Sailboat Review

Catalina 445

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Performance Is the Priority for This New Catalina Design

When Gerry Douglas sat down to design the Catalina 445, he started with a clean sheet of paper. As Catalina's chief engineer and designer, Douglas wanted to create a performance-oriented boat that incorporated the builder's years of construction experience but that also set itself apart from its own heritage and from other production boats. He may have done just that.

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We couldn't have asked for better when it came to testing the 445: Conditions were sporty off San Pedro, California, in an area of Long Beach Harbor known as Hurricane Gulch, where the winds were kicking up between 17 and 22 knots. Because Douglas designs his boats to reef in 14 to 15 knots, we went out with a 25 percent reef in both the furling 135 percent genoa and the in-mast furling main.

When I took the helm, the wind was around 18 knots true, and there was a two-foot swell with some small chop. Our best speed over ground was at 65 degrees off the wind, where we topped 8.4 knots as the 445 dug in and took off. A bit of weather helm put pressure on the wheel as we close reached up to 45 degrees apparent wind angle and slowed to about 6.4 knots. Falling off reduced the pressure, and we came back

up to a nice 8.1 knots on a beam reach. And that's when I became aware of the motion – a comfortable and gentle ride despite the 20 knots of wind. This boat could sail.

UP ON DECK

Even though the 445 is the latest in the yard's offerings, according to Douglas, it doesn't replace the 440. He feels that the 440, with its raised saloon, appeals to the cruiser and liveaboard, while the 445, with its narrower beam, lower freeboard and more traditional lines, will appeal to the club racer or anyone looking to do extended coastal and offshore racing.

The double spreader, 19/20th fractional rig is deck stepped with a construction unique to Catalina. The compression post passes through the deck to a metal plate that in turn serves as the mast step. The support system is metal to metal and doesn't sandwich the deck, therefore relieving it of compression and the resulting potential for sagging or cracking gelcoat. It's a tough, practical approach that has shown longevity on other Catalina models.

DIMENSIONS & SPECIFICATIONS

LOA	44' 5"
Beam	13' 7"
Mast Height Above Waterline	63' 10"
Draft	6' 4" *Fin Keel* 4' 10" *Wing Keel*
Approx. Basic Weight	23,500 Pounds
Engine	54-HP Yanmar 4JH2-DTBE diesel
Water Capacity	178.5 Gallons
Fuel Capacity	66 Gallons
Sail Area	856 Square Feet *100% Fore Triangle* 1,002 Square Feet *Standard 135% Genoa*
Base Price	$254,950
Price as Tested	$310,000

Standard equipment: 135% genoa, in-mast furling main w/ vertical battens, electric windlass, fiberglass propane tanks with visible gas levels, 660-Ah battery bank, electric Raritan heads, electric windlass, Isotherm refrigerator/freezer.
Select options: freezer, traditional main sail, electric winches, genset, additional fuel tankage, washer/dryer, bow sprit for gennaker, all electronics, Ultraleather upholstery.

With the standard 135 percent genoa, the sail area of the 445 is 1,002 square feet on a mast that's nearly 64 feet above the waterline. To compensate, the 445 comes with either a 4-foot, 10-inch wing keel or a 6-foot, 4-inch fin keel – which accounts for 8,000 or 7,200 pounds of ballast, respectively. The spade rudder is designed to break away in case of an underwater collision or grounding, leaving the top 60 percent in place.

When Douglas was at the helm, I took the chance to inspect the cockpit and deck. The 445's sheeting angles are tight, with extra-long genoa tracks well inboard, leaving the decks wide and uncluttered. Forward, an opening and divided chain locker houses the Maxwell 1500 vertical windlass and forms a watertight bulkhead. "You could cut off the first five feet of the boat and be fine," Douglas says. The stainless steel double bow roller looks tough but is as beautiful as anything from Tiffany's, and integrates a bowsprit for an optional asymmetrical spinnaker.

Moving aft, I liked the 27-inch lifeline stanchions, which are taller than standard, and the extruded aluminum toerail that is a secure attachment point for spinnaker blocks or a preventer. Midship cleats are small but critical details for anyone who's had to secure a boat in a finicky slip besieged by surge. But the aft cleats seem to be wedged between the pushpit and the terminal ends of the twin backstays, making the area tight and a bit of a knuckle buster.

CONTROLLING THE LINES

All lines are led aft to the cabintop near the cockpit, where two Harken winches control them. Electric winches are optional, and cutouts in the headliner below are incorporated for access to the motors. The way the companionway entry was designed lets you actually stand and grind the winches, as opposed to kneeling on the cockpit seat, therefore giving you much more leverage and resulting in less fatigue. I also particularly liked the waist-high coaming in that companionway entry, providing good bracing immediately upon coming up to the cockpit.

The aft positioning of the primary winches makes them handy for the helmsman to control, a great feature for shorthanded sailing. However, they are so far aft that taller crew with longer arms may tend to hit their elbows on the binnacle grabrails while grinding.

The custom, low-profile Garhauer traveler is easily controlled by lines that are both on the port side. “I like travelers,” Douglas explains. “I want people to use them, so I made it easier.” The unit is through-bolted, and again, cutouts in the headliner below provide access for future removal if necessary.

PERFORMANCE PARAMETERS

Undoubtedly, a contributing factor to the sailing performance is the sleek, low-profile design and the construction details. At 13 feet, 7 inches on the beam, the 445 is a bit narrower than most production boats of this size, and it’s also lower, so it has less windage. The hull is solid fiberglass below the waterline and cored with ¾-inch balsa from the waterline up to provide strength, stiffness and insulation. Unlike other Catalinas, where the transom is fitted as part of the deck mold, the 445’s transom is part of the hull mold, for added strength. Catalina uses a five-piece construction process wherein the hull, internal grid structure, hull liner, deck liner and deck are all molded separately.

Performance Under Sail

Reefed about 25% on both the furling main and 135% genoa

TWS	AWA	SOG
17	130	7.4
18	90	8.1
21	65	8.4
20	45	6.4

Douglas chose to place a single compass at the forward end of the cockpit table and put two cup holders near each of the dual 32-inch wheels. I noted how far that single compass was from the helm and how difficult it would be to read it and steer a course, doubly so at night. “My market uses the autopilot quite a bit, so I figured they’d rather have two cup holders and one compass,” he says. Instruments are clearly visible, though, as is the Raymarine E120 multi-display that resides at the aft end of the cockpit table and swivels toward whichever helm is in use.

On the sole directly between the helm stations is the attachment point for the emergency tiller. Douglas demonstrated the extension tube that connects the top of the rudderpost to the tiller, which can then be used while standing or sitting at the helm, with clear visibility forward. If you’ve ever had to use an emergency tiller, you’ll appreciate the thought that went into this simple design.

TOP-NOTCH TOPSIDES

Six to eight people can keep the helmsperson company in the huge cockpit. The seats by the wheels are wide and can accommodate two on each side plus two on raised seats built into the pushpit.
Speaking of the cockpit, the table here is the focal point of the topside. With a thick, solid-teak surface varnished to a high-gloss finish, it’s a bit of bling. It opens up with wings on either side and has insulated storage inside. It is also bolted through the deck, so it provides great foot bracing while heeling and lets you safely clip a harness tether to its legs or to the handy stainless steel rails on top. Engine controls reside at its aft end, and a recessed niche at the forward end can house an EPIRB.

Access to the cockpit is courtesy of a nicely sized swimstep, which has two lockers: one for gear, and one that houses two fiberglass propane tanks. For more stowage, there are enormous lazarettes reachable via the helm seats. The port seat houses the optional genset, which is additionally accessed via a door in the aft port cabin. Both lazarettes are quite deep and will require Catalina’s custom bag system to avoid becoming cavernous holes where gear disappears.

As for the deck, it's finished with molded diamond-pattern non-skid. It's grippy, but it might be useful to add two small foot braces inboard of each helm to provide better footing when heeling.

INTERIOR LAYOUT

Despite the focus on performance, the Catalina 445 is an elegant, comfortable cruiser. Doorframes are made of aluminum to retain their shape and trimmed with teak, and the entire interior is teak or teak veneer with a clear varnish. Catalina never uses stain on its interiors, so the natural beauty of the wood comes through. There are many nooks and crannies for equipment, spares and gear, which suggest that the 445 will be much more than a club racer. All interior furniture can be removed without compromising the structural integrity of the vessel, and the boat is also quite open down below; there are no partial bulkheads or knees to interrupt the clean lines and layout.

The spacious saloon is a good example. Featuring a U-shaped dinette and a four-way fold-out table to port, it also has your choice of a bench seat or twin chairs with a cocktail table to starboard. Just behind that is a forward-facing nav station with a built-in PC tray. Storage is excellent throughout, with drawers below the bench seat and even in the nav station for ship's papers.

Located across from the nav station, the galley stands out from others aboard sailboats in this size range, thanks to many small details. Sliding, vinyl wire racks increase the locker stowage, and the heat from the battery charger below the sink is used to help combat dampness in the bilge. A small pantry ensures food stores are at the cook's fingertips, and even the pots and pans have custom pegs to keep everything in place and rattle-free. An Isotherm front-loading refrigerator/freezer and a three-burner stove that gimbals to 22 degrees on either side round out the standard features, though you can opt for a freezer to go next to the double sink, with the compressor housed below the port settee.

The master stateroom is forward, with an island berth fitted with drawers beneath. Catalina manufactures all its own mattresses, even coating the innersprings to preclude rusting and squeaking. The area where your head lies on this one raises electrically for ease of watching TV or reading. Ensuring maximum privacy, there's an en suite head to port, with a separate stall shower. The compression post is also in the head, a good place should there ever be any water intrusion, as the room is made with a molded pan liner that won't be damaged by moisture.

Performance Under Power

Average of upwind and downwind powering on flat water

RPM	Speed	GPH	Decibels
2000	6.9	0.87	75 dBA
2500	7.4	1.55	77 dBA
3000	8.3	2.90	81 dBA

**Range with 66 gallons of diesel fuel:*
@ 3000 RPM making 8.3 knots = 221 statute miles
@ 2500 RPM making 6.9 knots = 363 statute miles
@ 2000 RPM making 6.9 knots = 594 statute miles

** Fuel-consumption data provided by Catalina Yachts.*

Guests can stay in either the aft stateroom or the port-side utility room – a space that serves double duty. The aft stateroom features a double berth on the diagonal to provide headroom and create a welcoming space, unlike many cabins situated below the cockpit sole. It also has direct access to the day head to starboard in the saloon. The utility cabin, meanwhile, has fold-up bunks, with the upper bunk serving as a workbench when needed (and when the lower berth is flush to the wall); an optional washer-dryer combo can make it even more of a utility room. A locker houses an accessible fuel filter and upon request can be made larger to hold twin Racors. In addition, a gull-wing hatch comprises the upper part of this cabin and leads to the cockpit, making it easier to use the room for storage, or even just as a great stateroom with a view of the stars.

TECHNICAL ACUMEN

When it comes to maintenance, there's excellent access to the 54-horsepower Yanmar. For a quick fluids check, the companionway hinges forward, exposing not only the engine but also a handy compartment for tools. For more serious maintenance, the entire engine box detaches and moves forward into the saloon. The same is possible with the box in the aft cabin, so the entire engine is exposed. All equipment, furniture and tanks come in via the companionway, ensuring that they can also go out the same way if ever needed. There are three water tanks – two below the saloon sole, and one below the forward berth – for a total of 178 gallons. There is also plenty of room in the bilge for a modular watermaker. Fuel is limited to 66 gallons, but an optional 40 gallons can be added under the starboard settee, and another 18 gallons can be placed in the lazarette, ensuring that the 445 can travel great distances whether cruising or on deliveries back from distant finish lines. (See the performance box for range information.)

Two wet-cell battery banks are also standard. Two 8Ds reside below the sole at the foot of the companionway, and one 8D is under the sole in the master, which places it closer to the windlass and optional bow thruster, therefore shortening expensive wire runs. The total house bank is 600 amp hours, and a separate starter battery is optional. Wiring conduits are built into the hull and deck liners to ensure clean runs and easy access.

The Catalina philosophy embraces "designing boats that stand up to real-world conditions, sail well, are comfortable above and below, are easy to maintain and hold their value." The 445 might have been born on a clean sheet of paper to be an aggressive performer, but it still fits all the elements of that philosophy. It also comes in on average at about $40,000 less than the 440, interesting enough. And if a boat is fast, comfortable, spacious and safe, what more could you want?

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