

# POWER AND MOTORYACHT

*Sweden Sends You Her Best!*



*Storebro Royal Cruiser 340*

# WHEN THE GOING GETS TOUGH...

The Storebro 340 is the latest cruiser from a company founded in 1728 in Sweden.



The Swedes take rough weather in stride. You can do that when your 34-footer is built to Det Norske Veritas standards.  
By Capt. Bob Armstrong



In Scandinavia, they don't have many of the cruising options we take for granted here. Stay "inside" when conditions are too rough to go offshore? On the Baltic Coast they should be so lucky! Their choice is usually either to go out in the rough stuff or totally miss out on the fun of boating. So they go.

One of the many reasons Scandinavians routinely go out in seas that might send us to the golf course is that they know that conditions probably won't get any better. But, more importantly, they also know their boats are built to take it. And they do.

The Storebro Royal Cruiser 340 is such a boat. Built

to the standards of Det Norske Veritas and the Swedish Bureau of Shipping, it's much sturdier than we're accustomed to. Det Norske Veritas is the Scandinavian equivalent of Lloyds'. In similar fashion, boats built to its standards are not only approved merely by type, they are also individually inspected during construction and individually certified.

#### A Good Rubrail Is Hard To Beat

Nearly every aspect of the boat shows an emphasis on seaworthiness and safety that means things are often done differently. One obvious difference is the deck hardware. The cleats—11-inch double bollards—are large for a 34-footer. But you know you'll never run out of belaying room. And if you need to use spring lines for working the boat around a dock, you know this hardware will not only handle hefty cordage, but the commensurate strain as well.

Likewise the rubrail. It's a hefty 3½-inch rubber "D" moulding that is also a part of the Storebro Royal Cruiser's hull/deck joint. A metal strip inside the D is machine-screwed through the sealed "shoebox" overlap into another metal backing strip. Solid. Secure.

And if you think such a rubrail is only for the novice or careless skipper (the nautical equivalent of training wheels), think again. In rough, tight-quarters situations, putting the boat's shoulder against a piling is often the best maneuver. Knowing you can do this without putting so much as a scratch on the gelcoat can be a great comfort.

Another obvious difference is seen in the welded stainless bowrail. Instead of coming to a point or jutting into a pulpit, it's open. As in gateway. The reason again lies in the way they use boats in Sweden. Lacking sandy beaches where you can anchor off and wade ashore, the Swedes often have to put the bow up against a rock to step ashore forward. Having had to use that technique often along the rocky coast of my native state of Maine, I can really appreciate this feature. Believe me, stepping through beats climbing over or under by a wider margin than you could possibly imagine unless you've also "been there."

#### How To Keep Dry

Yet, despite these differences, and others I'll mention when we look at the interior, it is the less obvious differences that are, perhaps, more important.

You can begin to see them by lifting cockpit hatches which, incidentally, have supports to hold them open. You never have to worry about one falling down on you should the boat roll from a passing wake. Another welcome feature.

In the lazarette, to starboard high along the forward bulkhead, you'll see a row of four ITT motor-operated diaphragm pumps. There are three bilge pumps, one for each of the boat's three separate water-tight compartments (the

forepeak is also separate, but totally enclosed), plus one for the shower sump.

Each suction hose has an accessible strainer and all discharges are manifolded to a common through-hull. Among the advantages: easy access for maintenance, the ability to quickly substitute for an ailing pump by changing hoses, plus the opportunity to inspect all pumps and strainers at once. And just in case these pumps should ever prove inadequate, there's a manual one to port. Its suction hose—long enough to reach anywhere in the boat—lies coiled and waiting to be used whenever and wherever you need it.

All this is really overkill because the Storebro 34's bilges are normally dry. This is partly because the boat is basically tight. The windows—all tempered glass—instead of being set *into* the openings, are mounted, outside, under pressure. The pressure mount means they shouldn't leak. The outside location assures that even if they do, the water will remain outside. This helps greatly in keeping the boat dry inside. The bilges are also dry because the shaft logs are lubricated by grease, rather than water.

The lazarette is also home for three 170-ampere-hour batteries, enclosed in a covered box. Diodes allow each to be charged independently. The diodes also assure that the two starting batteries cannot be discharged to ship's service, while allowing the service battery to be automatically paralleled if extra oomph is needed in starting.

And, in a neat arrangement I've never encountered before, all the vent caps are tied together by plastic tubing and tees to a single common overboard vent. Thus the gasses produced in charging will never come near the terminals, which means no corrosion or build-up. Indeed, the demo 340 I boarded had been in use for a year, yet the battery posts, cables, and terminals all looked brand new.

It's also here in the lazarette that you get a hint in things you *can see* of the kind of quality built-in where you *can't*—such as the double-bolted clamps which hold the exhaust hoses to the stainless elbows at the transom. By the way, please note that while the Storebro uses underwater exhaust, the exhaust tubes actually penetrate the transom well above the waterline. Plenums on the outside carry the exhaust downward. With the exception of intakes which must be submerged, all through-hulls are as far above the water as they can be.

#### Wood The Way It Should Be

The cockpit is perhaps more like a U.S. boat than any other element of the Royal Cruiser. Spacious (50 square feet) and practical, it is the nearly all-purpose "back porch" we expect on a family cruiser. It includes a transom door for access to the platform which has a fold-down swim ladder and additional compact stowage beneath removable hatches.

The operating end of the manual

**Woodwork (opposite) is really "furniture quality." Below, the open cabin area.**





bilge pump and two permanently mounted grease guns for the shaft logs are found behind a small door in the cockpit's forward corner. A similar compartment to starboard contains one of the fire extinguishers.

Looking forward toward the cabin, we see glass panels that look like typical sliding doors. If you've ever fought a sliding door in a seaway, you'll appreciate that they are not. The door to port, the basic entrance, *swings* open. Much easier to handle underway. But when locked open, back against the center panel, *both* may be slid (and locked) way starboard to open the saloon almost completely.

Once inside, the joinerwork is magnificent. Perfectly fitted and finished with seven coats of matte varnish, the African Mahogany woodwork shows that it has been assembled with care and pride. And it's not just for show—even unseen surfaces have been finished to protect them against the marine environment!

But, given the builder's history, quality—in any area—shouldn't be a surprise. Storebro Bruks AB has been in business in Storebro, Sweden since 1728. A machine toolmaker that began as a foundry and forge, the company has been building boats since the end of World War II. And while they started with wood, they were quick to adapt to the changes of the 1960s and have been using Fiberglass Reinforced Plastic (FRP) ever since. Not so surprising from a company that electrified its plant and community in 1897, well before they had electricity in Stockholm!

Today, Storebro Bruks' major business is still the production of machine tools, particularly lathes for ships. So it is to be expected that they fabricate most Royal Cruiser components in-house. And not just in metal—the beautiful joinerwork comes to Storebro in the form of logs.

### The Logic Behind The Helm

While it would be easy to get carried away with its surface beauty, the real charm of the 340's cabin lies in its functionality. There is some American influence in that the space is more open than on Scandinavian boats of the past—but it is unquestionably meant for being used at sea.

This is most obvious in the console. Located on the port side, it has been designed for operating when either standing or sitting. The steering wheel—traditionally spoked wood with a modern stainless rim—is well back from the large windshield, while the VDO engine instruments and the Swedish Silva compass are further forward. This accomplishes two things. Primarily, it puts gauges and compass within a flick of the eye of direct view of the water ahead. This makes both scanning engine function and also steering by compass as painless and automatic as watching where you're going.

And then, the slanted surface between instruments and wheel can serve as—are you ready for this?—a chart table. That's right. Unlike many U.S. builders, the folks at Storebro realize that you sometimes have to navigate and give you room to work with right at the helm. The surface lifts to provide stowage beneath for your navigation tools. This compartment also contains the boat's ID plate which has engine numbers, gear ratios, prop size, shaft specs, etc. Handy.

Single-lever controls are outboard of the steering wheel, on top of a narrow shelf that runs all the way back to the cabin entrance. Immediately abaft the engine controls are the switches and breaker/switches for electrical control. The switches and breakers are an illuminated rocker type so you can see immediately which circuits are energized.

What you can't see, unless you remove the face panel beneath, is the high quality of the electrical system as a whole.

Quick disconnects are provided to make change or replacement easy. Short leads with insulated connectors on the end also provide a degree of prewiring for options not installed at the factory.

The boat I boarded had only shore power for A/C, but the panel has a genset/shore switch built in, and there is ample room in the lazarette for whatever set you might choose.

### Swedish Crystal In The Bar

Abaft the electrical panel you'll find two well-crafted, drop-down panels. Looking much like secretaries you might find in the library of the old manor house (even to the classic brass locks), they further contribute to the traditional look of the joinerwork. The upper hides a bar with built-in racks for bottles and glassware. Highball and "rocks" glasses, all with heavy bases and etched with the Storebro logo, are hand-crafted Swedish Kosta Boda crystal. And yes, they're standard equipment. That's class.

The starboard side of the saloon features a large (six feet along the outboard bench) U-shaped settee with hi-low table. The whole dinette rests on a raised platform with stowage beneath. There's also stowage beneath the settee seats, though A/C components occupy part of it.

The L-shaped galley is down to starboard. Though it is as beautifully crafted and efficiently designed to boot, it may well be the weakest element of the boat when it comes to the U.S. market. Europeans just don't think of galleys the way we do. Not only is it smaller than you'd find on most U.S. 34-footers, but all surfaces are wood. It's beautiful, but not too practical. Richard Grotke of Storebro Yachts in Pompano Beach, Florida (the U.S. distributor) acknowledges this and comments that a change to plastic laminate countertops is a part of the "feedback" they've given to Sweden. It's in the works for the future.

Because of efficient design, there's a fair amount of stowage in the galley. However, some cupboard area is lost to A/C and refrigeration space is limited to a small under-counter unit (made even smaller because it's also under the sink) with a very limited freezer compartment. There is a space provided for stove and oven, wired with a 110v outlet. The stove is not included, though, which makes this, too, a buyer option. The area is "Princess" sized, however, so the choice really isn't that varied.

On the plus side, the countertops and shelves are well-fiddled. And the countertop has been designed with covers for everything, which effectively expands the work area. If you're not using it, you can work over it. The sink cover also flips over to be a cutting board. And the sole is easy-care vinyl.

Though stowage is limited, it's well arranged. There are drawers for silver and other utensils. A set of china and glassware—equally as classy as that in the bar—is also standard and set in "sized" compartments to prevent breakage. In fact, the galley really is adequate (with just over ten cubic feet of dry stowage—not counting utensil and china space, etc.—and 11 square feet of working countertop). It's just different from what we're used to.

### Sleeping Quarters (And A Tool Kit)

Otherwise, the accommodations are quite similar to U.S. 34-footers. A guest stateroom to port has over and under berths with adequate stowage in drawers and a hanging locker. In a rather neat arrangement, the mattress retainer for each berth curves around inboard to form a fiddled nightstand. The berths measure 26"x79" and have five-inch mattresses.

The master stateroom has two hanging lockers (the larger

one to port) plus drawers beneath the foot of the queen-sized pedestal berth. Shelves run forward alongside the berth until they "thin out" at the bow where the large fiddle is able to not only hide the indirect lighting, but also provide a mounting surface for reading lights. In addition to the drawers in the pedestal, there's more stowage at the foot of the berth, immediately beneath the mattress. It contains a very complete set of tools and spare parts. Standard, and another excellent idea.

The head compartment is to starboard between the galley and master stateroom. It's compact, but nice. A grate in the sole keeps your feet out of the water when you shower—the track overhead allows the curtain to slide around to keep water off the rest of the compartment. Yes, it's a combo unit. But that's not unusual in a boat this size. Among the nice touches: a one-piece vanity sink that has a soap holder with drain molded in. The W.C. is a Raritan manual type. It discharges into a rubber, expanding-bladder holding tank with macerator.

And, in a feature that will be particularly welcome in non-A/C areas, both staterooms and the head have Lewmar hatches overhead with built-in ventilators.

### Seatesting The "Mold"

After looking at the care shown in the way the rest of the boat has been put together, the engine compartment contains few surprises. A pair of Volvo—what else on a Swedish boat?—TAMD 60 Cs (240 hp each) occupy most of the space. Except for some filters on the outboard side of the starboard engine, most everything is easy to get at. The heat exchangers are, despite the low profile allowed by the Twin Disc gears' angle drive, right up against the bottom of the saloon sole. So they have plumbing and valves to add water directly from the fresh water system. Thoughtful design.

Down here, you can see that much of the boat's strength comes from a system of stringers and frames. It's hollow, all FRP, and formed as an integrated grid that's molded separately then bonded to the hull. Because they are hollow, the stringers gain their strength from a combination of overall size and the way they are integrated with the frames and hull.

The 340 really hasn't been designed or built as a lightweight: the hull is solid FRP. Yet the hollow stringers and frames do help keep the boat's total weight down, and the deck and cabin sides are foam cored. So the boat doesn't carry much "fat" either.

With this type of construction and a fairly low profile by design, this Storebro has a relatively low center of gravity. Add this to a modified-V bottom which progresses from a sharp entry through a 17-degree deadrise amidship to nine degrees at the transom, include a slight vestige of a keel for both strength and lateral stability, chine flats for dryness and lift, and you have a boat that is not only easily moved, but also takes the seas easily as well.

This doesn't happen by accident. Every Storebro is first seatested as a full-size wooden prototype. Fitted with the planned motive power and ballasted to design weight, the prototype is run, refining details all the while, until everyone is satisfied the hull is performing the way it should be. Then it becomes the plug for the mold.

Of course, this is only good for fine-tuning a basic design. If that isn't right, all the prototype testing in the world can't correct it. But if the design is right, refining makes it better. And by working *before* the tooling is developed, every boat built—starting with Hull No. 1—benefits.

On the basis of performance, I'd have to say the Storebro 340's design is excellent. It's a product of W.H. Wilke and his

firm, Yacht Design International. Wilke obviously doesn't think the deep-V is the only way to go, even in rough stuff. And if this Royal Cruiser is any indication, his theories are sound. The proof is in the way she handles and rides.

### Seatesting The Boat

With Grotke aboard, I took the 340 out through Hillsborough Inlet for an open sea run. Heading into a south-east wind of around 20 knots, we were getting a chop of about four feet. Because the wind was going with the stream, it didn't get any rougher when we got further offshore. So despite Grotke's hopes that I might encounter some "good stuff," four feet was the best we could find.

Running the tachs up to 2500 turns, we took the seas head on at an average 25 knots. The boat never shuddered, but our speed against sea speed proved to be less than totally comfortable. So I backed off until we were just sliding over the waves—2000 rpm, 17 knots. This is one of the 340's advantages. She never squats. Running angle remains essentially the same at all speeds. So you can adjust speed to the seas without worrying about improper or inefficient throttle settings.

Top speed at WOT (2800 turns) and running across the seas was 30 knots. At any speed near the top end, she'd do a 180 within a 50-foot circle. And except for running into the seas head-on at top speed, which isn't comfortable in any boat, it felt fine all the way. Very secure. Even powering straight into the seas, the boat felt solid.

At all speeds, even nearly flat out straight into the seas, the noise level was conspicuous by its absence. Either on the bridge or in the cabin, conversation in normal tones was the order of the day. This has to be partly because of the underwater exhaust, and partly because the engine compartment is well insulated (*plus* there's an additional sound shield mat beneath the saloon's padded carpet). But I think it's mostly because the boat is so solidly built. Not only is there no shudder or shake, the boat doesn't give much sympathetic vibration, either.

At low speed the Storebro Royal Cruiser 340 is also very responsive. Even when bringing it into a tight spot at the dock of a waterfront restaurant after but a couple of hours at the helm, I had the comforting feeling she would do as I asked. She did.

Operationally, my only objections would be that the flying bridge is strictly sit-down. The seat is great, and visibility, even astern (at least to starboard through the hatch) isn't bad. But if you like to do your dockside maneuvering standing up (I do), both the controls and the wheel are too low. You *have* to sit. (Grotke says this is also an area he's working with Sweden to be corrected in future U.S. models. After all, they don't get to use flying bridges that much in northern Europe.)

He adds that the bridge console was purposely designed "low" to aid in keeping an overall low profile. But it can be raised a bit without destroying the lines. And speaking of raising, the arch pivots neatly on aft hinges and can be easily raised or lowered by one person. Two stainless eye bolts, one per side, hold it in place when up. It's a nice feature if you have to put up with many bridges.

I have one other minor complaint: though I generally prefer single-lever controls, I found the Volvo controls to have too great a lag between neutral and "first notch" in gear. I got used to it, but I'd still prefer a more positive, quicker reaction.

I guess you can tell that on the whole, I liked the Storebro Royal Cruiser 340 very much. If you really enjoy being on water under all conditions—in a very seaworthy vessel—you'll like it too. □

## SPECTATOR by Tom Fexas

# DON'T KNOCK THE NEW YORK SHOW

(Or its hot dogs!)

### The Half-A-Boat Five Stars

Roaming through the show, I noted that the boats were decently displayed and there was great enthusiasm amongst both showgoers and exhibitors. But there was one exhibit that simply blew me away. After chastising the boating industry for its bland, unimaginative, crowded displays at the Fort Lauderdale Boat Show ("Spectator," PMY, January 1987), it was truly refreshing to see Storebro's display.

Storebro builds quality cruisers in Sweden. Had they displayed their 34-footer as other manufacturers were displaying their boats, it would have been just another nice boat. This year, Storebro simply outdistanced the competition as far as display and showmanship goes. For the New York Boat Show, they displayed *half* of a 34-footer.

I don't mean the bottom half without the top. Bare hulls have been displayed before. That's nothing special. No, with considerable guts, Storebro took a *saw* down the *centerline* of one of their boats and displayed

half of it.

It was just like looking at an inboard profile drawing. All joinery, machinery, and decor were in place. Towels were in their racks, dishes were in the galley—just like there were half people living aboard. You could clearly see stringers, frames, coring, joinerwork, glass work, etc., etc. A truly outstanding display and one, I am sure, to be copied in the future.

The display does, however, raise some interesting questions. Was it brought about by a spiteful divorce settlement? Is this a new installment method of buying a boat? What the hell happened to the other half? When the show circuit is completed will the two halves be glued together and used as a whole boat again? Is Storebro in the process of developing a catamaran? Did the husband want a sportfisherman while the wife wanted a cruiser? In the meantime we are wondering about all this, Storebro must be complimented for the most innovative display seen anywhere in a good number of years.

The most imaginative display at New York: Storebro's full-sized "half" boat, complete with engine!



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