

By | **Sven Donaldson**



Fathom 40

OUTSTANDING NEW EXPEDITION YACHT
FROM WASHINGTON STATE

Surrounded by scenic farmland, the quiet town of Sedro-Wooley, east of Anacortes, Wash., might seem an unlikely spot for state-of-the-art boatbuilding. But this is the longtime home of Janiki Industries—a firm specializing in robotic five-axis routing for large-scale tools (plugs and molds) vital to numerous aerospace and advanced marine projects. Lately, it's also become the birthplace of Fathom Yachts, an up-and-coming builder of "fast expedition yachts"—cruising boats specifically geared to meet the needs of those Baby Boomers now entering retirement.

Fathom's three founders have decades of experience in the marine biz, so they understand its unique challenges and have so far steered clear of the usual pitfalls. Eric "Ric" Reid, director of manufacturing, is a past president of Nordic Tugs and, before that, an executive at several other boat manufacturers. Tracy Prescott, marketing director, and John Green, financial director, are also Nordic Tug alumni as well as veterans of other well-known Pacific Northwest marine and manufacturing firms. In planning the Fathom 40, the three partners identified a market niche that is surprisingly underserved by existing products: in essence, a

brawny, liveaboard and offshore-capable vessel that will fit in most standard 40-foot slips. As it turns out, most power yachts in this bracket are considerably longer than 40 feet once you add swim grids and bow rollers, while the 36-footers offer far less in the way of accommodations.

Once Fathom's principals had pinpointed their market, they wasted no time in developing the product. It was scarcely more than a year from the time Victoria-based naval architect Greg Marshall received the commission until hull number one started sea trials. During the same brief period, Fathom Yachts set up their entire boatbuilding plant, and tooled up to mass-produce an exceptionally elaborate 40-footer. Literally months were saved thanks to state-of-the-art, computer-aided design (CAD) and the involvement of neighboring Janiki Industries for the rapid production of several dozen molds, large and small. Fathom, Marshall and Janiki had so much confidence in the accuracy of their CAD systems that even the major components—hulls, pan and deck—were tooled up independently (not contact-molded to match one another). The parts all met up for the first time as the prototype came together, and to everyone's relief, they fit like gloves.



FATHOM 40

LOA	12.29 m	40' 4"
LWL	11.00 m	36' 1"
Beam	4.42 m	14' 6"
Draft	1.01 m	3' 6"
Bridge Clearance	4.80 m	15' 9"
Displ.	10,910 kg	24,000 lb
Fuel	1,530 L	400 gal
Water	516 L	135 gal
Grey Water	172 L	44 gal
Holding	172 L	44 gal
Power	Single Cummins QSB5.9 series diesel (425–480 hp)	

BUILT BY

Fathom Yachts
Sedro-Wooley, WA
www.fathomyachts.com

SOLD BY

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DESIGN/CONSTRUCTION Greg Marshall is a noted innovator when it comes to creating interior arrangements that take maximum advantage of available three-dimensional space. His office is also known for drafting exceptionally sea-kindly, fuel-efficient hulls. The Fathom 40 combines both attributes with a voluminous interior on four discrete levels, and an exceptionally clean underbody featuring a narrow,



wave-slicing entry, non-inverted lifting strakes, and a prop tunnel for optimal efficiency and reduced draft. The hard chines add wetted surface compared to a soft-bilged design, but major gains in terms of roll damping and a seamless transition into semi-planing mode make this feature well worthwhile.

Stylistically, the Fathom 40 can be described as two parts stalwart trawler, one part streamlined express cruiser. Generously rounded corners and subtle compound curves in nearly all the “flat” areas serve both to soften the overall look and

increase structural stiffness. In addition, foam sandwich construction (Corecell coring) is used nearly everywhere except in the single-skin bottom where the port and starboard hull halves join up. The main stringers are also foam-cored, and the inner hull pan, permanently bonded down with Plexus two-part methacrylate adhesive, is designed to provide a protective double bottom in key areas.

The prototype Fathom 40 reviewed here was entirely laid up by hand, but all subsequent boats have utilized an advanced resin infusion process to ensure uniform,

void-free laminates with a very favorable glass-resin ratio. Weight saved above the waterline has been added back by further reinforcing bottom laminations, while in the process lowering the center of gravity for added stability. Resin infusion also improves the manufacturing environment because no resin enters the mold until the entire laminate stack has been sealed inside a vacuum bag.

SYSTEMS Standard power for the Fathom 40 is a single Cummins QSB common rail diesel rated at 425 hp, although optional engines based on the same 5.9-litre platform offer up to 480 hp. The engine is mounted at the center of a spacious engine room, flanked by twin “walkways” (with slightly less than five feet of headroom) that provide nearly unrestricted maintenance access. With a prop tunnel to reduce the shaft angle and the engine nestled low in the bilge, the hefty two-inch drive shaft is just seven feet long, virtually eliminating shaft flex.

To reduce noise and vibration, the entire engine compartment is lined with high quality acoustic foam. As a result, the sound level in the pilothouse is an extremely quiet 64 dBA when cruising at 9.9 knots with the engine turning 2,000



latter substitutes a larger 9-kW genset to power reverse-cycle heating/air conditioning and a Kuuma electric stove. Both versions get a Nova Kool two-way refrigerator/freezer.

EXTERIOR Boarding the Fathom 40 entails an easy step-up to an innovative, transom “tailgate” that extends the cockpit sole three feet aft when lowered. Under way, it can remain down with no risk of flooding—but, of course, there’s the increased danger of falling overboard.

The generous breadth of the 40’s saloon precludes wide walkways, so going forward on deck entails holding a handrail above the windows and moving somewhat carefully. However, the normal route forward is through the saloon and out the sliding door on the starboard side of the pilothouse. The secure, raised foredeck—roughly six feet above the waterline—is protected by massive bulwarks topped by stainless railings, from which fenders can be readily deployed amidships.

One level up is a cozy flybridge equipped with full helm controls. From

rpm; but, even more impressively, the sound level peaks at just 73 dBA with the throttle wide open (19.2 knots, 3,050 rpm). Such effective sound damping is rarely encountered outside the realm of luxury mega-yachts.

Very high installation standards are equally apparent in the plumbing and electrical systems—optimized in-house by Fathom’s resident CAD guru, Scott Ellis. All hose and cable runs are short and tidy; all pumps, thru-hulls and filters are

easily accessible. Weld Mount glue studs take the place of screw-on fittings wherever components are attached to molded fiberglass—definitely a quicker, cleaner way to build boats.

The Fathom 40 is offered with either a “Polar Package” (appropriate for local cruising) or, for about \$10,000 more, a “Tropical Package.” The former includes a 6-kW Northern Lights genset, diesel hot water heating and a Kuuma (formerly Force Ten) propane galley stove; the

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this vantage, and aided by the standard bow and stern thrusters, the single-screw Fathom is actually easier to maneuver than most dual-engine rigs.

INTERIOR Aboard the Fathom 40, the raised pilothouse doubles as a living area thanks to a comfortable L-shaped lounge complete with table and numerous opening marine windows by Diamond Sea-Glaze for superb, all-around visibility. The saloon offers equally enticing views with huge side windows and a sliding glass door aft. Of course, the pilothouse can be isolated and blacked out for night running—a worthwhile advantage for serious cruising.

The master suite, guest stateroom and a single large head with separate shower are located beneath the pilothouse and foredeck. Further aft and higher, but a step down from the saloon itself, is a generous, well-equipped galley. Interior fit and finish is first-rate, and the materials too are impressive. The furniture modules are lacquered teak, and the overhead liners are Ultrasuede—not

the usual vinyl. For upholstery, Fathom chose Ultraleather in a soft tan style called Brisa distressed buckskin; and as a crowning touch, the galley and head get real granite countertops. All in all, the Fathom 40 has a very livable, attractive interior that can comfortably sleep six when the convertible dinette comes into play.

ON THE WATER I tested the prototype Fathom 40 off Anacortes under relatively calm conditions, so these observations will focus primarily on efficiency, not sea-keeping. However, watching the boat in chop during an earlier photo session off Lummi Island, it was obvious that the boat provides a stable and virtually bone-dry ride.

At 1,200 rpm, the Fathom ran at 6.7 knots, burning only 1.7 gph according to the Smartcraft onboard instrumentation. At this modest pace, the 400 U.S. gallon fuel supply offers an impressive range of 1,400 miles with a 10 percent reserve.

However, most owners will normally wish to cruise faster, and in semi-planing mode,

the relatively lightweight Fathom comes into its own. Between 9.9 and 14.8 knots (2,000–2,600 rpm), the fuel burn rate progressively increased from 6.9 gph to 14.2 gph, which translates to fuel consumption numbers of 1.05–1.43 miles per gallon. Compared to a typical “fasttrawler” of similar size, this is impressive performance indeed.

Wide open, the Fathom prototype reached 19.2 knots (3,050 rpm). According to Tracy Prescott, the number five production hull with the same 425-hp engine, but a more finely tuned prop, topped out at 20.5 knots.

CLOSING REMARKS The Fathom 40 is a tall, wide and very spacious boat, so turning out a full-production version that weighs in below the 24,000-pound design displacement is a testament to excellent construction technology and craftsmanship. It can be found at Passage Maker Yachts in Seattle for \$549,000. In view of the exceptional performance, engineering and overall quality, the price seems justified; and Fathom’s brimming order books bear this out. ♦

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