all. That was the clear and final end of Ranger Yachts.

We got on to the subject of cruising boats. "We do a lot of cruising boats," Gary said. "But I don't like the word *cruising* boat. We do a lot of *regular* boats. Most of our designs are what I like to call 'really nice little boats.' "

When asked if he meant that he designed "club racer/cruisers," he answered, "Ehhh . . . I think that every name that you give them other than 'good sailboat' shades what they really are. If you call one a club racer, what you are really saying is that it is a racing boat that isn't quite good enough to race against the real racing boats. It can only do club racing. If you call it a cruiser/racer, that's some sort of a hermaphrodite that is neither fish nor fowl, but it is probably slower than a racer/cruiser, which is also a hermaphrodite, but maybe looks racier than its cruiser/racer cousin."

"When we had a decision to make in the design office, we always asked, 'Is it going to contribute to making it more fun?' "

Design parameters

When asked what kind of parameters he used when designing "just a really nice boat," he said, "It has to be good looking, and it has to sail well. It has to have good balance, and it has to have an airy, bright, pleasant interior so you don't feel like you are going to jail when you go down below. It's got to have a comfortable cockpit where you can work the boat without bashing your elbows or tipping over or whatever. It's a boat that, if you want to cruise it for a while, you can do it by simply loading aboard the stores and some clothes, and just do it. If you want to race it, you can do that by off-loading some of the stores and gear and going racing. And, of course, it's not going to be a successful IOR boat, because it's not an IOR boat, but it's probably going to be a better cruising boat than 99 percent of the cruising boats on the market, which are caricatures of cruising boats."

That first interview eventually ended. But the following January, at the 1986 Miami Boat Show, Gary delivered

another lesson in engineering and English. He was sitting in the cockpit of his latest design, a shiny new Freedom 30. He was casually asked whether the maximum speed of his intriguing new boat design was 1.34 times the square root of the waterline length.

"I wish people would quit saying that," he retorted with intensity. "There's no such thing as a maximum speed under sail. There's a point at which the speed-versus-resistance curve begins to get very, very steep. At low speeds, a certain increase in horsepower gets you a fairly good increase in speed — but at high speeds, doubling the horsepower only gets you a very slight increase in speed. Usually somewhere around 1.34 times the square root of the waterline length — the sailing waterline, not the static waterline — that speed/resistance curve starts to get very steep. But there's no absolute limit."

High quarter wave

"But," he was asked, "doesn't the quarter wave start to build up higher than the cabintop?"

"No! That's not so!" he exclaimed. "I've never seen such a thing. That's all magazine talk. That's not naval architecture. I'm continually seeing this 'maximum speed under sail' or 'maximum speed-length ratio' or whatever-the-hell, and it's totally meaningless to naval architecture, as an absolute maximum. It does have meaning, because the speed-resistance curve does get very, very steep, as I say; but it seldom gets absolutely vertically asymptotic."

The topic switched to a safer subject, the Freedom 30 rig, and the observation was made that "the mast doesn't have any standing rigging except the headstay . . . "

"Jibstay!" he shot back. "A headstay goes to the head of the mast; that's why they're called headstays. Forestays or jibstays go somewhere below the head of the mast. You have 'stowage' with a 'w' on boats, not 'storage,' which is what you have in your garage.

"I want to keep the language of sailing clean. Life jackets are life jackets, not PFDs (personal flotation devices). Heads are heads, not MSDs (marine sanitation devices). Calling them MSDs is just an example of the government not doing anything except generating words and not accomplishing anything. It's typical bureaucratese. Everybody knows what a head is."

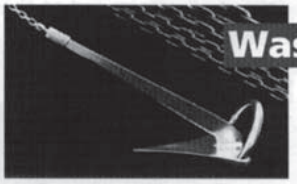
It was pointed out that there are two definitions for the word "head": the toilet or, alternatively, the room in which the toilet is located. The *Mariner's Dictionary* says that a head is "the compartment with toilet facilities." But again Gary shot back: "Yes, but when I say 'the head is stopped up,' that doesn't mean the door is jammed, does it?"

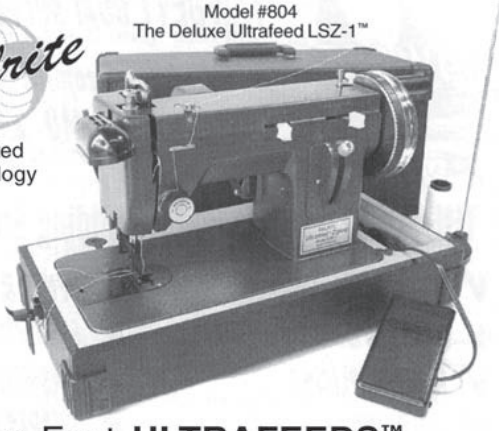
Epilogue

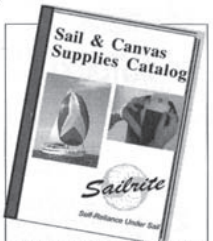
Gary was, of course, involved in many more projects than described here.

He worked hard for several years on the Golden Gate Challenge 12-Meter program for the 1987 America's Cup ("The 12-Meter stuff is just a 12-hour day, seven days a week. I haven't had eight hours' sleep in the last year or two."). The result was the radical forward-rudder *USA* skippered by Tom Blackaller. She showed promise but failed to win the trials.

Another of Gary's unusual designs was an ultra-high-performance 35-foot, ultra-ultralight (2,000-pound) sloop for Ron Moore with not only a winged keel but also a winged deck ("People who [will buy it] are the same kind of people







who get Hobie cats, which capsize, and . . . if a guy is crazy enough to buy this boat, God knows what he is going to do with it!").

And he owned boats himself, of which he said, "I name all my boats after Humphrey Bogart movie roles. I've got *Fred C. Dobbs (Treasure of the Sierra Madre)* and *Richard Blaine* . . . do you know who Richard Blaine is?"

Gary's creative signature is to be found in other less-conspicuous places, like the Dorade boxes built into the corner of the cabin trunk, which form part of the water trap; Gary called them "sunshine boxes."

Gary was nothing if not an entertaining conversationalist. Quickwitted and often humorous, he once asked, "How do you make a small fortune as a naval architect? Start with a large fortune."

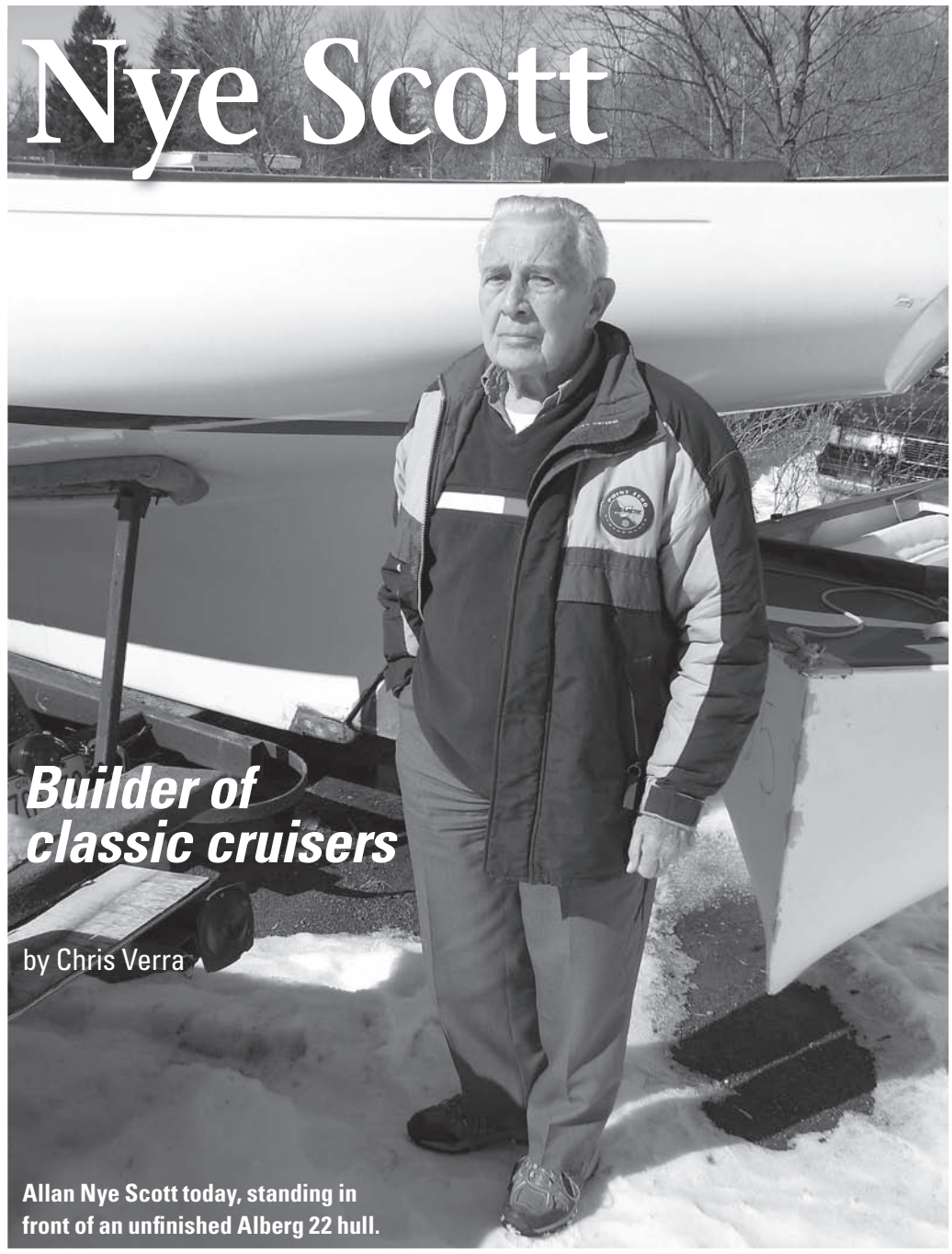
Fun was the operative word, in life and in boats. In describing the design objective of the Ranger 22 (the production version of his near-legendary *Pocket Rocket*), he said, "The basic parameter was fun. When we had a decision to make in the design office, we always asked, 'Is it going to contribute to making it more fun?' "

Jim Donovan, who worked with Gary, summed up his former boss this way: "Gary Mull was the 'teacher' for many talented yacht designers, one of the best storytellers of all time, and an excellent cook. He had a very organized and systematic approach to the design process along with a great attitude on how to balance work and enjoy life. Although yacht design sounds like just a lot of 'fun,' it's usually just a tremendous amount of work. I was very lucky to work with Gary; he was an excellent person."

Allan Nye Scott

Builder of classic cruisers

by Chris Verra



Allan Nye Scott today, standing in front of an unfinished Alberg 22 hull.

Just about any weekday morning after 10 you can find Allan Nye Scott behind his desk at the offices of Nye Boat Works in Foxboro, Ontario. Long past the normal retirement age, Allan no longer owns the business. He has taken on a consultant role. Despite the fact that he is in his 82nd year, he mirrors the tenacity, dependability, and endurance of the vessels he helped create, vessels such as the Contessas and several Albergs. The list of boats he built reads like the Who's Who of "small boats to choose for an ocean crossing."

First boats

Allan was born August 15, 1924, in Montréal, Québec. He was introduced to boats early in life at Boy Scout camp. Later, during World War II, he served as an Able Seaman doing radar control aboard the cruiser H.M.C.S. *Prince Robert* of the Royal Canadian Navy on convoy duty in the South Pacific. The ship was present for the handover of Hong Kong after the Japanese surrender in 1945, the final military action of the war.

After the war Allan returned to Montréal to study chemistry at McGill University. He loved to sail and, as an undergraduate student, purchased his first sailboat, a 16-foot daysailer.

Shortly after graduation he was hired by Union Carbide, a chemical company in Montréal. While there he was involved in the development of epoxy coatings. When he wasn't working, he often could be found at the Royal St. Lawrence Yacht Club. Little did he know that working with epoxy coatings all day and messing with boats all weekend were good preparation for what was to come.

Allan was described in a 1970 *Toronto Life Magazine* article as having a "nomadic, just-give-me-a-place-to-hang-my-hat attitude." His work took him from Montréal to Toronto many times during the decade after the war. Perhaps it was inevitable that he would one day join the National Yacht Club (NYC) in Toronto. That day came in 1951. While there he served on the board and as rear commodore and moved up through the racing ranks. In 1962 his romance with the R-class boat *Diana* began. At that time, there was a fleet of six R-boats at NYC. With *Diana* he honed his sailing skills, winning practically every cup around the lake. This wooden Universal Rule boat remains one of his favorites to this day.

Allan's ownership of *Diana* is tied to the beginning of his relationship with the late Swedish yacht designer, Carl Alberg. Allan and four other sailors asked Carl to design for them a seaworthy boat similar to his Triton design being built by Pearson Yachts. Carl agreed and for $100 the Alberg 30 was born (see *Good Old Boat*, March 2006). Kurt Hansen of Whitby Boat Works, builder of the Great Lakes Folkboat, was commissioned to build the first five. Before production began, however, Allan decided to pass on the deal and instead bought *Diana*.

In 1967, Allan again made a tentative advance into boatbuilding when he and four other sailors from the NYC contacted Olin Stephens of Sparkman & Stephens to design a boat. In Allan's words, "We wanted a boat we couldn't afford." The Hughes 38 was the result. Howard Hughes (no, not *that* Howard Hughes) of Hughes Boat Works was contracted to build it. (For a bit of Hughes history, see

the Hughes 25 article, *Good Old Boat*, July 2006.) Many hulls and decks were delivered to sailors' backyards. Some were completed at the factory. Allan had his delivered to the yacht club and finished it there.

This boat, named *Diana of York*, went on to prove her mettle on the racecourse, although Allan tells the story of his disappointing first race: "Jack Currie of National Yacht Club had purchased the original *Diana* from me. At the start of the race Jack sailed up behind me and passed us on the leeward side. As he went by Jack yelled over, 'Good looking boat!' and sailed on." The Hughes 38 went on to be one of the great success stories of the boatbuilding world and continues to be a respected and capable vessel. *Wild Card*, one of the better known Hughes 38s, is sailed today by cruising writer and sailing broadcaster Cap'n Fatty Goodlander.

J. J. Taylor & Sons

Evenings and weekends were spent building the systems and interior of the new *Diana*. Allan was working on his new Hughes in the yard at NYC the spring of 1968 when he was visited by Jack Martin, owner of a Toronto auto plant. Jack was interested in buying a boat company — J. J. Taylor & Sons — and asked Allan to negotiate its purchase and then manage it. J. J. Taylor & Sons had been building boats in Toronto since 1904 and had been kept busy during the war with military contracts. After the war, the firm built vessels for the Canadian Coast Guard, Royal Canadian Mounted Police, and anyone else it could get to sign a contract. In its heyday J. J. Taylor & Sons built boats from 10 to 134 feet. Working primarily in wood, the company was ready for a change. Under the leadership of Allan Nye Scott and Jack Martin, the company looked to fiberglass sailboat production.

At the age of 45, Allan put down roots in Toronto, due in no small part to the fact that he had gotten himself engaged to Evelyn Jonas, a young English teacher from Toronto and former lieutenant in the Royal Canadian Naval Reserve. His temporary address, as of November 1969: S/V *Diana of York*.

Over the course of his first year with J. J. Taylor & Sons, Allan searched for the right boat to take into production. The wrong decision at this critical juncture could bury a small business. He sought a sturdy little pocket cruiser and found it in the Contessa 26. A company called Rogers and Sadler had been building the 26 in Lymington, United Kingdom, since 1966. Allan had a hull and deck shipped to Toronto to make the molds and began production. The boat was a success: more than 350 hulls were laid up in the first three years. By the time J. J. Taylor & Sons closed in 1990, more than 400 had left the plant.

The Contessa 26, and later the Taylor 26, are considered by many to be the ultimate big-water pocket cruisers. Tania Aebi, the youngest woman to solo circumnavigate, did so in a Contessa 26 named *Varuna*. She was 20 when she finished her voyage. Tania told her story eloquently in her book, *Maiden Voyage*, which further promoted this capable little boat.

Because of the success of the 26, Allan returned to Lymington where Jeremy Rogers was building the big fin-keel sister of the 26, the Contessa 32. Again a hull and deck were shipped to Toronto in order to have molds made. Canadian production began in 1973. The design proved itself in the deadly 1979 Fastnet Race, in which it was the smallest boat in the fleet to finish. In 1996, long after Allan had left the company, 20-year-old B. J. Caldwell completed a solo circumnavigation on a Contessa 32, officially becoming the youngest person to do so. By 1990 when the plant closed, 87 Contessa 32s had been built.

Allan (at her helm, above) finished a Hughes 38 named *Diana of York,* but his heart still belonged to an R-class boat named simply *Diana.* Allan (aft of the mast without shirt on, at left) aboard his beloved *Diana*.

New ventures

In 1974, one year after acquiring the Contessa 32 rights for J. J. Taylor & Sons, Allan left to strike out on his own. He set his sights on Belleville, Ontario, a small town on the shore of the Bay of Quinte at the east end of Lake Ontario. Belleville is home to the oldest continually run yacht club in North America, the Bay of Quinte Yacht Club. What better place to build sailboats?

Belleville also had the advantage of being the former production center for the venerable 31-foot Cuthbertson & Cassian-designed Corvette. Allan set up his new company, Nye Yachts, in the old building where Ian Morch's Belleville Marine Yard (one of the founding four partners of C&C Yachts profiled in *Good Old Boat*, September 2002) had produced the Corvette. For his next boat Allan turned to Carl Alberg. A seaworthy pocket cruiser had worked for him in the past; perhaps he would hit gold again. Nye Yachts began production of the Alberg 22 in 1974. The molds came from Douglas Marine of Port Stanley, Ontario. Douglas had been producing the 22 under the name Douglas 22 because it never had the rights to use the Alberg name. After Douglas declared bankruptcy, Nye Yachts managed to get both the molds and permission to use the Alberg moniker.

By 1977 Nye Yachts was looking to add to its line. The first was the Carl Alberg-designed Alberg 29, of which around 70 where built. It remains one of Allan's favorites. "Those were our best years," he says. "The 29s were great vessels to sail." The design was a more modern approach to the classic Alberg designs. Though it has a full keel and keel-hung rudder, the beam is wider and carried farther aft. And it was one of the first boats of this size to have propane lockers as standard equipment. Imagine, propane on a boat?!

The 29 was followed by the Alberg 34 in 1979, but only six were built. Things were looking up for the young company. As was the case with so many boatbuilders at that time, optimism was rampant. In 1982 Allan moved the company to a larger facility in Bloomfield, Ontario. The new 20,000-square-foot plant would give the company room to grow.

From 1983 until 1984 Allan had 22 workers completing one boat almost every seven days. But in the mid-1980s the boat market went soft. Builders all over North America were closing their doors. Allan managed to get an order to build 10 26-foot Dragonfly trimarans. The customer who commissioned the boats had the molds shipped from Denmark where the boat first had been built by Quorning Boats. Nye Yachts immediately began production on the new multihull. Two were completed before Allan was informed that the buyer could not take the order. He had more than $50,000 invested in the project, more than his company could afford to lose in a slow year. Nye Yachts closed its doors for good.

Not to be dissuaded, Allan returned to Belleville, where he set up Nye Boat Works. As is the case with most forward thinkers, Allan was able to see opportunity in the shrinking new boat market. He began doing repairs and restorations on used boats. The glut of vessels that had sunk the new boat market would provide him opportunity for years to come.

Allan, tending *Diana's* mainsheet.

In 1968, Allan took over management of J. J. Taylor & Sons, which was moving into fiberglass yacht construction. Its first model was the Contessa 26. The boat later was made famous by Tania Aebi, who made a solo circumnavigation in her *Varuna.*

Retirement

Today Nye Boat Works is thriving in the village of Foxboro, north of Belleville. The new owner, Nathan Bresett, says the company continues to do repair and restoration work: "We are capable of doing any repair on boats up to 40 feet, but we specialize in Albergs and Contessas." Allan can be found there most mornings, coffee in hand, a fresh smile on his face. "All I do is have a desk here," he says. It is easy to suspect he does a lot more.

Allan and Evelyn currently live near Belleville, Ontario. Their only child (also Allan) is a professor of civil engineering in Fredericton, New Brunswick. Allan Sr. spends many of his summer evenings on his boat in the Bay of Quinte. *Diana of Hastings*, a fiberglass replica of his original R-boat, is a contender under his command in the Bay of Quinte racing fleet.

Looking at Allan's life makes one think he might just be the Forrest Gump of the sailing world. Like the movie character, he was fortunate to move through an era of change, playing a behind-the-scenes role in each event that defined that era, all the while oblivious to how significant those events would become. To steal a phrase from the movie, "Life is like a box of chocolates; you never know what you are going to get." It's likely Allan Nye Scott still has a few bonbons up his sleeve. The sailing world can only hope so.

***Diana*, at left, shows a turn of speed reaching on Lake Ontario. Allan actively raced her during his years of ownership in the 1960s. In 1974 Allan founded his own company, Nye Yachts in Belleville, Ontario, to build the Alberg 34, shown below, only a few of which were sold. As a young man Allan spent much of his time around marinas and yacht clubs, working on his boat and others, at right above.**

George O'Day: *The man who loved*

He put Americans on the water in affordable, trailerable sailboats

George O'Day, above. At top, photo of the 1960 Olympics gold medal crew: George in center with Jim Hunt, at left, and Dave Smith, right.

by Dan Spurr

The boating industry attracts people to it in different ways. Some people like to build things. Others like to draw or draft. Some get involved because they like to sail and think they'll spend much more time on the water than if occupied in a more lubberly profession. And a few are simply born to it. For George Dyer O'Day, there was never any doubt that sailing would be his career.

Born May 17, 1923, he grew up along the New England coast in Brookline, Massachusetts. That's not that far from the famous sailing town of Marblehead, its crowded harbor tucked behind a thin peninsula about 12 miles north of Boston. Ted Hood, who would race against O'Day, founded Hood Sails there at Little Harbor.

George O'Day started sailing, by some accounts, as a "handsome, curly-haired youngster." By age 10 he began winning races against older competition. He had a flair for it, that indefinable sense about the wind and the current and how to make a boat go. He was good. Cruising, his son Mark says, never really appealed to him. "I only remember him going cruising once or twice."

Racing turned him on the most, but he loved, too, the simple pleasure of just . . . sailing . . . getting in a small boat, grabbing the mainsheet and tiller, harnessing the wind and the water in his hands, and then just letting go. For George, it didn't get any better than that.

Childhood dreams

"I started racing in a Brutal Beast catboat inherited from my brothers," he told an interviewer in 1960. He'd had to acquire a new sail. "Her old cotton sail had lost its drive. Not until a Boston sportswriter wrote, 'It's a shame promising young O'Day is handicapped by a horrible sail,' could my father be persuaded. I got a new mainsail in a hurry!"

Competition in Marblehead was tough. As in any sport, however, going up against the likes of his buddy Bobby Coulson (who beat him out for North American Junior Sailing Champion when they were 13), Frank Scully, Clint McKim, or Barbara Connolly, only made him better.

"Those Sears Cup setbacks taught me," George said, "that some skippers were endowed with greater natural sailing talents than I possessed. Bobby, among others, could take a boat to windward a little faster. If I was to excel, I had to cultivate certain skills to a greater degree than my rivals."

Work hard he did, developing expertise at helming a boat downwind under spinnaker and making a boat get up on plane. Using a parachute spinnaker, he won the first International 110 Championship in Detroit, capturing three firsts, a second and a third. That 1941 trophy was followed in 1948 by capturing the first International 210 Class title at Wianno, Massachusetts. Others to come included the Firefly Championship in 1953, the Jollyboat title in 1957, as well as the prestigious Mallory Cup and the International 14-foot Dinghy Championship in 1958. There were many others too numerous to list here.

Unlike a lot of Marblehead sailors, George chose not to graduate from the Brutal Beast to heavy keelboats, preferring lighter-displacement boats, often centerboarders capable of planing. Sailing International 210s in the Buzzards Bay Bowl, he trailed leader Eldon "Shorty" Trimingham at the last mark by 400 yards. Then he got his *Bacalao* up on a continuous plane and raced down the last one-mile leg "as though jet-propelled to overhaul that rival easily and win going away."

For high school he attended the Rivers Country Day School, then in Brookline. During the war years he attended Harvard College, where he was Commodore of the Harvard Yacht Club and at the same time served as president of the Inter-Collegiate Yacht Racing Association. He also played varsity football. His class was '45, but he graduated in 1944 so he could serve as a lieutenant in the U.S. Naval Reserve from 1944 to 1946. For the next few years he floundered about, doing one year at Harvard Law School and a stint at the Boston University Business School. His father owned a chemical company that made fabric dyes. George spent a brief time there as well.

Writing in the 25th anniversary report for his class at Harvard, George said, "I started in the family chemical business, learned that, but it was not my cup of tea. Advertising via J. W. Thompson in New York, and market research via Lever Brothers gave me the insight into the consumer field. Commercial insurance also seemed to appeal, so in 1950, after I married my child bride, I went into business with my father-in-law. This relationship has lasted 20 years and permitted me to get into the boat business — the O'Day Corporation was started."

Becoming a boatbuilder

George O'Day Associates was formed in 1951, later becoming the O'Day Corporation. The first boats were imported from Fairey Marine in England. Fairey Marine made hot-molded mahogany boats coated with a polyester resin by Cellon called Faireyglass. Boats he imported from Fairey Marine included the 12-foot Firefly, 14-foot Albacore, 18-foot Jolly, the 14-foot International 14, and the 26-foot Atlanta.

His big thing was family fun. He believed large, complicated boats turned people off from trying to learn to sail. So he designed and built smaller boats that were simple to rig and easy to handle. His wife, Miriam, remembers, "He would say you played golf and tennis with others of equal skill, which eliminated your family. Sailing was an activity you could all do together . . . though we seldom did," she laughs. "He was always too busy!"

In 1958, he bought Marscot Plastics from Palmer Scott, an old-line builder of wooden boats who had started a fiberglass boat division in the late 1940s. Palmer built the Philip Rhodes-designed Wood Pussy and the Smyra, the forerunner of the Rhodes 19. He used the Marco Method developed by Herbert Muscat, a pioneer in fabricating composites. The forerunner of today's resin infusion techniques, like SCRIMP, the Marco Method used vacuum to suck resin into the laminate, in this case up from a trough into the dry fiberglass sandwiched in matched metal dies. The hurricane of 1954 leveled his wooden-boat facilities, leaving him with only Marscot Plastics. Four years later, in 1958, he sold the business to George O'Day. The first boat O'Day built at Marscot was the Gannet, which they sold to the U.S. Naval Academy.

"His big thing was family fun. He believed large, complicated boats turned people off from trying to learn to sail."

In an early bulletin to dealers, called *Spray*, George wrote, "And best of all — Marscot fiberglass now makes it possible to get complete enjoyment and utility from sailboats. Little or no maintenance, light weight, and attractive colors permanently molded in. In addition, spars and rigging are easy to handle and trailering is simple — all providing an irresistible appeal for O'Day Boats and 'Sailboat Living.' "

Dick Bryan, who worked for neighboring Carl Beetle and used a variation of the Marco Method, wasn't keen on the vacuum element employed in the Marco Method, noting, "It did work at times. More often than not the liquid, as liquids do, found the path of least resistance, leaving islands of dry glass fiber. These voids were later repaired and the boat made usable. It was not the economical method that it was thought to be."

In 1958, George bought *Hunter*, the first fiberglass deep-V powerboat made, designed by C. Raymond Hunt and molded at Bill Dyer's The Anchorage, in Warren, Rhode Island. At the America's Cup races in Newport that summer, everyone was impressed with a sister ship of *Hunter* that was tender to *Easterner*, Hunt's only 12-Meter. The Essex Fiber Boat Co. also began building Hunt deep-Vs, and George was sufficiently impressed with his boat and Hunt's concept that he bought the company. He worked with Hunt to develop a 16-foot version, of which more than 300 were built.

Olympic gold

A few years earlier, in 1956, George was a favorite to make the U.S. Olympic sailing team that would compete in Melbourne, Australia. He was barely eliminated in a three-boat race-off and was relegated to the position of alternate. He did not make the trip Down Under.

George's failure as a youth to win a Sears Cup continued to bother him even while piling up other medals. As a substitute, he set his sights on the Mallory Cup, an adult championship series sponsored by the North American Yacht Racing Union. The 1957 event was held off Marblehead in Thistles. His downwind prowess carried him to victory; though never leading at any windward mark, he gained 10 places in eight races, and not one of the races was in planing conditions. This helped set earlier disappointments aright.

In 1959, George won the Pan American title in 5.5-Meter one-designs, and the following year he again competed for the U.S. Olympic team. In the trials, George's *Wistful*

trailed Ted Hood's *Fantasi* by almost 1,000 points with three races left. But he achieved a startling three-way tie with *Fantasi* and Runyon Colie's *Complex* by taking a first and a second. In the race-off, George covered *Fantasi* the entire way and won.

As bad luck would have it, while George posed at the dock with *Wistful* and his family, a young man roared up in a runabout and T-boned *Wistful*. She was a loss. Fortunately, he was able to purchase another 5.5 from a competitor and had her shipped to Naples, Italy, for the 1960 summer games. There, racing *Minotaur*, he won a gold medal. His crew members were Dave Smith and Jim Hunt, son of designer C. Raymond Hunt.

America's Cup ambitions

What does an Olympic medalist do for an encore? In sailing, he might next take aim on the America's Cup, the most prestigious match-racing event in the sport.

For the 1962 defense, George skippered Ray Hunt's only 12-Meter, *Easterner*, a beautiful boat but not particularly fast. She and George lost to *Weatherly*, but his spirits were lifted when *Weatherly* skipper Bus Mosbacher asked him to serve as assistant helmsman. Together they defeated Australian challenger, *Gretel*, by a score of 4-1.

Of their collaboration Mark O'Day said, "Dad always had to be president or skipper or Number One of everything he did. Sharing the helm with Bus was the only time in his life he allowed himself to play second fiddle. When later he was asked if he'd consider helming another Cup boat, he said only if he could do it with Bus. That is a reflection of the great esteem in which he held him."

And team again they did, the next time around in 1967. The two co-skippered the revolutionary *Intrepid*, the first 12-Meter with separate keel and rudder appendages. They beat Australia's *Dame Pattie* 4-0, making George O'Day the first person to win both an Olympic gold medal and the America's Cup.

Though he won more than he lost, he liked to say that sailing teaches one how to lose gracefully. "He thought it was a wonderful training and character-building activity," Miriam says. "You can be on top one minute and at the bottom of the heap the next, because no matter how good you are there are variables you can't control, like the wind and currents."

"The Day Sailer was immensely popular . . . more than 14,000 were built before it evolved to the Day Sailer II."

Meanwhile, back at the yard

While using his racing success to build a boat company, George also found time to raise a family at their Dover, Massachusetts, home. By 1960 he and Miriam had three children — nine-year-old Pamela, six-year-old Mark, and two-year-old Elizabeth.

He was active in other businesses and his community. He contributed to a number of sailing magazines: *Yachting, Popular Boating, Rudder, Sail*, and *One-Design Yachtsman*; wrote a series for *Sports Illustrated*; and wrote three books on learning to sail: *Sail in a Day, Have Fun Learning to Sail,* and *Learning to Sail is Fun.* As always, the operative word was fun!

Production of small boats had been moved from Scott's New Bedford yard to a facility in an old mill on Stevens Street in Fall River, Massachusetts. Miriam remembers George spending a lot of time at the yard there the first three or four years he owned it. Though marketing was his strong suit, here he had his hands on the product, learning the techniques necessary to master the new material. "He'd come home smelling of fiberglass," Miriam says. "The yard was right next to a potato-chip factory, and the smell of the two of them was enough to send you in the other direction."

Perhaps the first really successful boat George built himself was the Rhodes 19, whose origins can be traced to the Hurricane class built by the Allied Aviation Corporation of Cockeysville, Maryland. A keel version, known as the Smyra (after the Southern Massachusetts Yacht Racing Association), was used as a plug by Marscot Plastics. When George took over Marscot in 1958, he changed the name to the Rhodes 19. Miriam says he and Phil Rhodes collaborated on some revisions. The fixed-keel design had a cuddy cabin for overnighting. More than 3,800 were built during George's time with the company. The same hull was used for the Mariner, which had the centerboard more to George's liking. An additional 3,500 of these were built.

Other successful daysailers were the 14-foot Javelin, the 12-foot 6-inch Widgeon, and the 15-foot Osprey. These three designs alone accounted for about 15,000 hulls. Miriam says he often made sketches of a new model and discussed his concept with a designer like Rhodes or English designer Uffa Fox, who'd convert George's ideas to lines that could be worked with on the shop floor.

In all, George O'Day "designed, created, or implemented" 32 boats, one of which was the Sabre 32 for the Columbia Yacht Corp, which he helped to develop while serving as vice-president and a director after leaving the O'Day Corporation *(see Columbia history, Page 9)*. For his own company, the largest was the Ohlson 35, imported from Sweden, of which just 40 were sold. More to his taste were the smaller 23-foot Tempest and 24-foot Dolphin, which he actually built. Seven powerboats, ranging from 12 to 28 feet, were built to the names Hunter and Marscot, and another seven were built under the name Osprey.

Bruce Hammann's 14-foot Javelin, above. Jim Adensam's 16-foot 9-inch Day Sailer, on facing page above, and also on Page 33. On facing page below, Eric Schoenberg's Rhodes 19.

The most successful O'Day, however, was the 16-foot 9-inch Day Sailer. In 1959, O'Day commissioned Uffa Fox to design an easily handled, easily trailered family sloop. Fox was a fan of small boats, too, uttering the famous words to those complaining about headroom, "If you want to stand up, go on deck!"

The Day Sailer was immensely popular. In many ways it embodied all that George held dear about sailing — simplicity, value, easy maintenance, and fun. More than 14,000 were built

before it evolved to the Day Sailer II. It sold for $1,695 in 1961, less sails. A small outboard could be mounted on the stern for increased versatility. In the 1980s, after the fall of O'Day under Lear Seigler ownership, the Day Sailer passed to Pearson Yachts' small boat division, then to Laser/Sunfish, which spun it off (the original Day Sailer, not the Day Sailer II) to Cape Cod Shipbuilders, which produces it under license from the Day Sailer Association, which owns the molds.

By 1961, the O'Day Corporation had stockholders, and George was made chairman of the board. Harvard chum Lyman Bullard was installed as boss of day-to-day operations. The company was quite profitable. During

this period it was purportedly the largest builder of sailboats in the U.S. It employed 350 people, had 450 dealers, grossed $15 million a year, and sold more than 70,000 boats in all.

In 1966, the O'Day Corporation was bought by the Bangor Punta Corporation. George retired only to resurface with the Columbia Yacht Corp. He also started a company called Gemico, which imported the Olympic class Soling and built the Wildfire and Chipmunk, experiments in thermoplastics. Another was the Super Gamefisher for Sears, Roebuck and Co.

"They beat Australia's Dame Pattie *4-0, making George O'Day the first person to win both an Olympic gold medal and the America's Cup."*

The O'Day Corporation began to build much larger boats, such as the O'Day 22, 23, and 25 trailersailers, the 27 and 30 keel sloops, and the center cockpit O'Day 32. In 1975, on the heels of Robert Saltsonstall, Jr., and Jack Howie, Bangor Punta made Jim Hunt president of the O'Day Corporation. Jim, of course, sailed with George in the 1960 Olympics in Naples, so his selection seemed only fitting. Small boats gradually disappeared in favor of larger family cruisers.

In 1983, Fortune 500 conglomerate Lear Siegler bought Bangor Punta and renamed the company the Lear Siegler Marine Company. Then it became Starcraft Sailboat Products, and then in 1987 it was bought by L. T. Funston & Co. and renamed The O'Day Corporation, building boats ranging from the Day Sailer to the O'Day 280, 302, 322, and the O'Day 40, a joint venture with French giant Jeanneau.

Then in 1989, the company was dead. Gone was another of the great fiberglass sailboat companies of the 1960s and '70s that reshaped American boating. During the same several-year period, between the late 1980s and early 1990s, Columbia, Islander, Pearson, Cal, Ericson, Ranger, and Irwin all went down. It was the end of an era, an era George O'Day lived from beginning to end.

Sailing into the sunset

Miriam remembers a telling event back around 1951 or so that involved the O'Day warehouse outside Boston. Someone was breaking in and stealing parts. She suggested that George hire a watchman or at least buy a watchdog. He said, "No, I have another idea." When spring came he began getting up early every Saturday morning and disappearing until noon. The thefts stopped. Miriam asked him what could he possibly be doing on Saturday mornings to thwart vandals? Turns out he'd put up a sign on the building advertising free sailing lessons Saturday mornings at 7 a.m. Rather than rounding up the wagons and defending his property, he reached out to the area youngsters and offered them something they probably couldn't have found or afforded elsewhere — friendship and some great time on the water.

In his late 50s, George took up boardsailing, which, despite the difficulty of the sport, isn't really that surprising since he sailed everything else he could get his hands on. This was probably the last craft left that he hadn't conquered.

At age 62, George began a battle with cancer that was to last two years. He died in July 1987.

Of all the boats he raced, the International 14 was his greatest love. It was the 14, Miriam says, that "made him say, 'Whoopee! I enjoy this! This is great!' "

Dave Smith, who sailed with George and Jim in Naples, recalls sailing with George all over the "western world."

"Those were our best days," he says. "George never had a harsh word, even when we got in a jam . . . and we got into some nasty jams! He'd yell, but never nasty — always exuberant."

Some years before his death George wrote of his own career: "Sailing and boats have been a great way of life, not easy and not very remunerative, but very rewarding. I have friends from Israel to Alaska, and Norway to Australia. I have sailed with Kings and Princes, Communists and industrialists, tycoons and sailing bums, and down to the last man, they are all great people. The sea is the great equalizer. The challenge of the wind, water, and the elements seems to bring men closer and more equal than at any time in their lives. Ashore they are different, but at sea they have to depend upon each other."

In a sport where bigger often is seen as better, a sport where money makes a difference, George O'Day embraced the small daysailer. For on an open boat, close to the water, with sheet in one hand and tiller in the other, one tames the elements and turns them to his own purpose. That is sheer joy, and for all the big boats he raced, all the kings and princes he met, none could equal that simple pleasure of getting an International 14 up on plane and kicking tail.

Because we understand, he need not have told us: "Sailing and boats have been my love and life."

Beattie Purcell: Catalina Yachts legend

What's a retired Snipe and Catalina 22 champ to do?

by Henry Cordova

When it comes to sailing, Beattie Purcell has done it all. He was a major figure in the early days of Catalina Yachts and has a long record as a fearsome competitor on the racecourse on both sides of the Atlantic Ocean. At an age when most ancient mariners are taking in sail and seeking out a quiet anchorage, this remarkable Florida sailor is just getting under way.

Beattie was born in Ireland. Since no point in the Emerald Isle is far from the sea, salt water was a neighbor and a constant presence. He was born in 1925 in Belfast, a great port city and shipbuilding center, and grew up in the Belfast Lough town of Carrickfergus in County Antrim. His grandfather was a mariner and, as a 12-year-old, Beattie watched him almost drown after a capsize at nearby Whitehead on the coast.

Beattie's father was a yardbird, having worked throughout the British Isles, including the great Harland and Wollf yards in Belfast where the *Titanic* was built. It was Beattie's father who built him his first boat, a 9-foot dinghy, and later, his first sailboat, a 16-foot sharpie designed for construction in Masonite, but which was executed in wood.

Growing up on the water, Beattie also built his own boats and became a figure in club racing in Northern Ireland, sailing 505s, Hornets, and Merlin Rockets, and going on to win national sailing championships in GP 14s he had built himself, and several Lipton Cups in Snipes. Later, in the United States, he won championships again with the Super Satellite and the Catalina 22.

Coming of age in the 1940s, Beattie has vivid memories of World War II. The U.S. Army Rangers were founded at Sunnylands Camp, in Carrickfergus, and he remembers a Luftwaffe raid on the Belfast yards, the crash of bombs, and the rattle of anti-aircraft fire from warships in the harbor.

He also recalls fondly sailing his Snipe out to the American invasion fleet, at anchor awaiting D-Day in the Irish Sea, to barter sailboat rides for rationed fruit and chocolate. Beattie expressed the hope that perhaps some of those brave young men who survived that terrible time will read this story today and remember him.

After the war, he continued his sailing and boatbuilding activities and he learned the fundamentals of the up-and-coming technology of fiberglass boat construction.

Move to North America

Beattie had a cousin in California, who came to visit him in Ireland. Beattie took him sailing, which gave his cousin a bad case of the bug. When he returned to the States, Beattie's cousin purchased a boat from Frank Butler, then owner of Wesco Marine and Wesco Tool and later founder of Catalina Yachts, the largest sailboat builder in North America.

Not long afterward, at the age of 30, Beattie and his wife, Maire, moved to Canada where he worked at a Toronto auto dealership and later as a machinist for Northland Navigation in Vancouver. Meanwhile, the cousin, knowing how much Beattie loved sailing, brought Beattie's name to Frank Butler's attention. Frank was a businessman, boatbuilder, and recreational sailor. He needed an accomplished sailor, so he contacted Beattie and offered him a job at Wesco, later to be known as Coronado Yachts, in Burbank, California. It was the start of a lifelong mutually productive and rewarding professional collaboration — as well as a deep personal friendship.

Beattie's experience at Wesco began in 1962 with small-boat (14- and

For the past 20 years, Beattie Purcell has built Shamrock-class radio-controlled boats, which he and others race. The design is based on the R-boats of the 1930s.

21-foot) fiberglass hull construction, a relatively new technology at the time, and then he moved into rigging. He also successfully promoted Wesco's boats by campaigning vigorously in various regattas. The business grew rapidly and he was deeply involved in every aspect of it, designing company artwork, traveling as far as Hawaii to troubleshoot rigging problems, and even managing an Oxnard, California, marina owned by Frank Butler. In an amazing coincidence while at that marina, he met once again the young nurse who had helped revive his grandfather 27 years earlier at Whitehead.

Full hull liner

In 1964 the firm began marketing the Coronado 25, a design that introduced the full-pan hull liner to the U.S. boatbuilding industry, a construction technique Frank had adapted from the aircraft industry.

In 1968 Frank sold Wesco Marine to Whittaker Corporation and soon afterward parted with them altogether. However, he retained the rights to build the smaller boats, the Coronado 15, the Omega, and the Super Satellite. The Purcells briefly moved back to Ireland to start a family. But Frank called Beattie in Ireland to say he was forming Catalina Yachts and wanted him back.

Beattie jumped at the chance, arriving in time to take part in the design, development, and marketing of one of the most popular boat designs of all time, the Catalina 22, a 1995 inductee into the Sailboat Hall of Fame.

The Catalina 22 was one of the first reasonably priced, mass-produced, trailerable, swing-keel weekenders that opened the sailing lifestyle to American working families in the late 1960s and early '70s. It was by far the most successful of the lot; thousands were built and, unlike most of its contemporaries and imitators, it is still in production.

> "Beattie was…transferring his uncanny skills as a dinghy sailor to skipper Catalinas to victory after victory."

Catalina Yachts became, and remains to this day, a runaway success. Other models followed, with Beattie always there at their birth. He was the first person to sail both the Catalina 22 and the Catalina 27, and he helped with the development of the Capri 25. In 1973, as demand for the new boats soared, Frank sent him to South Carolina to start up and manage an eastern U.S. production facility built to meet the increasing demand for Catalina sailboats across the country.

In 1977 he was again dispatched, this time to Fort Walton Beach, Florida, to do the same with another plant. After seven years, Beattie moved again, to Largo, Florida, to work in purchasing for Catalina after the firm bought out the Morgan Yachts yard there.

Many victories

During this time, Beattie was still sailing, transferring his uncanny skills as a dinghy sailor to skipper Catalinas to victory after victory, culminating in the National Catalina Association Championships in 1979, over a field of 40 other boats. In 1998, at the age of 72, he crewed on his son, Brent's, Catalina 22 to a sixth place in the National Championships. Today, he is still a formidable competitor, racing frequently and successfully in club races, skippering his Catalina 22, *Tango*, very effectively in the Fort Walton Beach Yacht Club Catalina Fleet 77 he founded and in which he is still active.

He also was honored with the Catalina 22 Sailing Association's Racing Family of the Year Award for 2000. (The Purcell boys — Gary, Brent, and Glenn — are accomplished sailors.) Other honors include election in 2000 as vice-commodore of the Catalina 22 National Sailing Association and helping to organize the FWYC hosting of the Catalina 22 National Championship Regatta in 2001.

In 1995 Beattie retired from his long association with Frank Butler and the Catalina organization, though

Beattie Purcell has built more than 80 model RC boats for customers as far away as the Caribbean. Each measures about 5 feet and is beautifully finished.

he maintains close contact with his old friend and colleagues.

Now 81, Beattie still lives in Fort Walton Beach, a town and seascape he came to love when he founded and managed the Catalina facility there. He keeps busy sailing and working on boats, organizing cruises, and working part-time at the local West Marine store where he serves as advisor and consultant to the local sailing community. And he remains active in the Fort Walton Yacht Club. He also is a marine artist, working in watercolors and sculpting wooden hull models. And he's still designing and building racing yachts . . . but of a different nature.

R-boat model racers

About 20 years ago, one of the craftsmen at Catalina made him a mold of a model sailboat hull, based on the sensuous lines of a 1930's R-boat. Using the mold, he has been able to make identical hulls about 5 feet long, which he meticulously fits out and finishes to create lovely model yachts equipped with fully functional sloop rigs (sails built by a local sailmaker), and remote-controlled rudder and sheets.

The Shamrock-class model yachts, as he calls them, have become popular; more than 80 have been built and sold across the country, even as far away as Culebra in the Caribbean. They are raced in regattas (which he organizes) by enthusiasts who control the vessels with hand-held transmitters. For more information, contact Beattie: 850-243-2790, BeattiePur@aol.com.

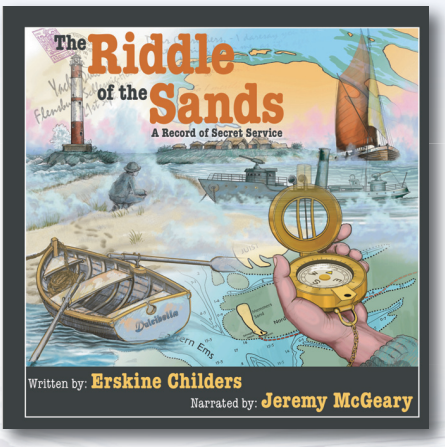
A radio receiver and servos inside the hull operate the controls. Although perfectly operational RC models, these are not mass-produced or home kits; the boats are lovingly crafted, beautifully realized, handmade miniatures with glossy painted hulls, ballasted lead keels and exquisitely varnished wooden decks. Removing a deck hatch reveals the interior mechanism and a signed and dated certificate identifying the owner and shipwright. The Shamrocks may be legitimate racing machines, but they are works of art too. Fully rigged, their classic lines form a striking decoration for many an elegant drawing room. They are made to survive their builder and owners and to be treasured by generations to come.

After a long life on the water, Beattie is a remarkably active man and a terrific resource for Florida Panhandle sailors. He has seen everything, been everywhere, and knows everyone. Meeting Beattie makes it easy to understand the affection and loyalty directed toward him by his friends in Fort Walton Beach.

Even after a lifetime on this side of the pond, he still speaks with a delightful Irish accent that — coupled with a fit physique, good tan, and alert, sparkling eyes — gives one the impression of a much younger man. He is cheerful, yet quiet, hesitant to speak of his own accomplishments, but his authority and experience are unquestioned.

In 1944, Beattie and his bride-to-be, Maire.

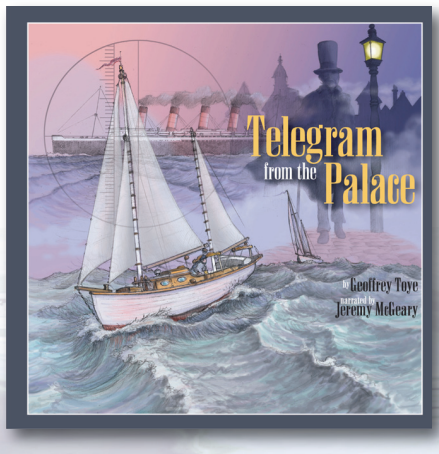
Thrills, Chills, and Suspense at Sea!



The Riddle of the Sands

by Erskine Childers

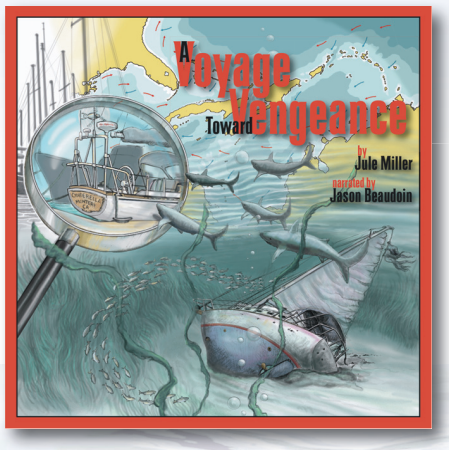
While sailing in the Baltic Sea, two men uncover a secret German plot to invade England. The Riddle of the Sands (written in 1903) was heralded as the first true spy novel, written by Childers to encourage the British government to bolster their presence in the North Sea. This story features equally thrilling scenes of espionage and adventures at sea. A real classic brought to life by the talented voice of Jeremy McGeary.



Telegram from the Palace

by Geoffrey Toye

Jack the Ripper in the 1880s. The sinking of the *Lusitania* during World War I. The British Royal family. Modern- day lovers enmeshed in life-threatening events they can't control and don't understand. You won't be sure until the very end who the good guys are and what motivates the heroes and villains. An adrenaline-filled thriller by Geoffrey Toye.



A Voyage Toward Vengeance

by Jule Miller

Missing persons, murder, sunken vessels, unlikely comrades, and a couple of real sociopaths will frighten and entertain the adult listener of this nautical fiction by Jule Miller. There are plenty of realistic sailing scenes and good nautical detail but not enough to prevent the non-sailor from appreciating the tale. Readers will find it difficult to sleep at night. For adults only.

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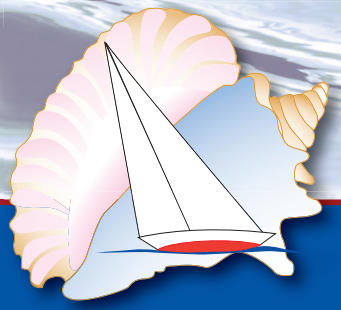

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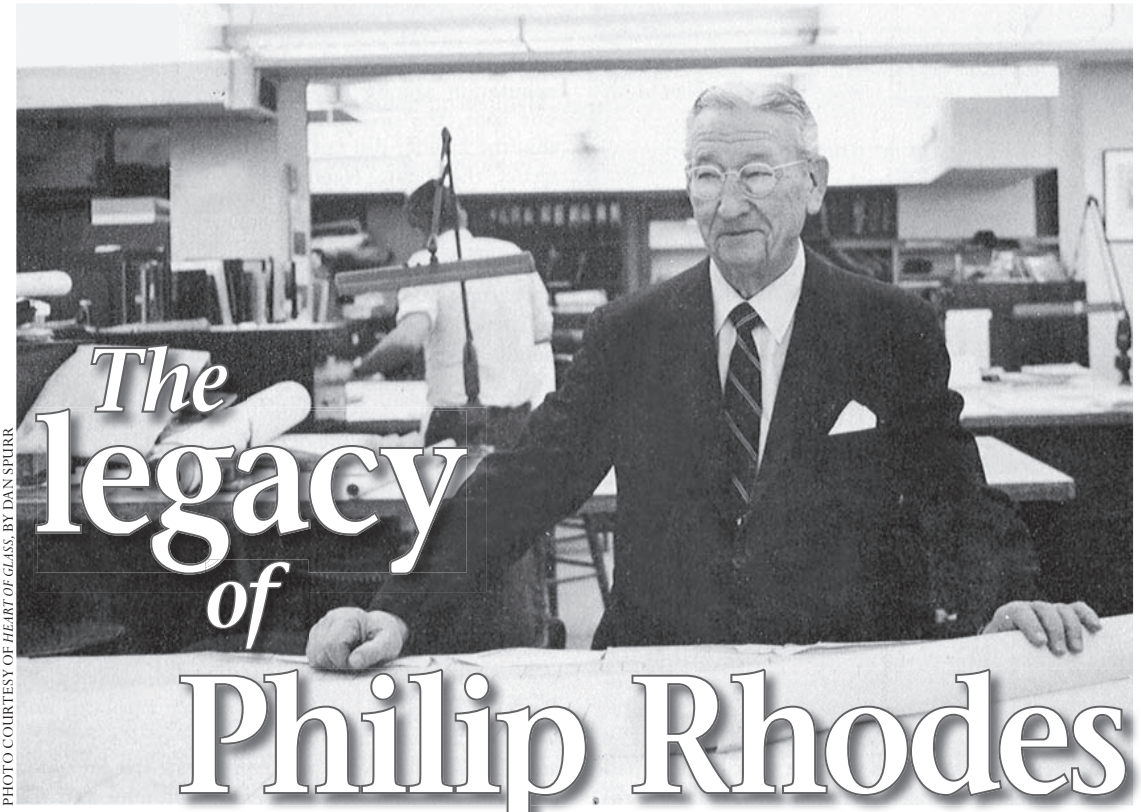


PHOTO COURTESY OF *HEART OF GLASS*, BY DAN SPURR

Philip Rhodes stands over a set of plans at his Lexington Avenue office in New York City.

The legacy of Philip Rhodes

A pioneering designer of many early production fiberglass sailboats

by Ben Stavis

PHILIP L. RHODES (1895 -1974) WAS one of the most distinguished yacht designers of the past century. Indicative of his importance, in February 2005 he and Olin Stephens became the first two yacht designers inducted into the North American Boat Designers Hall of Fame at the Mystic Seaport Museum in Mystic, Connecticut.

A brilliant designer whose boats were beautiful, fast, seaworthy, and comfortable, Phil Rhodes was active for 50 years — from 1920 to 1970. And he was prolific; a listing of his yacht designs totals 386, most of which are sailboats.

Phil was a graduate of MIT's program in naval architecture and marine engineering (1918), so he had unusually strong academic credentials. Moreover, he was active on professional committees that reached into the boating world. These included the Motor Boat and Yacht Advisory Panel of the U.S. Coast Guard Merchant Marine Council, the American Boat and Yacht Council (ABYC), and the Measurement Rule Committee of the Cruising Club of America (CCA).

Over the decades the list of people who worked in his office and later became distinguished designers or boating industry professionals in their own right, is its own hall of fame: Frederick Bates, R. P. Cook, Roger Cook, Richard Davis, Henry Devereaux, Mark Ellis, Weston Farmer, Ralph Jackson, Charles Jannace, Francis Kinney, Roger Long, Al Mason, James McCurdy, Joseph Reinhardt, Olin Stephens, Robert Steward, William Tripp, Bob Wallstrom, Winthrop Warner, and Charles Wittholz. It is easy to see why Phil Rhodes' influence was so pervasive.

Born on the river

Philip Rhodes was born in 1895 in Southern Ohio. From childhood he was enchanted by boats on the Ohio River: paddlewheelers, barges, and speedboats. His father was a manufacturer of wooden wheels, wagons, and carriages. After his father died his mother married a master carpenter. So Phil learned from an early age about crafting wood.

He designed and built his first hydrofoil speedboat at the age of 18 and soon was publishing articles in *Motor Boating* magazine. He graduated from high school in 1914 and from MIT in 1918, largely converted to the challenge of designing sailboats. His first job was a training position for naval construction at the Boston Navy Yard, followed by a job at the American Shipbuilding Company on Lake Erie, where he helped build ore carriers and became a practical shipfitter. His later design work was strengthened by his understanding of shipbuilding techniques.

But sailboats were his love. His first sailboat design was a prizewinner in *Motor Boating's* Ideal Series in 1919. He married his high-school sweetheart, Mary Jones, in 1920. Around 1925 he set up his own office in New York, and in 1932 he became associated with Cox & Stevens, a prestigious yacht- and commercial-design firm. In 1935 the head designer died, and Phil succeeded him as chief designer.

A diverse portfolio

Over the course of his career Phil designed sailboats of all types, for all kinds of sailing needs. He introduced countless sailors to the water with his small boats, such as the 11-foot Penguin and the Rhodes 19. His coastal and ocean-racing boats, generally in the 40- to 70-foot range, were always serious competitors. A Rhodes-designed gaff cutter, *Skål*, was second in the 1931 transatlantic race (which was won by Olin Stephens' *Dorade*). *Kirawan*, a 53-foot Rhodes sloop, won the Bermuda Race on her first outing in 1936 against fierce headwinds.

Her sistership, *Senta*, carried her owner on a world cruise from 1969 to 1980. His 12-Meter, *Weatherly*, won the America's Cup in 1962. In 2000, a 40-year-old Rhodes 41 won the Bermuda Race, and *Bengalore*, a wooden

cutter designed by Rhodes in 1928, was second.

His narrow one-design club racers (33 to 36 feet) are quick and agile. His family cruising boats (26 to 50 feet) are prized for their beautiful lines, comfort, and sailing ability. His trailersailer, the Rhodes 22, is popular on inland lakes. And his large ketches and motorsailers in the 70- to 150-foot range carry their owners and guests in style and comfort as they circle the Atlantic from the Caribbean to Maine to the Mediterranean and back. His range is amply illustrated by two consecutive designs in 1966 — a 122-foot three-master for a Rockefeller and a 12-foot aluminum sailing dinghy for mass production.

Phil designed a wide range of hull forms. Early in his career, he emulated Colin Archer's double-ended boats. One of these 1930 designs was converted into fiberglass in 1970 as the Traveller 32. When Alden schooners were popular in the 1930s, Phil designed schooners. When Baltimore clients liked the bugeye ketch, he designed elegant ones, not unlike the beautiful Cherubini 44. He had no problem drawing clipper bows when clients liked them. Phil also designed light-displacement, fin-keel boats in 1932, 1944, 1946, and 1957 — all before the Cal 40 made fin keels popular.

One of his major contributions was the shoal-draft, keel-centerboard form. Phil developed this hull form in 1932 and used it often through the 1960s in his custom-designed racers and cruisers in the 40- to 55-foot range. They were a little beamier than his normal designs, to increase form stability, but are still narrow by contemporary standards. Of course they had a bit less draft. This configuration gave them less wetted surface area, so they were fast as well as roomier below. Phil's famous 1955 transatlantic race winner, *Carina II*, was a superb example of this hull form. These keel-centerboard designs were the inspiration for the famous centerboarder, *Finisterre*, designed by Olin Stephens for Carleton Mitchell, who had asked Olin to make *Finisterre* similar to his previous Rhodes-designed centerboarder, *Caribbee*.

"In those days, among his clients, a yacht seems to have been more for racing and adventure at sea."

In shaping hulls, Phil was eager to test small-scale models. As a child, he had tested models of hulls in an Ohio canal. When the Stevens Institute of Technology's tank testing facility was built in 1935, he began using it immediately. His test boat was *Narada*. Her design was highly praised, and her test data provided the standards by which other performance-prediction methods were gauged.

Thoughtfully designed

Phil was thoughtful in designing accommodations. Whether on a 26- or a 76-footer, he designed cockpits, bunks, lockers, passageways, doors, and lockers that were ergonomically sensible. He was also creative and experimental. On different designs he tried putting the galley forward, midships, aft, and along one side opposite a dinette. On some boats he located the main cabin near the back of the boat. He had several ways of creating a real aft owner's cabin in moderately sized boats.

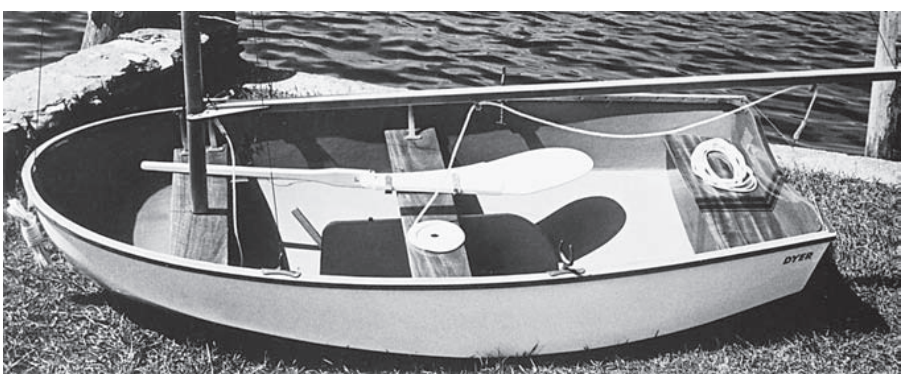
Apart from those boats with the dinette that converts to a double berth, exceedingly few Rhodes boats have a double berth. No matter how large and elegant the cabins, even if they were double cabins, they had two (distantly) separated beds, and not very wide ones at that. On his boats in the 70- to more than 100-foot range, there is room for a bathtub in the owner's cabin and two narrow bunks … almost 20 feet apart. On *Copperhead*, he came close to having a near double berth, but deliberately made it narrower and put in a "stowage bin" instead.

Obviously the constraint was not space. According to Charles Jannace, a draftsman in Phil's office in the 1950s and '60s, the reason for the absence of double beds was simple: clients didn't ask for them. In those days, among his clients, a yacht seems to have been more for racing and adventure at sea. It wasn't the place for family togetherness or marital bliss. Phil designed boats for sailing, with narrow, secure berths at sea.

While each design was individually developed, when one looks at his overall output of designs, the connections between boats are clear. Each design is an iteration of a previous work. When Phil designed a keel boat, sooner or later the design would be tweaked into a centerboarder. This is clear in the pairs of keel and centerboard 33-foot, 42-foot, and 45-foot designs. Phil himself pointed out the connections between his designs when he wrote to a prospective client that a 45-foot centerboarder was essentially a smaller version of the 53-foot centerboarder, *Carina II*.

One also can see a recurring pattern in interior layouts. For example, in the 45-foot *Olsching*, drawn in 1953, Phil drew a dinette on one side of the boat and a linear galley on the other. This approach shows up in a late 1950s boat, in the 1963 Reliant, and in the Rhodes 22.

I have unique evidence of this continuity. The owner of *Piera*, a beautifully restored sistership of *Olsching*, visited my boat, a Rhodes Reliant. He examined my dinette table and spotted a specially fabricated hinge that enables the table to drop. His boat, built about



While working for Phil Rhodes, Charles Wittholz drew the lines of this 9-foot Dyer Dhow, one of the most popular sailing dinghies of all time.

a decade earlier on a different continent, had exactly the same hinge.

All of Phil's designs follow a set of underlying design principles. The boats are beautifully shaped and proportioned. The Rhodes sheerline is distinctive, rising to a fairly high bow, dropping aft of amidships, and rising modestly to the stern. Medium overhangs give the bow and the stern plenty of buoyancy and increase the waterline under sail. The construction was strong. He did not cut corners.

Phil wanted his boats to be driven hard in Gulf Stream storms, and he used large safety factors to cover the unpredictable stresses of driving into headseas as well as the realities of long-term deterioration of materials. For these reasons a surprising number of old wooden Rhodes boats, as well as 30- to 40-year-old fiberglass boats, are still in commission.

Compared to more modern boats the Rhodes hulls are narrow and heavy with slack bilges. They have less interior volume than the flat, wide, modern boats. Yet the Rhodes boats have a much more comfortable motion. They roll more slowly and pound less. Expressed mathematically, their comfort ratio is very high. People accustomed to modern, lightweight saucer hulls are astounded by the difference when they get on a classic Rhodes.

Pioneer in fiberglass

Phil Rhodes played a crucial role in the transition from the wooden era into the fiberglass era. In the mid-1950s, as Dan Spurr has chronicled in his book, *Heart of Glass*, dozens of individual and corporate boatbuilders and navies in the United States and Europe were experimenting with fiberglass. Dinghies, skiffs, and daysailers were being successfully built of the new material.

In 1948 the Cape Cod Shipbuilding Company of Warham, Massachusetts, started producing the Rhodes 18 in fiberglass. The next year, Palmer Scott of New Bedford, Massachusetts, built the Rhodes-designed Wood Pussy in fiberglass. And that same year Bill Dyer's shop, called the Anchorage, in Warren, Rhode Island, commenced fiberglass production of the 9-foot Dyer Dhow, also a Rhodes design (though drawn by his draftsman Charles Wittholz).

Larger, auxiliary sailboats were next. In 1951 Dyer launched the 42-foot fiberglass ketch, *Arion*, and in 1955 a group of yacht club members in Oregon started building the 34-foot Chinook class. Phil was clearly involved in the earliest fiberglass experiments.

For his own initiation into large fiberglass boats, Phil found the perfect collaborator in Fred Coleman. In 1939, Phil had drawn the Bounty class (39 feet) for Fred, a Sausalito, California, builder who had pioneered inexpensive mass-production techniques in wood. Fiberglass had even more potential for mass production, so in 1956 Phil drew up the enlarged 41-foot Bounty II in fiberglass for Fred. Fred also asked William Garden, another naval architect, to provide structural details, such as the layup and tooling, including the deck mold — sort of getting a "second opinion."

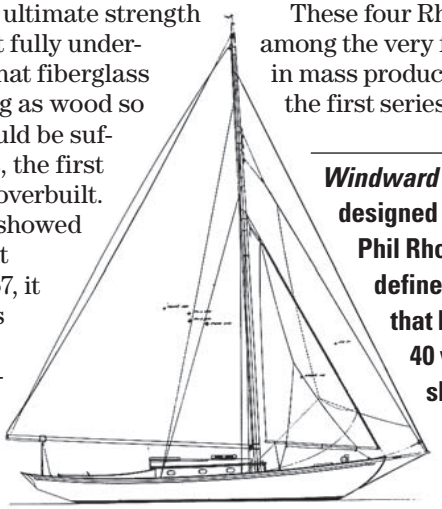
At this earliest stage of the fiberglass revolution, the ultimate strength of fiberglass was not fully understood. Phil figured that fiberglass was at least as strong as wood so wood scantlings would be sufficient. On this basis, the first boat was massively overbuilt. When the Bounty II showed in the New York Boat Show in January 1957, it was evident that this top designer trusted fiberglass. The fiberglass era for large sailboats had begun. The Bounty II molds were later used to make the slightly revised and very popular Pearson Rhodes 41.

While most Bounty IIs were rigged as sloops, a few were yawls, such as hull #37, *Tiara*, above left, built in 1959, and long a familiar sight in Hawaiian waters. The 33-foot Rhodes-designed Swiftsure, above right, launched in 1958, was commissioned by Brian Acworth, who founded Seafarer Yachts in Huntington, Long Island; he had the boat built by G. DeVries Lentsch in Amsterdam, Holland.

European-built

A number of other fiberglass auxiliary sailboats popular in the United States actually were built in Europe. In 1958, Brian Acworth, an Englishman living in Long Island, New York, set up Seafarer Yachts in Huntington. He asked Phil to design a 33-foot centerboarder for fiberglass production, which he called the Swiftsure. Brian had her built by G. DeVries Lentsch in Amsterdam, Holland, a major yacht builder in wood and steel, obviously eager to start in fiberglass. At about the same time, George Walton, a Maryland yacht broker, commissioned Phil to design a narrower, keel version of the Swiftsure to be called the Chesapeake 32. She was built by Danboats and Sanderson in Denmark.

These four Rhodes designs were among the very first fiberglass boats in mass production (Bounty II was the first series-produced auxiliary

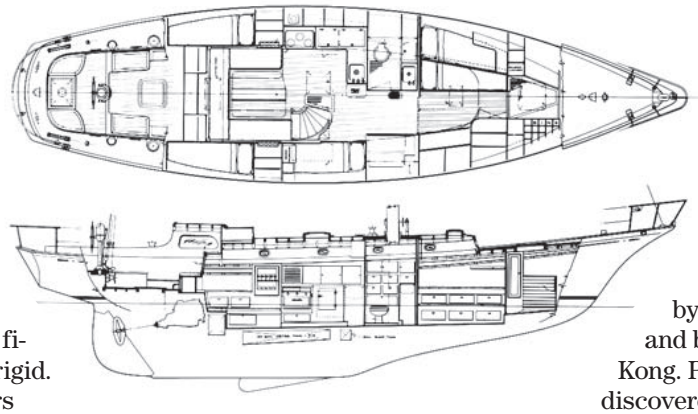


***Windward* is a 36-foot cutter designed in 1928. In this boat Phil Rhodes pretty much defined the hull shape that he used for the next 40 years — gorgeous sheerline and moderate, balanced ends. A sistership built in 1937 is still sailing.**

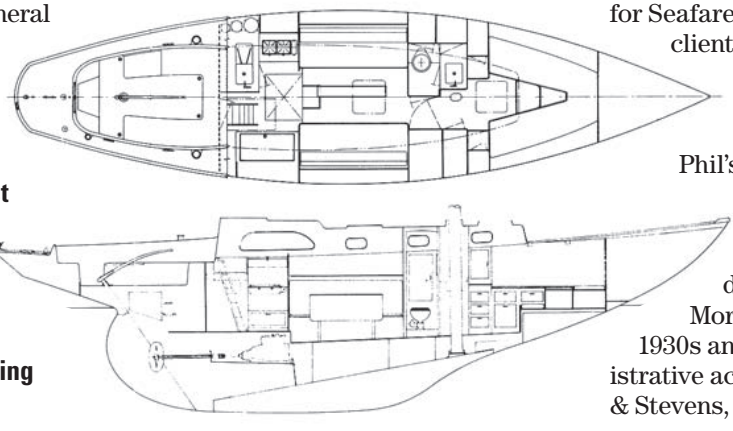
sailboat in fiberglass) and provided a large portion of the early testing and demonstration that fiberglass was suitable for building medium-sized sailboats. They also demonstrated that fiberglass hulls could be made thinner, though more flexible, thereby necessitating internal bulkheads and stringers to make the fiberglass structures sufficiently rigid. The original idea of making spars for the Bounty II of fiberglass was scrapped; fiberglass was too flexible. In fact, after Bounty II, scantlings for some of Rhodes' designs were not as heavy or strong. The first few Chesapeake 32s suffered from oilcanning and had to be reinforced with longitudinal stringers.

The next year, 1959, Phil designed the Ranger, a 28-footer, also for Seafarer. By then several other ground-breaking fiberglass boats were launched — the 25-foot New Horizon, designed by Sparkman & Stephens and built by Ray Greene; the 28-foot Pearson Triton, designed by Carl Alberg; and the Bill Tripp-designed, Hinkley-built Bermuda 40.

In 1960, industry standards for fiberglass production were published in *The Marine Design Manual for Fiberglass Reinforced Plastics*, written by the naval architecture firm of Gibbs & Cox. Now many designers and builders felt they could build fiberglass boats to established standards. The field blossomed with boats and designers, and Phil remained an active contributor to the fiberglass boat revolution. He designed the Meridian (26 feet), Vanguard (32 feet 6 inches), Reliant (41 feet), Tempest (23 feet), and Outlaw (26 feet). He also designed the popular micro-cruiser, the Rhodes 22, in 1968, as he approached the end of his career. That boat is still in production by General Boats of Edenton, North Carolina (see the article in *Good Old Boat*, May 2005).



The 49-foot *Thunderhead*, designed in 1961, had an unusual interior. Her main cabin, with table and two berths, is aft. Amidships are the head, galley, chart table, and additional berths for the off-watch crew. A large cabin forward would be a particularly comfortable owner's cabin in port. Access to the cabin is through a companionway from the cabintop.



The 39-foot wooden, pre-war Bounty was updated after the war as the 40-foot Bounty II. Launched in 1956, it was the first series-built fiberglass auxiliary sailboat. The design predates fin keels, spade rudders, and short overhangs. Phil Rhodes was noted for drawing beautiful sheerlines.

The Reliant (1963) exposed Phil to some of the new risks of the new materials — piracy. The Reliant, a unique three-cabin layout in a 41-foot boat, was brokered by Lion Yachts in Connecticut and built by Cheoy Lee in Hong Kong. Phil was dismayed when he discovered that Cheoy Lee was soon marketing a virtual sistership, the Offshore 40. The plug used to make the Reliant mold had been altered slightly, the deck mold was mirrored, and iron ballast replaced lead ballast. Phil considered litigation but ultimately decided that only the lawyers would benefit from that approach. Similarly, a Danboat 33 appeared that obviously was based on his Chesapeake 32 design.

These experiences soured Phil. He designed no more large boats for offshore fiberglass production. As a result, no centerboarders larger than the 33-foot Swiftsure were built in fiberglass. They exist now only as rare, treasured wooden boats, some of which have been restored to pristine condition.

Phil was never any company's "house designer," but he worked very closely with a number of builders. For Palmer Scott, a fellow MIT graduate, he designed eight boats. Bill Dyer's Anchorage commissioned eight designs. These two builders did some of the earliest experimental work with small fiberglass boats and must have given Phil confidence to take on the much larger Bounty II. Other clients included the South Coast Boat Building Company of Long Beach, California, which purchased nine designs, and Brian Acworth got five designs for Seafarer Yachts. Many individual clients purchased more than one design from him.

Commercial craft

Phil's design work ranged well beyond sailboats. He continued his early interest in motorboats and designed several large ones. More importantly, in the late 1930s and early 1940s, his administrative activities expanded at Cox & Stevens, and he had more respon-

sibility for commercial and military work. When World War II broke out, the military portion of the firm's work skyrocketed. For a while Phil had 498 men under his direction, working on myriad aspects of a two-ocean war that required fighting ships, troop movements, and supplies.

After the war, in 1947, Cox & Stevens was renamed Philip L. Rhodes Naval Architects and Marine Engineers and continued to do a great deal of commercial and military work. Phil designed many boats for the U.S. Navy, including 172-foot wooden ocean minesweepers in the 1950s. He designed a fleet of police boats for New York Harbor. These won the praise of policemen for speed, stability, and comfort. He also penned garbage and sewage barges for New York City as well as cargo vessels, fireboats, dredges, and steam-turbo-propelled vessels for service on the Yangtze River. In short, if it could float, he could design it.

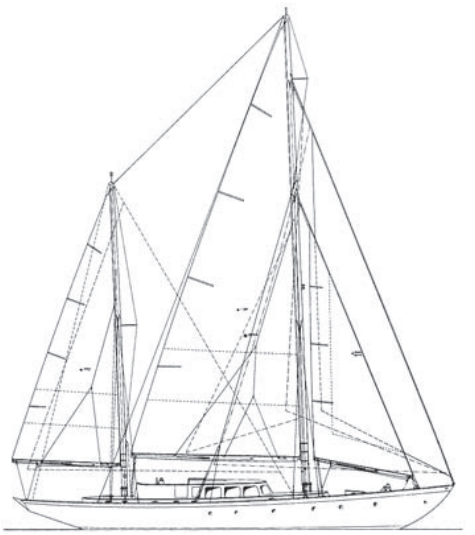
Work and play

Given these very broad professional obligations, the yacht-design section had its own leadership and staff. Phil discussed plans with clients and settled the basic parameters for new designs, but converting these ideas into drawings was the job of his talented staff. For many years Jim McCurdy was the head of the yacht-design section and had major responsibility for overseeing the drawings and engineering calculations. From 1952 to 1966 Phil's son, Bodie Rhodes, who in 1952 had earned a degree in naval architecture and marine engineering from the University of Michigan, was one of several designers in the office. Another son, Dan, was involved in brokerage.

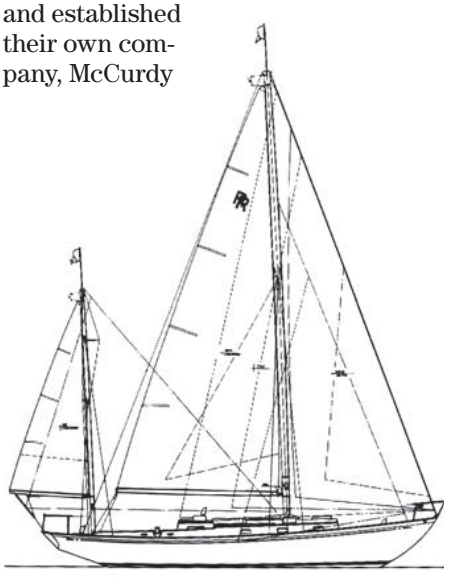
For all his brilliance as a designer, Phil was not a profoundly expert sailor. He sailed in three Bermuda Races, was in many other races, and certainly was a fine sailor, but he was hardly a world-class tactician or helmsman. His personal boat was the 25-foot, light-displacement *Nixie*, designed in 1933, deliberately a modest boat for a modest person raising three children during the years of the Great Depression.

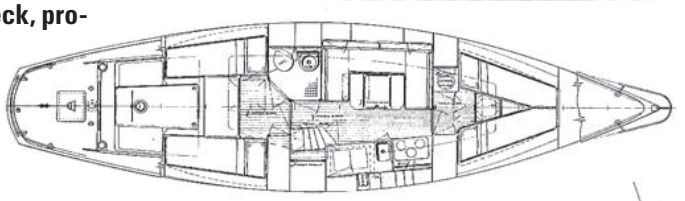
Later, in 1957, he owned a 52-foot aluminum twin-screw diesel express cruiser, adapted from a design to service offshore oil drilling rigs. The boat was used for weekend cruising as well as for hosting clients and guests and for observing America's Cup trials.

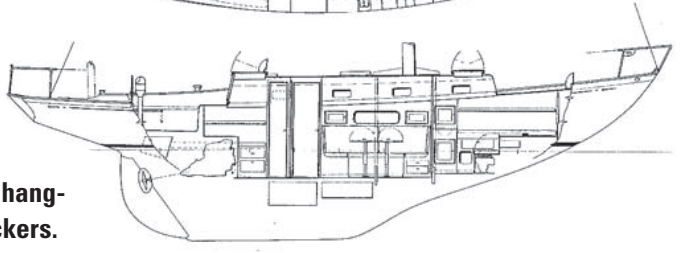
By the late 1960s Phil had slowed down. In 1966 Jim McCurdy and Bodie Rhodes formally left the Rhodes office and established their own company, McCurdy



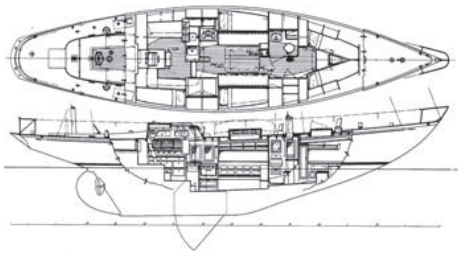
The Rhodes 77 was a large centerboarder drawing only 6 feet 6 inches with the board up. She has a nicely divided rig. The interior provided three double cabins for the owner and guests aft of the deckhouse. Forward was space for a crew of three. A 97-foot stretched version had larger cabins and space for a crew of six (skipper, mate, cook, steward, engineer, and deckhand).



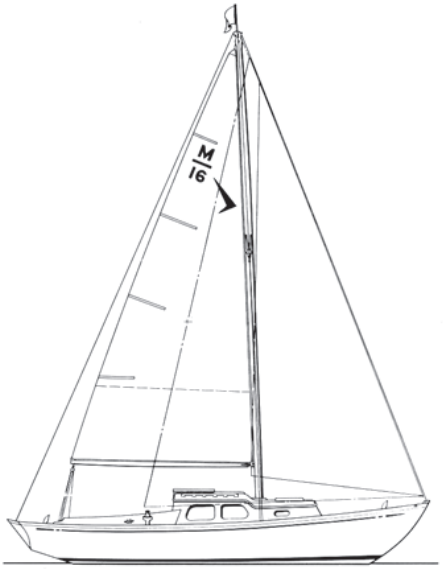




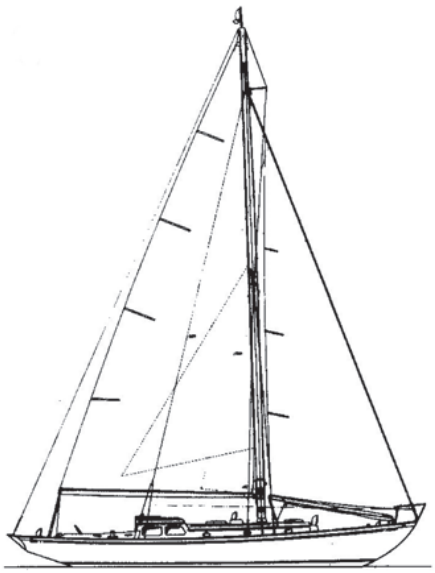
The 41-foot Reliant had a breakthrough interior design in 1963. She offered three separate two-person cabins. This unique layout was accomplished by an offset companionway a few feet forward of the bridge deck, providing access directly to the main cabin and leaving the aft cabin private. The dinette/double bunk to port and linear galley to starboard saved enough space so there could be a comfortable forward cabin with a sink, hanging locker, and other lockers.



***Carina II*, a 53-foot centerboarder and big sister to *Olsching*, was designed in 1955 and immediately after launching won the 1955 transatlantic race. She continued winning for the next decade. Sadly, she deteriorated and sank at a mooring, damaged beyond restoration, in 2004.**



The *Meridian* was designed in 1961 and built of fiberglass. She is Phil Rhodes' pocket cruiser, only 25 feet long, sleeping four with 6 feet of headroom. With a full keel and jaunty sheerline, she is a little sister in the Rhodes family.



***Olsching* is a 45-foot centerboarder, designed in 1953. Several were built from her plans. They have been highly competitive racers and very comfortable cruisers. Sisterships are in Nantucket, England, and Australia.**

***Skål*, 48 feet overall, was designed in 1930, primarily as a seagoing cruiser, but she also was fast. In the 1930 Bermuda Race she finished 11th out of 42 and weathered an 80-knot blow on her return. The next year she competed in the transatlantic race. *Dorade* became famous for winning that race, but *Skål* did very well, coming in second. She is currently undergoing a complete restoration in France.**

and Rhodes, in Cold Spring Harbor, Long Island. The last sailboat from the Philip Rhodes office was dated 1970. After that he continued to work in his office, did some commercial work, and continued to correspond with owners of his yachts, advise them, and share their adventures of racing or circumnavigation. He died in 1974, a year after Mary, his wife of 53 years.

Post script

Phil's yacht archives, with hundreds of designs, were donated to the Mystic Seaport Museum, where they remain accessible to the public. The design files that the Mystic Seaport has are labeled "for research only," but they are wonderfully detailed plans for construction. The Reliant file, for example, has 25 sheets, including construction specifications for both wood and fiberglass, plans for wood or aluminum spars, and alternative layouts.

There are many small sheets with plans showing exactly how to make mast hardware — tangs, special fittings, and chainplates — how many bolt holes, what diameter, and where to place them. They specify exactly how to position the top hole and how much metal must surround the hole. The aerodynamic shape and orientation of spreaders is also shown. Whatever affected the structural integrity of hull or rig was carefully specified and not left to the whim of builders.

The McCurdy and Rhodes company continued for about 30 years, obviously rooted in the Philip Rhodes yacht tradition but adapting to new ideas of design. They continued to provide designs for Seafarer Yachts. In the late 1990s, both Jim McCurdy and Bodie Rhodes died. Jim McCurdy's son, Ian, continues the corporate name and family tradition.

More information

An excellent collection of Phil Rhodes designs is Richard Henderson's book, *Philip L. Rhodes and his Yacht Designs* , 1981, with additional printings in 1993. This book is now out of print and hard to locate. The simple way to get it is to ask a library to order it from inter-library loan. Occasionally it shows up in the used-book market at a high price.

On the web, check Ben Stavis' website <http://astro.temple.edu/~bstavis/rr/rhodes.htm> which can be considered an updating of Richard Henderson's book with photos and links for many Rhodes boats. The site includes photos of major restoration projects of classic Rhodes boats.

Plans for most of the original Rhodes designs are available at nominal prices from the Mystic Seaport Ship Plans Collection <http://www.mystic seaport.org/library/collections/ships.cfm>, shipsplans@mysticseaport.org, phone 860-572-5360.

For further reading . . .

Dan Spurr's book, *Heart of Glass*, about the history of fiberglass boatbuilding, was an instant success with good old sailors when released in 2000. This book is available at <http://www.goodoldboat.com/bookshelf.html> or by calling 763-420-8923.

A designer's designer

Phil Rhodes inspired a generation of yacht designers, including Bob Perry

by Robert Perry

It was about 50 years ago. I was probably 15 years old. I had started sailing and I was studying mechanical drawing in school. I worked in a meat market after school and I would walk home from work and pass a drugstore that had a good supply of magazines by the front door. One afternoon, I picked up a copy of *Popular Boating* and there on the cover was a photo of the Chesapeake 32. Inside the magazine was a feature story on the Chesapeake 32. I was struck by the beauty of this little cruising boat. To my young eye, the boat just seemed to exude perfection of proportion. It was a fairly simple design but it was powerful enough to convince me that I wanted to design sailing yachts for a living. In this article, we are going to take a look back at the work of Phil Rhodes. His designs range from 12-foot Penguin dinghies to ocean racers, to mega-yacht motorsailers, large power yachts, and commercial vessels. I have tried to pick out a selection of his designs that I think show the Rhodes "eye" at its best.

An impressive life's work

Philip L. Rhodes was born in 1895 in Ohio and did not come from a yachting background. He spent some of his early years living by the Ohio River, where he was first exposed to the large paddle-wheelers and other vessels that worked the river. Phil soon started sketching and carving boats. While in high school, he designed and built a single-step hydroplane called *Dusty*. By the time he graduated from high school, he had had two articles published in *Motor Boating* magazine.

While attending Denison University in Ohio, Phil made the decision to become a naval architect and, in 1916, transferred to MIT. After working for several other designers, Phil opened his own office in New York City in either 1924 or '25. It was a small "hole in the wall" office with just enough room for Phil and one assistant. At one time, that assistant was a young Olin Stephens.

When the Depression hit, work was slim, and Phil began working with the large firm of Cox & Stevens, concentrating on large commercial vessels but keeping his hand in with yachts working at home. He quickly rose to an administrative position. Phil was considered an excellent draftsman, and that was back in the day when you drew with a drafting pen with ink on cloth. It was a demanding art.

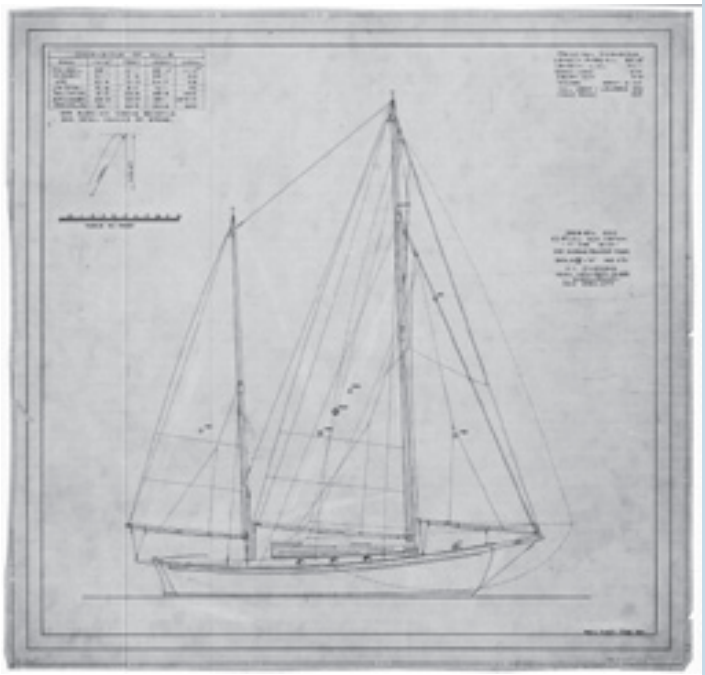
In 1947, Cox & Stevens was dissolved and the firm's name was changed to Philip L. Rhodes, Naval Architects and Marine Engineers. Rhodes designs were being built all over the world and the Rhodes office was one of the first to explore the use of fiberglass in series- or "production-" built boats. The Rhodes Bounty II was the first large sailboat built of fiberglass. I learned to sail in a 12-foot Rhodes Penguin dinghy.

Phil Rhodes, a tall, handsome, kind-looking man was usually photographed smoking a pipe. He died in 1974 at the age of 79. The list of designers who got their start in the Rhodes office is long and includes Bill Tripp, Al Mason, Francis Kinney, Winthrop Warner, James McCurdy, Olin Stephens, Bob Wallstrom, and Charles Wittholz.

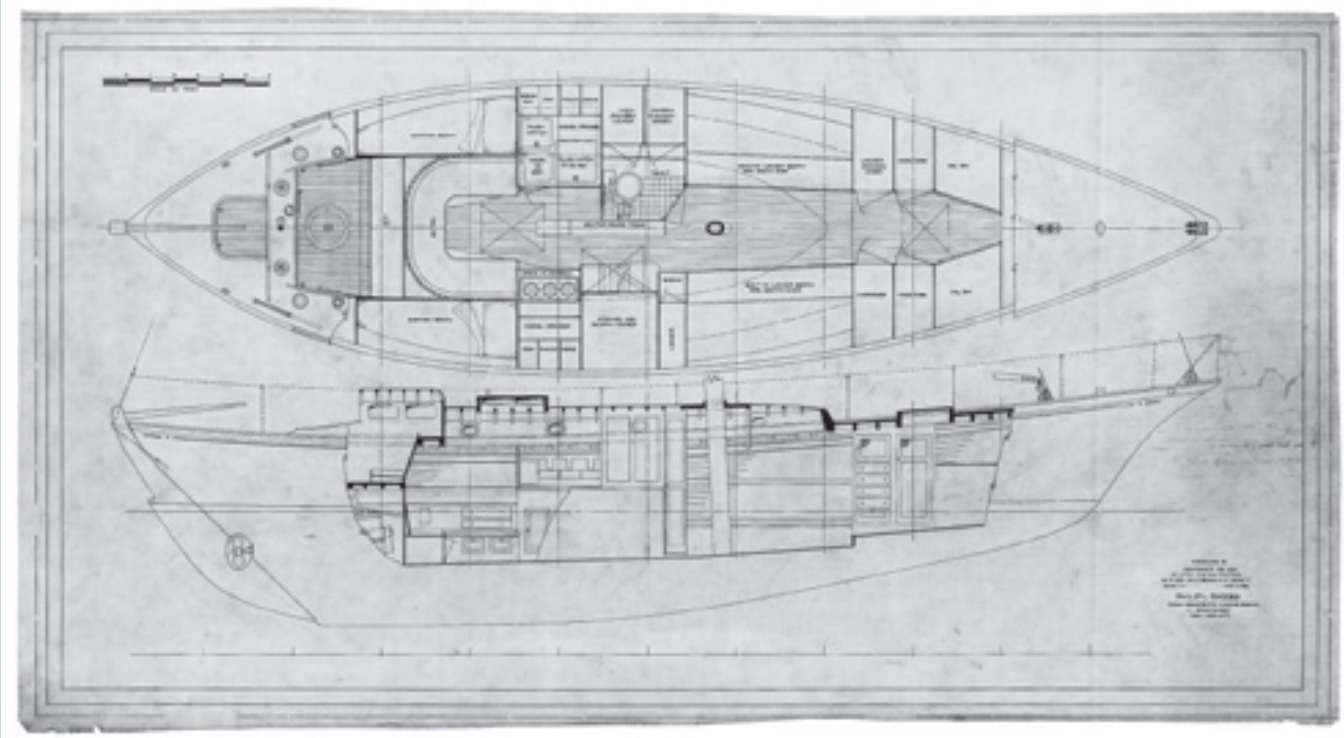
Tide Rip/Dog Star

Phil liked double-enders and designed several of them, starting in 1926 with *Caribe*. My favorite Rhodes double-ender is *Dog Star*, also known as *Tide Rip*. I could be wrong, but I think one modestly successful Taiwan double-ender was based on this parent set of lines. A GRP version of *Dog Star*, called the Traveler 32, was built in the U.S. The Traveler 32 has a much more dramatically cut-away forefoot than did the original *Dog Star*.

I just love *Dog Star*. It's only 30 feet 8 inches LOD, with 10 feet 2 inches beam and 5 feet of draft, but it is as shapely as can be and very salty looking. The waterlines are almost symmetrical fore and aft. In studying the tall, ketch-rig sail, plan you can begin to see the magic of the Rhodes sheerline. In Phil's era, designers were not afraid to bend that batten and put some strong spring in their sheers. Phil was extremely good at it and I think his sheers convey a proud strength.



Sail plan for *Tide Rip*. This boat was also known as *Dog Star*.



Kirawan II **has a most interesting layout, as the accommodation plan and inboard profile shows, above. With that hard dodger aft, you would assume there was belowdecks access from the cockpit, but no. The companionway is well forward, well off-center, and on top of the cabin trunk. You could never sell this to a client today. Below, there is a big U-shaped dinette aft flanked by quarter berths. The centerboard trunk interrupts the galley that spreads across the boat. A huge wet locker is to starboard and the head is adjacent to port. There are settee berths and pilot berths in the main saloon. It's a quirky layout designed for men who raced yachts in the 1930s.**

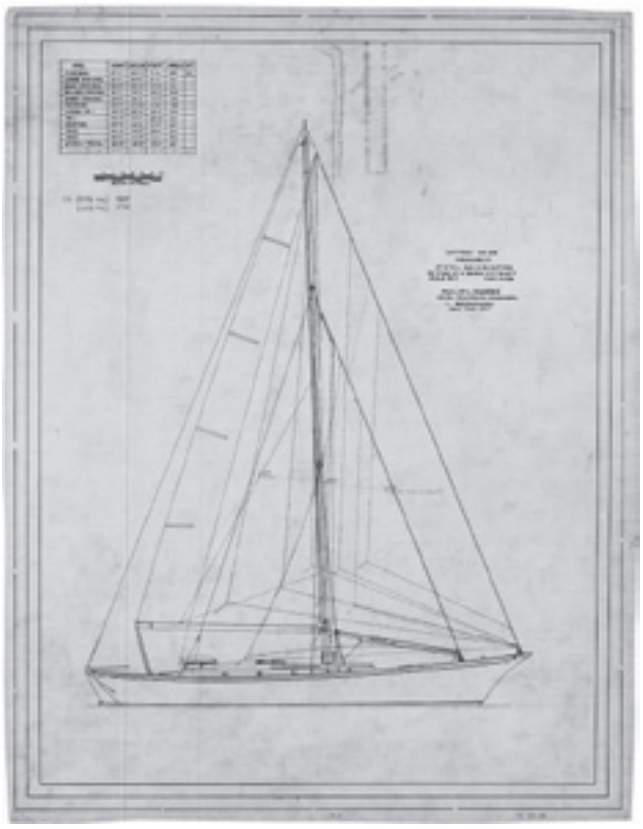
I don't know what the displacement of *Dog Star* is but I would estimate a D/L of around 330. Note on the sail plan how the main backstay is dead-ended on the mizzenmast about 5 feet above the gooseneck. You don't see that detail anymore. The working jib is club-footed. Also note how low the main and mizzen booms are. Back in those days, you learned to duck when you tacked. A designer could not get away with that today. "What do you mean, I have to duck?" I have never sailed this design but I would bet you a beer that the helm balance was impeccable.

Dog Star's layout below was very simple. The galley is forward, as was the style in the old days, just aft of the V-berth. The mainmast is well forward up in the eye of the V-berth. There is a wood-burning stove. Adjacent to the galley is an enclosed head. Large and comfy-looking settee berths are aft.

I think you can see in *Dog Star* some of the origins of the love of double-enders that was so strong among so many cruising sailors through the 1990s. I know this design influenced my own work.

Kirawan II (*Hother*)

I have a hard time picking my favorite Rhodes design, but *Kirawan II*, designed for Robert Baruch, is always very near the top. For one it's a double-ender and for two it has an outboard rudder and tiller steering. The LOA is 46 feet 3 inches and the draft is only 4 feet 9 inches, but a large centerboard at least doubled that draft. I do know that



Sail plan for ***Kirawan II*****.**

this hull was tank-tested in 1938. They tested a deep-keel version against a centerboard version and found them equally effective. The centerboard was bronze plate over a cast bronze frame with 1,000 pounds of internal lead. Imagine the expense of that today.

The bow of *Kirawan II* is unusual. You could call it a "modified clipper" bow. Originally, Phil drew the boat with a more conventional, short overhang bow and a bowsprit. But he did not like the look and tried this concave bow profile while giving the forward sections plenty of flare and buoyancy to keep it from burying. It worked. *Kirawan II* was raced extensively and then bought by Jakob Isbrandtsen who changed the name to *Hother*. In 1955, *Hother* was bought by Paul Hoffman and that's when she really started to clean up on the race course, winning 29 out of 33 races in their first season. This boat certainly was a very distinctive looking CCA racer with her outboard rudder and unusual stem profile.

I think the bow shape is a bit odd, but it just works so well with the rest of the proportions that I can't criticize it. Note again the strong sweep to the sheer and the way it's echoed by the cove stripe and thin bootstripe.

The modern cutter rig has proportions similar to my own Valiant 40. Note the mini boomkin aft to keep the backstay clear of the outboard rudder. You can easily see how Phil used the concave bow profile to pull the stem forward to get the center of pressure of the headsail forward. However, as originally drawn, *Kirawan II* had too much weather helm and, under Hoffman's ownership, Phil modified the rudder shape, adding area low on the rudder blade and shortening the boom to give the mainsail a 3:1 aspect ratio. This was the race-winning combination and a harbinger of modern mainsail proportions. To my eye, the mast should have been about 28 inches forward; that would have eased the helm pressure.

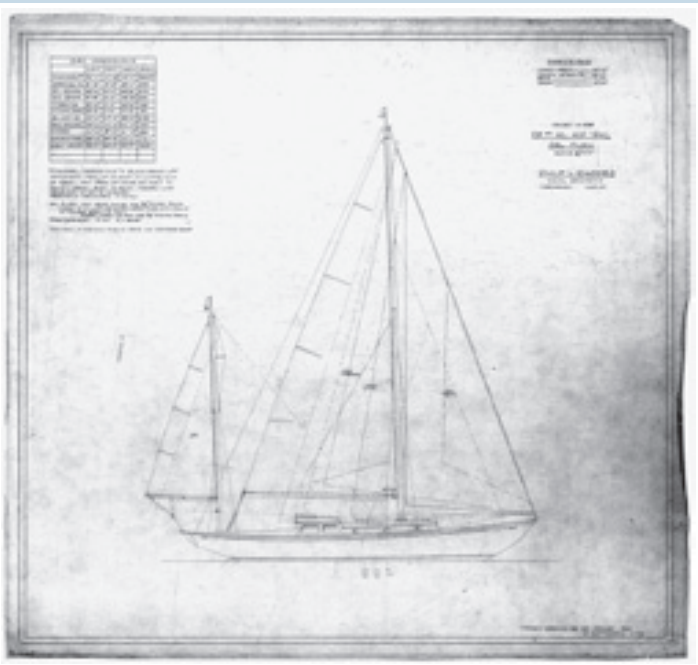
Bounty II

Bounty II, not to be confused with the earlier Rhodes Bounty, may not be one of my favorite Rhodes boats, but in the context of *Good Old Boat* it is probably the most important Rhodes design. Phil's son Bodie drew the lines for Bounty II, which has a 28-foot DWL and is a direct reduction of the beautiful sloop *Altair*, which was 29 feet on the waterline. It is unusual to just mathematically reduce hull lines but, in this case, the reduction was small so it worked well.

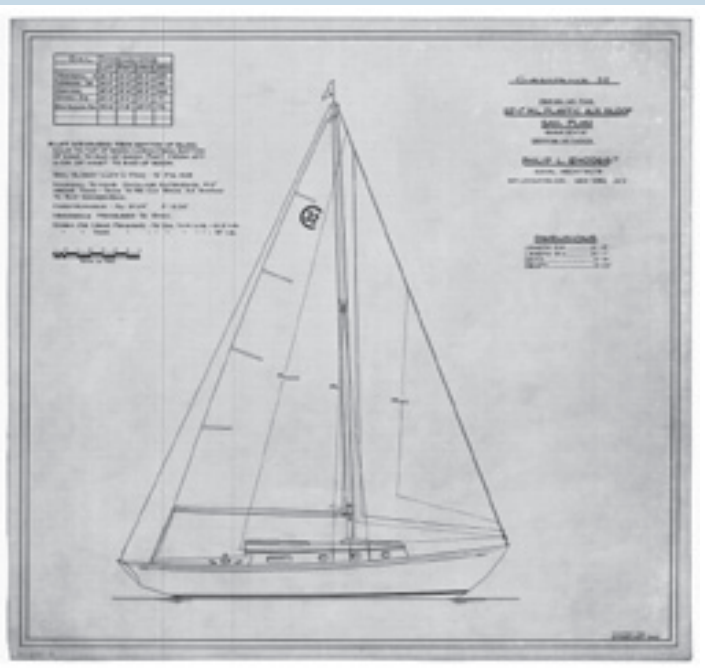
What makes Bounty II so important to the *Good Old Boat* reader is that this is one of the very first large GRP sailing yachts. After WWII, it was getting hard to find skilled wooden boatbuilders and materials. The builder for Bounty II was the Coleman Boat and Plastics Company, later changed to AeroMarine Plastics Corp., in Sausalito, California. Coleman was building the original wooden Bounty before the war, with production-line techniques, but the war brought that project to an end.

In 1956, Coleman decided to produce another "stock" boat and, with Rhodes having some experience in much smaller GRP boats, it was decided the new Bounty II would be GRP. Ironically, engineering data for GRP construction was pretty scarce at the time, so Rhodes collaborated with Bill Garden in Seattle on the engineering of the Bounty II's construction.

By today's standards, with its solid glass decks and a massively thick hull laminate, the Bounty II was an icebreaker. We know now that the scantlings were basically guesswork, resulting in an over-built heavy boat. But they did endure, and you can still find Bounty IIs in almost any marina in the U.S.



Sail plan for the Bounty II

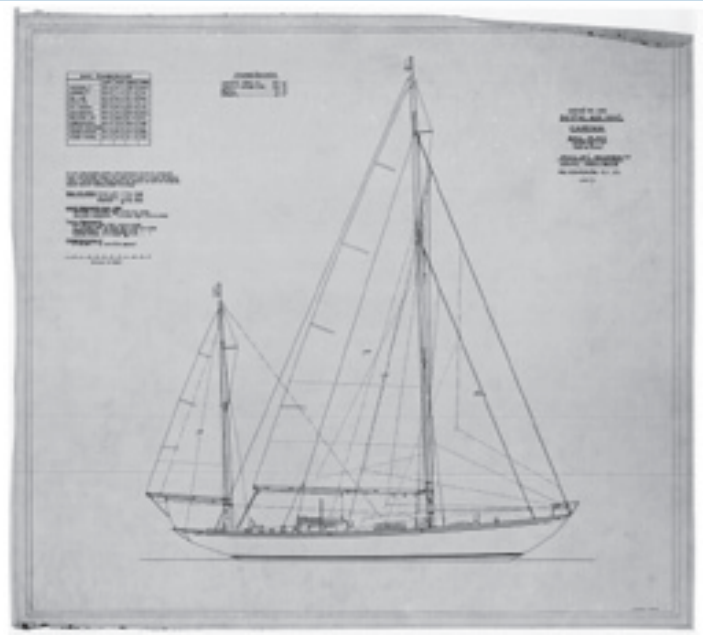


Sail plan for the Chesapeake 32

As you would expect, the sheer is perfection, dipping down around station 8 and kicking up with a strong spring to a very shapely transom. The sections are wineglass-type with thick garboards, which allowed the engine to be placed low in the bilge of the boat. The long overhangs conformed to the CCA rule. The cabin trunk features a raised portion aft.

As a kid, I was not too keen on the look of the Bounty II. All the glamour of the beautiful wood trim and detailing that had made the older Rhodes boats stick out was gone. With no wooden cap rail and no "eyebrow" on the cabin trunk it was all too "jello-moldish" to my eye. But I now realize that this was all part of the early experience in transitioning to GRP construction. Heck, the first boats built to this design came with GRP masts. They were extremely heavy and made the boats quite tender and were soon replaced by aluminum masts. Remember, this was 1956.

In the early 1960s, AeroMarine Plastics Corp. was bought out by Pearson Yachts in Rhode Island. Pearson retained the tooling for the Bounty II class and built it as the Rhodes 41, with some small design changes. The freeboard was raised slightly, the engine was lifted out of the bilge, and the single window in the raised house was replaced by two windows. In 1968, Pearson stopped production of the Rhodes 41 after building nearly 50 boats. Bounty II represents the beginning of production boatbuilding as we know it today.



Sail plan for *Carina*

Chesapeake 32

This is the little Rhodes design that got my heart pumping when I was 15. It was designed for the George Walton Company of Annapolis in 1959. It's a 32-footer with a short DWL of 22 feet 1 inch. The beam of 8 feet 9 inches gives it a length-to-beam ratio of 3.65, indicating what today would be a narrow boat. Draft is just shy of 5 feet. The boats were originally built in Denmark by Danboats, Inc., and the first eight boats were a little "soft" in the shell laminate. Later boats were reinforced with longitudinal stringers. After hull number 25, the builder was Sandersen's Plastic Boats in Copenhagen and build quality was improved.

I find the proportions of the Chesapeake 32 very appealing. Freeboard is low and I suspect "headroom" is less than 5 feet 11 inches. The "jello mold" look has been avoided by using a wooden cockpit coaming and a teak eyebrow trim on the cabin trunk. You can't see the underwater profile here, but by this time, Phil was pulling the leading edge of the keel well aft and the keel was starting to almost look like a fin. Yet the rudder stayed attached to the aft end of the keel. The 32 had a reputation for hobbyhorsing, so additional ballast was added amidships and reportedly helped the situation. The narrow beam of the 32 resulted in a smallish layout. But there were V-berths, an enclosed head, settee berths in the main cabin, and a minimal galley and chart table shoved well aft. Today, you could find roomier 26-footers, but certainly not prettier.

Carina

I hardly know what to say about *Carina*, designed in 1955. I think the drawings speak for themselves. To my eye, this is Phil's most beautiful design. It's perfection in yacht design, beautiful, and an ocean-racing rocket of its day. The long overhangs, the sweeping sheerline, the trim little cabin trunk, and the flush deck forward all combine to make this pure eye candy. There is just not an ugly line on this boat. Note the subtle spoon profile to the stem and the hint of hollow in the counter aft. I even think the yawl rig adds an air of interest to the look. *Carina* was built by H. Heidtman of Hamburg, Germany, in four months, probably a record. *Carina* went on to earn an impressive race record in the U.S. and in Europe. She won the Transatlantic Race that started 12 days after she was delivered to the U.S. *Carina* also won the Fastnet Race, the Bermuda Race, three awards at Cowes Week, then won another Transatlantic Race and another Fastnet. You can't ask much more of a boat. They don't make them like this anymore.

Robert Perry is a Good Old Boat *contributing editor. His own career in yacht design began toward the end of that of Phil Rhodes and he has carried on the tradition of drawing boats that remain good even as they get older.*

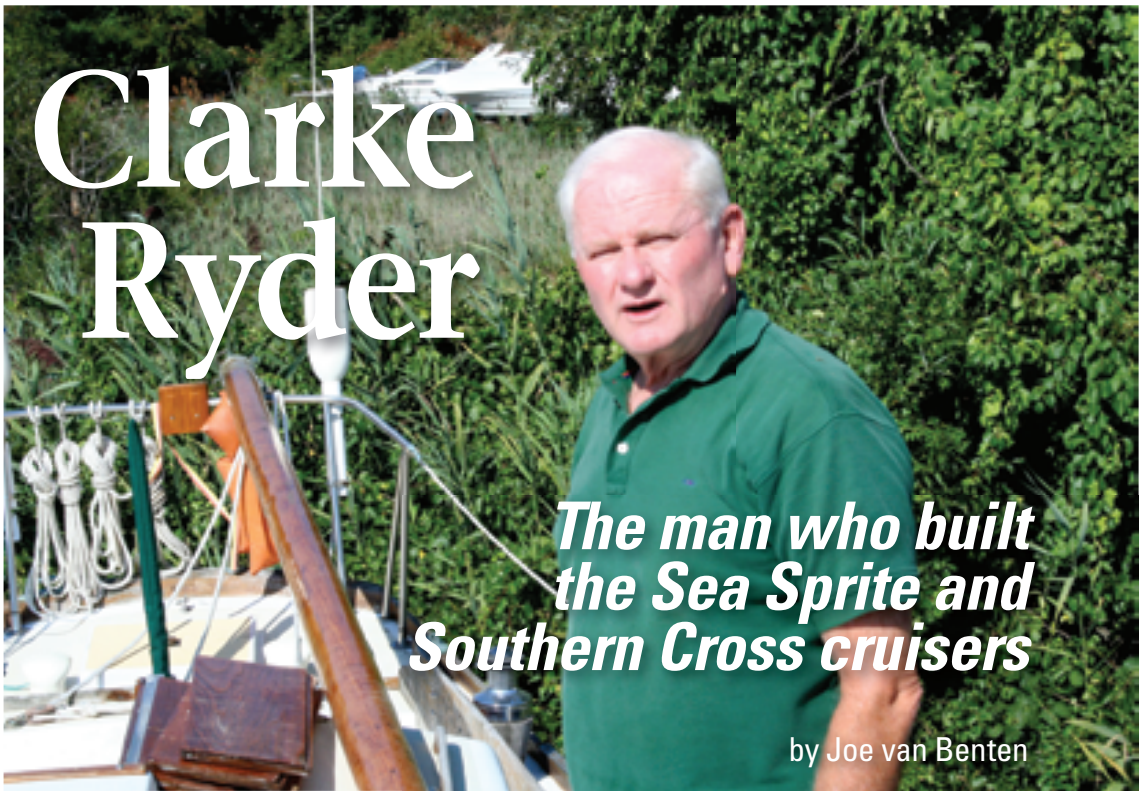
About the drawings on these pages

The illustrations that accompany this article are reproductions of the original ink-on-cloth drawings made by Philip Rhodes and represent his skill and artistry. These drawings, and hundreds like them, are in the Philip Rhodes collection held by Mystic Seaport.

The Daniel S. Gregory Ships Plans Library at Mystic Seaport preserves, and makes accessible, the documentary history of American naval architecture from the 19th and 20th centuries. The library actively collects plans from all areas of the U.S. In this specialized archive of approximately 100,000 naval architectural drawings, yacht plans and small-boat plans sit side by side with drawings of fishing draggers and lighthouses.

For information and to research and order plans, visit <http://library.mysticseaport.org> or call 860-572-5367.

Clarke Ryder



JOE VAN BENTEN

The man who built the Sea Sprite and Southern Cross cruisers

by Joe van Benten

ANYONE WHO SPENDS time looking at old sailboats soon figures out that boats with Clarke Ryder's name on them are held in high esteem. His company, the C. E. Ryder Corporation, employed as many as 100 people during its relatively brief life in Bristol, Rhode Island. The most memorable of the boats were the Southern Cross and Sea Sprite model lines, although he was subcontracted to build many others, such as the Eastward Ho and Sonar. The designers Clarke Ryder hired were a veritable who's who of American naval architects that included Thomas Gillmer, Bill Luders, and Carl Alberg.

John Vigor's wonderful book, *Twenty Small Sailboats To Take You Anywhere*, features the Southern Cross 31. And Ferenc Máté cannot say enough about the Southern Crosses in his book, *Best Boats To Build or Buy*.

Entering the boat business

Clarke Ryder attended Brown University in Providence, Rhode Island, on an NROTC (Naval Reserve Officers' Training Corps) scholarship. Recently graduated and freshly married, Ensign Ryder found himself visiting Cuba on the aircraft carrier USS *Saratoga* to participate in the Cuban missile crisis. Later, while finishing his service in Philadelphia, he wrote to Drake Sparkman, the brokerage side of the prestigious New York design firm Sparkman & Stephens, expressing his interest in boatbuilding. Drake wrote a nice letter back telling Clarke that he had two sons — one a priest and one in the liquor business — and both were doing better than he was. Undaunted, Clarke ran an ad in *Yachting* magazine expressing his desire to enter the boatbuilding industry. He was promptly hired as production foreman at Bristol Yachts, founded by Clint Pearson after he left Pearson Yachts in 1964.

The Bristol years were good ones for Clarke Ryder. Clint was serious about building with the new material called fiberglass and did mountains of testing. The boats were laid up in two molds. Then the hulls and decks were bolted together and the seams tabbed. Early on, there was a serious leaking problem with some 23-foot Sea Sprites. Beyond tracking down and fixing the problem, Clint jack-hammered the factory floor and installed a tank to test the boats for leaks before they left the factory.

In 1969 Clint asked Clarke to partner with him in a company that would be a spinoff of Bristol Yachts, concentrating on industrial fiberglass parts. It was called the C. E. Ryder Corporation. Their first customer was Bristol Yachts. At one point, however, they weren't making money and Clarke had a huge receivable with Bristol. Clint suggested that Clarke buy a boat from Bristol as a method of helping Bristol finance the Ryder payroll. Instead, Clarke purchased Clint's half of the enterprise for $7,200.

By 1974 the company had wandered back into building boats. Early projects included building the Eldredge-McInnis-designed Eastward Ho 24 and

Sea Sprite 23

Designer: Carl Alberg
LOA: 22 feet 6 inches
LWL: 16 feet 3 inches
Beam: 7 feet 0 inches
Draft: 3 feet 0 inches
Displacement: 3,350 pounds
Ballast: 1,475 pounds
Sail area: 247 square feet
Displ./LWL ratio: 349
Sail area/displ. ratio: 17.7
PHRF: 273

Sea Sprite 27/28

Designer: Bill Luders
LOA: 28 feet 0 inches
LWL: 20 feet 0 inches
Beam: 8 feet 10 inches
Draft: 4 feet 3 inches
Displacement: 7,600 pounds
Ballast: 3,600 pounds
Sail area: 340 square feet
Displ./LWL ratio: 424
Sail area/displ. ratio: 14.1
PHRF: 246

Sea Sprite 30

Designer: Bill Luders
LOA: 30 feet 0 inches
LWL: 22 feet 0 inches
Beam: 9 feet 6 inches
Draft: 4 feet 9 inches
Displacement: 10,000 pounds
Ballast: 4,100 pounds
Sail area: 425 square feet
Displ./LWL ratio: 419
Sail area/displ. ratio: 14.7
PHRF: 225

Sea Sprite 34

Designer: Bill Luders
LOA: 34 feet 0 inches
LWL: 24 feet 0 inches
Beam: 10 feet 3 inches
Draft: 5 feet 0 inches
Displacement: 12,800 pounds
Ballast: 5,000 pounds
Sail area: 524 square feet
Displ./LWL ratio: 250
Sail area/displ. ratio: 15.3
PHRF: 192

Clarke Ryder hired top-name naval architects to design his line of Sea Sprite and Southern Cross cruising sailboats. Good looks and quality construction explain their continuing popularity.

31 for the Portsmouth Yacht Company, headed by Jack Bagley. These were great boats: salty and well received by the boating community. At the same time Clarke was molding hulls and other fiberglass parts for the Sea Sprite 23, which was being finished by the Wickford Shipyard. In 1975 Clarke bought the Sea Sprite business from Wickford and formed a new division, mostly a marketing entity.

Carl Alberg had designed the Sea Sprite. Clarke called him and asked what he would take for the design rights. Carl, unaccustomed to builders being concerned about royalties, asked for and was paid $1,000. The Sea Sprite 23 became a success for the young company, and it didn't hurt that one was sailed across the Atlantic Ocean singlehanded by a young man named Robert Gainer, who figured in Ryder's advertising.

Three hundred 23s were built during its production run. This success inspired Clarke to develop bigger Sea Sprites. Carl Alberg had retired, so Clarke looked around and commissioned Bill Luders to design the Sea Sprite 27, 28, 30, and 34.

The Southern Cross 31

The Southern Cross series was born as a marketing scheme to compete with the Westsail 32, an even heavier cruiser that was selling like hotcakes. A national magazine had run a feature on the Westsail and, as a result, it was taking the factory 18 months to fill orders. The Westsails were also being sold as bare hulls for owner completion. During the hippie, counter-culture days of the 1970s, the yen to "get away from it all" helped sell these solid seaworthy boats. Another popular bluewater cruiser at the time was the Seawind ketch, designed by Tom Gillmer for the Allied Boat Company in Catskill, New York. The Seawind was introduced in 1969 and had a 12-year production run of 150 boats.

Looking for something similar, Clarke commissioned Tom Gillmer to design the Southern Cross 31. These days a Southern Cross 31 on the used sailboat market costs three or four times as much as the typical 30-foot sailboat. The reason is pedigree. (A profile of Tom Gillmer appears in the July 2002 issue of *Good Old Boat*.) The Southern Crosses were inspired by Northern European workboats. The double-ended hull, full keel, outboard rudder, and cutter rig give it a "take-me-anywhere" look. The 31 weighs in at 13,600 pounds. A respectable Bristol 30 weighs 8,000 pounds. The 31 sports eight opening bronze portlights and

Designed by Thomas Gillmer, the Southern Cross 31 is a heavy double-ender capable of blue-water voyaging. *Scoundrel* is owned by Ed Mustra, who sails her in the waters off New Jersey. She was built in 1979.

ONNE VAN DER WAL

Resources

<http://www.southerncross-boats.org>
<http://www.seasprites.com>

two opening hatches. There is also a nifty vertical anchor locker built into the deck.

The Southern Crosses were built with Airex-cored hulls in which two layers of fiberglass sandwich a layer of foam. This made for a lighter hull and a boat that was less prone to condensation problems in the cabin. The foam also served as sound-deadening insulation between the waves and the cabin. The method was not used on the decks because of concern about the foam reacting to heat on deck and a lack of stiffness.

About half the Southern Cross 31s went out of the Bristol, Rhode Island, plant on what was called the owner-completion program in which buyers purchased a hull with all the exterior fittings, but finished out the interior themselves. Some of these were done beautifully and some were not.

Tom Gillmer then designed the Southern Cross 28, a boat that was tender and required additional ballast to sail well. One 28 recently completed a solo circumnavigation, skippered by grandmother Donna Lange. Eventually, the model line included the Southern Cross 35, 39, and 41. Of these, the 31 was the only boat with a full keel.

Other projects

Clarke's reputation for quality and his collegial nature brought in lots of interesting prototype work for boats that became famous. Garry Hoyt brought the Halsey Herreshoff-designed Freedom 40 to Clarke before he made his name as a marketer and innovator. Clarke built the molds and the first hull. Bruce Kirby of Laser fame had Clarke build his 23-foot Sonar, and former employee Gary Lanigan brought the Ted Brewer-designed Quickstep 24.

Scot Free, a Sea Sprite 23, gleefully graces our cover. She is owned by Herb and Kristin Browne. Herb is at the tiller with their son, Jim, working the sheets.

ONNE VAN DER WAL

The sailboat industry tanked in the 1980s. The entire industry turned out only 4,000 units a year. Clarke says the auxiliary sailboat market has never been a very big market and pretty soon everyone who wanted one had one. The product never wore out. There were plenty of cheaper boats on the used market. And there was a limit to the number of available moorings and affordable slips. Four thousand new boats a year was a lot for the no-growth mooring business.

The C. E. Ryder Corporation lasted a few years longer than Pearson Yachts, Cal, O'Day, and Columbia Yachts, all of which went out of business in the mid- to late 1980s. Making Black Watch powerboats and doing molding work for Boston Whaler helped. Ultimately though, the boatbuilding enterprise was too capital-intensive to survive. Clarke closed up shop in 1990.

Today, Clarke is a successful yacht broker, specializing in boats he built. Last summer he singlehanded a Sea Sprite from Maine to Rhode Island. It is safe to say he has a couple trips to Bermuda left in him. In reflecting on the boatbuilding industry, he says the owner of a Hinckley would never consider owning an O'Day, but he and the other builders saw the brand differences as being much smaller and had more respect for products of lesser status than the public did. That is a pretty generous statement for a guy who worked at or near the top of the game.

Joe van Benten has operated a shop in Chestnut Hill, Massachusetts, building handmade furniture for the past 29 years <http://www.vanbenten.com>. Last year he purchased a 1977 Bristol 30, which he sails with his wife, Sarah, out of Pocasset on Buzzard's Bay.

Southern Cross 28

Designer: Bill Luders
LOA: 28 feet 0 inches
LWL: 20 feet 0 inches
Beam: 8 feet 10 inches
Draft: 4 feet 3 inches
Displacement: 7,600 pounds
Ballast: 3,600 pounds
Sail area: 378 square feet
Displ./LWL ratio: 424
Sail area/displ. ratio: 15.7
PHRF: 246

Southern Cross 31

Designer: Thomas Gillmer
LOA: 34 feet 6 inches
LOD: 31 feet 0 inches
LWL: 25 feet 0 inches
Beam: 9 feet 6 inches
Draft: 4 feet 7 inches
Displacement: 13,600 pounds
Ballast: 5,600 pounds
Sail area: 447 square feet
Displ./LWL ratio: 389
Sail area/displ. ratio: 12.7
PHRF: 252

Southern Cross 35

Designer: Thomas Gillmer
LOA: 35 feet 0 inches
LWL: 28 feet 0 inches
Beam: 11 feet 5 inches
Draft: 4 feet 11 inches
Displacement: 17,710 pounds
Ballast: 5,750 pounds
Sail area (cutter): 632 square feet
Displ./LWL ratio: 360
Sail area/displ. ratio: 14.9
PHRF: 177

Southern Cross 39

Designer: Thomas Gillmer
LOA: 39 feet 0 inches
LWL: 31 feet 0 inches
Beam: 12 feet 1 inch
Draft: 5 feet 6 inches
Displacement: 21,000 pounds
Ballast: 7,600 pounds
Sail area (cutter): 835 square feet
Displ./LWL ratio: 315
Sail area/displ. ratio: 17.6
PHRF: 144

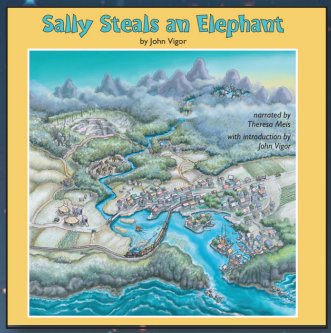
Read Me a Story

Bedtime Stories for Young Sailors

Join Sally, Peter, and Andy Grant as they sail their way through the unpredictable waters of childhood. A great two-part series for children ages 8 to 12.

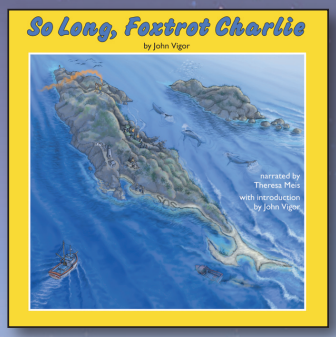
Danger, Dolphins, and Ginger Beer takes readers on an exciting romp across the islands of the Caribbean as the children save an injured dolphin and fight to save their own lives.

Sally Steals an Elephant finds the Grants in the South African jungle, where the children encounter a kindly elephant, her cruel circus owner, and even a witch doctor.



John Vigor:
Danger, Dolphins, and Ginger Beer

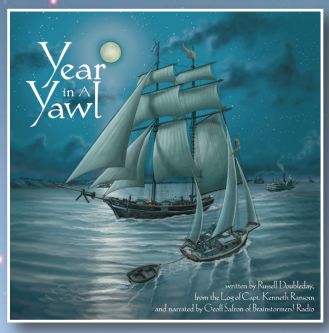
John Vigor:
Sally Steals an Elephant



John Vigor:
So Long, Foxtrot Charlie

Foxtrot Charlie just wants to get along with his foster family. But sometimes being an ordinary 13-year-old boy gets him into trouble — messes, explosions, accidents — the harder he tries, the more he fails. Just when he thought things couldn't possibly get any worse, Foxtrot is lost at sea with his foster father, foster sister, and a friend. With the lives of three other people in the balance, Fox is faced with a challenge that helps him understand what's really important.

Russell Doubleday:
A Year in a Yawl



Not long after Joshua Slocum completed his historic circumnavigation, four young men from Michigan set out on another adventure that had never been done before: the Great Circle Route of the eastern U.S. They built a boat and traveled down the Mississippi, around Florida, up the Eastern Seaboard, back through the Erie Canal, and home to the Great Lakes. Their youthful enthusiasm and resourcefulness make this classic true story of a century ago a powerful influence on youngsters today.

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www.AudioSeaStories.com

The *Remarkable*

A designer with a lifelong passion for fast, seaworthy sailboats

by Steve Mitchell

His nametag for the 15th annual Chesapeake Sailing and Yacht Symposium held in Annapolis gave his affiliation simply as "retired." But for famed yacht designer Olin Stephens, that word's not in his vocabulary. At the age of 93, after one of the most illustrious careers imaginable, he is still actively pursuing his lifelong passion — designing fast, safe sailboats, whether for racing or cruising.

"I was really lucky with racers," he says modestly. "I had no real difference in my approach with cruisers. There's nothing radical or different in my designs. I had grown up seeing boats built at City Island, where they used bent frames instead of cut ones. The boats were lighter and just as strong. They also had the ballast on the outside of the boat, where it would do the most good, and not on the inside."

Given his long record of racing success, it was hardly just luck. Olin Stephens designed five boats that won seven America's Cup races, and collaborated with Starling Burgess on the J-Boat, *Ranger*, that won the Cup in 1937. That makes six boats and eight Cup victories, surely a record no one else will ever approach. For the icing on the cake, he skippered *Columbia* to victory in the 1958 Cup race. His boats also have won just about every famous bluewater race there is: Whitbread, Fastnet, Newport-to-Bermuda, and the Transatlantic, to name a few. Everyone knows about the tragic 1979 Fastnet Race in which 15 sailors died and five boats sank in a violent storm. Which boat won that year? *Tenacious*, skippered by Ted Turner and designed by Olin Stephens, of course. In short, Olin Stephens has done it all.

Boats fascinated him

In his autobiography, *All This and Sailing, Too*, Olin writes: "As far back as I can remember, I wanted to design fast boats." From the age of six, boats fascinated him, especially after he took his first sail. As a youth, he spent time at boatyards, sketching hull designs that appealed to his eye and soaking in all he could about boat construction and design. Of those early days Olin says, "I found that the Scottish designers built good boats that also were good to look at." So early on, he had an appreciation for the beauty of a well-designed boat, an appreciation he would carry forward throughout his career in his own designs.

A case of jaundice forced Olin to leave MIT after a year, and he chose not to go back because he wanted to pursue his boat-designing dream. In 1927, at the age of 19, he started his career drawing small-scale accommodation plans for brokerage boats for Henry J. Gielow in New York. A small beginning, it was at least in the chosen field of a young man who had sketched boats his whole life. Within a short time he found an opening with Philip Rhodes and became a draftsman for the famous designer. He had little formal training in drafting, but he learned quickly. A few months later, he resigned from Rhodes' firm and struck up a partnership that was to last.

Through his father, he met Drake Sparkman, an established yacht broker who was well connected in the sailing community. Olin became the head of design for the company. He writes in his autobiography, "The arrangements were informal and experimental, to be extended or not, depending on how things worked out." As we know, things worked out just fine for the company they simply called Sparkman & Stephens.

The famous *Dorade*

Success came quickly. In 1929, Olin designed for his father a racing boat named *Dorade*. He and his brother, Rod, sailed her to a surprise victory in the 1931 Transatlantic race, and then added top honors in the Fastnet race shortly thereafter. *Dorade's* success gave the new firm of S&S instant credibility, not to mention a ticker-tape parade for the Stephens brothers when they returned to New York.

From there it was a short step for Olin to work on America's Cup designs. In 1936 he worked on *Ranger* in collaboration with Starling Burgess. As with *Dorade*, his early success with *Ranger* led to more than 40 years of unparalleled success in America's Cup designs.

In addition to producing outstanding boats, Olin Stephens also turned out a fair crop of designers who worked for him at Sparkman & Stephens. Says Bill Shaw, an 11-year S&S veteran and later long-time head of Pearson Yachts, "We, the people who went to that wonderful school I call S&S, had one of the finest educations in yacht design one could ask for. Olin's main impact was, year after year, coming up with well-found boats that could go fast. In particular I can remember working with him on a preliminary design for a customer, and Olin could meld the traits of one boat with the traits of another in his mind. He could tell a customer how long a boat was going to be after just listening to the accommodations the owner wanted. He would sketch out the boat in his head. He's an absolute genius. S&S had a bent toward cruising boats like *Finisterre*. She was designed as a world-class cruising boat that also could go fast."

Speed is another contribution to safety that Bill learned at S&S. "A slow cruising boat really is dangerous if you think about it," he says. "The crew is out there that much longer, so more things can go wrong. Olin knew how to design a fast boat."

Cruising and racing

Dual-purpose boats were much more common in the early days of S&S than today. According to Bill, S&S designed many dual-purpose boats the owners could "cruise or race, depending upon the crew and gear they had aboard. The boat was fast either way." Modern race rules have changed that dual-purpose approach, he notes. "Boats today are

Stormy Weather *in the Miami - Nassau Race, 1938.*

Olin Stephens

designed to a particular rule, like the IMS, for a single purpose. If that boat doesn't turn out to be as fast as expected, the boat loses its appeal. They're almost throwaway designs today.

"Olin has always served on about every rules committee possible, emphasizing safety. He's still very influential in all aspects of the sport."

Bill has many memories of the tank testing that S&S helped popularize for boat design as early as the 1930s. "Once, while working on the *Columbia* design, Olin and I drove to New Jersey to test six or seven models in the tank. Olin was also interested in automobiles, and back then he drove a convertible that only sat two people. After testing, we had to bring the chosen model back to the office. The only way we could get it in the car was for me to get in first, then turn the model upside down in the car with my head inside the hull. I had one hand on the stem to keep it from poking a hole in the roof. That's how we drove back to New York."

He adds, "There is one thing people should know. Olin employed people like me to work on designs. But the boats were Olin's ideas and his designs. We just pushed the pencil on paper where he told us to. He was the driving force. He was the one responsible for all those successful boats."

David Pedrick is another "graduate" of what Bill calls the S&S school. "I started working there in 1970 as a fresh graduate of the Webb Institute," David says. "I began as an intern. It was a wonderful opportunity for me personally." Early on, David worked on the *Courageous* America's Cup program with the tank testing. That led to his becoming full project manager for the boat's construction. "Olin gave me a lot of scope to do what I could under his watchful eye. It was a good tutelage for me," he says. *Courageous* went on to win the America's Cup in 1974 and 1977.

David says, "The intuitive sense of shapes the water will treat kindly is something Olin has cultivated since he was a young man. He's been able to apply that intuitive approach with the technology of the day in a number of successful projects. He was an early advocate of tank testing in his work with Ken Davidson in the 1930s. He also was one of the first to study sail forces to propel the yacht, examining the power needed to drive the hull versus the resistance of the water on the hull. He's never satisfied with the status quo. He always wants to move forward."

Always open-minded

David notes another key personal quality of Olin's. "He has always been open-minded," he says. "In 1974, just before the start of the Bermuda race, he and I were standing on the dock in Newport looking at all the boats entered in the race. Olin told me you could look at the rigs and tell the S&S designs, with their stout masts and single-spreader rigs. Most of the other boats had multiple spreaders and cleaner-looking rigs in general. Olin knew he was missing the boat, so to speak, on rig design."

David points out that Olin had an eye for beautiful and graceful shapes. "He felt that Mother Nature prefers beautiful shapes, so he stressed beauty in his designs and not just brutal performance."

Olin's love of beauty also extended to automobiles, as previously mentioned. While a student at Webb Institute, David remembers when Olin came to speak at

Dyke Williams

Olin Stephens at the Sparkman & Stephens Designer's Recognition Rendezvous in June 2001.

the school. David was impressed by the white Mercedes Olin was driving. "Years later, when I was working for him," he says, "Olin drove me someplace in his white Porsche. He had a bandage on his hand, and I asked him what had happened. He told me he had cut his hand changing the oil in the Porsche. It struck me as funny that a man of Olin's success and stature would be changing the oil in his car. But it's typical of how down-to-earth he is. Other "graduates" of S&S are Bill Tripp, German Frers, Gary Mull, Bill Langan, and Al Mason. That's not a bad group to be in.

Made famous by his racers, Olin also turned out a number of noted cruising designs. His emphasis has always been on cruisers for the open sea, not necessarily on coastal cruisers. When listening to him, you get the feeling that he thinks the high sea is where all boats belong, or that they at least ought to be designed to take bluewater conditions.

"Cruising boats need to be strong," he says. He didn't have to add that they also need to be fast. Talk to him about cruisers, and the conversation invariably winds its way back to speed, safety, and rating rules for racers.

It's clear Olin doesn't care how an owner intends to use the boat, as long as it's fast, safe, and comfortable." *Brilliant* was designed as a seagoing cruising boat, he says. "She was not designed as a racer even though she won her share." Today, *Brilliant*, built in 1931 at the Nevins Yard in New York where a young Olin sketched so many boats, is a training vessel for Mystic Seaport. Despite her cruising roots, she continues to win races to this day.

Another fast cruiser

Finisterre is another cruising design with race credentials. Olin designed her as a centerboard cruising boat, but she still won the Newport-to-Bermuda Race three times. The boat popularized centerboard designs despite Olin's reservations about them. "Centerboarders have their place," he says, "but in a rough sea those boats will not necessarily right themselves, and that's not safe. Winged keels are a good design alternative today. The wings can be made heavier to supply ballast down low where it does the most good."

As both Bill Shaw and David Pedrick point out, most boats built until fairly recently were dual-purpose, meant to race and cruise. "In those days not so long ago," says David, "boats were true racer/cruisers. There were many more overnight races a few years ago, and many people actually went offshore in their boats. The boats had to have cruising amenities. For example, when *Tenacious* used to race, the crew included a full-time cook. Not so today. Now racing boats are stripped out with no compromises for cruising."

Today, Olin is critical of current designers of cruising boats who borrow too much from the racing side. "Too many cruising-boat designers today copy racing designs even though the racer may have been built to meet a particular rule," he says. The result usually is something else he can't tolerate: a boat that may be fast but is uncomfortable at sea and probably unsafe to boot. In Olin's design scheme, comfort is an aspect of safety, and safety is always at the forefront of his mind.

"The Cruising Club of America (CCA) sponsored the Bermuda race for years, but their designs were mainly cruising boats," he states. "It's still a good rule. It

From left:* Dorade *in the Bermuda Race, 1932;* Kalmia *in the Gibson Island Race, 1929;* Ranger *in 1937.

didn't give every boat a chance, but it did result in a good boat. *Running Tide* is one of my best designs. It was fairly light for the time, too. The CCA gives the best all-round boats I think. Today there's so much emphasis on the space factor. There's almost too much room below for people to bounce around in at sea. The new materials are light and make for a fast boat, which the new rules encourage. But ultimately the designer has to do what the owners and sponsors want. The safety factor isn't there today, in my opinion. For example, my rigs were heavier than they needed to be. You don't find that much anymore."

Beginning in fiberglass

S&S collaborated with many production builders down through the years and was involved in the very beginning of the fiberglass boat era. In 1957 S&S designed the New Horizon sloop, one of the first commercially successful fiberglass boats. When asked about Ray Greene, the man often thought of as the father of fiberglass boats, Olin says, "Yes, I remember Ray Greene and that boat. It was an unfortunate-looking boat, but it did pave the way for the new material."

It was the Tartan 27, another S&S design in 1960, that overshadowed the New Horizon (at least in Ray Greene's eyes). But it led to a long association between S&S and the company that was to become Tartan Marine. "We had a long, very happy relationship with Charlie Britton at Tartan," says Olin. "We shared many mutual ideas about good boats. He also built solid boats, and that was important to us. Swan is another outfit we had a long association with, starting in the late 1960s."

Many production builders came to S&S for at least some of their designs. In addition to Tartan and Swan, the list includes Grampian, O'Day, Seafarer, Hinckley, Columbia, Dufour, and Siltala (Nauticat). S&S also designed the Rainbow 24 for the Annapolis Sailing School.

"My brother Rod was terrific at inspection, at keeping the builders in line," says Olin. "That was important to us — to maintain quality if our name was going to be associated with a boat."

Olin often has lamented his lack of formal design training despite his long list of successful boats. When asked how formal training could have improved his work, he says, "My designs probably wouldn't have been much different if I had continued with my formal education. Starling Burgess had a few formulas he used, but his approach wasn't that different from mine even though he had more formal training than I did. But today I have trouble keeping up with all the math people use. I can't always follow their formulas to conclusion. Today it's hydrodynamics, and fluid, and sail dynamics that matter, and not so much naval architecture. That's where it's at today, and you need to understand math to get the most out of it."

Today's designers

Asked about designers he likes today, Olin gives a qualified response. "There are lots of good designers today. Bruce Farr comes to mind, even though I don't much like his designs. Bruce King is one. German Frers is another one; he worked at S&S. I got to know his father in Argentina, and that led to the connection with us."

One is tempted to over-analyze, and certainly to overstate, Olin Stephens' contributions to sailing when the plain fact is that his record speaks for itself. From a pure aesthetic view, one can make a case that perhaps his most noteworthy contribution is his intuitive combination of beauty and performance in boat design unmatched by anyone else.

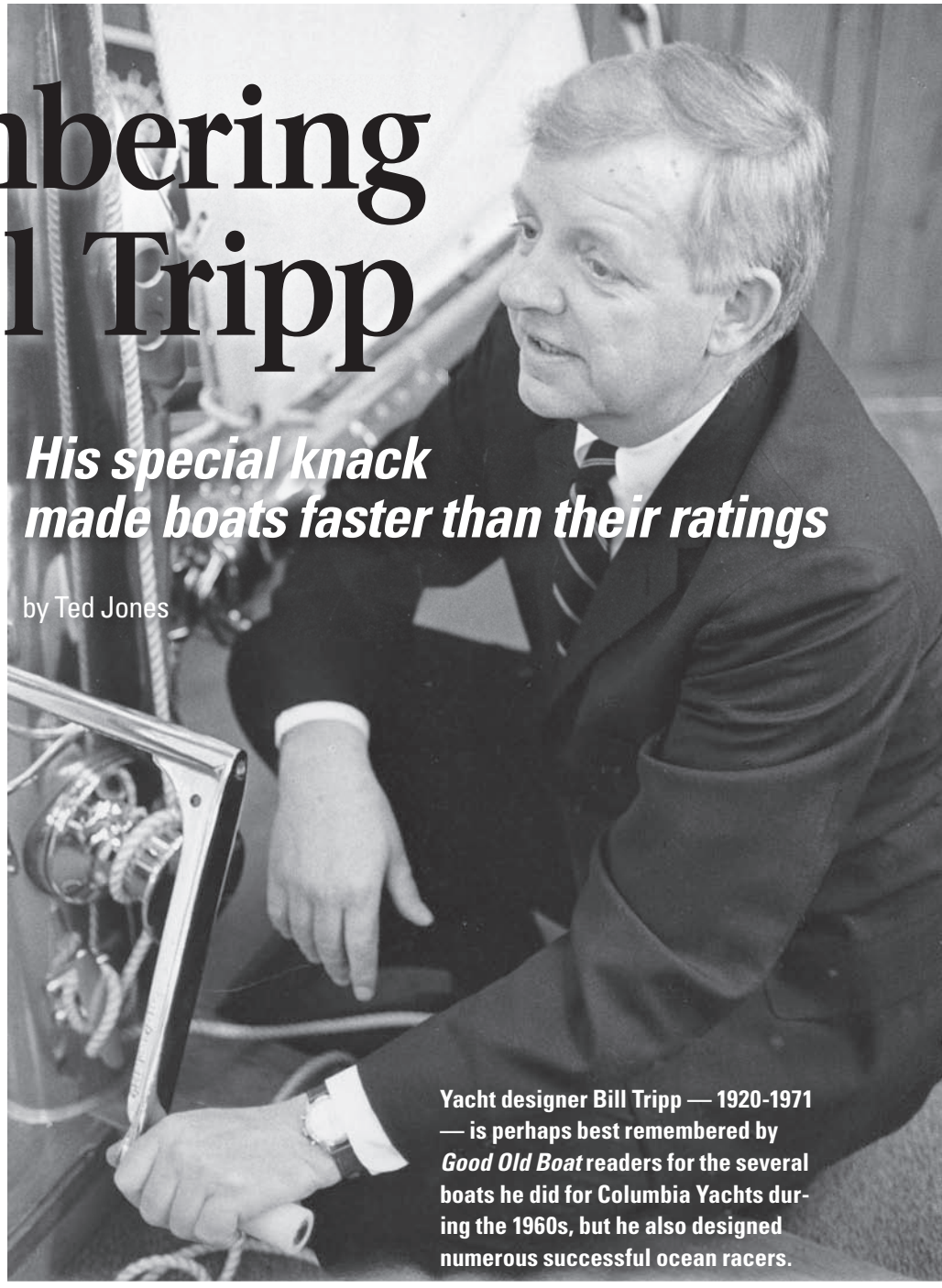
David Pedrick points out a key aspect of Olin's contribution to the science of boat design, an aspect that continues to this day long after Olin stopped putting pencil to paper. "Olin is very generous with his knowledge. He shares what he knows with others because he knows it will push thinking to the next level. That's what he's always reaching for, the next level. He's an amazing man."

When not working at his job for the government or singlehanding his 1989 Pearson 27 in the Annapolis, Md., area, Steve writes for marine publications.

Remembering Bill Tripp

His special knack made boats faster than their ratings

by Ted Jones



Yacht designer Bill Tripp — 1920-1971 — is perhaps best remembered by *Good Old Boat* readers for the several boats he did for Columbia Yachts during the 1960s, but he also designed numerous successful ocean racers.

During the 1960s, William H. Tripp Jr. was one of America's most successful yacht designers, drawing custom ocean racers for a distinguished clientele and smaller boats for production builders like Seafarer and Columbia Yachts. His Bermuda 40 for the Henry R. Hinckley Co. is considered by many to be one of the prettiest boats of the fiberglass era.

Sadly, he died suddenly, in a car crash at just 51 years of age. Beyond his inclusion in Bill Robinson's *The Great American Yacht Designers* (1974) and the more recent collection (2005) by Lucia del Sol Knight and Daniel MacNaughton, *The Encyclopedia of Yacht Designers*, not much has been written about Bill Tripp.

I had the privilege of working with him for a number of years and counted him as a friend as well as a colleague. In 1958, while I was working for the yacht brokerage firm of John R. Lyon Inc. in Greenwich, Connecticut, I spotted an ad in *Yachting* magazine announcing the formation of the design/brokerage firm of Tripp & Campbell, with offices at 10 Rockefeller Plaza in New York City. I knew Bill Campbell but had never met Bill Tripp. I wrote a letter to Bill Campbell, congratulating him on his new venture. I received an immediate reply from Bill Tripp inviting me to visit their office. In very short order I began commuting to New York City to help Bill Campbell sell new and used boats.

Georjabelle and *Touché*

I knew Bill Tripp by reputation, of course. The 43-foot yawl he designed for Jasper H. Kane was skippered by my high-school classmate, Rod Oakes. *Georjabelle* was a lovely red-hulled centerboard yawl. But the boat that really got Bill noticed was *Touché*, a radical flush-decked 47-foot sloop designed for Jack Potter of Oyster Bay, Long Island. *Touché* had proven almost unbeatable in her early races on Long Island Sound. Because of his reputation for designing race-winning sailboats, prospective boatowners had begun beating a path to Bill's door. He also was one of the first yacht designers to make use of the then new boatbuilding material called fiberglass.

Early fiberglass designs

Bill's first fiberglass design was the 32-foot Galaxy for American Boatbuilding in East Greenwich, Rhode Island. But before the Galaxy could be built, a group of offshore sailors approached him to design a 40-foot fiberglass centerboard yawl, to be built by American Boatbuilding and known as the Block Island 40.

Of that first batch of BI 40s, I remember *Swamp Yankee* (#1), built for Van Allen Clark; *Seal* (#2), for Frederick J. Lorenzen; and *Rhubarb* (#3 or #4), for Ben DuPont. There were others, as well: *Scylla* for Sailmaker Charlie Ulmer; *Reindeer* (sloop rigged) for E. Newbold Smith; and *Wahini* for Pat O'Gorman. All did extremely well in the 1958 racing season and several entered the Bermuda Race of that year. *Seal* became infamous for taking a hunk out of the concrete dock at Pearlman & Watlington's in Bermuda without so much as a scratch to her (or so

The 32-foot Vineland sloop, left, was built in Norway and imported to the United States by Tripp & Campbell, but being built of wood, interest never amounted to much as the boat-buying public was turning to the maintenance-free promise of fiberglass. The 47-foot *Touché*, center, designed for Jack Potter, enjoyed an enviable race record on Long Island Sound, garnering attention for Bill Tripp's fast boats. Bill's legacy may well be as master of the centerboard yawl drawn for competition in the CCA rule. His first was *Georjabelle*, right, a 43-footer for Jasper Kane.

the legend goes). I often sailed aboard *Seal* with Fred and Dottie Lorenzen after the 1958 Bermuda Race.

Since fiberglass was a new and untried material, Bill Tripp specified a hull layup fit for a Sherman tank. The first BI 40s were reported to have 2-inch thick fiberglass in parts of the hull. The cost of production and other factors put American Boatbuilding out of business, but not before they returned to the original 32-footer to build several Tripp Galaxys.

The Galaxy was unusual for its time with a flush deck except for a "gun turret" rounded doghouse, wide beam, and wide plumb transom that "just didn't look right" to most traditionalists. It also had a fin keel and spade rudder. I believe she was the first of this configuration — in contemporary boats — predating Bill Lapworth's wonderful Cal 40 by several years. In the right hands, the Galaxy sailed very well.

Tripp & Campbell

When I moved to the seventh floor of 10 Rockefeller Plaza, we had two rooms at a snazzy address but a somewhat less-than-snazzy office. Bill Campbell and I occupied the smaller room. The larger room with the design and correspondence files was occupied by Bill Tripp, Walter Bleumhardt (his design assistant), and Mary Ryan, our secretary.

On the boards when I joined the firm was Sumner A. (Huey) Long's custom aluminum 57-foot *Ondine*, under construction at Jacobsen's Shipyard, Oyster Bay, Long Island; the production fiberglass Tripp 30, being built in Holland for Seafarer Yachts; and a 40-foot fiberglass yawl designed for a group of eight from Port Washington's Knickerbocker Yacht Club, to be built by the Henry R. Hinckley & Company in Maine. We were also about to take delivery of the first of three 32-foot wooden boats built in Norway. In honor of their heritage, we named these the Vineland class.

The Vineland was beamy and light, and the four-bunk/enclosed head/galley aft cabin arrangement was a bit cramped. Prospective buyers complained about the lack of room in the head, on one occasion causing Bill, a tall, muscular man, to demonstrate that it was big enough by entering the head and closing the door. "But could you get your pants down?" the prospect wanted to know.

Ondine

Bill was often asked to sail aboard his designs. He was an excellent helmsman and sail trimmer, and his presence always seemed to make the boat sail faster.

Ondine was launched in the spring of 1959. Bill had made frequent inspection trips and had dealt with a few problems, one of which was the significant expansion and contraction of the aluminum plates as they were welded into the hull, the boat getting alternately longer and shorter in the process, although apparently things ended up where intended.

She was an immediate success and was campaigned in prestigious ocean races all over the world. Her professional captain was Sven Joffs, who seemed to prefer being at sea to being on land. In the first couple of seasons, Sven and a young crew sailed *Ondine* 30,000 miles as she went from the Bermuda Race to the SORC to the Sydney-Hobart Race in Australia and back.

Bill and I sailed the last part of one SORC race aboard *Ondine* with an all-star crew: Bobby Symonette, from Nassau; Dick Bertram of Bertram Yachts fame; English ocean-racer owner Dennis Miller; and Carter Sales from Detroit, along with professionals Joffs and Dick Grosmiller.

In those days, the Lipton Cup Race was a triangular course from the Miami sea buoy to a vessel trying to maintain station by steaming southward into the Gulf Stream. These were pre-GPS days, and many racers were sure the mark boat would speed up just before they got to it, putting them at a disadvantage. From the middle of the Gulf Stream the course headed back toward the shoreline to a sea buoy off Baker's Haulover between Miami and Fort Lauderdale, and finally back to the Miami sea buoy.

Tight reach

The first leg this day was a very tight port-tack reach. We were in the lead soon after the start, and Huey ordered

> **"I think the Javelin is Bill Tripp's best design of that period. It is certainly a very attractive boat and a fast sailer with a very good CCA rating."**

the spinnaker set. Bill argued that it would overpower the boat and that we should stay with the genoa. Huey was the owner, so we attempted to set the chute. It went up almost to the top of the masthead and then filled prematurely. *Ondine* heeled sharply, and Bobby Symonette, who was hauling on the halyard, was thrown to leeward and the halyard promptly peeled off the winch. Wisely, Bobby let go. The spinnaker streamed out to leeward until the bitter end of the halyard stopped in the deck block, then fell into the water to leeward. *Ondine* went from 10 knots to 2 as the spinnaker billowed out in the water, tethered by the halyard at the masthead and sheet and guy from the deck.

The halyard was cut at the deck, but no amount of hauling would bring the sail aboard. Meanwhile, we were caught and passed by our nearest competitors. This was too much for Huey so he ordered the sheet cut to cast the sail loose (it was later picked up by a spectator boat).

"Set another one!" Huey ordered. Again Bill objected, but again the owner prevailed.

This one went up and drew well; we were able to hold off those behind and were no longer losing ground on our rivals ahead.

About 2 miles from the turning mark, this spinnaker split from luff to luff with a loud bang, and we scrambled to get its remnants on deck.

"Set another one!" Huey demanded.

This time Bill prevailed. "Huey, we only have one spinnaker left and only a couple of miles to the mark. We'll need the last chute for the run to the finish."

We rounded the mark second, sailed by the lead boat on the close fetch to Baker's Haulover, rounded that, and set the last spinnaker we had aboard to roll down to the finish. *Ondine* was first to finish and first on corrected time in class and fleet. The next day a marvelous aerial photo appeared in the *Miami Herald* showing *Ondine* towing her spinnaker through the Gulf Stream.

Javelin

When pressed to meet a builder's deadline, Bill would work undisturbed at home. There were distractions in the office at "10 Rock," but there were advantages also. A printing company in the basement handled our printing needs. Messenger service was summoned by a phone call. Bill's full-size drawings were returned with copies within an hour.

The Seafarer 38 Javelin was one for which Bill had difficulty meeting plans deadlines. He had a lot of design work — production boats for Seafarer, Hinckley, Pearson, and others — and custom racing cruisers for individual clients. I think the Javelin is Bill Tripp's best design of that period. It is certainly a very attractive boat and a fast sailer with a very good CCA rating.

The first one to be delivered was *Soufflé* for Talbott and Polly Baker, to be raced by the Baker sons, Nick and Toby. I sailed aboard *Soufflé* with the sons in the season's first race on Long Island Sound — the Edlu Trophy Race from Larchmont around Six Mile Reef buoy and return. Everything was new and unfamiliar, but Nick managed a good downwind start and we set the spinnaker for the long run to Six Mile Reef. We were flying. However, when we rounded the buoy for the return leg on the wind, *Soufflé* laid over on her side and couldn't carry a reasonable amount of sail. Something was

The Columbia 57, left, was the largest boat Bill Tripp designed for Columbia Yachts. *Concerto* took first place in class in the 1969 Transpac Yacht Race. Predecessor to the lovely Hinckley Bermuda 40 was the Block Island 40, both centerboard yawls with long overhangs that immersed and added to sailing length as the boat heeled. *Seal*, center, was hull #2 and sailed in the 1958 Bermuda Race shortly after launching. Bill designed several boats for Sumner (Huey) Long, each called *Ondine*. The first was an aluminum 57-footer, right.

Brian Acworth's Seafarer Yachts of Huntington, Long Island, New York, built several Bill Tripp designs as production models, including the Tripp 30, left. The first Seafarer 38 Javelin, center, proved to be tender. Subsequent hulls had 900 pounds of ballast added in the sump. The 38-foot Invicta, *Burgoo*, right, built by Pearson Yachts, won the 1968 Bermuda Race. The flush deck and gun-turret doghouse were and remain unusual features.

clearly wrong. We made the best of a bad situation by close reaching to the Connecticut shore to smooth water and then close reached in its lee on one tack back to Larchmont. Considering our difficulties, we had a respectable finish somewhere near the top four of our class.

More ballast

After considerable Monday morning head scratching back at the office and lots of work with slide rules, Bill suggested adding 900 pounds of lead in the sump behind the keel. He asked Bob Derecktor to install it before the Block Island Race the following weekend.

The following week we heard from Polly Baker that they were giving the boat back. She didn't want her sons sailing what she considered to be an unsafe boat. There was also an allegation that the hull was too thin, so Bill asked me to cut 4-inch square samples from each side of the hull just above the waterline. He sent these to Underwriter's Laboratory for analysis. The returned samples, in which the resin had been burned off, showed the laminate schedule was exactly as specified and that the resin-to-glass ratio was ideal — better than most contemporary U.S. builders were achieving.

I had the feeling that Nick and Toby wanted to keep the boat, but Polly would not have it. Bill Campbell insisted that they couldn't simply "give it back" but agreed to fix it at company expense and then sell it without charging a commission.

Soufflé was eventually purchased by industrial designer Walter Dorwin Teague, who cruised and raced her happily for many years. She was ultimately driven ashore at Jamestown, Rhode Island, in a storm and was wrecked beyond repair.

The reason for the light ballast was never determined, the builder insisting he had followed the designer's specifications. It had to be a miscalculation of volume by Bill Tripp, an error in making the pattern by the builder, or their use of an alloy with a lower specific gravity than lead. Whatever the reason, all Javelins subsequent to *Soufflé* had 900 pounds or more added to the sump tank aft of the external ballast keel.

Invicta

The Invicta was an unusual 37-foot yawl Bill designed for Pearson Yachts. The Invicta was a departure from other Tripp centerboarders in several ways, being flush-decked with a turret doghouse and a wide keel box below the cabin sole into which the engine was fitted entirely below the sole. The keel was relatively deeper than other Tripp centerboarders, the Invicta drawing 5 feet with the board up as opposed to the Block Island or Bermuda 40's draft of 4 feet board up. Not many Invictas were built, but one became famous for winning the Bermuda Race in 1968. *Burgoo* was the smallest yacht — at 25 feet waterline length — ever to win and the last to do so. Subsequently, the rule was changed to increase the minimum size so *Burgoo* could never compete again.

I always liked the Invicta in its original configuration, which was way ahead of its time. All of its unusual features make it a very capable cruising boat in an economical size. Headroom under the doghouse and on top of the engine is close to 7 feet, which gives the main saloon a very open feeling. I expect later owners have found ways to install a small diesel where the Atomic 4 once lived without having to raise the cabin sole enough to compromise headroom.

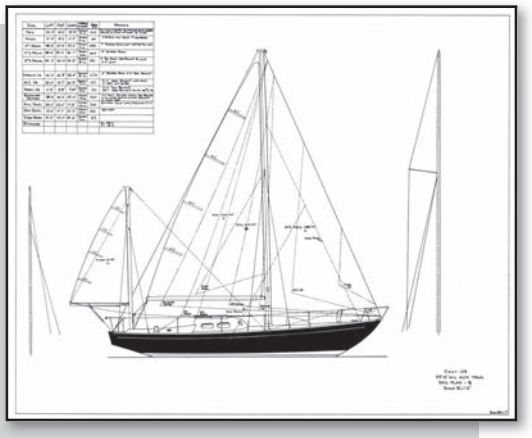
Medalist

Before joining Tripp & Campbell, I had sold Dick Sheehan an Ohlson 35. Dick subsequently became president of U.S. Yachts, a subsidiary of O'Day, and became the Ohlson distributor. He expressed an interest in a fiberglass boat of 33 feet to add to the line and wanted to discuss his ideas with Bill. Dick was adamant that he didn't want a boat like the Vineland, which he disliked. But that's exactly what he got. Bill trusted the basic design of the Vineland and gave the new boat the same underwater shape but with raised freeboard and a flush deck with the "standard" Tripp turret doghouse.

Dick liked the boat (he never knew it was a "warmed over" Vineland), but he insisted that Bill redesign the doghouse. Several tries at making it longer and more streamlined weren't satisfactory. The final version had a pleasing line but didn't look right where it met the deck. Forward of the doghouse, up

Bill Tripp's design drawings

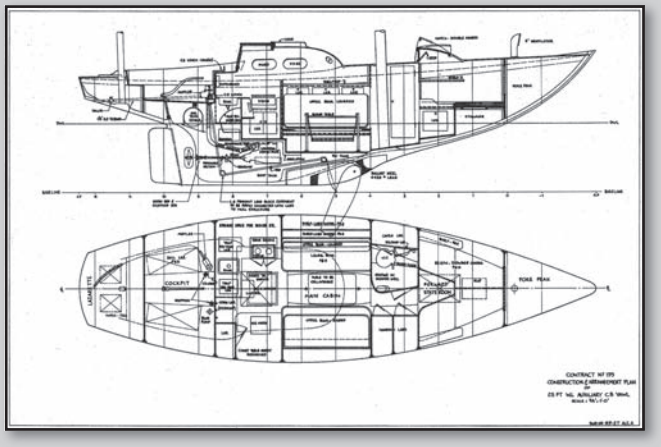
Fond memories of the days before computers



These days, yacht design is carried out on computers. Pencil or pen rarely touch paper. But in the 1960s, when Bill Tripp was designing custom ocean racers and production fiberglass auxiliaries, it was all done on paper, and the calculations were all done with a slide rule. Hewlett-Packard's multifunction calculator was still on the drawing board.

Bill Tripp designed in pencil on large sheets of drafting paper pulled off a roll. The size and scale of the drawing depended upon the size of the boat being drawn, limited in height by the depth of the drawing board. Lines plans were laboriously drawn in pencil as well, but on Mylar vellum to preserve the accuracy of the drawing. Paper is subject to expansion and contraction due to changes in temperature and humidity. Lines were particularly tricky as the sections (body plan), buttocks (profile plan), and waterlines had to agree with the intersections on all drawings.

From the final lines, the designer would produce a table of offsets that described each intersection of sections, buttocks, and waterlines expressed in numbers entered into the table in feet, inches, and eighths of an inch (for example, 3 feet, 11⅝ inches would be expressed 3-11-5). When the builder laid down the lines on the mold loft floor, he would follow the table of offsets, marking each section on the floor, then recreate the lines plan full size using flexible battens to connect the dots. Invariably, small corrections would have to be made, due to scaling from a small drawing to full-size. These corrections would be made using a fair batten. When the builder was finished, he would often have the designer check the lofting to be sure it was as intended. Lofting is still done this way, except that the table of offsets is computer-generated and pre-faired. Some computers produce full-sized sections on Mylar film, obviating the need for lofting altogether.



Metal plate

Changes in a lines plan were made with an eraser and eraser shield, a very thin metal plate with holes of varying sizes and shapes. Bill's finished lines plans (and I'm sure other designer's as well) were covered with light spots and smudges from erasing and correcting the hull shape. It was, clearly, a long and laborious process that wasn't really finished until the boat was laid out on the mold loft floor.

Bill Tripp's lines plans were sacrosanct. Only those who absolutely had to use them got to see them. They were never published.

Once the basic shape of the hull was finalized, the accommodations, machinery, electrics, and plumbing could be fit into the space. Each of these elements required separate, often intricate, drawings. Most designers, Bill Tripp included, had stock drawings for hatches and fittings so these didn't have to be re-drawn for each boat.

All of the plans were drawn in pencil for ease of correction, although designers usually produced sail plans, accommodations inboard profile, and plan views in ink. This was strictly for show, for brochures, and publication. Ink drawings were tedious to produce, each one taking several days. Is there any wonder that Bill Tripp had a strict rule forbidding coffee cups and soda cans from getting anywhere near the drafting table?

Bill's ink drawings were masterpieces of neatness and detail. Everything was labeled by hand, resulting in very distinctive work. To this day, I can recognize Bill's hand in the few drawings that surface from time to time. The drawings one sees in magazine design sections and brochures were made by having the large ink drawings photographed and then printed in a greatly reduced size — typically an 8-inch by 10-inch sheet of glossy photographic printing paper.

Art fight

As design editor of *Popular Boating* magazine, I had many a fight with our art director, who wanted to fatten up lines that were dropping out because of the reduction in size. I argued (successfully) that the designer would rather have the backstays drop out than have them re-drawn by some art director who didn't know a backstay from an Allen wrench. All designers, Bill Tripp especially, get very testy when someone alters their drawings, which are, after all, their artwork.

All of the calculations required of a sailboat design, such as displacement, center of buoyancy, righting moments, and all the ratios — sail area/displacement, displacement/length, prismatic coefficient, to list a few — had to be calculated by slide rule. Today, the computer does it all and corrects everything automatically when one factor is changed. The computer is a fantastic yacht-design tool, and no designer in his right mind would want to revert to the way Bill Tripp and others of his generation had to design sailboats. But computers are impersonal machines, and their output lacks the personal touch of pen to paper that are apparent in Bill Tripp's beautiful design drawings.

The T/L 29, which stood for Tripp/ Lentsch, was not a rewarmed Tripp 30.

A number of early fiberglass boats were built in Europe for U.S. distributors, including the 33-foot Medalist.

by the mast, Bill had drawn port and starboard Dorade boxes. I suggested to Bill that he connect the aft end of the Dorade box with the forward end of the doghouse. We made the extension a deck box for winch handles. It saved the day and U.S. Yachts commissioned Dolf LeComte to build Medalists in Holland.

Tripp 30 and Polaris 26

Seafarer Yachts built the Tripp 30, the first of the Seafarer Tripp designs. It was a very popular boat with classic good looks. It was designed for the light winds of Long Island Sound. We raced Tripp 30 #2, owned by Seafarer's Brian Acworth, several times with success. I sailed the Vineyard Lightship Race with Bill as skipper and with Harry Molitor and Breck Marshall, who later went on to build the Marshall Catboats. It was a rough race for a little boat, but we beat all the other Tripp 30s.

Today, there are several Tripp 30s being maintained and restored by loving owners. Laura Watt, of Oakland, California, has a website, <http://users.California.com/~lawatt/other/mouette.html>, through which she keeps in touch with other Tripp 30 owners. No one can convince Laura that there is a better boat than her *Mouette*, (#15), which she lovingly maintains and sails on San Francisco Bay.

The Polaris was the third Tripp design for Seafarer. It was a nice 26-foot centerboarder with a trunk cabin that had a slight break into a small doghouse and good-looking varnished mahogany trim to separate the cabin sides from the deck, much like its sister Seafarer boats, the Tripp 30 and the 38-foot Javelin.

T/L 29 and Northeast 38

The "T" and "L" in the T/L 29 was for Tripp and Lentsch. In working with Holland's Gerard de Vries Lentsch on the Seafarer Tripp 30, designer and builder developed a rapport that led to collaboration on a new 30-footer. It was not another Tripp 30, as many have thought, but a totally new design with better all-around performance.

The Northeast 38 came about through the association with the builder selected for the Medalist, Dolf LeComte, who also built boats in Holland. The NE 38 was to the Javelin what the T/L 29 was to the Tripp 30: the same size and general configuration, but a totally different boat and, I think, a better one.

Bermuda 40 and Mercer 44

I've saved these two fiberglass Tripp designs for last because they have the greatest longevity of any of Bill's designs. Both are available today from their builders, the Bermuda 40 by The Hinckley Company, and the Mercer 44 by Cape Cod Shipbuilding. These boats are no longer in regular production, but they can be ordered on a semi-custom basis.

> **"I think it is fair to say that the Bermuda 40 was responsible for the high esteem in which Hinckley yachts are held to this day."**

The Bermuda 40 has a cult mystique about it. Its legendary cruising virtues defy logic. Used Bermuda 40s command a very high resale value, as much as five times their original cost. I think it is fair to say that the Bermuda 40 was responsible for the high esteem in which Hinckley yachts are held to this day.

I raced aboard George Moffett's *Guinevere* in the 1962 SORC and aboard Humphrey Simson's *Kittiwake* on many Long Island Sound races. We always finished well, but the Bermuda 40 is a CCA Rule design of the 1960s and does not fare well under later rating rules.

Still, with her quality construction, comfortable arrangement, and shoal draft of only 4 feet with the centerboard up, the Bermuda 40 has to be one of the all-time favorite cruising auxiliaries.

The Mercer 44 was so-named as she was built in Trenton, New Jersey — Mercer County — by Mercer Reinforced Plastics. This design is a flush-decked version of *Georjabelle*, gaining the additional foot of overall length through the higher freeboard. She has a well-proportioned doghouse on the otherwise flush deck.

Despite my lack of experience sailing on this design, I think it is Bill's best. I have known several of her owners, and all had high praise for the design. The additional 4 feet versus the Bermuda 40, plus the flush deck, gives the main cabin enhanced spaciousness and opens up the otherwise traditional layout. It has a head in which even Bill Tripp would have no difficulty disrobing and huge hanging lockers opposite. Mercer 44s do not appear on the used boat market very often because their owners love them.

The tooling was acquired by Cape Cod Shipbuilding after 1962 when Mercer had built six boats. Since then, Cape Cod has built eight more, including *Synia* in 1978 for Charles Struthers who cruised aboard her to Antarctica.

Home to Port Washington

After two years in the cramped quarters on the seventh floor at 10 Rockefeller Plaza, Bill Campbell leased new and larger space on the fifth floor. It had a large drafting room for Bill and his assistant, Alan Gurney, who had replaced Walter Bleumhardt. There were also three private offices and a reception area.

Bill Tripp was never really happy with his partnership with Bill Camp-

bell. He dissolved the partnership and set up his own design firm out of his home in Port Washington. Alan Gurney and I stayed in New York with Bill Campbell, who took on Dick Sheehan as a partner, and we became Campbell/Sheehan. I left when Dick decided I was selling too many Ohlson 35s, leaving him little else to sell. We parted friends, however, and Dick arranged for an interview with Bob Carrick, editor of *Popular Boating* magazine, and I switched careers in 1962.

Bill Tripp, meanwhile, joined forces with George Post, who was very successful selling Tripp designs and brokerage boats. Bill finished the T/L 29 in Port Washington, and went on to design a new and larger 65-foot *Ondine* for Huey Long, and a near sistership, *Blackfin*, for a West Coast owner. A third, slightly larger sistership for James Mullins was under construction when the IOR was born and it proved to be outside the maximum size limits. She was built anyway but never raced.

“The best of these is the Columbia 50, Bill’s first attempt to fit a fin keel/spade rudder combination on a conventional hull.”

First attempt

Bill continued to design production fiberglass auxiliaries, notably for Columbia Yachts. The best of these is the Columbia 50, Bill’s first attempt to fit a fin keel/spade rudder combination on a conventional hull. Being built on the West Coast, the Columbia was most popular there.

Bill designed a pair of 43-footers for Columbia Yachts and their counterpart, Coronado Yachts, and also a 26-footer. These are like no Tripp designs before and, as with so many of his original designs, they took some getting used to.

I last saw Bill Tripp on the St. Francis Yacht Club’s Stag Cruise in 1971. This cruise was billed as an introduction to the International Offshore Rule (the now infamous IOR). This was the first time I’d seen Bill since he left the Tripp & Campbell partnership.

A few months later came the shocking news that Bill had been killed by a drunk driver who lost control of his car on the Connecticut Turnpike, hurtled the divider, and smashed into Bill’s Jaguar. The drunk survived; Bill Tripp did not.

Epilogue

Bill’s heritage remains as champion of the CCA Rule, with a special knack of making slow-appearing boats sail faster than their ratings. Perhaps he was fortunate, after all, to remain apart from the disaster that the IOR became.

Thinking back, I can see many innovations Bill’s fertile imagination introduced. While he did not create the wide beam, shallow draft centerboarder (that credit goes to Olin Stephens with *Finisterre*), he surely refined the type to the extent that he became associated with centerboard racing/cruising boats.

The wide transom, low counter design of his boats’ sterns were quite new in the late 1950s, causing many derisive comments among traditionalists, but I don’t hear anyone laughing about the shape of the Bermuda 40’s stern anymore.

Bill was the first to put portlights in the topsides (*Touché* and *Ondine*) as well as opening ports in cockpit sides to improve air circulation and communication below (*Touché* again). He popularized flush decks on small boats (Galaxy, Medalist, Invicta, Mercer 44), and set high standards in hull and rigging scantlings that have been proven over time. He designed boats to stay together under the most difficult circumstances. I cannot recall one of his designs ever being dismasted or suffering structural damage at sea.

Bill’s son, Billy, was too young at the time of his father’s death to be able to understand what it was that made his father’s boat designs special, yet he has now exceeded his father in this specialized field.

Young Bill has become one of the world’s leading yacht designers, with success and prestige his father could not have imagined. So the name Bill Tripp has a new meaning and commands new respect a half-century after William H. Tripp Jr. (the father) became prominent in the world of offshore racing sailboats.

Other Bill Tripp designs included the Hinckley 48, left, and the US 41, center. The NE 38, right, shared many characteristics with the earlier Seafarer 38 Javelin.

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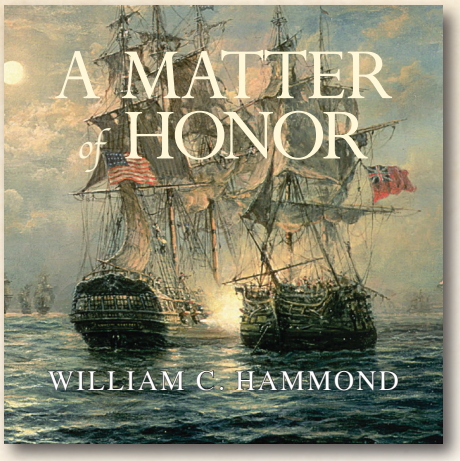


A Matter of Honor

A New Novel by William C. Hammond (Historical Fiction)

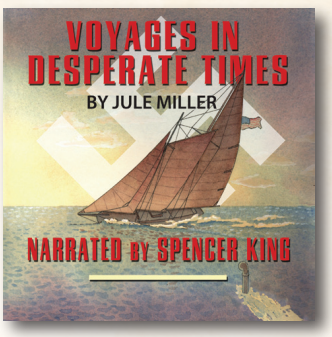
The American Revolution is the daily reality in this story of a Massachusetts teenager who ships out with John Paul Jones. On the high seas, in England and France, on the sugar islands of the Caribbean, as well as on the battlefield of Yorktown, Richard Cutler proves his mettle and wins the love of a beautiful English aristocrat from the very arms of Horatio Nelson himself while also earning the admiration and allegiance of many in the new republic of the United States.

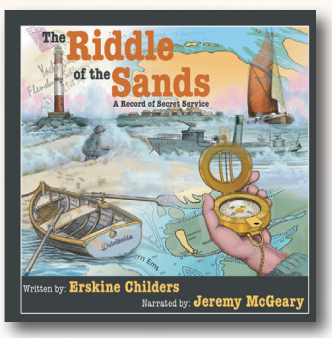
A *Matter of Honor* is the first of the Cutler Family Chronicles, a brilliant new naval historical fiction series by Bill Hammond. This well-researched series will delight fans of Patrick O'Brian books. What sets this historical fiction apart is its focus on the Napoleonic Wars from the perspective of the United States.

Voyages in Desperate Times

by Jule Miller (Historical Fiction)

In the early days of World War II, the U.S. Navy and Coast Guard were woefully short of vessels to fight the battle with German U-boats along the U.S. East Coast, a battle the United States was rapidly losing. The 54-foot schooner yacht, *Tiger Lillie,* was commandeered and became Coast Guard Reserve *Vessel 3114*. The regulations required Ensign Nicholas Worth and his six-man crew to repeatedly take her out into the Atlantic that winter and spring . . . but the regulations did not require them to come back.





The Riddle of the Sands

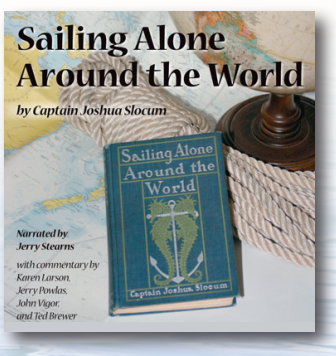
by Erskine Childers (Historical Fiction)

While sailing in the Baltic Sea, two men uncover a secret German plot to invade England. *The Riddle of the Sands* (written in 1903) was heralded as the first true spy novel, written by Childers to encourage the British government to bolster their presence in the North Sea. This story features equally thrilling scenes of espionage and adventures at sea.

Sailing Alone Around the World

by Joshua Slocum: (Historical Non-fiction)

In 1895 at the age of 51, Captain Joshua Slocum began a 3-year, 46,000-mile solo circumnavigation aboard his 37-foot sloop, *Spray*. The first man to ever successfully complete a solo circumnavigation, Slocum recounts the adventures he had along the way in this novel. His eloquent narrative is filled with vivid battles against man and nature and stands as one of the greatest sea stories of all time. Sailors and non-sailors of any age will enjoy this gripping tale.



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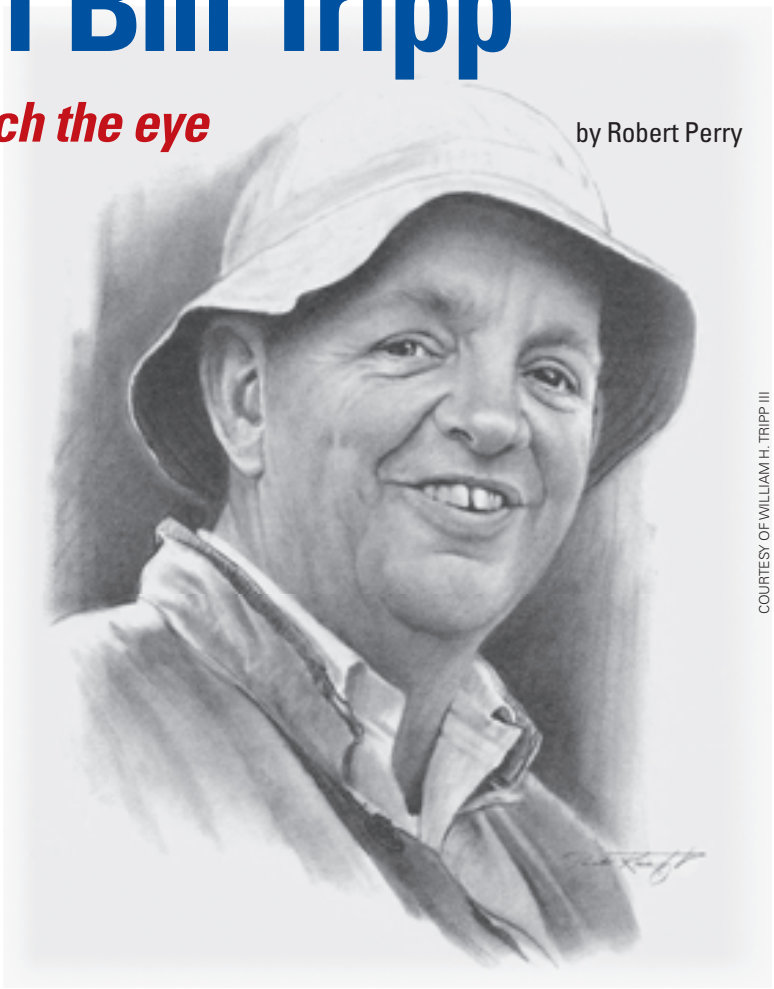
The legacy of Bill Tripp

Good old designs that still catch the eye

by Robert Perry



COURTESY OF WILLIAM H. TRIPP III

When I was a kid in the early 1960s, there were quite a few yachting magazines. Each had its own character but they all had one thing in common, the design section. It was my favorite section. Typically, each magazine would present four new designs a month, each one illustrated by the designer's drawings and accompanied by a cryptic and usually bland description giving the basic information on the boat. I liked Jack Smith's reviews in *Yachting* the best. To me, at 15, these design sections were gold mines. While I didn't have the money to subscribe, I became an expert at collecting cast-off piles of magazines, usually while they were being dropped off at the yacht club. My dad told me once that he was concerned about the floor under my bookcase sagging under the weight of all the magazines I had collected. It was a magnificent collection. I had *Yachting* magazines back into the 1940s. I had one from the month I was born, June 1946.

The dominant American designers of raceboats in the day were Sparkman & Stephens, Rhodes, Luders, Kettenburg, Lapworth, Seaborn, Morgan, Alberg, K. Aage Neilsen, and Bill Tripp. I cut out all the designs I liked and filed them in a cardboard box. I wrote letters to Olin Stephens, Phil Rhodes, and Bill Tripp. I got a short but nice letter back from Olin Stephens, a two-page handwritten letter from Phil Rhodes, but nothing from Bill Tripp. Ironically, Tripp vied with Rhodes to be my favorite designer.

Tripp's boats had a very distinctive look, with proud sweeping spoon bows, bold sheer springs, long concave counters terminating in almost vertical transoms, and sexy and svelte cabin trunks. You would never mistake a Tripp design for an S&S design. They just seemed to my young eye to have a strength and boldness, kind of an "in your face" quality. Plus, his boats were consistent race winners. Today, when you hear the name Bill Tripp, it is often his son, William H. Tripp III, who is being referred to, but in our world of good old boats we need to spend some time focusing on the work of William H. Tripp Jr.

Bill Tripp was a self-taught designer who came up through the ranks working for other designers, including S&S and Phil Rhodes. Unfortunately, in 1971, at the height of his career, William H. Tripp Jr. was killed in a car accident when his Jaguar was hit by a drunk driver.

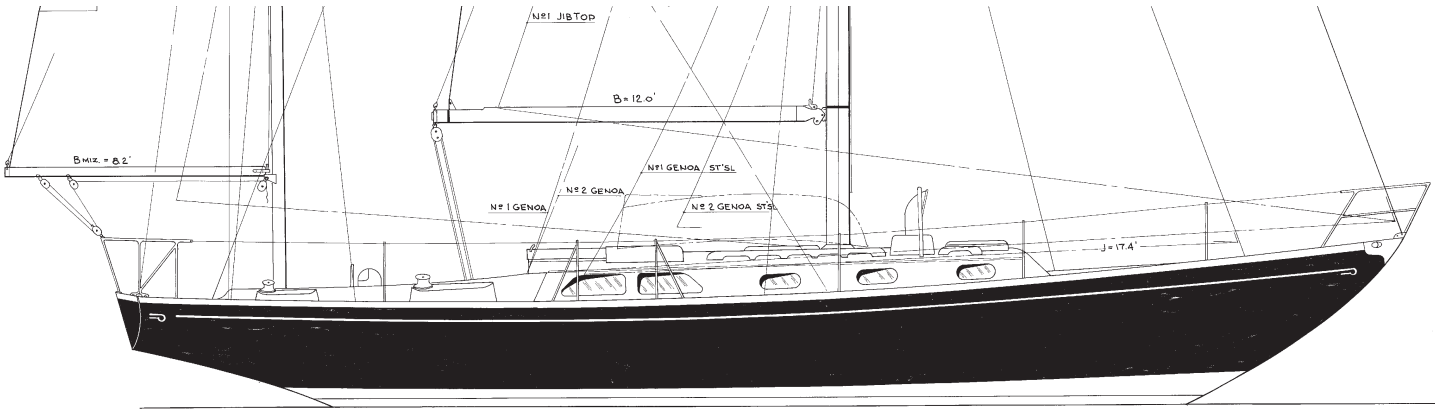
Early designs

Since I never met Bill Tripp, I am writing this from a distant perspective. I wish I had personal vignettes of the man and his life but I don't. Bill Tripp's output was very impressive, but I've tried to pull together the parts of his work that are relevant to *Good Old Boat*.

Probably the most noteworthy of all of Tripp's designs is the Block Island 40, designed in 1958. After several successful custom racers, including the spectacular *Touché*, his adventures in production boat design began with the Block Island 40. The next year, he designed the Bermuda 40, the first fiberglass boat built by the Hinckley Company.

The Bermuda 40 was a development of the Block Island 40 design, and it is very evident when you look at these two designs that they were designed to the CCA rule. They are centerboarders. The CCA favored centerboard boats and Tripp did many of them. The DWL is very short and the bow is quite full to take advantage of immersed volume when the boat heels. Interestingly, it's the stern where real advantage can be taken of overhang and, although much narrower than those on today's performance boats, Tripp's sterns were wider than the accepted style of the day. In fact, Tripp's hulls in general were considered "radical."

While you can argue about the effectiveness of the CCA-induced overhangs, there is to my eye no argument about the beauty of these boats. If you see a well-kept Bermuda 40 today, that will be immediately evident. Take, for instance, the bow profile, and this is consistent with most of Tripp's designs. They are not simple long spoon bows. There is a subtle flattening of the bow profile just above the DWL where the CCA measurement would be taken for



length, i.e., 4 percent of DWL above the DWL. Above that, there is a slight swelling to the profile to try to capture back volume lost at the measurement point.

The end result is a complex profile to the bow. I know this because I had a client who asked me to draw him a Tripp-style new boat. I agonized over that bow profile. In the end, I never got it correct, but I came close.

Their keels were long and fat and perfect places to get the lead down low. The centerboards themselves were of high-aspect-ratio shape and Tripp was one of the first designers I know of to start working with foil shapes in his appendages. But below that big fat keel, the poor centerboard is operating in a lot of disturbed water.

A master draftsman

I must say a word about Tripp's drawings. They were, of course, all hand-drawn. Computer-aided drafting was off in the future when Tripp was designing. To be able to sell his ideas, the successful designer had to be an expert draftsman. You could have great conceptual design ideas, but if your drawings looked like the dog's breakfast the second time around, it was hard to get anyone to take your work seriously. So Tripp came out of that tradition of great designer/draftsmen who could bring their designs to life on a sheet of vellum with pencil, splines and weights, a plethora of ship's curves, and a drafting pen. Tripp liked to show his hulls black, and that meant taking a drafting pen and painstakingly inking in the blackened hull line by tedious line. I have done it, too, but today I just hit the "hatch" button, choose the "solid" pattern then stand back and just hope the computer doesn't crash.

Tripp's drawings have a lace-like quality. The detail and control of line "weight" is exquisite. I marvel at the beauty of Tripp's hull-lines drawings (he guarded them like a mother lion — they were never published). I did note, when researching this article, that very often Tripp did not draw the "body plan" or sections on the same sheet of vellum that he used for the profile, plan, and diagonals. It may be that he found it more convenient, in that demanding exercise of transferring a multitude of points while he faired the hull lines, to expedite the process by having the body plan on a separate sheet. It's an unusual way of doing it. The hull lines for *Ondine* and the Columbia 26 Mk II show the body plan in its normal position, superimposed on station 5 of the profile.

As a kid, I would write to boatbuilders something like, "Please send me all your brochures." It usually worked. I amassed brochures. My very favorite brochure and boat was the Le Comte Medalist 33 designed by Tripp and built in Holland. It was a stocky little CCA design with relatively high freeboard, soon to become a Tripp trademark, and a sporty little bubble of a cabin trunk. Some call this Tripp cabin trunk a "gun turret" cabin trunk. This, too, would become an earmark of Tripp's designs when he later went to work on the Columbia line. I just thought this little Le Comte 33-footer was the sexiest thing afloat. I have the hull lines in front of me sans body plan. The keel is a

ANDY GOLDBERG

William H. Tripp Jr., on facing page, put his indelible stamp on yacht design with boats like the Bermuda 40, which carries his hallmark spoon bow and sweeping sheer, at top, and vertical barn-door rudder, at right.

modified-full type with the leading edge of the keel pretty well defined from the forefoot. The rudder is on the trailing edge of the keel on a highly raked rudder stock. On many of his early designs, Tripp used barn-door-style rectangular rudders mounted on vertical stocks. That can't be a fast shape but it sure looks right and totally Trippy.

When I talk about Tripp designs with my cronies, the one boat that someone always brings up is the Mercer 44, arguably one of the best-looking stock boats ever built. I have two drawings of it here, but one shows an elongated cabin trunk that spoils the look. The other drawing, an inboard profile and layout, shows the truncated bubble-style cabin trunk and the long extended flush deck forward. As far as I know, this was the only deck they used. This remains for me the "Tripp look." You can still find Mercer 44s cruising and racing today. They are a marvel of balanced proportions and look as good today as they did in 1959. They have that distinct straight rectangular barn-door rudder on the vertical post.

The *Ondines*

Tripp's first *Ondine* was a 57-foot aluminum yawl. I don't have any drawings of this boat. Many years ago, my cat mistook my precious collection of design-section cutouts in the cardboard box for its own cat box and there was no saving that material. Trust me, though, the first *Ondine* was a beautiful boat with that signature little bubble cabin trunk and long flush deck forward. This boat won everything it entered. It was followed by a 73-foot *Ondine* designed to the max LOA allowed by the CCA rule.

I know this boat. I redesigned the outboard rudder that was fitted after they discovered they could not steer the boat downwind in a blow with the original rudder. I redesigned the interior layout and I did some racing on this boat. It is now called *Atalanta* and lives in Seattle.

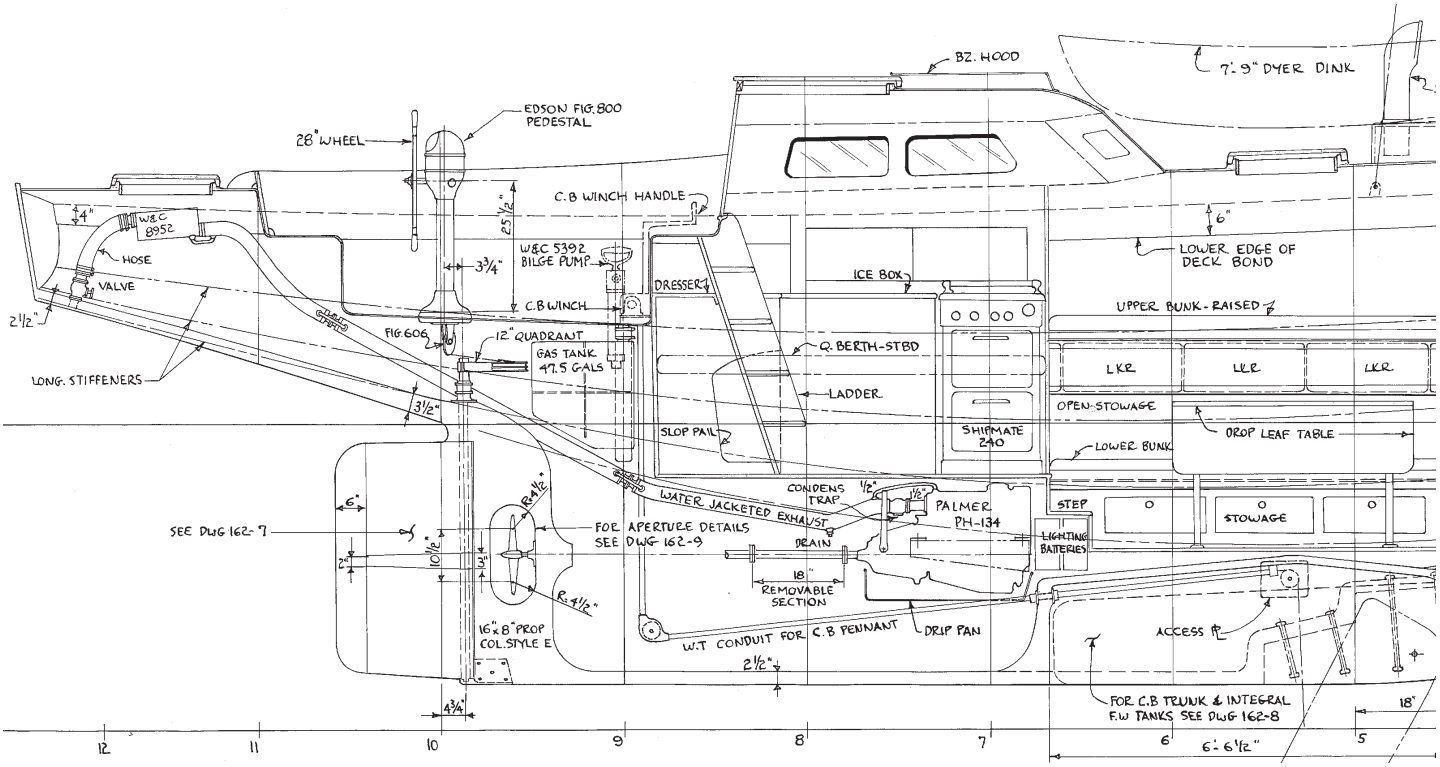
Atalanta is a brute of a boat, weighing 80,000 pounds with 40,000 pounds of ballast and "as stiff as a church." Its ends are relatively short with almost no overhang aft and it has a high-deadrise midsection similar to the 12-Meters of the day. Not all designers had yet bought into the concept of the fin keel and spade or skeg-hung rudder. When he designed *Atalanta*, Tripp was only halfway there. *Atalanta* had a very short-chord keel, much like any fin-keel boat, but the rudder was attached to the trailing edge. This put the rudder way too far forward. It might work upwind but off the wind it was hopeless. So *Ondine*/*Atalanta* was fitted with a transom-mounted outboard "flip-up" (no, I am not kidding) rudder like you would see on a 23-foot trailerable boat. It was this rudder that I redesigned, after it had given many years of service. The original forward rudder, which looked far more like a keel trim tab than a rudder, was finally welded shut to avoid the IOR's movable-appendage penalty.

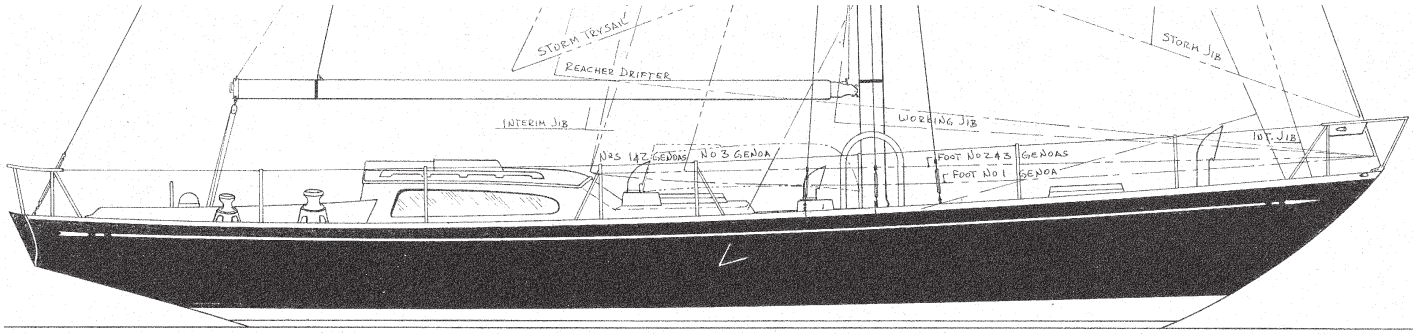
There is no ride to weather in a breeze quite like *Atalanta*'s. This *Ondine* had a sistership, *Blackfin*. They represent the last of the CCA maxi superboats. I'm sure glad I got to sail on one.

Race winners and rules

Another high-school sweetheart of mine was *Burgoo*, the Tripp-designed Pearson 37-footer that won the Bermuda race in 1964. At that time it was the smallest fiberglass boat to ever win the race. Of course, it had all the Tripp trademark design features and it was a very sexy-looking little boat. In fact, and I could be wrong, this may be the first Tripp design to have the "gun turret" cabin trunk.

In the same time period as this design emerged, you can see Tripp turning out designs with high freeboard. High freeboard allows you to get headroom under the flush deck. But freeboard is slow. It's windage. Nonetheless, it suited Tripp's eye and he made it work.





But the 1960s brought rule turmoil. Europeans raced under the RORC rule that produced its own family of quirky rule-induced features. It measured sailing length by a series of girth measurements in the ends and produced pointy-ended boats that were in stark contrast to the full-ended boats the 4-percent-of-DWL CCA length measurement produced. It was pretty much impossible for the two fleets to combine for a race under one of those rules. That's where the IOR (International Offshore Rule) comes along. Championed by a small group of international racers and designers like Dick Carter, a rule was devised to take advantage of the best features of the CCA and the RORC rules. In short, they took the basic hull-measurement ideas from the RORC with its girths and combined that with the CCA's method of handicapping rig dimensions. Tripp fought hard against the IOR. He had the CCA down and I don't think at the pinnacle of his career he wanted to have to adapt to a new game. Although Tripp's work bridges the two rules, he never really got into the nuances of the IOR, and the work he did for Columbia in California is proof.

The Columbia collection

Tripp started designing for Columbia in the mid 1960s. His designs for Columbia include the Columbia 26 MkII, Columbia 34, Columbia 39, Columbia 43, Columbia 45, Columbia 50, and the Columbia 57. Excluding the Columbia 45, which was a rather ungainly looking center-cockpit cruising boat, the rest of that design series are vintage Tripp, but with fin keels and spade rudders. Columbia and Coronado both built Tripp raised-saloon and long-cabin-trunk cruising boats and I have never believed Bill Tripp drew those decks. They just stand out as un-Tripp-like.

The two most successful of the Columbia line were the little 26 and the 50. Both were race winners and they also sold well — 948 Columbia 26s and 60 Columbia 50s were built. The 26 was a plump little rocket and did exceptionally well in West Coast racing fleets. It looked exactly like a Tripp boat with flush deck forward and little bubble house. At the time it was introduced, it was the sexiest little racing boat available. The Columbia 50 was a big elegant-looking boat with the same bubble house and long flush deck. It was a very good-looking boat and it was fast. Seattle's racing scene was dominated for years by a Columbia 50 called *Six Pack* while the smallest class was dominated by a Columbia 26 called *Miller's High Life*. But Tripp never went in for the distortions required to make the IOR rule work in your favor. To the end, his boats were pretty full in the ends and some, like the Columbia 34, were very full in the ends. The Columbia 50 stands out to me as being a more moderate approach to fullness in the ends. Maybe Bill was trying to warm up to the IOR.

It's hard not to wonder what would have happened if Tripp had survived that crash. What would his boats have looked like as the IOR took over and designers quickly learned how to play that game of distorting the ends of the boat to squeeze the girths together? It was a fun game to play, but those shapes only made sense in the IOR context. We will never know. Still, Bill Tripp left us a wonderful collection of beautiful designs that make some of the very best good old boats.

Robert Perry is a contributing editor with Good Old Boat. *A highly regarded yacht designer himself, he has a deep respect for the work of many of his predecessors and contemporaries in the field.*

COURTESY OF JUSTINTHOMPSON.BOATBROCHURE.COM

Bill Tripp's fine draftsmanship is evident in this small sample reproduced from a (very large) drawing he made for the Mercer 44, facing page. His "gun turret" house evolved into the "bubble" cabins on the Columbia 50, at top, and the Columbia 26 Mk II, at right.

The world is their kingdom

Cruising royalty Larry and Lin Pardey continue their adventures — and encourage you to have your own

by Cindy Christian Rogers

Larry and Lin Pardey aboard their beloved *Taleisin*, at left facing page. A rare shot of *Taleisin* (foreground) and *Seraffyn* (astern) sailing together in 1999; *Seraffyn* is now owned by Wayne and Norma Tillett.

STARK JETTY

Meeting Larry and Lin Pardey can be a bit intimidating for a weekend-and-vacation sailor, awed as you are by the accomplishments of this much-fêted cruising couple. After sailing for more than 35 years and to 72 countries, after describing their experiences in 10 books and five videos, after doing it all in boats no larger than 30 feet with no engines — the Pardeys are arguably the reigning king and queen of cruising sailors. But then you meet them … and these venerable cruisers prove to be genuine and generous souls who talk unassumingly about their adventures — and passionately about how you can have some of your own.

Their story remains fresh and inspirational, a tribute to their delight in sharing it. You feel that no matter how many times they have described their exploits, they now are conveying them to *you*, even if you never intend to set sail for Gibraltar or Bora Bora. They speak swiftly and spiritedly, interlacing sentences in a rhythm born of a long camaraderie: it's not so much that they complete each other's thoughts as that they represent two variations of a single voice. When Lin argues, for example, that "the perfect sailboat is the size any single member of the crew can handle alone," Larry chimes right in: "A 400-square-foot main is probably the largest that any person alone can hoist." Lin may lead off most conversations, but Larry is hardly reticent, and they tell their tales with an almost tangible energy. You can just imagine them on a boat, undertaking tasks with the same symbiotic zeal.

They remain so enthusiastic about the cruising lifestyle that it's hard to believe they've reached their 60s, but a quick check of the math confirms it. They prepared for their first cruise as 20-somethings back in the mid-1960s; in 1968 they married the same day they launched their first self-built wooden cutter, the 24-foot *Seraffyn* (see "Crowning achievements" on Page 48). Since then, the Pardeys have each sailed more than 170,000 miles, circumnavigating the globe twice, once each way, in *Seraffyn* or *Taleisin*, the 29-footer they built over a several-year period and christened in 1983. They have been honored worldwide with awards, featured in newspapers and boating and general-interest magazines, and invited to speak at more than 300 seminars in seven countries. Perhaps their greatest sailing achievement came in 2002, when they rounded Cape Horn against the prevailing winds, for which they received the Ocean Cruising Club Award of Merit.

Other sailors have covered as many miles, charted ambitious itineraries, or achieved feats as impressive, though the number is few. What sets the Pardeys apart is their approach, summarized in their mantra: "Go simple, go small, go now!" They are champions of the concept: they leveraged their original meager cruising kitty to spend a year in Mexico, then set off for the Panama Canal, earning additional funds along the way. They have repeated the process over and over ever since, financing the next leg of their adventures with "freedom chips" from repairing or delivering boats — and, of course, by detailing their experiences and boatbuilding expertise in print. A letter to a magazine editor launched a successful writing career, which decades later has culminated in their own imprint — Larry says they are the "only floating publishers in the world." Their books have intrigued more than a quarter-million readers, sailors and armchair adventurers alike (see "For further reading and viewing" on Page 51).

> **"What sets the Pardeys apart is their approach, summarized in their mantra: 'Go simple, go small, go now!'"**

Anachronisms or role models?

That Lin and Larry Pardey have made both a life and a livelihood from cruising has enhanced their mystique. So has their insistence — even as the size of yachts has trended upward — that smaller boats are a better choice for extended cruising because

Crowning achievements

May 1965
Begin three-week whirlwind courtship

October 31, 1968
Marry and launch *Seraffyn*

March 1969
Begin first circumnavigation (east-about)

May 1976
Publish *Cruising in Seraffyn*

August 1975
Tour Europe by motorcycle

October 31, 1983
Launch *Taleisin*

1960s | 1970s | 1980s

February 1972
Lin publishes first magazine article

July 1977
Dolphin Book Club names *Cruising in Seraffyn* the best-selling nautical title of the year

August 1980
Complete first circumnavigation

October 1984
Begin second circumnavigation (west-about)

they are easier to handle, far cheaper to maintain, and less likely to break down. Smaller, simpler boats may even be safer, they argue, and they advise cruisers to carry less, rather than more, gear. In this age of technological wizardry, Lin and Larry's list of onboard necessities might strike many sailors as minimalistic, particularly since it contains few electronics (see "Cruising necessities" below). *Taleisin* does not carry a GPS, radar, or weatherfax; there's not even a depth sounder, though an EPIRB recently came aboard. Such convictions make the Pardeys role models to some fellow sailors, anachronisms to others.

But whether you accept their counsel or consider it more provocative than practical, you can't deny that the approach works for them. It is a philosophy emboldened by vast and hard-won experience — and inextricably linked to their quest for a simple lifestyle, a view that can seem especially radical in the consumer-driven United States, as when Larry, for example, refers to credit cards as "chains" or Lin says that "Americans have a gene that costs them money."

According to Larry, "When we first started building *Seraffyn* … living with her while we prepared to go cruising … it was almost Steinbeckian. Now cruising is seen as a lifestyle market. And the market makes it harder to go cruising." Larry suspects that too many would-be cruisers don't set sail because they don't have the "right" boat, the "right" amount of money, or the "right" complement of equipment. "We want to break down the barriers," he explains. "We want people to enhance their safety onboard through building their skills rather than depending on expensive gadgets. We think it's better to use the wind and your brain and hands instead of a diesel and checkbook."

Yet even as the Pardeys espouse their views, they refuse to turn the "Go simple, go small, go now" proclamation into an edict. "Our mission is simply to get you to stop and think," Lin explains. "We may advise you to buy a boat five feet smaller than you'd been fantasizing about or equipped with a head nearer the companionway, but if you already own a 40-footer with the head by the V-berth, we won't discourage you from cruising in it." It's a stance that can surprise you, given their reputation, until you realize what the Pardeys want most is to inspire you to go cruising … however you decide to define it.

An amazingly safe world

While many Americans have been reluctant to travel in the wake of 9/11, the Pardeys believe that cruising remains a prudent option. "It's an amazingly safe world if you go out into it with an open heart and a bit of brain," Lin says, noting that not all geographic areas have been touched by turmoil or terrorism. Her perspective — as a long-time world traveler and dual national (a citizen of the United States and of New Zealand; Larry is Canadian and Kiwi) — is that the significant majority of serious misunderstandings occur at the governmental level, not among nations' citizenries.

"Most natives welcome Americans because they welcome anyone interested in their country," Lin says. "It's Americans who have the tendency to nationalize. People abroad are curious about U.S. cruisers, sure, but to most of them, the flag you fly coming into the anchorage is at least 35th on the list of what makes you who you are."

She adds, "We find that cruisers are judged by their individuality, not their nationality. People accept you for how you accept yourself." One of her favorite tips to long-range cruisers is to carry a photo album containing family snapshots and pictures of

Cruising necessities

Here's what the Pardeys consider as first and foremost requirements for safe cruising, categorizing all other items as conveniences or luxuries. Not that they object to creature comforts — they do, after all, use the bilge as a wine cellar.

- Sailing skills
- Navigation skills
- Boat with a strong, reliable hull
- Mast and sails
- Rudder
- Drinking water
- Rice and beans
- Sextant and timepiece
- Multiband receiver
- A small, reliable engine, unless you sail as sport

August 1986
Buy Mickey Mouse Marine on island in Hauraki Gulf, New Zealand, to serve as home base

April 1993
Tour Kalahari Desert in Africa for seven months

February 1997
Start own book imprint

April 2000
Inducted into *Cruising World* Hall of Fame

April 2002
Round Cape Horn against prevailing winds (east to west)

Spring 2005
Return to *Taleisin* and cruise British Columbian waters

1990s

2000s

January 1990
Voted cruising sailors to contribute most to the sport of sailing by readers of *Sail* magazine

January 1996
Larry receives award from Royal Institute of Navigation for voyaging using traditional methods of navigation

Lin receives Ocean Cruising Club (OCC) Award for contributions to seamanship education

April 1998
Receive Geoff Pac Memorial Award for encouraging ocean cruising in small yachts

December 2002
Receive OCC Award of Merit for west-about rounding of Cape Horn

August 2003
Complete second circumnavigation

November 2004
Receive Seven Seas Cruising Association Service Award

December 2004
Begin renovating *Thelma*, an 1895 37-foot racing yacht, for competition in New Zealand waters

their hometowns. "When you show it around," she says, "you're more likely to become a real person to the locals." And she recommends spending time with the people who live where you visit, rather than playing tourist or hanging out exclusively in the marina with fellow cruisers.

It also helps to try communicating with the residents in their own language. "Traditionally, though, Americans are one-language folks and are unprepared to interact with speakers of other languages," she notes, "but it's not as vital to know a second language as much as it is to *try* to communicate. At least try some kind of sign language. Or resort to show-and-tell."

Lin adds that they've encountered few problems with officials and had trouble entering only one country. Arriving in Brazilian waters, they learned they should have obtained a visa beforehand; most countries permit you to get a visa after you arrive.

Having said all that, Lin adds that cruisers nevertheless should be cautious. She and Larry avoid known problem areas where piracy and drug trafficking are commonplace. And while they advise against carrying handguns, partly because of difficulties clearing customs and partly because they see guns more as hazards than helpers, they do carry Mace and would readily deploy, if need be, a standard onboard piece of safety gear: "A flare gun is a nasty weapon," Lin says, "and it looks like a gun if you hold it right."

One way, Lin observes, for concerned Americans to cruise more comfortably and securely, yet still venture far afield, is to study the routes of Eric and Susan Hiscock. This famed British couple made several circumnavigations from the 1950s through the 1970s, favoring stays among English-speaking cultures. The Hiscocks are symbols of an era of cruising that to many observers represents a safer time, a calmer world climate. Indeed, it is tempting to consider the period between World War II and the advent of production fiberglass boats as the golden age of cruising, a time when the likes of John Guzzwell, one of Larry's heroes, would take off in small boats like the 20-foot *Trekka*. Larry, however, points out, "Those people didn't think of cruising as a lifestyle. They thought of it as an adventure. They didn't expect the comforts and securities of home while exploring the world." As for Lin, she says adamantly, "The golden age of cruising is when *you* go."

Go for your own reasons

"The big dream is to go to exotic locales," Lin acknowledges, but she and Larry wouldn't dream of suggesting you must cross an ocean to have a meaningful cruising experience. Instead, they fret that too many cruisers set themselves up to fail. First-timers, in particular, announce to friends and families that they're "sailing into the sunset," she says. "Many of these cruisers will discover that they don't enjoy cruising as much as they thought they would — or they'll miss their shore lives and families." Then, "when they come home early," Larry adds, "they will have failed in everyone's eyes."

"We know of one couple who spent a year sailing to the South Pacific and had a lovely time," says Lin. "But then they'd had enough and sold the boat. 'Why did you fail?' they were asked. 'You planned to sail around the world.' But they hadn't failed. They had had a successful cruising adventure. It just was different from the one they'd projected."

JILL DINGLE

The Pardeys make it a point not to tell anyone what they're planning next, not even when they made plans to round Cape Horn the "wrong" way. They gave themselves permission to opt out, and if they had, Lin says, "no one would have been the wiser. We would have had a great sail to Argentina and a fresh batch of stories to show for it."

Their best advice: go cruising for six months, rather than announce to friends and family that you're sailing around the world. Choose a cruising ground nearer your home — the San Juan Islands, the Baja Peninsula, the Great Lakes, Down East, Chesapeake Bay, the Intracoastal Waterway, perhaps the Bahamas — especially if you're concerned by the current world political climate.

Never a dull moment under way: Lin steers as *Taleisin* sneaks through the wind shadow of Pico in the Azores, at left. Larry uses only traditional navigation methods, at right facing page.

"One of our most enjoyable cruises was right along the coast of Maine," Lin says, noting that it's possible to enjoy unique cultural experiences within U.S. waters. "We met a local who invited us to Isle au Haut for a church service. It turned out the congregation met only once a month, in a 200-year-old church the community had just finished restoring, with a minister who traveled from island to island much like the ministers on horseback during pioneer days. The whole community came and cooked up a lobster feast afterward."

What's important, the Pardeys say, is to choose your own tack. But, as Larry warns, "life is a series of decisions even when you don't make them," so you may find that your indecision to leave the dock is a signal to enjoy sailing some other way. He estimates that as few as five percent of cruisers pursue the activity for the sheer love of sailing itself, reminding you that chartering, trailering, racing, and daysailing offer sailing pleasures too.

In fact, the Pardeys are joining the ranks of racing sailors: last winter, while spending the season at their home base on Kawau Island, 30 miles north of Auckland, New Zealand, they launched yet another adventure in their sailing career by buying one of the oldest racing yachts in New Zealand, the 37-foot *Thelma*, designed and built by C. and W. Bailey in 1895. "Why did we do it? She needed us," Lin says. "And we needed a good project, an excuse to spend more time at this lovely spot. She was sitting unused with a few small problems that are right up Larry's alley. We'll get her back in full sailing condition, get to know her well, and then gradually upgrade her to a state her original builders would be proud to see."

Following in their wake

Of course, the Pardeys will always be best known for their far-flung travels during a lifetime of living aboard. If you choose to follow in their wake, here is their advice:

Be self-employed. "The key to doing it our way is to be self-employed," Larry says without hesitation. "Perform small contract jobs. Don't be afraid to test your skills. Be involved in life. While building *Seraffyn*, Lin even had a real office job for a while. But we quickly got her out of that and into her own business." Lin concurs: "Hustling for a living makes cruising more interesting. In one case we found we could live for one-and-a-half years from the proceeds of a single delivery job." Their list of cruising-compatible careers includes nursing, carpentry, writing, photography, crafts such as jewelry making, and bartending.

Depend on your skills rather than your equipment. "A cruising sailboat is a complex, miniature city," Larry likes to say. "It's a restaurant, a hotel, and a bus." Even though technology has made it possible for larger vessels to be singlehanded, think carefully about how much gear you are willing to take responsibility for keeping up. It may be wiser to invest in your own skills, particularly coastal navigation and sail repair. "Safety is something you *learn* rather than *buy*," Lin insists, noting that first-aid training can prove valuable and that women may benefit from taking one of the for-women-only courses now available.

Don't cruise exclusively with a group. "We tend to cruise as a couple," Lin says. "When you cruise in groups you spend more time — not to mention more money — on entertainment and partying with fellow cruisers. We enjoy our times with fellow cruisers, make no mistake, but we also give ourselves

Taleisin **at anchor in the Marquesas Islands, flopper-stopper set to cut down the rolling. The Pardeys celebrated the end of their second circumnavigation here after crossing their outboard track. Though their boat is modest, the Pardeys are not without luxuries aboard, as evidenced by the table set for dinner in the main cabin (inset).**

permission to stop and just 'be.' That's a key reason we keep having interesting cultural experiences."

Don't scrimp. The Pardeys tend to be frugal with their freedom chips, but Lin will tell you, "We don't scrimp." And she advises fellow cruisers to not be too stingy: "The reason to go cruising is to get outside of your own world. So *do* visit local cafés, take inland excursions, and have your laundry done so you're not devoting time to it. *Do* buy art and jewelry in the countries you visit. Use them for a while, then give them away, whether to family and friends at home, cruisers you meet along the way, or friends you make among the locals."

Lin and Larry have not neglected their own creature comforts: Lin insisted on having a sitz bathtub aboard *Taleisin*, for example, and tales of their land-based respites and inland travels make up significant portions of their *Seraffyn* books. They still talk excitedly about a seven-month "land cruise" through Africa; they left the boat in good hands, bought a truck, and set out. Larry even installed pipes atop the roof so they'd be able to enjoy warm-water showers.

> **"We think it's better to use the wind and your brain and hands instead of a diesel and checkbook."**

Share your lifestyle. Some cruisers worry that they won't see their families or friends, "but we actually see more of our family than we would otherwise," Lin believes. "We orchestrate family reunions in fascinating places, using the boat to take our guests on daysails. And we invite our nieces and nephews to come stay a while just as their parents are ready to kill them."

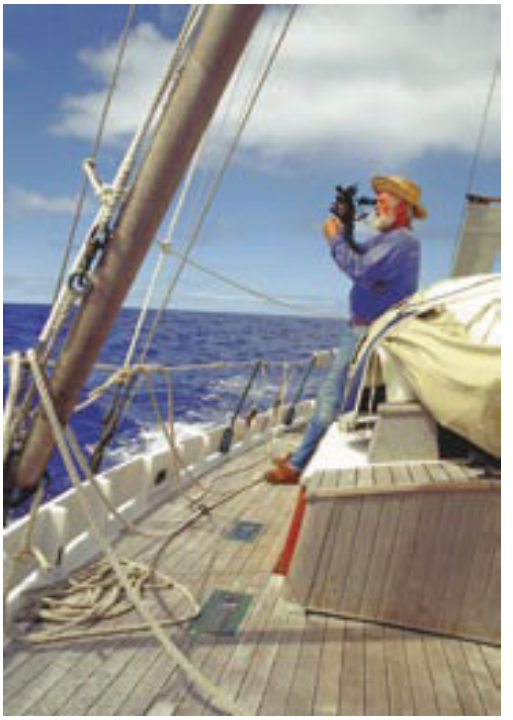
Stay flexible. Cruise as long as you enjoy it and not a moment more. "We always said we'd be doing this as long as we have fun," Lin says. "If our cruising life didn't change, it would become the same grind we have been running away from." Larry adds that they don't know how much longer they'll cruise: "as long as we're able, we're saying now." The demands of age — their own and their parents — are starting to encroach; they used to work three months and sail nine, now it's more likely to be six and six, with time spent at their home base in New Zealand. "We get port fever," Larry confesses. "We have down days like everybody else. But the freedom still makes up for them. A boat is the only thing I can't imagine not having."

Beating the system

Nor, of course, can anyone who's familiar with the Pardeys' story imagine them without a boat . . . or without each other . . . or without their attitudes about life. And when you spend time with Larry and Lin, you can't help but want to expand your own horizons, clichéd as that sounds, and not only as a sailor, but as a human being. You can't help but marvel at how they whole-heartedly embrace the world, convert strangers into friends, turn the sea into a realm of joy.

When you ask what they consider to be the greatest satisfactions of their cruising lifestyle, Lin credits learning "how competent I can be at a wide variety of skills." For Larry, it's "beating the system. I wanted time, time to *live* my life." Smiling, he recalls his grandfather, a self-taught builder who crafted the first aluminum RV in Canada: "He instilled in me a positive attitude about building things — and about the notion of individuality. He was quite irritating to the rest of the family because he didn't work a 'normal' job. He lived like Lin and I do."

The Pardeys now find themselves in Canada, exploring the cruising grounds near Larry's birthplace. "We have not forgotten our lovely *Taleisin*," says Lin. "We plan to spend the northern summer enjoying her graces. If our program works out, we might just have nothing but summers for several years — with two completely different types of sailing to fill our days." Then, true to form, only they'll know how next they'll choose to crown their diverse accomplishments.



For further reading and viewing . . .

Whether you're discovering the Pardeys for the first time or sampling again their adventures or advice, you will find the complete collection of their books and videos/DVD at <http://www.goodoldboat.com/bookshelf.html> or by calling 763-420-8923. You can follow Larry and Lin's more recent adventures at <http://www.landlpardey.com>, which features a "Where are they now?" update, a regularly posted newsletter, and cruising tips.

Read about their travels

Cruising in Seraffyn (1992)
Cruising in Seraffyn, 25th Anniversary Edition (2001)
Seraffyn's *Mediterranean Adventure* (1991)
Seraffyn's *Oriental Adventure* (1996)
Seraffyn's *European Adventure* (1998)

Learn from their experience

The Capable Cruiser (1995)
The Care and Feeding of Sailing Crew (1995)
Storm Tactics Handbook (1995)
Self Sufficient Sailor (1997)
Cost Conscious Cruiser (1998)
Details of Classic Boat Construction: The Hull (1999)

See them in action (videos/DVD)

Cruising with Lin & Larry Pardey (1992)
Voyaging with Lin & Larry Pardey (1992)
The Care & Feeding of the Sailing Crew (1992)
Cruising Coral Seas (1992)
Storm Tactics (2002)
Storm Tactics — DVD (2002)

Hal & Margaret Roth

Meet the cruising couple who inspired a generation of dreamers

by Marianne Scott

Photos courtesy of Hal and Margaret Roth

If it's true that "marriage is one long conversation, chequered by disputes," as Scottish novelist and poet Robert Louis Stevenson wrote, then Hal and Margaret Roth have conducted a prolonged and intense conversation. Over the past four-and-a-half decades they've sailed more than 120,000 nautical miles in a Spencer 35 called *Whisper*, a Santa Cruz 50 christened *Sebago*, and most recently, a Henri Wauquiez Pretorien 35, again baptized *Whisper*. Many of their adventures are recounted in Hal's 10 books and numerous magazine articles.

And the partnership continues. When I visited the Roths at their on-the-golf-course townhouse in St. Michaels, Maryland, they had just finished repainting *Whisper's* bottom. Margaret, who was turning 82 the following day, said this was the last time she wanted to scrape the keel. "Haulouts are dirty," she said in her precise British accent. "Next time, we'll have someone else finish the bottom." She reflected a bit. "But," she then added in a soft voice, "Hal is so fussy about the sanding and filling. So if he goes, I go too."

That statement likely reflects Hal and Margaret's relationship since they married in 1960. Since then, except for the two singlehanded BOC races Hal completed, they've spent all their time together circumnavigating the world, sharing the tranquility of countless anchorages, exploring the Mediterranean, and surviving some horrendous sailing debacles. If there have been disputes, they've been unimportant. And what's even more remarkable about these celebrated adventurers is that they'd never sailed until they were 30-something — neither had salt in the veins.

Depression-era childhood

Hal was born in 1927 in Cleveland, Ohio. His father played the violin and directed a popular orchestra, but nearly disappeared from his son's life in the early 1930s. Hal was raised by his mother and his grandparents. "Life was hard in the Depression," he recalls. "But my mother got a job as a telephone operator. She earned $18 a week, and when she got a better job, with a $4 raise, it was a big thing for us." In childhood, Hal developed the hobby of building model airplanes from kits. Eventually, his dexterity and inventiveness led him to design and build his own models and absorbed so much of his time that his high-school grades suffered.

"I was bored out of my skull," he says. "In retrospect, I realize I just didn't know about homework. I never did any. My parents were school dropouts and didn't know about studying either." When World War II improved the economic climate, Hal began taking odd jobs. At age 17, near the end of the war, he enlisted in the U.S. Air Force. "There was a policy never to reveal air-force casualties," he said dryly. "So I didn't know the casualty rate was 30 percent." True to his youthful passion, he became an airplane mechanic and accompanied pilots and navigators on many B-25 and B-29 missions, "flying along to keep things going." Much of this time was spent in Alaska, where he rose to the position of panel engineer.

"In 1999, Cruising World *inducted Hal and Margaret into its Hall of Fame, demonstrating that you can start sailing in your 30s and still earn a most-valuable-player award."*

After mustering out, Hal returned to Cleveland, took a bank teller job and enrolled at Western Reserve University. But a year later the young man traveled west, having decided California was a better place in which to live. He first signed up in chemistry at the University of California at Los Angeles, then transferred to Berkeley. Money was always a problem. "The GI Bill gave me $65 a month," he grumbled. "Not enough for tuition and all the other expenses. Today, parents seem to be obligated to send their kids to college. In my day, nothing." He vividly recalls seeing a billboard over the Oakland Bay Bridge advertising student loans. "It was the Bank of America. 'We want to help the youth of America,' they said. So I went and asked them for $1,000. 'We need a co-signer,' they told me. I hate that bank and have never done business with them."

About that time the Korean conflict was heating up, and Hal enlisted in the Air Force Reserve. "I was patriotic and had a desirable skill. People who can fix things are always in demand." As Cold War fears were on the rise, Hal flew in old World War II planes dropping shredded tin foil from the air to determine if Russian planes, using the same technique, could confuse radar. Results were inconclusive.

After serving two years in the Reserves, Hal re-enrolled at Berkeley and completed a degree in journalism in 1953. Why journalism? "I was always a good writer," he says. He recounted how, at age 11, he wrote a letter to the editor of the *Cleveland Press* describing how his model airplane had been trapped in the thorns of an unclimbable tree. Wanting to save his precious model, Hal chopped down the tree. As the tree tipped, the model fell and was crushed under the branches. "The newspaper," Hal says with satisfaction, "published the letter under the headline, 'Poor lumberjacking.' " He picks up a 2-inch stack of paper. "These are copies of the letters I have sent this year," he continues. "I correspond with people all over the world, with fans and editors and people I've met over the years. I much prefer letters over email. Much of email is appalling. Full of misspellings and poor writing. I try to write carefully and edit my stuff."

Freelance career

With his journalism degree in hand, Hal went looking for a position as a newspaper reporter. But in the early 1950s, television was fast becoming a fixture in most households and newspaper circulation plunged. Hal remembers that in 1953 San Francisco had five newspapers. Two years later, just two were still in print. To earn his living, Hal turned to freelance writing, covering just about any topic.

He quickly noted that editors wanted photos to illustrate articles, so Hal, ever enterprising, took up photography. This time he was in the right place at the right time. He studied with such icons as Ansel Adams and Edward Weston. He bought a 4 x 5 Linhof camera and built a darkroom. Soon he was selling stories and photos to *True*, *Argosy*, and the Sunday supplement, *American Weekly*. He was able to capitalize on his model building by publishing pieces in model airplane magazines. Always a quick study, he also peddled articles to the medical press. But the golden magazine markets of the day were the *Saturday Evening Post* and *Colliers*. "I finally sold my first story to *Colliers* in 1956," says Hal, relishing the memory. "They paid me $1,500. That was big money (equivalent to $10,500 in today's funds). I was finally in the big time and counted on selling many more articles. The next year, *Colliers* folded. But I did sell photos to the *Saturday Evening Post* after I switched to a 35 mm camera."

Growing up in Bombay

In 1958, Hal and Margaret met at a Chinese New Year's party in San Francisco where Hal was assigned to take photos. Margaret had recently arrived from England. Born in Bombay of British parents, she'd spent her early years in India. At age eight she was sent to boarding school in England, a common practice in the 1920s and '30s. Margaret remembers her time away at school with fondness. "I loved sports," she explains. "Lacrosse, cricket, and tennis, I was quite good at all of them." After serving in Britain's Women's Royal Naval Service (WRENs) during World War II and attending university, Margaret went to Paris for seven years as a translator for NATO.

In 1958, encouraged by her sister who lived in Westchester, New York, Margaret emigrated to the United States. "In the United Kingdom the winters were so cold," said Margaret. "All those clothes you had to wear. Such an awful bore." Later that year, Margaret

Hal and Margaret on *Whisper* in Sausalito in 1970, facing page. Hal in *Whisper's* cockpit, at right, while rounding Cape Horn.

Margaret wears a marvelous Cheshire grin along with her tam-o'-shanter while sailing *Golden Feather*.

decided to visit a former NATO colleague living in San Francisco. It was during this visit that she and Hal met. Neither revealed if love hit them like a lightning bolt, as the French say, but Margaret returned to New York, spent $150 on an old Plymouth and drove back across the country. The couple married a year later. Hal continued his work as a freelance writer and photographer; Margaret managed the financial side of the business, "doing the accounts and tracking spending," and, of course, taking care of Hal. Forty-four years later, although suffering from a heavy cold and a back distorted by osteoporosis, she continues the pattern started early in married life. "When you get married," she stated, "you have to adjust. Everyone has to adjust."

The first sail

In 1999, *Cruising World* inducted Hal and Margaret into its Hall of Fame, demonstrating that you can start sailing in your 30s and still earn a most-valuable-player award. How were they transformed into sailors? I asked Hal if he'd ever taken advantage of Lake Erie's proximity during his youth. "I couldn't have afforded an oar, let alone a boat," he groused. Margaret remembers her parents sailing 18-foot Bombay Tomtits, but she herself never participated.

They experienced their first salty adventure aboard a friend's 38-foot wooden ketch. "Sailing has a lot of intriguing aspects," says Hal. "You know, the design of a boat, the interplay of the wind and the water." Smitten, the couple began walking docks and learning about various sailboats. They sailed on other people's boats. Wishing to become more competent and confident, they decided to take lessons: to this day they scorn people who risk themselves on the open sea without training. A charter in Antigua supplied them with a captain, a 45-foot wooden cutter, and a lot of rums with ginger ale. "We were able to ask questions all day long," recalls Hal. "We learned a lot." During the charter, he took batches of photos and wrote several stories recounting their sailing education for the *New York Times* travel section.

They also signed up for a "nuts-and-bolts" sailing course on the Clyde in Scotland, then chartered in Greece to learn more. "It was a disaster," says Hal grimly. "The captain didn't know how to sail, the crew couldn't boil water, and we had to [use] the mainsheet to moor." Brightening, he adds, "but it did make an interesting story for *Skipper*, a slick magazine published out of Annapolis."

In 1963, having gained confidence, the Roths bought their first boat in Holland — a 36-foot steel sloop called *Golden Feather*. It cost $4,500. Another $750 shipped it to San Francisco aboard a German Lloyd ship. They practiced sailing in sheltered waters, madly read sailing tomes, and tried to perform all tasks under sail, including docking. Two years after they acquired the yacht, a gasoline fire destroyed her.

The mishap did not deter them, and they began searching for a new boat. "Fiberglass was becoming a popular yacht material," explains Hal. "There was a lot of skepticism about its strength. Many thought the stuff would dissolve in a year." But Hal had written an article for *Popular Science* in 1958 describing the first large fiberglass production sailboat, the Philip Rhodes-designed 41-foot Bounty 2, built in 1956. He knew the newfangled material would last. So when he and Margaret spied the lines of a fiberglass Spencer at a Seattle dock, they traveled to Vancouver, British Columbia, to investigate the boatbuilder. Liking John Brandlmayr's design and the Spencer's construction, they ordered a boat despite its steep price of $16,000.

Offshore ventures

In his writings, Hal encourages boat buyers to purchase a used yacht, as they're more economical. But in 1966, perhaps encouraged by the publication

1964
San Francisco to San Diego aboard a friend's boat, *Vaeringer II*.

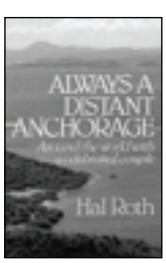
1966
Vancouver to San Francisco aboard their first *Whisper*.

1967-68
From San Francisco, they sailed to the South Pacific, Japan, the Aleutian Islands, Alaska, British Columbia, and back to San Francisco.

1972-76
From California to the Galápagos, Peru, Chile, around Cape Horn, Argentina, Uruguay, Brazil, Bermuda, Maine.

1977
Maine to Florida and Bahamas. Book: *After 50,000 Miles*, not shown.

1981-84
West-about circumnavigation. Beginning in Maine, the pair sailed to Bermuda, West Indies, Panama, the southern and western Pacific, Torres Strait, Indian Ocean, Seychelles, Red Sea, Suez, Mediterranean, Martinique, Maine. Book: *The Longest Race*, not shown.



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1969
San Francisco to Vancouver Island and return.

1970-72
San Francisco to Victoria, Vancouver, and around Vancouver Island to San Diego. *Whisper* was altered in Vancouver and became the standard for the Mark II version of the Spencer 35.

1978-79
Bahamas to Maine; Maine to Annapolis.

1979
Hal navigates *Toscana* from Massachusetts to Ireland.

of his first book of text and photos, *Pathway in the Sky: The Story of the John Muir Trail*, the previous year, he opted for a brand-new Spencer. Moreover, it was about this time that the couple "elected to sail and earn our way with words and pictures while living aboard a 35-foot yacht," as Hal wrote in his latest book, *How to Sail Around the World*. So they went to Vancouver Island to commission and sea-trial their new *Whisper*, met the famous Smeetons, and then left on their first bluewater sail to San Francisco. The trip stimulated them to plan a Pacific voyage, and a year later they provisioned, loaded two typewriters aboard, and set off from an island off Mexico straight to Nuku Hiva in the Marquesas. Hal chuckles, remembering they were given a couple of wooden spinnaker poles before their departure. "They were very thick and heavy. We had a terrible time raising them. So the first chance we had, we planed them. On the next island we planed them some more. At each stop these poles got skinnier and skinnier."

From French Polynesia the Roths moved through the western Pacific to Samoa and the Gilberts, visited Japan and then circled past the Bering Strait to the Aleutians, British Columbia, and on to California. Hal chronicled their adventures in *Two on a Big Ocean*.

How did the couple manage the close quarters on their first offshore voyages? "It wasn't much of a change," says Margaret. "From the time we married, we were always together. You know, at boat shows when Hal is selling his books, men come up to us and ask how they can persuade their wives to cruise with them. Now I'm the first to admit there are dangers. So I tell these men that to sail together the wife has to have complete confidence in the captain. I've always had complete confidence in Hal."

" 'From the time we married, we were always together. You know, at boat shows when Hal is selling his books, men come up to us and ask how they can persuade their wives to cruise with them.' "

Margaret adds that they worked out a system for maximum safety. The couple shared watchkeeping around the clock, making sure each would have at least seven hours of sleep every day. "One of us was always dressed and ready for action," says Margaret. "In busy places like Mediterranean ports, with boats everywhere, we'd both be on watch." Each also used the sextant but always double-checked the other's calculations to avoid errors.

Continuing offshore

During their next major journey, the Roths went south, eventually rounding the Horn. It was at the Wollaston Islands where *Whisper* was blown ashore. "We set two anchors, but they dragged because there was too much kelp," remembers Hal. "The boat was holed and half-filled with water. To survive, we set up camp on an island about a mile away. I was rowing stuff from our boat in our dinghy when the wind picked up suddenly, swinging our little vessel [the dinghy] out to sea. Three-foot waves are a big deal for an eight-foot dinghy. 'Next stop, Antarctica,' I thought to myself. But another tiny desolate island, one-quarter mile away, just allowed us to land. We ate wild celery and small crustaceans. When the wind died, we rowed over to the camp."

A week later they saw a Chilean navy vessel and, after attracting the crew's attention by signaling with an Aldis lamp, they were able to patch *Whisper's* 3- by 4-foot hole with plywood and 75 through-bolts. After they pumped out the water, the yacht was towed and repaired in a Chilean port. Two months later, the intrepid pair again rounded Cape Horn, then sailed on along South America's coast, eventually reaching Bermuda and then Maine. Their adventures led to another book, *Two Against Cape Horn*, a film, and a North American lecture tour.

Hooked on adventure in a small boat, the Roths next circumnavigated the world, from Maine to the Caribbean via Bermuda, through the Panama Canal, to the southern and western Pacific and Torres Strait, through the Indian Ocean to the Red Sea, Suez, the Mediterranean, Caribbean, and back to Maine. Their one misadventure, caused by a faulty Australian chart, left them on a reef in Torres Strait. How they managed to get off the sharp coral is described in *Always a Distant Anchorage*.

From 1966 to 1986 Hal and Margaret Roth sailed a Spencer 35 named *Whisper*. From 1986 to 1992 they switched to a Bill Lee-designed Santa Cruz 50 named *American Flag* (later called *Sebago*). In 1993, they bought a French-built Wauquiez Pretorien 35, again called *Whisper*, which they still sail today.

1986-87
Hal completes his first singlehanded BOC race via the Southern Ocean on the Santa Cruz 50, *American Flag*, coming in fourth in his class.

1987-90
Hal and Margaret sail from Maine to the Chesapeake Bay.

1990-91
Hal completes his second BOC race on the Santa Cruz 50, renamed *Sebago*. Book: *Chasing the Wind: a Book of High Adventure*, not shown.

1995-97
Chesapeake to Turkey and back.

1999
Voyage to Newfoundland.

2000
A second voyage to Newfoundland and Labrador.

2003
Hal publishes *How to Sail around the World*, a culmination of his sailing knowledge.

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Racing around the world

Hal always had a yen to see if he had the backbone and skills to sail long distances singlehanded. He decided to sail the 1986-87 BOC Challenge, an east-about around-the-world race — 27,000 miles in four legs starting in Newport, Rhode Island, and on to Cape Town, Sydney, Rio de Janeiro, and back to Newport. He asked yacht designer Bill Lee to build him an engineless Santa Cruz 50, figuring an ultra-light boat would serve him well. It did. He completed his contest, with Margaret meeting him at the three stops and serving as shore support. Three years later he reenacted this feat, again with Margaret as backup and, of course, publishing two more books about his experiences.

Having proved his stamina and ability, Hal sold the Santa Cruz, bought the Wauquiez 35, and rejoined the "best mate a man ever had." Their next major sail also involved a project: tracing the wild peregrinations of Odysseus trying to return home to Attica after the Trojan War. As Hal describes in *We Followed Odysseus*, figuring out the semi-mythical locations described in a saga based on oral tradition was a challenge — but an appealing one as it allowed the couple to explore the Mediterranean at leisure while studying the *Odyssey* and the many commentaries on that classical poem. Since that time, they've made a series of shorter voyages.

Sailing and writing

For decades, the Roths have supported themselves through Hal's writing and photography. "We've learned to live simply," says Hal. "During our voyages or on land, we never went to restaurants. We anchored out. No marinas." They never bought health insurance, counting on their wholesome lifestyle and paying for the occasional doctor visit. Their modest two-story Maryland townhouse is furnished with comfortable 1970s teak furniture. They didn't join the golf club, but the course provides for great walks. Bookcases line the walls and are filled with marine books, among them Hal's tomes in English and their various translations into German, Portuguese, Swedish, and Japanese.

Next to the bookcases Hal has his desk with a laptop, which he says has really speeded up his book writing. When we met, he was working on a book about six artists/adventurers who spent time in the South Pacific searching for their personal paradise, but who mostly came to a sticky end: Paul Gauguin, Robert Louis Stevenson, Robert Dean Frisbie, Alain Gerbault, Jack London, and Tom Neale. Margaret, still fluent in French, was translating Alain Gerbault's autobiography for Hal. Had she ever wanted to write herself? "I'm not a good writer," she responds with emphasis. "It didn't come up to Hal's standards, and I was busy looking after him. His work is more important than mine."

The Roths on their first boat, the 36-foot steel sloop, *Golden Feather*, in about 1964, at right. Margaret steering the Spencer 35, below.

Age not a barrier

Now that Hal is 77 and Margaret 82, will they give up sailing? Not necessarily. They'd agree with Gabriel Buck's statement, "I refused to let my age determine my destiny." Margaret showed me her newly repaired knees that allow her "to run up and down the ladder like a girl." The new knees don't hurt the way the old arthritic ones did during their late trips in the 1990s. Hal's study of "paradise seekers" has stimulated his desire to return to the South Pacific, although he dreads traversing the Panama Canal. Margaret has a yearning to visit Portugal. "All we have to do is get the yacht ready, lock the condo doors, and go," he says. "We may just do it."

Perhaps what they're not ready to relinquish is the romance of seeing the world from a small boat. Despite the knockdowns Hal experienced during the BOC races, and notwithstanding such events as their near-death experience in the Wollaston Islands, or their Torres Strait reef grounding, what they remember is the beauty of the wispy fogs around the Aleutians. What still tickles them is their ability to find a speck of land in the vast Pacific through their accurate dead reckoning and celestial navigation. What gives them joy is remembering that special feeling when seeing "that big black rock that is Cape Horn," even after holing *Whisper*. "It's been wonderful to make all these trips," says Margaret. "Yes," adds Hal, "I think what Slocum said so succinctly applies to both Margaret and me, 'The wonderful sea enchanted me from the first.' "