TALKIN' BOATS

with LARRY GRAF OF ASPEN POWER CATAMARANS

By Chris Landry

SENIOR REPORTER

t 30, Larry Graf built his first power catamaran, a cedar-stripplanked 24-footer that became the launching pad for his Glacier Bay Catamarans. That company, during Graf's 20-year tenure, built about 3,000 power cats from 22 to 34 feet.

After leaving Glacier Bay in 2007, Graf, 53, founded Aspen Power Catamarans of Snohomish, Wash. With their asymmetrical proa hulls—the port hull is 35 percent narrower than the starboard—and single starboard-mounted diesel, these boats are all about fuel efficiency. The company's Aspen 28 C90, a 28-foot pilothouse cruising cat with a master stateroom and head, gets about 3.5 mpg at cruising speed with its single 150-hp engine. Aspen has

built seven C90s and two open boats (www.aspenpowercatamarans.com).

A self-described boating nut and adventurer, Graf grew up in Olympia, Wash., and had owned 31 boats before starting Glacier Bay. He has piloted his boats for thousands of ocean miles to prove their seaworthiness.

Graf has three grown children and lives in Snohomish with his wife, Cathy.

Q: You were the founder of Glacier Bay and now Aspen. Why do you like cats so much?

A: I love my time on the water. I have a wife who hates rough water, and I do, too. A cat is a way to enjoy the water, even when it gets rough. And I am fairly frugal. I like the fuel efficiency of a catamaran, especially the new displacement cats. Why would you want to go boating in a monohull? They're fat, heavy, and



they pound. Once you've played with a catamaran, it's really hard to go back.

Q: Even with their soft ride, cats remain a distant runner-up to monohulls in the United States. What's holding back cats?

A: A variety of things. Boaters tend to be a fairly conservative group. And the companies that have introduced catamarans have been fairly small, so they've had to get a foothold and grow on their own. The larger companies that tried to get into the catamaran market saw it as an interesting segment and had some ... tough experiences with cats — and so did their customers. They tried to get monohull designers to develop a catamaran, and they didn't have any clue as to what really needs to happen with a catamaran. I think that scared away some of the other big players. ... I spent 22 years learning about the nu-



Q: What makes Aspen catamarans different?

A: There's a whole bunch of new thinking going on with an Aspen. It really is a step forward. We're the first self-balancing cat hull design, which means you can mount the engine on one hull. The design compensates for the thrusting on one side. It's also a pure displacement catamaran. It's a single-engine power proa. The bows are shaped like an airplane wing on edge, where they lift slightly starboard while the thrust from the engine pushes to port, and the actual correction required is quite small because the port hull is 35 percent narrower than the starboard hull. And when you reduce the beam of a hull by 35 percent, its drag decreases by about 50 percent. That hull also has no appendage drag — no keel, rudder, shaft, drive, prop. That's about 20 percent of the energy typically used to push a boat through the water. That port hull is very easy to push through the water or, conversely, it has little twisting effect on the starboard hull.

People ask, "Isn't it going to lift funny?" If it was a planing design, one hull would, indeed, plane out before the other, and the boat would twist and do funny things. But because it's a true displacement hull, there is no lift factor. The way the machinery and equipment is put in, the actual load per square foot on the port hull vs. the starboard hull is exactly the same, so as long as the load per square foot is the same, the way the boat reacts to a sea or a turn is the same as well. This is what our pending patents are all about.

Q: How much fuel does the C90 version of the Aspen 28 burn with its single diesel?

A: It has a top speed of 22 mph, cruises between 16 and 18 mph, and at 16 mph uses 4.6 gallons per hour. Most boats at this size and weight are burning about 18 to 20 gallons per hour. This is a dramatic gain in efficiency. That [fuel-burn rate] is unheard of for a boat with a king-size bed and sleeps five and has a separate

ances of catamarans. There is some finesse with designing a cat. Weight balance is important, and there's not much technology to learn from. With a monohull, there's a lot of history.

Q: What is wrong with the recreational boats of today?

A: They're fat, they're heavy and they're rough-riding. ... Whenever

you try to push something through the water, just think of all the molecules you have to move out of the way. It's just a brutal effort to move all that water. Look at the wakes they make. My wake is about 4 inches high. The typical 28-footer's wake is at least 18 inches high. And before I established Aspen I looked at everything, including a narrower monohull and planing catamarans. I looked at displacement cats with twin engines, but I couldn't get the fuel economy I wanted. We really needed a new way to move through the water efficiently.

head and shower. On the open Aspen boat, the efficiency is even better. The launch burns about $3.1~{\rm gph}$ at $16~{\rm mph}$, so it's getting about $5~{\rm mpg}$.

Q: You have cruised long distances in your company boats over the years. It's not something most builders would do, so why do you?

A: I have a healthy adventure streak. This was a unique way to combine that adventure with a way to show people what these boats could do because people are leery, and I was dealing with a conservative boating group. They needed a graphic demonstration of the capabilities of a catamaran. The first trip was to Bermuda, and we were the first to run a trailerable boat 726 miles without refueling — at an average speed of 22 mph. That's never been done, as far as I know.

Q: What was your greatest boating adventure?

A: The scariest one was crossing the Bering Strait, going to Siberia and back. But the most fun was the two boats [Glacier Bay 2680 hardtops with Honda 130s] we took 1,400 miles across the Pacific. There is this group of islands northwest of Hawaii. They had been closed due to the Navy activity at Midway for, like, 50 years. About every 160 to 300 miles there is a little island. We might have been the first guys to visit some of these islands in 50 years.

Q: Does your adventure streak help you design and build boats?

A: It's a huge advantage. A lot of guys are based in an office and don't get to play with the boats. While I am out using the boats, I'm always thinking, How can I improve this boat? Or I'm noting how a boat does in a particular sea state. How are we doing in this 20-foot swell out here in the Pacific?

Q: What is important for today's boat buyer?

A: A buyer shouldn't compromise his desire for space and comfort but needs to think about what sort of efficiency — or inefficiency — he is buying. If you buy a boat that just drinks fuel, and if the price of fuel goes up to \$7 or \$8 a gallon, what kind of value is that boat going to hold? I am thinking the smart move is the more efficient products. A boater could really get hurt [financially] if they don't think about this.

Q: How is your business doing in this economy?

A: We've scaled our business so it doesn't have a lot of overhead. We're

doing quite nicely. What we're doing with Nordic Tugs, with them doing the fiberglass work and us doing the assembly, is working really well. Nordic has been a great group of guys to work with, a great builder and honest businessmen. I did the mock-ups and the plugs and molds in my shop. Once I was ready for production, we moved them to Nordic's lamination facility. So

Nordic laminates the parts for me to my specification, and then I move them to our facility for assembly. They do about half the construction work, and I do the other half.

Q: What are you working on right now, any new Aspens?

A: Our next product ... is going to be a 36-foot power proa with two state-

rooms and a large saloon. It's a big brother to the 28. It's for those who don't need a trailerable boat and want that second stateroom and second head, too. It will come as a sedan or flybridge boat. Same performance: 22 mph top speed and a cruise at 16 to 18 mph. It should be 8 gph at 16 mph. After that, we'll do a bigger one. I have another group that wants to do a 48 and another group that wants me to do a 52 or 54.