

Southerly 110

Beachable yet able to navigate open-ocean waters, this swing-keel vessel offers versatility, if not a lot of horsepower.

This picture is worth considerably more than a thousand words. It's the image of the Southerly 110 nearly high and dry, with its bow up on a beach, the boat surrounded by nothing but shallow water and sand. The photo is eloquent testimony to the unique and remarkable capabilities of the vessel's swing keel, and the go-anywhere, two-and-a-half-foot-draft-with-beachability concept that has gained a devoted following for the Southerly family of unique cruising auxiliaries built by Northshore Yachts, Ltd.



The Southerly 110 draws just 2' 4" with its 2,310-lb. swing keel retracted. That makes exploring shallow water destinations very convenient, but it's hard not to be wary of a moveable appendage with that kind of heft.

Self-proclaimed as "world leaders in swing-keel yachts," the Chichester, England-based company has been building "variable-draft cruisers" since 1975. Well over 750 are extant. Via transatlantic crossings and circumnavigations, as well as gunkholing, the boats have proven eminently successful.

The first Southerly (the 28, designed by John Bennett,) was introduced in 1975. In 1978, Northshore commissioned American designer Dick Carter (at the time one of the most sought-after racing boat designers in the world) to refine the swing keel concept. "I remember," Carter said recently, "first discovering the joys of cruising the harbors and bays of Brittany...until the tide went out. I've been to the Bahamas and was drawn to the shallows there...Being able to explore them all made tremendous sense."

Working with Northshore, Carter developed the 105, the flagship 145, a 48-foot ketch introduced in the early '80s, and several robust and well-accepted models in between. They all had single, shallow-draft rudders on the centerline, afforded interior as well as exterior steering stations, and carried hefty, wedge-shaped keels.

When the company changed hands just over three years ago, Rob Humphreys—another designer known best for his success on the race course—was tapped to work with the Southerly line. Beginning with a retrofit of the S135, he created a dual-rudder system. This was a crucial enhancement because the shallow centerline rudders necessitated by minimum-draft hulls on the older boats couldn't develop enough lift to be efficient in heavier air when sea conditions tax steering control. Humphreys also sculpted the keel into a higher-lift, foil-like configuration in addition to thickening it at the bottom into a bulb-like shape that aided the boat's sail-carrying capacity.

The S110, the 35-footer that appeared in the U.S. for the first time early in 2005, is the first Southerly that Humphreys has done from scratch. "When Brian Moffatt sold the company to Lester Abbott, the new owner, he brought some changes with him," Humphreys explained. "The focus now is much more on performance. The boats used to be sort of motorsailers. They are still well-built, but now we want them to be good all-round sailboats, too."

Design

The heart of the S110 is her hydraulically operated swing keel. It differs remarkably little from the original mechanism that the boats of the '70s and '80s were built around. The assembly includes a large cast-iron housing, the keel itself (also cast iron), and the machinery to raise and lower it. According to Humphreys, "North-shore has evolved the lifting-keel system from the beginning, and we've stayed with it." With the S110 (and the Raised Saloon 35, a sister design introduced subsequently), the plate is eight feet by four feet, three inches deep and weighs 4,455 lbs. The keel weighs 2,310 lbs. This gives the boat (which weighs just over 15,000 lbs.) 6,765 lbs. of ballast. The S110 is thus on the heavy side for a cruiser of her size, but enjoys a very high (45%) ballast/displacement ratio.

Curmudgeonly though it may seem, at PS we harbor a deep-seated mistrust of massive movable underwater weights and the systems necessary to control them. Pry, poke, poll, and investigate as we could, however, we unearthed no evidence of a Southerly keel system failing. One owner testified: "I got beneath the boat, undid the nuts, and had the boat literally lifted off her keel after five seasons...no wear on the pivot pin...no problems at all." Said another, "I've heard of people renewing the Spectra pendant every five years or so, but that's about it." The hydraulic system (through-bolted to the grounding plate) is rated "robust" and "durable" by other owners. On the S110, it are operated by an electric pump, but there is a manual backup. ("It takes about three minutes to bring the keel all the way up by hand.") Clearly, a big part of the Southerly's success comes from a swing keel that does what it's supposed to, reliably and well.

But a two-ton keel is somewhat obtrusive—accommodations are certainly affected. And there are definite requirements in the shape of a hull that's designed to sit flat on the ground when the tide goes out. The steering, powering, and sea-keeping ability, along with the volume distribution and virtually every aspect of the S110's design revolves around her unique, retracting keel.

Superior sailing performance has long been a big part of Humphreys' design objective. "When you calculate the ratios, you'll find that the S110 has perhaps less sail area for her displacement than the average American cruiser," explained Humphreys, "but when you think in worldwide terms, I believe that she is slotted about right for pure cruising. Her smallish sailplan means that you need not reef so early and makes her more manageable and pleasurable to sail." The S110 has a standard masthead rig with an overlapping (110% or 135%) genoa. Humphreys added: "We're also particularly pleased with the alternate rig configuration offered first on the RS 35 (and soon to be available on the S110). In that sailplan, we've lengthened the mast, enlarged the mainsail, and married it to a blade jib that is self-tacking. We've seen real gains in pure performance and certainly appreciate the gains in maneuverability and tacking ease.

"There's no doubt that the dual rudders work well." Humphreys continued. "As the breeze comes on, the lee rudder becomes increasingly vertical and thus gains efficiency. There is some slight parasitic drag from the dead rudder to windward at lower speeds, but overall we're very happy with the result. Combined with the capacity to change the trim and center of lateral resistance by raising the keel, the new Southerlies offer helming feel and control that are exceptional." A byproduct of the twin rudders is the elimination of "prop wash" as a maneuvering component under power. Many owners have specified bow thrusters, even in boats as small as these 36-footers, as a result.

Both the S110 and the RS 35 ("I'd choose the interior of the 110 with the rig of RS 35," Humphreys told us) share some of the same characteristics: They have positive righting moments (keel down) to a remarkable 150°, for instance. The boat's high ballast/displacement ratio plus the form stability derived from her virtually flat-bottomed

midsection make her very stiff as well. When the keel is extended to its full 7' 2", the righting arm achieved gives her remarkable sail-carrying capacity. Still, when the keel is retracted fully, her generous ballast gives the S110 stability that is remarkably close to that of a conventional fin keeler. Said John Hiltunen, Northshore's U.S. sales manager, "Sailing the boat on the wind with the keel up is quite possible. Normally the degree of heel is no more than five to 10° greater. You make considerable leeway, of course, but it's a nice feature of the boat to have should you need it."

Humphreys describes the S110 as having a "relatively high prismatic." By "filling up the prism" described by her length and width, she tends to eliminate hydrodynamic curves and "corners" that can make for irregular water flow and squirrely behavior in a seaway. At the price of some added wetted surface, the designer has sculpted a boat that is at her best at the top of the wind speed range. Her relatively high sides also help keep her deck and cockpit dry. Then there is her rounded entry—Humphreys' remedy for pounding in head seas. Minimal rocker makes the S110 quite easy to turn. Though she's obviously at home in shoal-water locales, this 36-footer has also been bred to be at her best where the water is deep and the breezes strong. From the beginning, the Southerly aesthetic emphasized function and substance rather than style. With the S110, Humphreys has moved the boats in a more contemporary, sprightly direction. Gone are the double rows of ports that gave an apartment-block look to the older boats, replaced now by a single band of stylized hull ports and a modern expanse of (semi-tinted) house windows. The house silhouette is streamlined and low, the stem and stern angles purposeful, the sheer just-sprung and virile; the Southerlies look like motorsailers no longer.

On Deck

The Southerly 110's cockpit affords its inhabitants substantial protection. It begins with high coamings and continues with a large bridgedeck where one could perch comfortably in foul weather, snug beneath the dodger with legs dangling in the companionway.

A central opening in the transom facilitates boarding as well as the use of the small (10" shelf) swim platform. This opening is spanned by a hinged fiberglass helm seat that sits just aft of the Whitlock steering pedestal. The cockpit seats are long enough to be used for sleeping because they extend into the bridge deck.

All sail control lines from the mast are led aft to line clutches in front of twin cabintop winches. For the headsail sheets, Lewmar 44 primary winches are mounted on the coaming, but at somewhat of a stretch from the helm.

The mainsheet traveler is mounted just forward of the pedestal, so it does divide the cockpit in an awkward fashion, but also provides a better sheeting angle for performance.

If there's a flaw in the deck layout, it's the lack of space on the side decks, especially just outboard of the bridgedeck. This is the price a designer pays to incorporate more volume within the coachroof.

Accommodations

Compare the S110's accommodation plan with a standard fin-keel cruiser and you'll bump up against one of the larger drawbacks of the swing keel—it takes up living space. Northshore and Humphreys have done a good job of arranging the S110's interior so that the space hogged by the keel box is minimal, and so that the integration between the trunk and a galley counter and settee divider is as seamless as possible, but it's not hard to envision more elbow room and better traffic flow were it not there.



The 110's deep, high-sided hull and house afford better than 6' 4" headroom, which is nice. However, her raised galley with athwartships counters houses some awkward corners. Still, the area seems sited well to serve cockpit and saloon and to enjoy the freedom from motion afforded by being at the boat's longitudinal center. The head, located at the bottom of the companionway, is generous, double-doored, and contains both an efficient shower and good oilskin stowage. Countertops in both head and galley are fashioned from Nordstone, a Northshore

product available in a range of colors, none of which appear to be found in nature.

Forward and aft cabins are designed and executed along the lines of those in many modern cruisers of this size. In addition to the generous double berth, the aft cabin includes a vanity and stowage enough for a cruising couple to make this their base. But the sole opening port signals a serious lack of ventilation. Forward, there are options for two, or three single berths. The port berth in the latter set up measures 7' 2".

The primary casualties of space due to the swing keel come, not surprisingly, in the boat's midsection. There you have a cramped and awkward settee to port and the minimal navigation station to starboard. Though the table pivots nicely to admit people into the settee and functions as well as fixed furniture, the space given over to this social center of the boat is not enough to assure elbow room and relaxed comfort. While we don't favor over-sized nav areas in boats under 40 feet, the S110 has a chart table barely big enough for half a chart, and the instrument display cabinet lacks space.

Because the boat is cut in half at this point by the trunk, spaces on both sides suffer. One antidote was Humphreys' use of a deck beam girder in the mast step area to avoid the use of tie-rods and chainplates and thus open up some interior space. The plan works, but we wondered why a tie-rod for the aft lowers was added.

The midships stowage afforded by the S110 was excellent. We especially applaud the elegant ingenuity of her built-in wine rack.

An additional problem with the S110 is ventilation. The companionway hatch plus the aforementioned opening ports in the cockpit and two small cabintop hatches (plus two overhead Dorades) are the sole openings aft of the mast. While the deck vents work well at sea, the breezes they admit cannot be called "tropical." Boats built in the UK rarely evince much thought given to airflow; and the Southerly is no exception.

It's reassuring to know that Southerly builds just 30 boats a year. This means that each boat is an "owner's boat," and that the company works with individuals, helping them choose the features, woods, fabrics, and options that will go into their vessel. "We have standard elements, but most owners enjoy picking and matching to create their own boat where they can," explained Hiltunen. "The biggest change (since the new ownership) has been in the use of unusual woods: American cherry, English oak, Japanese maple, etc. We've also paid much more attention to electronics. The nav-aids and conveniences aren't just bolt-ons, we're doing our best to build them in. When we started sending boats to the U.S., we learned that shore power and a holding tank made little sense as options. We've changed our thought on that and made them standard items."

Most owners are happy with the finish and function of their boats, but there are some glitches. "These are just niggles, but we are unhappy with some of the gaps in the joinery and carelessness in the sealing around the windows," one owner told us. Said another, "I looked for the longest time for a mysterious leak only to find the bolts holding the anode to the hull eaten away."

Performance

When we sailed the Southerly 110 (with a tall rig) in Miami, the most breeze that we experienced was 12 knots of true wind. For a boat that's "at her best in 20 and above," it was not an ideal trial. However, we were able to answer some of our questions. The steering is a brilliant success. Even in light air the feel on the S110's helm was sensitive and accurate to an impressive degree. The vessel was responsive when we made repeated tacks, retaining control despite progressively losing way. She is an easy boat to turn.

However, even with the tall rig we sorely missed the sail area that would have enabled us to make the most of those lightish winds. A drifter and a gennaker (along with a removable bowsprit) are available as options for the S110. Unless the prevailing breezes in your local waters are strong or your plans involve nothing but passagemaking, you would be wise to invest in the additional light-air sails necessary to add some life to this heavy boat.



We did try beating with the keel retracted. In the benign conditions of Biscayne Bay, the difference was remarkably slight when we put the boat on the breeze with her keel fully lifted. She tacked through 100°, accelerated well, and made leeway that was hardly noticeable. More breeze and bigger waves would sap this performance, we guessed, but we were pleasantly surprised at how mannerly the S110 was, even sailing upwind, in the shallow-draft mode. With her keel deployed to its full 7' 2", the helm was lighter and it was no problem to bring the

apparent wind to less than 35°. Footing like this seemed to put her at her best in light air. Steering up close to the wind the boat felt "pinched" and lost much of her drive. Hultinen offered some perspective: "We've done test sails, quite happily, in 35 knots." Given her robust construction, smallish rig, and potent sail-carrying capacity, we could see that North Sea breezes might show the S110 to better advantage than Florida zephyrs. Humphreys has designed a nimbler, more modern Southerly, but one whose sail area still appears a bit small for her considerable displacement.

Conclusions

There's more to performance with a Southerly than tacking angles and boat speed. The boat's shallow draft capabilities move her into a whole different realm. Many dinghy hassles go away when your boat is, in effect, her own dinghy. The anchorages to explore, the navigational ease to enjoy, the safety and convenience to exploit, and the special features to relish, all of these are unconventional benefits when you have no conventional fin-keel. Of his rock-hopping in Finland, one owner reported that, though he hadn't missed them all, the rocks had left his keel without a mark because of the shock-absorber effect of a keel that bounces when others crunch. "And if you run aground at speed," he said, "that safety factor extends to keeping the rig in the boat."

Another owner who deemed himself a "lifelong fan" of his Southerly perhaps captured it best: "I have the boat to go where others dream to go but can't." Despite being a bit

cramped downbelow and a bit undercanvassed above decks, the Southerly 110 compares favorably with a number of "normal" cruisers. She is not cheap (priced at just over \$213,000 at the current exchange rate) and, despite work on a new plant (which will double yearly production to around 70 boats), she is currently hard to get. Still, she offers significant and worthwhile cruising capabilities that you really can't get in many other production built monohulls.

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