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Wonder from Down Under

TESTING THE BELIZE 54 DAYBRIDGE SPORT CRUISER

By Phil Friedman

I'm not going to kid you. When *PassageMaker* editor-in-chief, Jonathan Cooper, called to ask if I was available to test a Belize 54 for an upcoming issue, I wondered what the world of yachting journalism might be coming to.

Oh sure, I've tested and reviewed several hundred boats and yachts of all kinds, back when I was a senior editor at one of *PassageMaker's* sister publications and during the intervening years. But I'm a motorsailer and trawler-yacht kind of guy, and from a professional standpoint, for the most part I'm a large- and megayacht-builder and project manager. Could I achieve the

right perspective for evaluating this type of planing sportyacht?

Well, not to worry, my friends. Notwithstanding that the Belize 54 Daybridge isn't even a distant relative of a trawler-yacht, I didn't have to break a sweat to grow to really like her. It just happened pretty much on its own.

I admit that part of the reason is she's built in Kaohsiung, Taiwan, a yacht-building center where I've found the level of craftsmanship these days to be second to none. And I guess another part of the reason I took an immediate liking to the Belize 54 Daybridge is that she's entirely designed and engineered by

Convenient top-end speed and a relatively shallow draft of 3.5' make the Belize 54 Daybridge a solid Caribbean cruiser.



Riviera Yachts in Australia, a firm with 34 years in the business, its own manufacturing facility on the Gold Coast of Queensland, and some 500 yachts currently cruising the world. All of which becomes immediately evident in the first impression the Belize 54 Daybridge makes.

First Impressions

The positive gut-response to the Belize 54 that I had as I approached her on the fuel dock at the Sailfish Marina in Stuart, Florida, was triggered, no doubt, primarily by her seriously good looks. (Yep, I can be just as superficial as the next guy—but cut me some slack and call it being “aesthetically sensitive.”)

With her low profile, unbroken sheer, single large deckhouse, swept-back windscreen, and deftly shaped large side-glass, the 54 Daybridge radiates a strong hint of the powerful and capable offshore sportfishing yachts so well known in the Carolinas and South Florida—but made over by what could be mistaken for the best of Italian design genius. Visually, she oozes power and stability and is thoroughly contemporary yet not in the least finicky, a winning combination according to my “aesthetic sensibilities.”

My first impression of the 54 Daybridge was that she was designed and built by people who have their kit together. My subsequent impressions, gained as I “looked under the hood,” confirmed that.

Under the Hood

The Belize 54 I tested was fitted standard with twin Volvo Penta IPS 800 diesel engines and pod drives (each max rated at 600 horsepower). When I arrived at the dock, Riviera/Belize International Sales Director, Chris McCafferty, had the yacht warming up with the quarterdeck engine room hatch open. (Note that, being at one time a rag-bagger, I outright refuse to call a flush aft deck a “cockpit.”)

Big diesel iron is pretty noisy, even at idle. And generally, the bigger it is, the noisier it is. So as I dropped down the ladder into the Belize’s compact but workable engine room, I wondered whether I should have brought my ear plugs. But as my head descended below the hatch coaming, I immediately noticed how quiet the diesels were. And any lingering doubt about my need for ear plugs was dispelled entirely when I later ran the yacht at wide open throttle. But more on that later, when we talk about performance.

In the meantime, just to ensure we’re all on the same page, let me remind you that the Volvo Penta IPS incorporates an under-the-hull drive leg that carries two forward-facing, counter-rotating propellers that rotate through a full 360 degrees as directed by a fully electronic control box. The drive leg is not “hard” or “close-coupled” to the propulsion engine, but instead is attached via a jack shaft that has a universal joint at each end. This setup allows the engine to be “soft” (resiliently) mounted, which minimizes transmission of noise and vibration to the hull structure. Soft-mounting the engine is possible because, with IPS, propeller thrust is transmitted to the hull through the drive-leg mounting flange, not through the engine mounts as would be the case with a traditional setup (propshaft to close-coupled marine transmission).

The Volvo Penta IPS drive leg (called a “pod drive”) also incorporates a forward-facing propeller arrangement. This puts its



Top: The transom hides a cleverly-designed griddle/grill and wetbar. **Above & Opposite:** Forward cabin walkarounds and tasteful interior design in both staterooms (master stateroom, opposite page), employ beautiful textiles, carpet, and book-matched wood joinery.

props in clean, undisturbed water, in contrast to what happens when they are placed in a trailing position relative to the drive leg. The result is a significant increase in propeller efficiency. And that’s not all. The efficiency of the drive is further enhanced by Volvo Penta’s signature twin counter-rotating propeller arrangement.

I need to point out that the improved efficiency of twin counter-rotating propellers is not just empty marketing hype. When I first started testing Volvo Penta DuoProp drives for a number of boating magazines in the 1990s, I was often able to arrange to test a non-DuoProp version of the same boat at the same time. And I can say without hesitation that the differences in terms of propeller bite in fast, hard turns and during acceleration to top speed from a dead stop were significant. During my recent test of the Belize 54 Daybridge, I observed that Volvo Penta IPS takes these improvements to the next level.



By the way, an unusual feature of the Belize 54’s IPS installation is that the engines are connected to the pod drives by means of a much-longer-than-usual jack shaft—I’d say almost six feet, without having put a tape measure on them. I was told this approach was dictated by the need to fit the engines into the available space, while accommodating the fore-and-aft centerline tender “garage.” Maybe so, but it also had, as I see it, the serendipitous consequence of keeping the heavy weight of the engines further forward than in most pod-driven yachts. The ultimate result is that optimum longitudinal running trim is easier to achieve and maintain than if the engines were further aft and closer to the pod drives. Again, more on running trim later, when we talk about performance.

The Inside Story

While the evaluation of the interior layout of a yacht is almost entirely dependent on personal tastes and preferences, there are several important points I’d like to note about the layout of the Belize 54 Daybridge.

The lower helm is raised and the helm situated on the centerline, providing good visibility all around. The result is the 54 Daybridge can actually be operated comfortably and safely

from her lower helm—a capability not nearly as common as you might suppose. (And BTW, I don’t use the term “main helm” in referring to a yacht like this because in most waters, the flybridge helm will be used the majority of the time and, therefore, should more properly be designated the “main helm.”)

Aft of her lower control station, the 54 Daybridge has a roomy galley to port and a large L-shaped settee to starboard with a very clever convertible dining table. The table not only raises and lowers to various usable heights, but it also converts from a smaller coffee tabletop to a large dining top to a filler piece for an occasional double bed—all in a way that puts the Transformers to shame.

At the aft end of her moderately sized saloon, the 54 Daybridge has a large sliding door, beautifully crafted of armored glass and polished stainless steel, that leads to her quarterdeck where she is additionally fitted with a generously sized aft settee and dining table (which converts electrohydraulically to a daybed or lounging pad).

The pièce de résistance of the maindeck layout is, to my mind, the combination of this large glass sliding door with a top-hinged, fully opening glass window to port. When raised, it creates a common social area fully 30 feet long by merging the saloon with

the quarterdeck area that is effectively on the same level. Add the optional (and beautifully executed) polished stainless steel frame and fabric shade extension to the flybridge deck and you have a truly huge open area for entertaining or just lounging comfortably while enjoying the pleasures of being on the water.

On her lower deck, the 54 Daybridge offers basically a three-stateroom layout that includes a master suite, a VIP right forward, a third twin berth cabin to starboard, and an additional compact compartment to port that can serve as an office or a even a crew-style or kids' cabin. All these spaces are adequate, but here is where the 54 Daybridge displays, perhaps, some measure of cultural predisposition toward the rugged, make-the-best-of-it Aussie and Kiwi traditions.

The nominal "master" suite is placed amidship—which in most circumstances makes the most sense, for amidship is where the motion running at sea is minimized and where best advantage can be taken of the full beam of the yacht for accommodations. In the case of the 54 Daybridge, however, this location is directly beneath the maindeck control station and the saloon. With the need to provide full headroom on the maindeck plus keep the overall exterior profile relatively low, the headroom in the master suite is significantly reduced both over the king bed and at its foot.

The result of this arrangement does not affect someone like me much, but I am a relatively small guy (5' 9" on a good day). And I'd expect anyone pushing six feet or taller would feel a bit pinched. Unless, of course, you possess that rugged make-do attitude.

This headroom situation in the "master" suite is in distinct

contrast to what you find in the VIP forward, where there is marvelous headroom well in excess of seven feet, not to mention a surfeit of natural light and elbow room. All of which lead me to predict most North Americans will choose to use the nominal VIP as their owner's stateroom, with the port small cabin finished as a bath en suite to the redesignated master stateroom right forward.

The Devil Is in the Details — Or Not

The fit and finish found in the Belize 54 Daybridge is first-rate and more than commensurate with the market niche she targets. Too many Euro-styled—some might say contemporary-styled—yachts these days seem almost to mimic high-end commercial bank decor, with mitered joinery corners and veneer selections and finish that seem not quite natural. There is none of that in the 54 Daybridge, which is replete with swept countertop moldings and richly finished solid hardwoods and veneers.

From hardware to appliances, the 54 Daybridge evinces high quality, durability, and accentuated utility. Miele predominates in the galley, for example. Natural stone and first-quality solid surface materials are used for the more heavily used countertops.

The yacht I tested was fitted standard with a CZone digital networked electronic control and monitoring system for all AC and DC equipment and onboard systems. The CZone system is so complete that, according to Chris McCafferty, it can even control the starting sequence of the compressors for the Dometic direct-expansion air conditioning system so as to prevent any two compressors from starting up at the same time. Which,



Plenty of seating at the cockpit settee or on stools by the galley bar.



The view aft from the saloon demonstrates how open the boat can extend through to the cockpit space.

believe me, is a very big deal indeed. Because a compressor's momentary starting load is five to seven times its running load, several compressors coming online at the same time becomes the single most important determining factor in genset sizing. Preventing multiple compressors from starting at once can reduce total max loading on the genset by as much as 65%, easily reducing the required genset size by a model step or two. And in doing so, it also reduces potential noise, fuel consumption, and exhaust emissions, as well as the propensity for lights to flicker when the air conditioning system kicks on.

And while we're talking about air conditioning systems, allow me to bust a common myth about direct-expansion systems (which Belize uses in the 54 Daybridge) versus chilled-water arrangements. While many boaters and industry people will tell you that chilled-water systems are quieter, the claim results from mistaken reasoning. While it is true both that most larger yachts use chilled-water systems and that the air conditioning systems in most larger yachts are significantly quieter than those in smaller yachts, it is faulty logic to conclude that the chilled-water approach should be the system of first choice.

In fact, the true cause of most of the commonly noticed noise in a yacht's air conditioning system is an accelerated cold-air flow being forced out of too-small exit vents. On larger yachts, there is generally enough room to provide for larger cold-air vent exits that allow the same given volume of air flow to exit at a lower velocity. So a split direct-expansion system can be just as quiet as a chilled-water system. My point here is that Belize's use of direct-expansion air conditioning in the 54 Daybridge

is actually a smart choice and not at all inconsistent with their demonstrated commitment to high quality and solid utility.

Running Fast, Running Silent

Whatever else might be said for the Belize 54 Daybridge, her strongest suit is her overall performance—handling, running in a seaway, sustainable speed, and the like.

The IPS units are fitted with dynamic positioning and vectoring joystick controls. When we pulled away to sample the yacht's performance, it was only necessary to push the joystick directly to starboard and her IPS drives vectored her away from the dock on an axis exactly 90 degrees to the face of the fuel dock, without bow or stern thrusters. Low-speed maneuvering was easy and sure, with joystick control that is more responsive and precise than traditional rudder and throttle. At slow speed in-harbor, she moved with minimal wake and once clear of the inlet entrance, accelerated smoothly up through the 20s to a genuine 30-knot max speed at WOT (with full fuel aboard and confirmed by making multiple runs in opposite directions).

That was with the twin 600-horsepower D8 7.7 liter Volvo Pentas that are fitted standard. According to McCafferty, the optional 700-horsepower version of the engines will yield a top speed of a solid 33 knots at WOT.

During our test, wind and sea conditions were relatively mild, even outside in the ocean. At most, a two-foot sea was running onshore with a breeze coming from the same direction. But the crests were pretty widely spaced and seemed more like swells than seas, so the best we could do was create our own disturbance

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LOA: 54'1"
BEAM: 16'6"
DRAFT: 3'6"
DRY WEIGHT: 51,257 lb.
FUEL: 792 gal.
FRESH WATER: 184 gal.
BLACK WATER: 100 gal.
SLEEPS: 6
STANDARD PROPULSION: 2x Volvo Penta diesel D8-IPS-800 600 HP each
OPTIONAL PROPULSION: 2x Volvo Penta diesel D8-IPS-900 700 HP each
GENERATOR: Onan EQD 17.5 kW



by circling and crossing back over our own wake to see how the 54's hull would perform in a chop. Every indication was that her sharp-entry, warped-plane hull form would do admirably even in conditions much rougher than we could generate during our test.

With her low profile and resulting low vertical center of gravity (VCG), the 54 Daybridge runs and feels exceptionally solid and stable. No doubt this is also the result of her warped-plane bottom, which enables her to have a deep-deadrise entry (to minimize pounding in a seaway) while at the same time flattening out to a modest 12-degree deadrise at her stern. Of course, the 54's stability underway is also significantly aided by her electronically controlled trim tabs, which operate independently from one another to not only dampen out roll but also enable her to accelerate from zero to top speed without exhibiting the exaggerated momentary bowrise so frequently associated with planing hulls as they make the transition from displacement to planing mode.

At both top and "cruising" speeds, the 54 Daybridge exhibited a clean run and a flat wake, with no energy-wasting "rooster tail" rising from it. Indeed, even at speeds just below her transition to planing mode, she does not suck up a huge quarter wave, as do so many planing hulls. And I found the ride at an economical 12 to 13 knots to be excellent. All of which indicates an efficient hull form, and again, is very likely the direct result of her warped-plane bottom with its flatter aft sections.

When I put the 54 through hard-over tight turns at full speed, she would power into the turn with the correct heel to the inside and was generally well mannered. When I mentioned this to McCafferty, he explained that the IPS drives are fitted with electronically controlled variable radius turning that prevents the vessel from turning so hard at speed that it causes a potentially dangerous "tripping" situation.

The View Astern

Wow! I started this report by explaining that the type of planing yacht represented by the Belize 54 Daybridge is not naturally my kind of yacht. Yet, I've gone on to bend your ear (figuratively, of course) for quite a long time about how much I liked her. Which should, in itself, tell you something about the Belize 54 Daybridge, namely, that overall it is superior in both conception and execution. And it's well worth looking at if you are in the market for a fast cruising yacht that can take you from, say, Fort Lauderdale, Florida, to Grand Bahama Island in just over three hours in good weather, then provide you with a luxurious and comfortable platform from which to enjoy the surroundings for a weekend, a week, or even a month at a time. ■