We first saw the Mackenzie River as we drove the truck and trailer over the Deh Cho Bridge to Fort Providence, a hamlet on the highway to Yellowknife, the capital of Canada’s Northwest Territories. My stomach knotted as I gazed down on the silty river, which was a mile wide at this point. The wind was blowing like stink, and the brown surface was streaked with whitecaps.

At the only suitable launch ramp, we splashed the 34-foot Aspen C107 power catamaran without incident. But as we tied up alongside a rusted steel barge pier, the water was so shallow that the outboards kept bumping on the rocky bottom. As we loaded our gear, I kept wondering how in the heck we were even going to make our way from the launch ramp to the main channel.

The Mackenzie is Canada’s longest river, and our plan was for a 1,200-mile expedition along it, following its flow north from Great Slave Lake to the Arctic Ocean. Because the Mackenzie is so shallow, it’s considered navigable only by vessels with 4 feet or less draft; with our outboard engines at half-tilt, we had 22 inches of draft, making the C107 ideal for the mission.

This boat falls in the middle of the range that Aspen Power Catamarans builds, with other models coming in between 28 and 50 feet. I was aboard with Larry Graf, the founder of Glacier Bay Catamarans who went on to create Burlington, Washington-based Aspen, and to develop the power proa—possibly the world’s most fuel-efficient powercat design. Unlike other power catamarans, in which both hulls are of equal size and shape, Graf’s design incorporates two different-size, full-displacement, asymmetrical hulls. The port-side hull is 35 percent thinner than the one to starboard. A thinner hull means less drag, and that translates to the need for less power (and fuel). Compared to similar-length planing monohulls, Aspen estimates a 50 percent to 60 percent fuel savings.

For our purposes on the Mackenzie, though, I was more interested in design elements that reduced draft. Until recently, all Aspens had a single shaft-drive diesel in the starboard hull. The C107, by contrast, has twin Yamaha outboard engines. The one to starboard is 200 horsepower, while the one to port is 70 hp. They provide redundancy, the ability for fishermen to troll at slower speeds, less noise (because the outboards are mounted outside the hull) and the ability to raise the outboards partially in shallow waters—something we had to do constantly as we navigated the river.

By our fifth day out there, our nerves had gone to hell. Already, I had blamed stress for leading me to buy cigarettes, though I’d technically quit smoking some time ago. The big problem...
By our fifth day out there, our nerves had gone to hell. Already, I had blamed stress for leading me to buy cigarettes, though I’d technically quit smoking some time ago.

This particular buoy positioning (top) certainly didn’t instill confidence in shallow water with a stiff current. Left: Refuelling was always an interesting exercise. Below: Dressed for the elements and ready for anything, Graf keeps watch.
was that many of the actual buoy positions had no relation to the routes on our paper charts, and we could never really trust that any buoy marked deep water. The river was a monster studded with sandbars and islands. This part was 2 to 3 miles wide, and our shallow-water alarm was screaming constantly. We often had to slam the outboards into half-reverse and back out, looking for a new route while the 3- to 5-knot current tried to pin us sideways.

Even still, things would've been a lot harder with a single inboard engine. Aspen's transition to twin outboards for the C107 involved getting the two hull shapes just right, to ensure that the two outboard pods were positioned to let clean, smooth water get to the props at the proper height relative to the cavitation plates—regardless of speed. After a number of prototypes, Graf settled on the 200- and 70-hp Yamahas; the two articulating outboards can be used in unison or individually.

When we weren't working the engines to avoid the shallows, we were testing out the C107's amenities. And that was an adventure unto itself.

The standard C107 has a salon finished in Burmese teak. The galley is to port, and a raised dinette is to starboard. An under-salon quarter berth is abaft the galley, while stairs across from the portside helm station lead down to the head and a king-size bed between the two hulls.

Sounds lovely, right? Well, the C107 we were aboard was the prototype open model with a Bimini top and radar arch; a galley/seat module abaft the two helm seats; and a sunken head compartment accessed via a hinged hatch adjacent to a center console. Accommodations consisted of two single settees/berths abaft the chain locker and windlass. A low-slung canvas bow cover was fitted over the sleeping area to keep us dry and protected from the Mackenzie's notorious swarms of black flies, mosquitoes and no-see-ums. The more-or-less open boat made our expedition closer to camping than cruising.

Still, when we were confident of the depth and course, we were able to cruise at about 20 knots with the aid of an average 3.5 knots of current. At night (we were above the Arctic Circle, so it never really got dark), we'd look for protection alongside the main stem of the river, behind a sandbar or shallow island or, on occasion, tucked inside a river mouth.

Because of the annual freeze, there are no
permanent docks on the Mackenzie. Twice, we were able to contract fuel tankers to deliver shoreside, and twice, we drove the C107 right onto the beach to fill (thanks to locals with pickup trucks) our 10 jerry cans with 5 gallons of fuel each. With those jerry cans and full tanks (170 gallons combined) we could safely plan on going 300 miles without refueling, though it was mostly 150 to 250 miles between villages—with no guarantee of fuel anywhere. Subsistence hunters and fishermen made up most of the working population in these tiny communities.

On day eight, we made the final 90-mile run through the maze of the Mackenzie Delta from the town of Inuvik. Finally, we gazed out at the vast expanse of the Arctic Ocean. We were drifting in 8 to 10 feet of water, and we savored the moment. There were high fives, whoops of joy and some photos. I discreetly wiped away a few tears. For the past eight days, we’d been living in constant fear of the Mackenzie’s shallows—and we’d survived. So many things could have ended in disaster or death; we’d made our way through 1,200 miles of mostly pristine wilderness knowing there was little chance of rescue had anything gone wrong. My joyful grin was so wide it was silly. My celebratory smoke tasted wonderful. I took off one of my shoes and dipped my foot in the 56-degree ocean. It was one of the most rewarding moments of my life.

The Aspen and its outboards never failed us. The Yamahas ran flawlessly, as did all the electrical and mechanical systems. Perhaps most impressive was the soft, cushioned ride. We were often speeding into 20-plus knots of wind and up to 4 feet of steep chop. The C107 carved right through and tracked straight. Even without the autopilot, we could cruise for miles without touching the helm. In fact, sometimes it appeared that we were on autopilot when we weren’t. The tracking was that good.

Looking back, we were amazed that we survived. We cruised back south following the route we’d mapped out on the way up, vastly reducing our stress and helping me to understand what it might feel like to be on the C107 in a more forgiving environment.

It would be great—so great, in fact, that it might even help a guy give up smoking for good. ✨