

# THE GREAT SOUTH BAY...



# ...SCOOTERS

**F**irst off, get it out of your mind about a Scooter being an iceboat. It's not.

While the iceboat may have been around for 200 years and produced some astounding speeds, it is still good only under a very limited set of conditions. Iceboats need smooth, hard, clean ice. Without it, they're useless.

The Scooter, on the other hand, was born from adversity. It can fly over anything that is frozen or wet—ice, slush, water, even land—and do it in heavier winds and with greater safety than an iceboat. While the iceboat is waiting, the Scooter is out there tearing it up, and usually at embarrassingly high speeds.

Think of the Scooter more as a high-performance 4x4 for the ice, a

true boat that sails on ice—any ice.

## A Few Thoughts on Ice

In the salty waters of Long Island's Great South Bay, almost twice as much time is needed to form ice as on a freshwater lake. Newly formed saltwater ice has a plastic quality; it will undulate like waves of syrup as a boat moves through it. However, if a winter is long and cold enough, the ice on the Bay eventually becomes thick, brittle, and hard, like lake ice, and will support great weight. But the ocean is a moderator of temperatures, and its tidal currents continually stir up the warmer bottom waters—making the possibility of a solidly frozen Bay unlikely and the probability of a partially frozen Bay quite good. If the Bay does freeze,

tidal action and strong winds often build up hard pressure ridges and rolling hummocks in the ice.

These kind of conditions were frustrating to the men who once worked the waters. Standing on the mainland, the hunter, the fisherman, and the lifesaver, have looked out across a "frozen" Bay that was as good as quicksand. On Great South Beach (known as Fire Island today), the 25-mile-long barrier island that separates the Bay from the ocean, there were fowl and fish for the taking and lives that begged to be saved. All unreachable for four months of the year for want of safe transportation.

## The First Scooters

Before I get into trouble, let me offer a disclaimer for what follows. The

*Norman Reich and friends race off Bellport, Long Island, in a Scooter Reich built in the 1970s. Even at 40-50 mph, scootering is "pretty safe," according to devotees. During a capsize, the sail acts as a parachute and softens the fall. The crew just slides off.*

by David Seidman  
Photographs by Mitch Carucci



*The utilitarian punt, which could be poled safely—and slowly—across soft Bay ice, preceded and inspired the Scooter's evolution.*

Scooter started out as a tool, something to get a job done. No one thought it worthy enough to record its evolution; therefore, accurate information about Scooters before they were discovered by yachtsmen is almost impossible to find. A number of reminiscences written in this century

about what went on in the world of Scooters 50–100 years ago are of little use other than entertainment, and must be carefully sifted to find nuggets of fact. Given all this, I have tried to present an objective history of the Great South Bay Scooter, and if you can add to it, please let me know.

During the 1800s, market gunning or shooting waterfowl for commercial purposes was a major rural industry in the East Coast marshes. A variety of small craft was used in this trade until around 1850, when the popularity of the Barnegat Bay sneakbox, which looks like two spoons joined at their rims, began to spread beyond its home waters of New Jersey.

Local builders adapted this form, and on Great South Bay the sneakbox arrived as the "punt." Since there were no set plans, and a lot of small yards and individuals were building them, the shape of a punt was open to interpretation. Usually, they were not over 12' in length and just over 4' in beam. Unlike the true sneakbox, the bottom cross section was not part of an arc, but flattened out for stability. They had low vertical sides compared to the sneakbox, whose deck and bottom actually met. In plan view, the punt gave up the

sneakbox's bluff bow for an extended point (although I have seen squared, rounded, and triangular bows as well). The transom was usually straight in plan and profile, but again builders often showed that they had imagination. Deck frames were highly arched with wide side decks and a small, narrow cockpit with high coamings. Most punts had no exposed keels or skegs. So, to protect the bottom and gain a little directional stability, low, wooden rubbing strips were sometimes fitted parallel to the centerline.

Punts were poled, rowed or sailed. A small sprit main was rigged for downwind work, and I have heard of (but never seen evidence of) leeboards or daggerboards used to help it get to windward. The boat was low to the water, easily camouflaged, and perfect for the job during the warmer months. This was the boat most favored by commercial hunters, and this was the boat that was to eventually become the Scooter.

The design of the punt changed little until the 1860s, when economic forces pressured baymen to pursue their occupations later into the colder months. Hunters, fishermen, clammers, and volunteers of the Life-saving Service were anxious to get to

the barrier beaches, and began looking for a way over the partially frozen Bay. At first punts were rowed where there was water, pulled like a sled over hard ice, and pushed along on soft ice with a spike-ended pole called a pike. The pike also had a sharply pointed spade that

extended perpendicular to the spike and was used to pull the boat out of the water and onto the ice. The result was an amphibious vehicle that, while not a breakthrough, at least made life a little easier.

To work on ice, punts were fitted with 3"-high wooden runners, often just extensions of the existing rubbing strips. Not ideal for soft ice and only a little bit better on the hard stuff, these runners worked, nevertheless. The flat, slippery shape



*A Scooter at rest. William Mills of Greenport has decorated his boat with scrollwork.*

*Scooters are "moored" by tipping them on their sides—quicker and easier than dropping the mainsails, especially on boats with cane-mast rigs. Here, at the end of a day of racing off the Sayville Yacht Club, crews begin to dismantle their boats and head off the ice.*

of the hull allowed it to make easy transitions between water and ice. If the wind was right, a small spritsail was set, and progress improved going downwind. Steering was another matter. For control on ice, the pike was dragged, but this was not particularly effective. As an alternative, a long pole with either a vertical blade (like an extended rudder) or a spiked wheel was used. When passing through water holes, an oar was used as a sweep. Such was the punty at the end of the 1860s.

In the 1870s, two major advances were made to the hull of the punty. First, flat or half-round brass strips were fixed to the bottom of the runners to increase speed. Second, a touch of intuitive genius on someone's part, the runners were given a greater amount of rocker. Previously, runners had always been either dead flat or gently curved to follow the shape of the hull to help support the boat when traveling over rough ice. The new, highly rockered runners made it a little harder to get over the rough spots, but now, by shifting your weight (as in a St. Lawrence skiff), you

could help steer the boat by changing its center of resistance. This also helped the boat get itself in and out of water holes much more easily and made it even faster than before. In fact, some were beginning to call it a Scooter.

The increase in speed, however, was often of little use because there was no way to steer with any sort of precision. Control was the next frontier.

During this period, the chronology of the development of the Scooter is muddled by self-serving assertions and unsubstantiated stories. For instance, a "colorful" source states that in 1882 his father, one

Capt. William R. Corwin, put the first jib on a punty and began steering the boat by pulling the jib in to fall off, and easing it out to come up into the wind. Normally, I would dismiss this as bragging, but it has been confirmed that a boat named JIB was built and owned by a Capt. Corwin. JIB is a peculiar enough name and was probably given because of the boat's unique feature. Whether actual steering or good windward performance was affected is questionable. But it was a start.

Others were also working to perfect the Scooter. Albert Latham added a bowsprit or "horn" to his Scooter. He mounted a swivel on its end to which he fixed a club (known as a jib boom in scootering circles) that went along the length of the jib's foot. These two features added tremendous force to the steering capabilities of the jib by bringing its center of effort forward and keeping its shape flatter. In 1895 Newton Moger and the crew of the Blue Point (Long Island) Life Saving Station refined the Scooter further. They believed that the shape of the



*The steersman is the jib tender, here easing off the jib sheet and trying to head up.*

Scooter's runners was causing slippage and ruining its windward performance. They began beveling the runners—that is, setting them at an angle to the ice so they would run on an edge, not on a flat surface. The question, then, was which way to set the bevel. Two Scooters were used as a test. One lifesaving station beveled its boat's runners iceboat-fashion with the sharp edge outside. The Blue Point station put the edge on the inside. The boats were raced against each other. Both went to windward, but only the Blue Point Scooter was capable of tacking or jibing.

The results seemed to have surprised all involved. In hindsight, it's obvious that on hard ice you can travel on the edge of a blade, but on soft ice you still need a flat surface that will not dig in. The slight edge on the inside of the runner is just enough to prevent slippage without slowing down the Scooter. Bevel angles started at 10°, and are now optimum at about 30°.

At the turn of the century, economic forces once again brought change to the lives of the men who worked the Bay. Restrictions were placed on waterfowl hunting, and the days of the market gunner were

soon over. As the Life Saving Service became a professional Coast Guard, volunteer baymen and their Scooters were in less demand. The era of the working Scooter was coming to a close.

### The Drive for Speed

Around 1900, Scooter builders like Daniel Petty and Henry Watkins were still building boats (at a cost of \$100–\$125) for the Life Saving Stations, but more and more frequently their customers were pleasure sailors looking for winter sport. People from Maine to Wisconsin had heard about Scooters that could make five miles in six minutes. The drive for speed was on, and the Scooter began to evolve away from its working origins and toward a craft that was more effective for pure racing.

Hulls became flatter in cross section, coamings were reduced in height to make hiking out easier, and sail areas and hull lengths increased.

A second set of runners, placed outboard of the originals, was installed to give the boat more stability. Angle irons on the runners worked more effectively than flat bars. Scooter builders experimented with rigs, and the sprit gave way to the gaff. Since sail area couldn't be put too high up, it was spread outward for stability and better control. In 1904, it wasn't too unusual to have a 17' boat with a rig—jib tack to main boom end—that measured over 30'. Boats might have different length horns for specific wind strengths, and jibs often had diagonal sprits (instead of, or in addition to, the jib boom) to help flatten the sail. The pre-World War I Scooter was exceptionally fast, maneuverable, and could sail at four points off the wind in all but the worst weather.

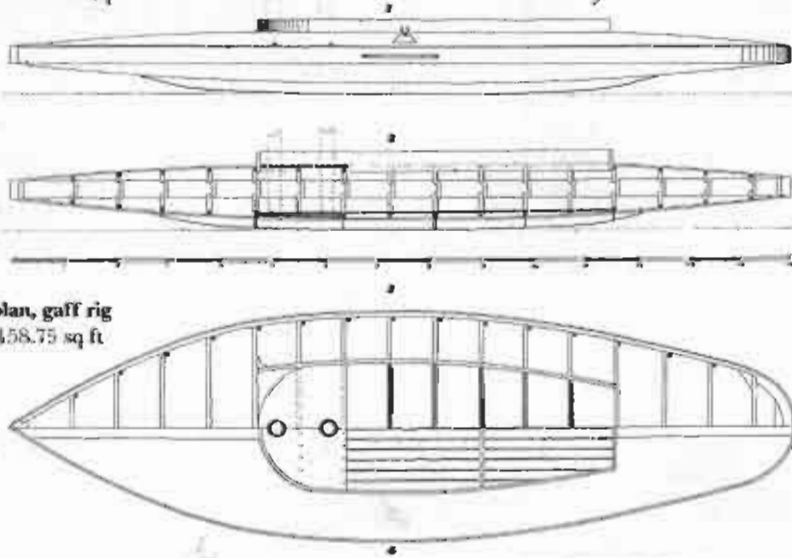
Possibly the most important advancement was the balanced jib boom. As jibs grew bigger, they became harder to handle until someone (again, it is not clear who or precisely when) moved the pivot on the jib boom back a few feet from the tack. This made the sail easier to sheet and also put its leading edge farther outboard. The jib could



*The 15' Rudder Scooter could be built of white oak and spruce for \$100 in 1904, according to its designer, H. Percy Ashley. Today, some of the old gaff-riggers like Justin McCarthy's (left) are still seen on Great South Bay.*

**Knockabout sail plan, sprit rig**  
Sail Area = 100.48 sq ft

**Racing sail plan, gaff rig**  
Sail Area = 158.75 sq ft



The Builder, November 1904

now be trimmed parallel to the main, and could be used almost exclusively as a steering device without fear of backwinding. Pivot points of up to a third of the boom's length were tried. Today, the pivot is close to the halfway point.

Most early racing activity centered on the eastern end of Great South Bay where it was shallower, narrower, less affected by tides, and, therefore, more likely to get good ice. The first recorded race was run off Patchogue on February 23, 1903. A year later, *Rider and Driver*, a weekly sporting journal, sponsored the first large race off the town of Blue Point. Fourteen boats raced three times around a six-mile triangular course. The winner, LEADER, averaged 27 mph. By 1906 the Great South Bay Scooter Association had clubs in Patchogue, Bellport, and Sayville. From 1900 to the 1920s, Scooters flourished in a golden age, and racing activities centered around the Blue Point Club until World War I.

By the mid-1920s, a sliding gunter rig had replaced the gaff, and some claimed that a well-tuned Scooter could trounce the best of the rear-steering iceboats. In 1922, five years after the Blue Point Club folded, the



*Turning the downwind mark. When the ice is hard enough for scootering (not until after Christmas), there's a plentiful supply of marks.*

South Bay Scooter Club was founded in Bellport. It brought together all the other clubs, and often during its races 30 or more boats would be at the starting line. Today, this is the only club left.

Scooter development stagnated during the Depression and remained that way until after World War II. The trend toward more sail area and bigger boats began to reverse itself. Larger and heavier boats, while good in a strong blow, forced the soft ice to bend and sometimes break. This slowed the boats down. Heavier Scooters were also less manageable in water and more difficult to get back up on the ice. But a boat that was too small and light was only good in gentle winds. Eventually a middle ground was found for best all-around performance, and a weight

of about 250 lbs on a 15' boat has become standard.

After the war, interest in Scooters renewed. The efficiency of the rig improved. Main booms were shortened, masts were made higher to get a better aspect ratio, and jib booms were stretched out further to facilitate steering. There were two diverging ideas on how the efficiency of the main should be increased.

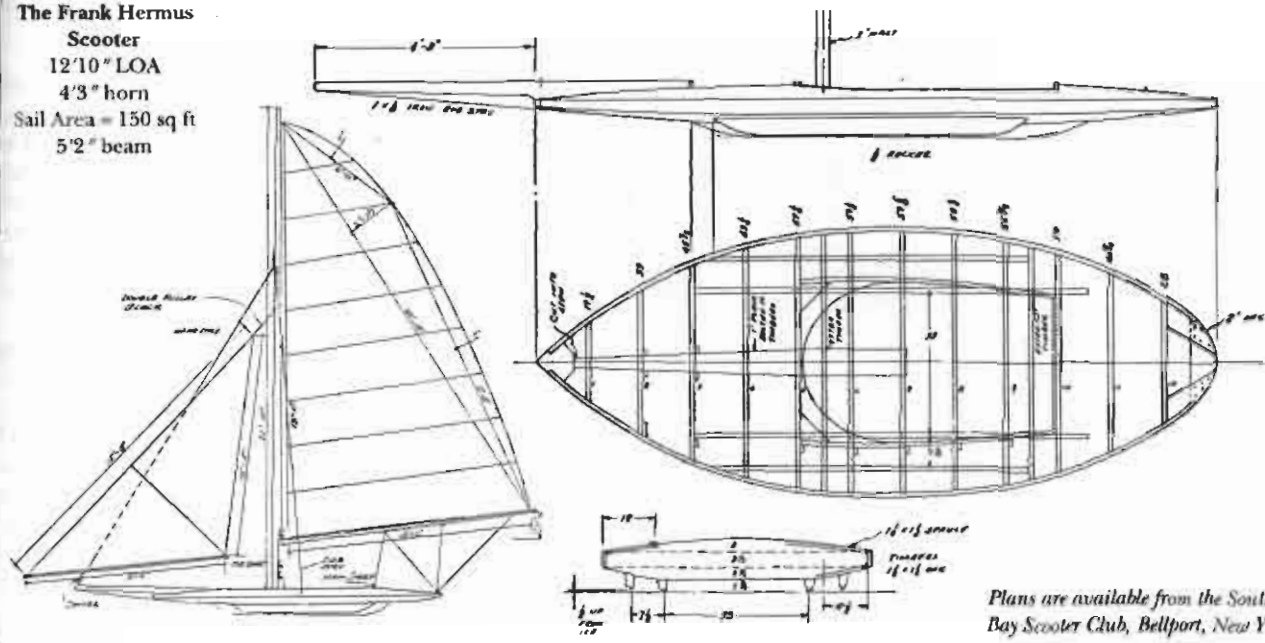
Frank Hermus of Bellport believed in the marconi sail. He used full-length battens, made enormous increases in the roach, and developed a sail that was a precursor of today's catamaran sail.

William Harless of East Moriches had another approach, something he called the cane mast, which was quite revolutionary for 1946. Hooked like a walking cane with a laminated, 180° arc at the top, the mast went inside a broad pocket in the main's luff, which had cut-outs for rigging attachments. This design eliminated the turbulence of the mast and its track. Harless incorporated battens that floated freely in their almost full-width pockets, and put a ball-and-socket pivot at the mast's base. This sail closely resembled an airplane's wing with its superior capability for lift.



*Dick Richardson (#20), Bob Hermus (#9), Robin Paris (#24), and other members of the fleet scoot toward the finish line. Paris's boat has a Harless-style cane-mast airfoil rig. Richardson's and Hermus's are fully battened marconi rigs on boats designed by Bob's grandfather, Frank Hermus, in the 1940s.*

**The Frank Hermus  
Scooter**  
12'10" LOA  
4'3" horn  
Sail Area = 150 sq ft  
5'2" beam



Plans are available from the South Bay Scooter Club, Bellport, New York

Courtesy of South Bay Scooter Club

These two styles of Scooter rigs were immediately at odds with each other and continued to have their own supporters (and detractors) for the next 40 years.

### Sailing the Scooter

During harsh winters that normal folks dread and Scooter sailors pray for, boats all over the Bay are resurrected. There are probably 200 in all, and during an exceptional (long and cold) winter, maybe 70 will become active. If past seasons were bad, the number might be fewer—it takes time to get an unused, dried-out Scooter back into shape. Everything about Scootering is catch as catch can. But when Scooter owners get together at the Bellport Yacht Club (which becomes the South Bay Scooter Club from November to March), this is what a race is like.

There are two classes: Small boats with less than 150 square feet of sail, and large boats with more. The course is triangular and must be rounded three times. Small boats sail a total of nine miles (in a minimum of 45 minutes) and large boats 12 miles (in a minimum of 60 minutes). Each boat must have at least a captain (who handles the jib) and a sheet tender (who handles the main). Crew is optional and can be taken on, or let off, at any point in the race. You can't wear spikes, and piking is definitely forbidden unless you're stuck in a water hole. Everything else is pretty much like a regular sailboat race. Well, sorta....

To begin, all boats line up at the starting line dead downwind of the first mark (usually an old Christmas tree). Positions on the line are determined by draw. When the gun goes off, everyone makes a mad dash to push his or her boat to windward. The captain, holding the jib sheet, pushes against the weather shroud. The sheet tender, holding the mainsheet, pushes against the hull, as does the crew. Once the boat gets going, the captain jumps aboard near the mast, the sheet tender finds a seat facing aft with his legs spread to encircle the deck blocks, and the crew tumbles into the cockpit. We're underway, and so is everyone

else. The first few minutes of a Scooter race are won more through intimidation than sailing. It's a bumper-boat free-for-all until things sort themselves out.

For the beat to windward, the crew keeps its weight forward, and the main is trimmed almost all the way in, with the jib's boom set parallel to it. If winds are steady, it's all up to the captain's touch on the jib to keep the boat on course. When it's gusty, the sheet tender will have to work to keep the sail areas balanced and the boat properly heeled for maximum speed. Ideally, you try to



*Not all puddle-jumpers make it across a water hole with as much aplomb as Bobby Hermus of Bellport (right). Rescuing a Scooter and crew from the shallow bay is simply a matter of tying a line to the horn of the boat, hauling out the people, then pulling the boat until it hits solid ice and pops out.*



*A turn-of-the-century photo showing Scooters with various rigs being piked on ice and sailed in water.*



Sybilok County Historical Society

sail on the leeward-most runner (not the chine), with the next runner just kissing the ice.

The tricky part is to deal with the gusts. Since there is no warning, like a cat's paw, the first hints of a gust are felt in the jib. You then parry with the main, steer with the jib, and use them both to lift you to windward. Catch a puff, and she'll go up on her lee runner, side slip a bit, dig in, and then fly. Acceleration seems almost instantaneous, although not as much as on a true iceboat.

Of course, things don't always go that smoothly. And sometimes, especially if you're pushing her, there will be a capsizes. With the speeds involved and the ice's hard surface, a capsizes sounds like a brutal occur-

rence. It's not. It happens almost as if in slow motion, with the sail acting like a parachute and cushioning your fall to leeward. As it's happening, you just climb to the high side and hang there waiting for the boat to stop. Then everyone drops to the ice, exchanges sheepish looks, rights the Scooter, gives a push, and gets back to it.

The ride on a Scooter is as hard as the rough ice it grinds over. Each ridge, fault, or fissure is transmitted directly to your butt. The noise is impressive. Ice is crushed, cracked, and scraped, and the roar of a 30-knot wind adds to the feeling of violently aggressive speed.

Probably the most satisfying maneuver on a Scooter is making a tack

without a rudder. In light-to-moderate winds, everyone leans to the bow, shifting the center of lateral resistance forward. As the boat nears the eye of the wind, the jib boom is held aback to help her around. If the wind has any weight to it, this is not necessary, and just freeing the jib is enough.

Depending on tactics, a Scooter can be either rapidly pivoted or allowed to coast up into the wind for a few boat lengths before bearing off on the new tack. There is almost no luffing, the main is rarely touched, and the Scooter is sailed through the whole process, with the captain taking a leisurely walk (or mad dive) around the forward side of the mast to change sides.

At the windward mark, we bear off for the downwind leg. Because of the boat's speed, the apparent wind still feels as though it is ahead of the beam, and stays that way until we try to go dead downwind. This course is untenable in a Scooter because the jib loses its function as a steering sail. Your only choice is to tack downwind

in a series of short broad reaches.

On this course, the crew settles aft to help the boat stay off the wind, while the captain keeps in tune with the less-than-sensitive jib. This leg is fast; speeds approach 40 knots on a good day, and the thought of a jibe is less than appealing.

A jibe in a speeding Scooter requires split-second timing, perfect crew coordination, total knowledge of the boat, and a whole lot of luck. The captain initiates the turn by sheeting in the jib to gradually start bringing her dead before the wind. The crew begins to cautiously creep forward. The sheet tender watches the main to make sure that the boat stays level and keeps moving as it goes through the jibe. You don't want to get caught in irons. The idea is to carve a smooth, gentle arc, not the easiest thing to do while balanced on a narrow strip of metal.

On the next leg, a reach, calm is somewhat restored. The crew sits amidships, and the captain regains some feeling in the jib that makes steering easier. The main is eased

out. Speeds are apt to be at their highest (50 knots or more) on this, the glory leg; and if the race isn't too serious, it's a good time to look for a water hole.

Before Scooters became purely fun boats, they could take to the water and sail to a limited degree. Today's boats don't have the buoyancy to do this. With a full crew aboard, a modern Scooter's waterline might be a foot above the deck (especially if her seams have opened up after a few inactive seasons), so a water hole is nothing to linger in.

But when a nice, small one is located, we make off for it at the highest possible speed. The approach is straight on, sheets in, and crew weight aft. She'll fly across it at planing speed, riding on a bow wave and sinking some in the stern. The mainsheet is eased once in the water to prevent a capsize from the apparent wind, which has shifted toward the beam. The main is sheeted in when we exit the hole, and off we go once again.

The transition between ice and

water is dramatic and wet, yet surprisingly gentle. All that is felt is a slight sinking. Getting back up is also smooth because of the high bow wave, and the fact that even 6" of sea ice barely sits only an inch above the water.

Of course, your speed might not always be fast enough, and even the fastest Scooter has trouble making it over a 100-yard water hole. Each year a few boats do go in and stay there, but none have ever been lost.

### Wanting and Getting

If all this sounds attractive to you, I've got some good news and some bad. First the good. If you can manage to get yourself to the Bellport town dock during winter, and there's a race on, you'll probably be able to catch a ride as crew. Live, frost-proof ballast is at a premium, so you'll be welcomed with open (if somewhat frozen) arms.

Now the bad. If you love that first ride and just gotta have a Scooter, you'd better be either a boatbuilder or someone who knows an owner

who is about to pass on and whose family owes you a tremendous favor. Scooters are not easy to come by. And good ones are treasured, kept as heirlooms to be passed on within a closed circle of locals.


Building a Scooter is one route to take. Construction is straightforward enough, and you can develop an idea of what you want, check out what everyone else has done, get a pile of oak, cedar, and spruce, and go to it. But it helps if you're familiar with Scooters before you start. Some how-to-build articles that have been published include pieces in the February 27, 1904, *Forest and Stream*; the November 1904 *Rudder*; the January 1909 *Scientific American*; the February 1937 *Popular Science*, and the December 1949 *Popular Mechanics* (reprinted in 1950 in *23 Boats You Can Build*).

It's a shame more people aren't building new Scooters. The existing fleet is rapidly aging, with very little new blood coming in. And it's not because Scooters are hard to build. They're basic plank-and-sawn-frame

construction. It's an ideal amateur's project.

The only new boats that I know of have come from Ed Laviano and Tod Raynor. Aggressive, soft-water racing sailors and Scooter owners, Laviano and Raynor have brought the Scooter into the 1990s. During the winter of 1988/89 they built identical boats, FLOUNDER and FLUKE, using the WEST System and basing their design on a computer-generated steel jig. For bulkheads they used 1/4" five-ply sapele (a hard, dense African wood). The chines and coamings are of 1/4" mahogany, and the runners are 3/8" spruce. Planking is done with two layers of 3/16" four-ply sapele. There are no fastenings on the boats, and they are lighter and stiffer than any other Scooter. Their rigs are slightly improved cane masts with inboard shrouds for safety when capsizing (less likely to trap a leg) and foam-cored/laminated-wood-skin horns that get weight out of the bows and add strength. The deck layouts are untraditional, with three watertight cockpits—one main

cockpit behind the mast for the sheet tender and crew, and two smaller cockpits on each side, and slightly ahead, of the mast for the captain. These two mini-cockpits look like the eyes on a flatfish, hence the boats' names.

As of this writing, FLUKE and FLOUNDER have yet to prove themselves on the Bay, although one did give a sneak preview on a New Hampshire lake. Both Laviano and Raynor aren't giving away anything when asked if she was fast. They're just biding their time until the Bay freezes over again, waiting to pounce on the old-timers, and keeping Scooters alive well into their second century. 

*This article would not have been possible without the help of Mitch Carucci, Ed Laviano, Tod Raynor, Peter Zendt, and the staff at the Suffolk Marine Museum—all lovers of Scooter history, lore, technology, and fun. Thanks.*

*Once a New York advertising executive, David Seidman now lives a poor, but happy, life as a part-time delivery captain and full-time boating writer.*