LOA: 34'8"
BEAM: 10'0"
DRAFT: 2'7" (half load)
DISPL.: 8,400 lb.
FUEL: 120 gal.
WATER: 50 gal.
STANDARD POWER: 1/220-hp Volvo Penta D3 diesel inboard
TEST POWER: 1/220-hp Volvo Penta D3 diesel inboard
OPTIONAL POWER: none
TRANSMISSION: ZF45 AF-0 w/ 2.03:1 ratio
PROPELLER: bronze 17 x 18 Acme 3-blade
GENERATOR: none
WARRANTY: structural hull and deck (10 years); tanks, steering, electrical system, and gelcoat (5 years); hardware components (3 years); and electrical components such as pumps etc. (2 years); warranty is transferable within first three years with $695 service fee and an extended warranty is available.
BASE PRICE: $287,440
PRICE AS TESTED: $321,365

Outta the Box

HOW DOES A SERIOUSLY ASYMMETRICAL, CUTTING-EDGE, 32-FOOT POWERCAT WORK? VERY WELL, THANK YOU. **BY CAPT. BILL PIKE**

▶*Like what you see here? See additional photos and video of the Aspen 100 Escape @ www.pmymag.com*

The solar array (above) is cool. But check out the guardrails. To manage the juice, electrical highlights include tinned-copper marine-grade wiring and total fuse/breaker protection (above). The dayhatch (top right) and waterproof manual-type Blue Sea Systems battery switches (above).

Larry Graf's an outta-the-box kinda guy. Back when he was still the head honcho of Glacier Bay Catamarans, I remember pitching him with a wholly off-the-wall (but totally cool) idea. I wanted to rig a new Glacier Bay 3470 Ocean Runner so she'd burn regular diesel and, after a few valve changeups, biodiesel as well. With such an arrangement, I figured I could do a double-header sea trial and thereby determine, both practically and scientifically, how biodiesel compares with the conventional stuff in terms of oomph and efficiency.

Graf jumped on the project with both feet, staying straight through to completion (for our results, see "Does This Stuff Really Work?" from October 2006 at *www.pmymag.com*), in spite of many complications, among them engine warranty issues, manifolding challenges, and a raft of logistical concerns. "If you're willing to keep pushing the envelope on this thing, Bill," I remember him saying at one point, "So am I."

These days, Aspen Power Catamarans is Graf's big-time adventure—he started the company a year after selling Glacier Bay in 2007. And I gotta say, my first virtual laptop tour of Aspen's introductory model, a 28-foot coastal cruiser called the C90, got me pretty fired up—it seemed that Graf's drive to produce seaworthy, super-efficient, environmentally-friendly midrange cruisers was still zipping along as smoothly as ever. He was still pushing that ol' envelope.

I confirmed all this a few months ago. The festivities began one bright, sunshiny afternoon as I strolled down a dock at Shilshole Bay Marina in Ballard, Washington, looking for my test boat du jour, which, as luck would have it, was Aspen's 32-foot C100 Escape, a vessel much like the C90 but just a tad longer. A faint whiff of confusion obtruded.

"Hmmm," I mumbled, "So where the heck is she?"

In accord with the directions I'd gotten earlier, a brand-new flag-blue vessel was indeed parked all by her lonesome about halfway out. But—and this was the confusing part—she did not look at all like a proa-type catamaran, at least when viewed from the stern, or even from the side. And what's more, she really did not look like a catamaran at all!

"Hey Bill," yelled Graf from the interior, no doubt spotting my puzzled expression. "Come aboard."

Appearances can indeed be deceiving. I soon discovered that not only was the C100 a genuine catamaran (with a transom/swim platform configuration that obscures the fact, at least to viewers at the stern or alongside), she was also a genuine proa, meaning she had one hull or sponson that was considerably narrower (about 35 percent in this instance) than the other. Moreover, in accordance with Graf's take on proa design, she had just one engine—a 220-horsepower Volvo Penta D3 inboard diesel—in the broader, starboard sponson and nada, propulsion-wise, in its narrower mate.

"Interesting sea trial comin' up," I told myself as Graf began explaining. While such an asymmetrical approach to the powercat realm was not entirely new, it wasn't exactly mainstream either. And while proas (powered and otherwise) have been around since the Micronesians dreamed 'em up ages ago, I'd never before come across a variation quite like this one.

The basics were fairly understandable. To obviate the steering issues that would logically arise from an underwater configuration featuring two disproportionate sponsons, the larger one powered and the other not, Graf said he'd shaped each in a proprietary (patent pending) way so that the turning effect of an off-centerline propeller would be very precisely balanced by some admittedly complicated hydrodynamics. Then, to further refine directionality, he said he'd added "tracking pads" to the bottoms of both sponsons as well as a short but substantial keel to the wider one to starboard. Then finally, to further boost the operating efficiencies he'd already achieved by going with a weight-saving, drag-reducing, single-engine propulsion system, he said he'd molded an ample blister into the starboard sponson's underside, as well as a propeller pocket, so that engine placement could be lowered and shaft angle optimized.

"And don't forget," Graf concluded, as we checked the oil in the D3 through a dayhatch installed within a larger, screw-down molding, which was removable for major maintenance chores, "When you cut the width of the port hull by 35 percent you simultaneously cut the drag coefficient by about 50 percent, which means even more efficiency."

With considerable anticipation, I climbed into the Bentley's Marine driver's seat, all the way forward on the port side of the saloon/galley/dinette/helm area, and almost immediately tapped into a heady mixture of cushy ergonomics, handling ease, and crackerjack performance. Yeah sure, the expanse of Puget Sound beyond Shilshole was pretty smooth at the time, but shoot—at virtually any speed, from idle to top end, I could put the boat on absolutely any course, lift my hands slightly off the wheel, and simply let her steer herself, asymmetricality be darned.

Sightlines were superb all around as well, thanks to an immense two-part wraparound Taylor Made windshield and a host of large sliding windows (with screens) that encompass the saloon. Also, the Teleflex Sea-Star hydraulic steering system had a smooth feel to it, and turns produced little heel, only slight rev reduction, and (believe it or not) virtually the same three-boat-length turning diameter, whether I went right or left. Again—asymmetricality be darned.

Go-go-juice use was miserly. The average top speed I recorded was 20.5 knots, a velocity that generated a fuel burn of just 12.2 gph, for a wide-open operating efficiency of approximately 1.69 nautical miles per gallon. Good! But when I pulled the throttle back to a sedate but comfy 7.8 knots, I more than doubled our MPG and concomitantly bumped the range up to 383 nautical miles. Great!

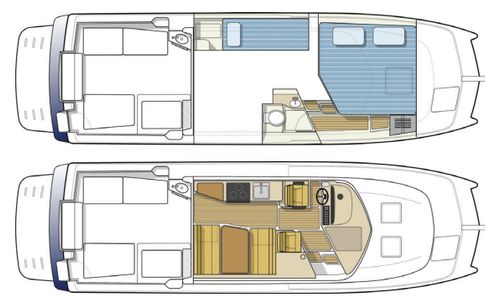
A couple of sporty tugboats, pulling swell-like 4-foot wakes, brought out one final performance-related feature—the boat simply

Although the C100's a catarmaran, she has a very conventional interior. The dinette (top left) converts to a queen-sized berth; Larry and Nick Graf show off an optional varnished cockpit table (left); plenty of lockers in the galley (below left); and a helm station that is wholly mainstream (above).

does not seem to lurch, roll, or pound dramatically when dealing with seas, no matter what her orientation to them. Reasons for this, I would suppose, include the lateral stability a proa configuration tends to generate, the resistance to pounding inherent in a wide and lofty tunnel beneath a web with an ample snuff-busting fin on centerline, and the knifelike qualities of a displacement-type hullform that does not ride atop the water, but rather slices through it.

Docking the C100 alongside after our sea trial, so she'd line up for an easy shot at her optional Float-On trailer, was a piece of cake. Ideally, I'd have opted for a portside tie-up, given the boat's single-engine-related tendency to back to port, but I had absolutely no trouble going in starboard-side-to for trailering purposes, thanks to our standard Side-Power thrusters, one fore and the other aft.

Graf gave me a thorough tour before hauling out, of course. And the C100's interior arrangments seemed straightforward and surprisingly roomy, with the aforementioned saloon/galley/dinette/helm area on the main deck, a single berth in the port sponson and a master (with a king-size athwartship berth) and a head (unfortunately without a separate shower stall) abaft it in the starboard sponson. Highlights, inside and out, included a rooftop-mounted 160-watt solar charging system with Blue Sky Energy controller; top-shelf running gear (with a PYI dripless shaftlog, by-the-book bonding components, and a shaft brush); gutsy, light-weight construction



(with a total of six watertight compartments, double bottoms in the sponsons, and Kevlar reinforced, foam-filled collision compartments at each bow); and primo, compression-type cast-stainless exterior hatch latches from Southco.

"Very cool boat, Larry," I synopsized at tour's end, as we stood on the Aspen C100 Escape's flat, nonskid-paved, safety-promoting foredeck, with its optional Lewmar windlass and hip-high bowrails. "She's simple and easy to operate, seaworthy—and really, really efficient."

"Well," Graf responded with a grin, "that's sorta what I was aimin' for, Bill." ❐

Aspen Power Catamarans, 360-668-4347; www.aspenpowercatamarans.com

Better Boat: The Compleat Mid-Range Cruiser

Nick and Larry Graf prior to their nonstop circumnavigation.

It's obvious that the Aspen C100 Escape was designed by a guy who does a good bit of cruising himself. For starters, the galley features a propane stove—no shore power (and no genset) required. Moreover, the NovaKool reefer is a low-amperage-draw model. Team these two appliances up with a couple of golfcart-type house batteries, a Group 27 starting battery (with crossover), a 2,000-watt Magnum inverter, a high-end Blue Sky Energy solar array, and a hot-water heater that's tapped into the engine, and you've got true state-of-the-art cruising potential in a 32-foot envelope. Could you comfortably overnight in some remote anchorage sans generator? No problem. Could you even add a little cool air to the equation? Most likely, with the right air-conditioning system. And by the way, The C100 we tested on Puget Sound was subsequently used by Larry Graf and his son Nick (shown above) to set a new record for a nonstop circumnavigation of Vancouver Island. They did the trip this past summer. It took 47 hours and five minutes, covered some 557 nautical miles, required just 267 gallons of diesel fuel (for an average fuel burn of 5.6 gph). For photos and video of the trip, head over to *www.pmymag.com*.

RPM	KNOTS	GPH	RANGE	dB(A)
700	3.0	0.2	1,620	54
1000	**4.1**	**0.4**	**1,107**	**58**
1500	5.7	0.9	684	61
2000	**7.8**	**2.2**	**383**	**73**
2500	9.2	3.9	255	73
3000	**13.8**	**5.8**	**257**	**75**
3500	17.4	8.2	229	78
4000	**20.2**	**12.0**	**182**	**82**
4020	20.5	12.2	181	82

TEST CONDITIONS: Air temperature: 60°F; humidity: 75%; seas: 1-2': wind: 3-6 knots; load: 94 gal. fuel, 30 gal. water, 4 persons, 1,100 lb. gear. Speeds are two-way averages measured with Garmin GPS. GPH taken from Volvo Penta display. Range based on 90% of advertised fuel capacity. Sound levels measured at the helm. 65 dB(A) is the level of normal conversation.

NOTEWORTHY OPTIONS: Float-On trailer ($14,700); Garmin Adventure electronics package ($17,800); cockpit control station ($5,650); Wallas 30D diesel heater ($4,380); cruise pack w/ fenders, ground tackle, etc. ($1,980); Lewmar windlass ($2,860).