



IMPROBABLE

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Photos by Steve Bunnell

“Improbable” is the wrong name for this boat. “Logical” would be better, or “Synergy” or “Refinement.” I wasn’t thinking about names when I first spotted her at Seattle’s Shilshole Marina. I simply responded to the boat’s great lines - clean, open decks, carbon fiber spinnaker poles, jillions of winches, no real cockpit, perfect sheer, small low cabin, tiller steering - all the parts of a serious race boat. And - it was wood! I couldn’t help but stroll over and meet owner Len Schwab.

Len had single-handed his 42’ boat down from Friday Harbor in the San Juan Islands to have covers made for the two beautiful carbon fiber spinnaker poles chocked onto Improbable’s deck. The twin poles are the latest refinement, the latest tweak in Len’s ongoing effort to improve his single-handed sailing. Carbon fiber of course, because there is nothing lighter or stronger and Len wanted poles that he can manage alone. Twin poles, notice, because he’s worked out a two pole spinnaker jibing system he can pull off all by his lonesome with the boat charging downwind.

Len is 66 years old. His boat is 31 years old.

They’ve been together since 1976 when Improbable retired from a successful ocean racing career that included an overall win at the 1971 Fastnet Race. Which makes sense, as the boat was designed for, and does best, in heavy weather. Built in 1971 as an all-out ocean racer with design input by the Bay Area racing’s whose-who; “Commodore” Tomkins, Skip Allen, Tom Wylie and Ron Holland, Improbable proved to be a great ocean racer and the breakthrough design her creators envisioned. She set a record in the heavy weather 1971 Miami-Montego Bay race and won her class in the 1972 Transpac. Those, plus other victories, landed her in Sailing Magazine’s 1993 “100 Greatest Sailing Yachts in North America,” the only Northwest boat to be included in the “modern racers” category.

That’s all well and good and interesting but why an article about a former ocean racer in a cruising publication like “Good Old Boat?” In brief, because of all the intelligent modifications Len has made for single handed or short handed cruising, a situation that challenges many of us. I often notice brokers listing boats as “set up for single (short) handed sailing” and wonder just what they might mean. Sure, you can install an 12 volt autohelm and do just fine in moderate conditions. But I’ve heard many tales of autohelm failure under severe conditions, which I believe, is just when you need them the most. My friend across the dock, a Viet Nam veteran addicted to single handed passages up Vancouver Island’s West coast, takes two identical tillerhelms every year. Every year he burns both of them up. Every year he takes them back for warranty replacement. He’s got the faith, man!

An engineer by profession, Len takes a very practical, very solid approach to so-called short handed modifications. He has an Benmar pilot steering system on Improbable, so it’s not likely to fail. Adapted from hydraulic units used in fishing vessels, Improbable’s autopilot has the power to push a 19,000 lb boat around in heavy seas. There are no little plastic gears to explode, just good old hydraulic fluid squishing around inside fat hoses. It’s an impressive system.

Len saw the need for the robust autopilot system early on. He has maintained the same simplicity and ruggedness in all the other modifications he has made to his beloved vessel. He can’t stop dreaming about ways to improve the boat. We all do that to some extent and I thought that a review of one man’s visions might stimulate the dreams of others.



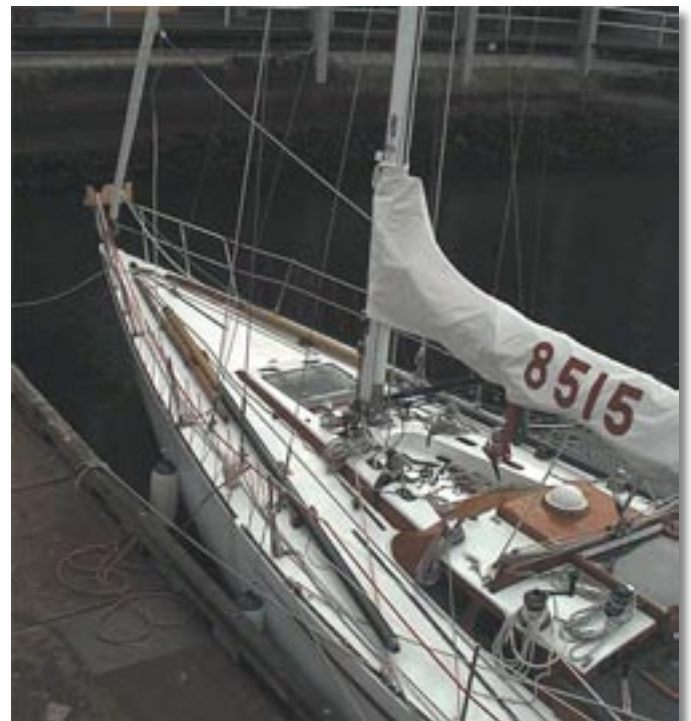
But before reviewing the modifications, let's review the boat. Designed by Gary Mull in 1970 to goals generated by a racing syndicate, Improbable is far from the usual production vessel seen in "Good Old Boat." Yet she has proved to be a first rate ocean cruising vessel precisely because she was designed to go fast under difficult conditions. In other words, she was the antithesis of the customer pleasing assemblage of head to bed specifications around which naval architects try to wrap a successful sailing vessel. Stepping below in Improbable, the immediate impression is "this is a working boat - a stripped out ocean voyager." But a second look reveals that it's all there - from bed to head to nav station and galley, it's just all in one "room" and it isn't fancy.

Dave Allen, a top Bay area sailor and his syndicate cohorts first planned a 38' ocean racer. When their planning efforts did not jell, Dave took many of their parameters to young Gary Mull and asked him for a similar ocean racer but one with standing headroom. Mull's 42' response featured a ". . . Fairly fine bow and good stability for windward work, and at the same time (would) maintain a long, light hull for off-wind performance." He configured a deep stern-mounted tiller controlled rudder to gain maximum steering force. The design called for a small shallow cockpit with a low deck box surrounding the mast for the stowing of halyards and control lines. A fin keel was called for, hanging under a narrow hull with a deeper vee than today's ocean racers.

Beam came out at 11 feet, water line length is 37 feet, and draft is 6'11." Sail area is around 830 sq ft balanced by 8,500 lbs of ballast. Weight was concentrated mid vessel with the engine just aft of the mast and the top section of the steel keel holding diesel fuel. To further save weight, the boat was constructed of cold molded triple laminated New Zealand Kauri wood over 4" laminated Kauri frames. Because they were experts in such things, and because the wood was there, Allen had Improbable built by the T.K. Atkinson yard in Auckland, NZ (this before the world knew much about New Zealand sailors).

Final displacement came out to just 18,000 lbs (very light for it's day). Len figures she displaces about 19,000 lbs today. The hull structure consists of three thin Kauri wood skins wrapped around longitudinal stringers. Hull thickness is one inch. Len has glassed the hull for extra strength and maintenance reduction. There are two sizeable watertight bulkheads forward, joined to stringers that create a strong girder arrangement. The hull has remained stiff and rot free, a testimony to the design, the builders and the dense Kauri wood (now almost a protected species - no logging, no exporting).

The small cabin makes for an open deck space holding fourteen spinnaker, sheet and halyard winches. Len doesn't



have to “manhandle” much. The setup testifies to power of the lever. Improbable even has a unique set of “linked” winches which allow sheet trim from the opposite side of a heeled deck. The winches are cleverly designed with below-deck driveshafts linking winch handle to winch. They are hefty, powerful and convenient. Len modified the cockpit until it has a depth of only 6”. Why? He never sat in it and reducing the depth created a usable aft “cabin.” The autopilot steers, he moves around adjusting or goes below to eat, rest and sleep. Course adjustment is often done with a simple “joy stick.”



In his quest for strength and efficiency, Len has redesigned the big rudder three times. He thinks he’s finally got it right. Improbable goes to windward very well in heavy weather, chunking along at 7 knots even in big seas.

When not sailing under the autopilot, Len can steer from anyplace on the working deck using a deck-circling line led to the tiller.

Len has worked out a safe procedure for solo spinnaker launch and recovery. He doesn’t hesitate to fly the big kite even in blustery conditions. The boat tracks so well, the autopilot steers so well and the dual spinnaker poles jibe so easily, that Len has been known to drive her solo downwind at speeds up to 12 knots!

Sails and steering aren’t the only controls that Len has modified. He has put in a thoughtful system of central pad eyes that enable him to move about the boat firmly tethered at all times. A dual jack line clipped to his harness means that he is never unclipped and the short jack lines protect against projectile falls as well as possible man-overboards.

Len’s engineering training certainly aids his modifications of Improbable. Just as important is the wisdom he has gleaned from his considerable sea time. He began sailing in 1964 in Southern California. Soon he purchased a Baltic 29 and got in some offshore sailing before taking a job with Boeing in Seattle where he purchased a 38’ wood ketch and moved aboard. By the early 1970s he was off with his three young sons for what would be a three year cruise down the Atlantic seaboard and through the Caribbean aboard a 39’ wood cutter. Then to San Francisco where what should catch his eye but the mighty Improbable. He bought the boat and returned to Seattle where the boys once again (reluctantly?) attended school.

Since buying the boat, Len has singlehanded up and down the West Coast several times when he moved between various aerospace firms. He doesn’t hesitate to take the old war horse out solo, even when conditions are a bit snotty. He is confident about the boat and confident in his single handed modifications. When sea conditions prohibit sailing, Len can set Improbable up with a small backed staysail to lie a-hull, a configuration he’s used successfully in over 60 knots of wind.

Len’s sailing skills as well as his solo fever spread to at least one of his sons. Bruce Schwab participated in the 2002-2003 Around Alone single handed race aboard cold-molded wood (what else!) Tom Wylie designed Steve Rander built 60’ ocean racer, Ocean Planet. Like his father, Bruce is a tinkerer when it comes to hot-rodding boats. A respected Bay Area rigger for many years, Bruce modified the vintage 30 square meter Rumbleseat for ocean racing and easily won his class in a single handed TransPac (Calif. to Hawaii).

Len allowed that he is somewhat worried about Bruce in such a demanding test. While Bruce qualified for the race by singlehanded from Florida to the Azores, the boat is relatively untested and Bruce’s ocean experience is limited. It makes perfect sense that Len should worry. Any father would. When that father is someone who has futzted, tweaked and perfected a famous ocean racer over a long period of time, he is only too aware of the time and testing necessary for “bombproof” configurations. Then too, Len knows well the strength of the sea and the fragility of boats and men. However, Bruce has had a good mentor in this father and the boat has so far proven to be fast and strong.



For “Good Old Boat” magazine, the Improbable message is twofold. First, well built former ocean racers make great (but not fancy) cruising vessels. And second, even big powerful 42’ vessels can be set up for single handed control. More than money, it’s the proper application of physics that counts. Don’t hesitate to modify your own good old boat. Keep your eye open to other setups, let yourself dream new configurations, test modifications in mild conditions and always think safety, safety, safety. In this world of high tech complexity, there is much reward in the straight ahead physics of boat rigging. We can actually see the need, dream the solution and configure the mechanism and almost feel like we’ve got a bit of control in an increasingly technical world.