





My brother Rik and his wife, Anne, have had a long love affair. They met in high school, and even though Anne never shared Rik's passion for boating, during 37 years of marriage she has always happily gone along as he pursued his lust for boats.

When they married in 1986, Rik already owned a 24-foot Pearson Lark. That sailboat was followed by numerous canoes, a Lightning, a WoodPussy, an International DN iceboat, a 22-foot inboard-powered Seabright skiff and, in 2019, the mother of all boat purchases, a 1989 Transworld 50 fantail trawler.

Because Anne had always taken care of everything at their home, she agreed to the trawler purchase on one condition: She wouldn't have to do a thing aboard the boat. That was fine by Rik, who would agree to almost anything to be on the water.

That first summer, Consensus made some jaunts up New York's Hudson River, crossed Raritan Bay and cruised New Jersey's Shrewsbury and Navesink rivers, where Rik and Anne had raised their three kids. But seven months after

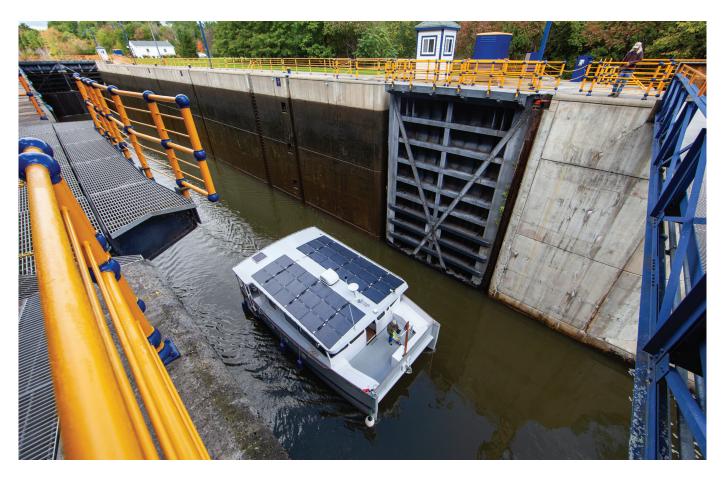
the trawler purchase, when Anne was 61, life took a cruel turn and she suffered a massive stroke. Even worse, she was also showing signs of frontotemporal dementia. Realizing that Anne would probably spend the rest of her life in a wheelchair and that time might be running short, Rik hired a full-time live-in aide and modified their home. He built a ramp, added a lift and turned a downstairs bedroom into a wheelchairaccessible bathroom.

But Anne's new wheelchair-based existence had reduced her world to the walls inside their home with only the television as a distraction while Rik went to work. She could no longer do her own work as a substitute teacher, or hike, garden, canoe, walk the dog or do any of the physical things that she had always enjoyed. The stroke had affected her speech, and the dementia was reducing her ability to keep track of a conversation. Her condition quickly put her into a depression.

Rik saw that the only things that would lift her mood were social activity and a change of scenery, so he began scheduling regular cocktail hours to bring friends and family into the home. Then the Covid-19 pandemic struck, making indoor visits impossible. Undeterred, Rik added a deck to the front of the house so Anne could engage with friends outdoors. "When there is someone else, that person and I can chat," Rik said, "and Anne feels involved and gets stimulation."

When boating season arrived, the fantail trawler seemed the perfect vehicle to get Anne out of the house-but to get her aboard, Rik had to sling her over





his shoulder, and once inside, Anne's wheelchair couldn't make it up to the pilothouse or down the winding staircase to the forward cabins and heads. They needed a different boat.

That's when Rik put his aerospace and ocean engineering degree to work. Early in his career, he'd worked as a naval architect and co-designed a 12-Metre for the 1987 America's Cup, so he sketched a 30-foot power cat with twin electric outboards.

When Rik asked Anne how she felt about building a single-level boat with wheelchair access, she managed to respond with characteristic humor: "I am so sorry that my health situation requires you to spend all our money on boats."

Rik knew who he wanted to build the boat. As a marine surveyor, he'd worked with Scarano Boat Building in Albany, New York. He liked the way they made boats, and over the years, he and Anne had become friends with the yard's owners, Rick and John Scarano. Rik floated the idea of an electric power cat to John, who urged him to find an existing hull to save time and money. A quick calculation by John showed that a 35-foot catamaran would be needed to provide enough displacement and beam

to execute Rik's single-level floorplan.

When Rik told me he was looking for a used boat, I scoured the internet for the next 12 hours, e-mailing leads to Rik and John. It was well after midnight when I came across a 1996 Luau 35 sailing catamaran on a DIY multihull forum. I sent the link off to them and hit the sack.

By the time I woke up, Rik and John were en route to Portsmouth, Rhode Island, to inspect the boat. Just nine days after sketching a power cat on a piece of paper, Rik purchased the derelict Luau 35 on the spot. Five days later, Lenny Pucci and Matt Boyle, two old friends from Rik's Newport sailing days, attached the Luau's trampoline, installed new control cables for the twin 9.9-hp Yamaha outboards and prepped the boat for a quick transit to Scarano's yard.

But in the middle of Long Island Sound, one outboard gave up the ghost. Within seconds, so did the other. Rik got a tow into Westport, Connecticut, where he tried for a month to get the engines repaired. When he couldn't get the outboards fixed, he rounded up more crew and used *Consensus* to tow the Luau through New York Harbor and up the Hudson River.

Meanwhile, Scarano design manager

Keith Duffy had started drawing Rik's concept on the computer, a task that was complicated when they discovered that the Luau, which should have been symmetrical, was not. If designing a handicapped-accessible, electrically powered cat wasn't hard enough, recreating an asymmetrical catamaran on a computer wasn't making it any easier.

While the Scarano crew vanked the Luau's mast and chopped the top off the boat, Keith and Rik started exchanging a flurry of design briefs, a practice that would last for the next nine months. The basic plan was straightforward: Belowdecks, almost everything, including the galley and two cabins to port, and the head to starboard, would be preserved; abovedeck, everything would be newly built. The layout included a forward open deck with high bulwarks that would span the boat's 19-foot beam. Inside to port, an L-shaped settee and table would sit forward, with a master stateroom and head aft, and with a galley and access to the port hull in between. To starboard of the helm station aft, Rik planned an enormous desk and stowage shelf, access to the starboard hull, a wheelchair-accessible shower and a cockpit that would be home to the

wheelchair lift that Anne needed.

The execution would turn out to be far more complicated than the planning. What they were building wasn't just a custom wheelchair-accessible boat, or a custom electric-drive boat. They were building both, and it would all have to fit on what used to be a cruising cat with two gas outboard engines.

One of the first electric-power manufacturers Rik spoke to was Torqeedo, which proposed a propulsion package with twin 10-kW outboards that would give Rik all the speed he wanted.

As a lifelong sailor, he felt that a 5-knot cruise would be enough. Rik envisioned using the boat for day trips on the local rivers around their Fair Haven, New Jersey, home; long weekends up the Hudson River; and vacations on the protected waters of the Erie Canal and Lake Champlain. For shorter trips, the battery range would be supplemented with 36 Xantrax 110W thin film solar panels on the cabin top. And when longer jaunts were on the agenda, a new Fischer Panda diesel generator would supply additional juice to the batteries.

When Rik and Scarano systems specialist Chris Kane pulled out the solar and inverter parts, Rik realized he needed more help. Luckily, Chris Hanrahan of Tekris, a Victron supplier, had just opened a new office in nearby Point Pleasant, New Jersey. He walked Rik through the systems, but to make the build more digestible, Rik and the Scaranos agreed to commission the systems in phases. They started with the steering, motors, battery packs and shore power, and then commissioned the other systems once the basic propulsion was sorted out.

The goal was to get the boat in the water by spring 2021. Over the winter, Rik and Anne made regular trips to Albany so Anne could test the boat's layout and the wheelchair lift that would get her aboard. "She loved the construction process," Rik said. "Going out to Albany, being part of the fitting, testing and planning."

Getting the boat to look good was not easy. *Consensus*, with her teak exterior trim and varnished interior, looked like a proper yacht, but making the 35-foot catamaran look reasonably good with what would in essence be a 665-square-foot condo on top was a challenge.



A lot of thought went into minimizing the boat's boxy appearance. Rik used varying window heights, pickle-forked the bow stems by bringing the bow bulwark aft, and put portholes in the hulls to break up the slab surfaces and give the cat a more shippy look. As a way to deal with the cat's flat sheer, he created a bow stagger by adding a Garolite cove stripe, which was sanded to give it a teak-like appearance. Inside, the white interior got an inexpensive dress-up by staining the wood trim with Minwax and water-based clearcoat.

On April 26, 2021, they sea-trialed the new cat on the Hudson River. With seven people aboard, the newly named *Aberration* did about 8.5 knots, and despite winds in the 15- to 20-knot range, she behaved herself.

The sea trial included a lot of electrical-system glitches, and even though the boat wasn't fully finished (a national foam shortage delayed the cushions and mattresses), Rik and Anne took delivery in May 2021. For the rest of the summer, with family and friends, they explored the waters near their house. A fall trip to Lake Champlain was thwarted when one of the Torqeedo props was damaged and supply-chain problems prevented a replacement from arriving in time.

The 2022 season turned out to be much better for *Aberration*, allowing Rik and Anne to spend a lot of time on the water. After working out electrical challenges over the winter and adding a spare prop to the parts locker, *Aberration* made it into Lake Champlain, where she lived up to her potential.

Rik is really happy he built the boat to get Anne out into the world. If he were to do it again, he said, he might change some small details, but he wouldn't change the overall design.

He is full of praise for the Scaranos for getting the boat built. "It succeeded because there were so many experienced designer/builders keeping an eye on the whole project," Rik says. "Building custom boats is hard, but working with professionals like John, Rick, Keith, Chris and the rest of the Scarano crew allowed us to get over the bumps and grinds without too many bruises."

And he is overjoyed with the overall efficiency of the design. "This is a huge 35-foot boat that is a total liveaboard and as good as the 50-footer," he says.

At the end of the 2022 boating season, Rik, Anne and some friends took *Aberration* out on the Erie Canal for one last spin. After going through one of the locks, Rik handed the helm off to Anne's aide, Marina, pulled up a chair next to Anne, and held hands with her while they watched the scenery go by.

As Aberration glided back toward Albany where the cat would be laid up for the winter, Anne suddenly piped up. "I married a good one," she said. Rik smiled, looked back at Anne and replied. "I married a good one too."

Left: Aberration passes through a lock on the Erie Canal. Above: Knowing Anne loves kids, and much to everyone's delight, Rik offered a random group of college students a ride on the cat.

44 FEBRUARY 2023 **45**