

HOW DOES A CUSTOM BOAT BUILDER get into the production, or semi-production, boat-building business? If you're Bracewell Boatworks Ltd., of Richmond, B.C., you start with the tooling for a well-known, well-respected 41-footer.

"We acquired the tooling for the Camano 41 from the previous owners," Lance Bracewell said, "made some interior changes, including adding a second stateroom, and installed equipment any good cruising boat should have."

Bracewell's changes have resulted in what is really a new boat based on a proven hull design, a fact reflected in the boat's new name: the Bracewell 41.

The Camano hull shape was developed by naval architect Bob Warman in 1989 when he was designing his 31-footer. He started with the standard semi-displacement hull design—displacement sections forward with

planing sections aft — and then added full-displacement keel sections that floated about 25 percent of the vessel's weight.

This keel allowed the engine to be placed lower in the boat, which lowered the center of gravity and improved stability. It also allowed the shaft to be protected inside the vessel for most of its length. The engine, being lower in the boat, reduced the shaft's down angle, which improved driveline efficiency and, in turn, reduced fuel consumption.

Warman, who built the vessels under the Camano Marine label, sold the business in 1997. The new owners, Brad and Jasyln Miller, continued to build the 31s, and by mid-2007 boaters

had purchased 268 of them. In 2005, the Millers introduced a 41-footer, based on the design of the 31, including the Keelform hull. The molds, and other tooling for the 41, were built by Bracewell.

Seven of the single-cabin 41s were built before Lance Bracewell acquired the tooling and began production of his 41-footer.

Bracewell, the owner of Bracewell Boatworks Ltd., has been involved in building and servicing boats for more than three decades. In fact, he worked with Warman building the plug for the original Camano 31. Bracewell has built and serviced both commercial and pleasure yachts in fiberglass, steel and aluminum, and currently operates an integrated boat-building and service facility on Richmond's Fraser River.

Because of his custom building experience, Bracewell can easily install

items any individual buyer might like. The owner of our test boat works in the marine service industry and wanted a complete hydraulic system on his new 41. It was installed during the build.

Having tested the first 41-footer out of the mold in 2006, I looked forward to a chance to test Bracewell's new 41, and that chance came in May at a trawler gathering in Anacortes, Wash.

NEW LOOK & FEEL

Even at first glance there is no doubt that Bracewell has stayed true to the original Camano sedan design. The vessel still has that slightly softened, husky, broad-shouldered workboat look about it — upright windows all around, slightly swept sheer, curved transom, a large, useful swim grid and a wash-and-wear exterior.

There are, however, subtle but significant changes. The most obvious is the extension of the deckhouse roof aft so rain runoff dumps onto the swim step rather than onto the aft deck. On the first day of the trawler gathering, a rain- and hailstorm hit, and everyone on the back decks of the other trawlers — about 40 of them — had to rush inside to keep dry. Those of us on the back deck of the Bracewell carried on with conversation and coffee. Experienced tropical cruisers will also appreciate the covered aft deck for the shade it provides from the relentless sun.

A less obvious change is the mast. On the original 41, the mast was really nothing more than a radar pedestal, and antennas were fixed to the command bridge at various locations. Bracewell's mast is much more substantial and carries most of the antennas as well as radar.

The additional weight of the deckhouse extension and mast has solved what some considered a design deficiency in the original 41 — a quick roll recovery that can be uncomfortable. In the test of the original 41, I noticed the quick roll return, but I didn't have a problem with it. However, the added weight up top on Bracewell's 41 gives the vessel an easier, more comfortable motion, particularly in a seaway.

A transom gate off the swim step allows boarding access. That step, in

An Inside Look



TESTER'S OPINION
"Lance Bracewell brings a custom-builder's touch to a production boat."







Windows in every wall flood the deckhouse with natural light, and a second stateroom is a welcome addition.



there's plenty of room up top for sun worshipers.

All deck surfaces are a sharp, molded-in, nonskid surface that provides good footing even in the rain. It also provided reasonably good footing in the hailstorm we experienced.

A watertight door opens into a deckhouse flooded with natural light because of windows in every deckhouse wall and a glass window in the aft door. The deckhouse itself is spacious and open, with a double-seat helm forward to starboard, from which visibility is excellent all around. The galley is

keeping with most new swim-step designs, is about the same height off the water as most floating docks, which makes for an easy step from the dock to the boat. This is a small but important feature to boaters with small children or aging parents.

The cockpit is large, with high coamings and beefy, stainless handrails, an ideal place for fishing or just lounging. It has a complete set of engine controls. A ladder on the cockpit port side leads up to the command bridge and dinghy deck. The visibility from the command helm is excellent, and

Bracewell 41



SPECIFICATIONS

LOA	41 ft.
Beam	14 ft.
Draft	3 ft., 9 in.
Weight	28,000 lbs. (half load)
Fuel	400 gals.
Fresh water	200 gals.
Cruising speed	8 knots
Max speed	16 knots
Engine	Volvo Penta D6-435

STANDARD EQUIPMENT

Stainless steel bowrails, 800-lb. davit, 10-foot inflatable, 10 hp bow thruster, integral self-draining anchor locker, nonskid surface on all exterior weather decks, two pedestal bridge seats, full-sized wet locker, convertible dinette in salon, washer/dryer, complete entertainment package, boarding platform, international running lights, two opening hatches over forward cabins, transom storage compartments (2), swim ladder, lazarette locker, full-length stainless steel handholds on sidedecks, port and starboard stainless steel deck fills (water and fuel) and more.

OPTIONAL EQUIPMENT

See dealer for a full list of optional features.

BUILDER

BRACEWELL BOATWORKS, Richmond, B.C.; (604) 821-1890; bracewellboatworks.com

WEST COAST DEALERS

WaterLine Boats, Seattle; (206) 282-0110; waterlineboats.com

North 49 Yacht Sales, Richmond, B.C.; (604) 899-4430, north49yachtsales.com

forward to port, and an L-shaped settee, with storage underneath, and a folding dining table, is located in the aft starboard corner of the deckhouse. The table drops down to form a double bunk. Across from the settee is an entertainment center, complete with a small desk. A swivel tub chair sits in the space between the entertainment center and the galley.

Below, forward of the helm station, is the space that is most different from the original 41s. Those boats had a single stateroom, whereas Bracewell's new offering has two staterooms — a forecastle master and a port-side guest cabin. Also down and forward is the head, complete with a freshwater toilet, a vanity, a separate glass shower stall and plenty of storage. The master is well finished with plenty of natural light from twin overhead hatches and twin ports, all of which can be opened to allow for cross ventilation. There's plenty of stowage and a comfortable padded bench on each side of the island queen bed.

The guest stateroom is a comfortable double and is complete with an opening porthole, overhead and reading lights, and an LCD flat-screen TV. The guest stateroom on our test boat also houses a combination washer/dryer. That space could also be finished as an onboard office.

ON THE MOVE

We fired up the Volvo D6-435 and eased away from the dock. This six-cylinder, 336-cubic-inch (5.5L), electronically controlled, common-rail engine started quickly and easily with no fuss or smoke. It ran quietly, reading 62 decibels at its 600 rpm idle speed. This double overhead cam, four-valve-per-cylinder power plant, new in the Volvo line in 2009, is turbocharged and aftercooled. It weighs in at 1,541 pounds and has a cast-iron block and head. It is compact and light for the power it produces.

Despite a fresh breeze, and with barely a touch of the thrusters, we moved away from the dock. Even in the wind the vessel tracked straight and true, despite the slow speed — 3.7 knots — we were going.

When we cleared the no-wake zone, we set the engine at 900 rpm and

were making 4.5 knots and burning 0.6 gph. At 1200 rpm, we burned 0.8 gph and made 5.9 knots; our noise meter read 65 decibels.

We made 7.5 knots at 1500 rpm and burned 1.37 gallons per hour. The noise level was 70 decibels, about the same as a normal conversation. At 2000 rpm, we made 9.3 knots while burning 4.22 gph; 2500 rpm gave us 10.8 knots with a fuel burn of 7.92 gph. Noise level was 75 decibels. We burned 12.94 gph and made 12.9 knots at 3000 rpm. At wideopen throttle — 3600 rpm — we made 17 knots and burned 22.1 gph.

All speeds were measured by GPS, and fuel-consumption figures were generated by the engine computer.

The fuel consumption of this vessel at 7.5 knots is 5.47 nautical miles per gallon — remarkable for a vessel of this size. Its range, allowing a 10 percent reserve, is 1,969 nautical miles, or 2,264 statute miles. According to the builder, this speed range is where the Keelform hull really shines. "As speeds increase," Bracewell said, "the vessel continues to get good fuel economy, but toward the top end it becomes more ordinary."

During our test, the vessel handled easily, responded smartly to the helm and tracked well. As we moved along at various speeds, I went below looking for doors or drawers that rattled or slid open and didn't find any. Hatches and ports stayed dogged down, and there was no discernable paneling vibration or drumming. The transom door stayed firmly in place, and I couldn't find any loose or vibrating rails or deck fittings.

As we went through various maneuvers, the vessel always felt solid underfoot and had an easier motion than the original Camano 41, due to the extra weight up top, as already noted, and the fact that our test vessel weighs about a ton more than the original 41. Part of that extra weight comes from additional equipment specified by the owner.

Lance Bracewell brings a custombuilder's touch to a production boat. He has recognized the excellent design qualities of the Camano Keelform hull and provided his experience in fitting the vessel out, so a buyer can fire up the engine, take aboard food, fuel and water, and go cruising.