

Pitch Poling a Hobie in Lake Tahoe

It was a beautiful, sunny afternoon on Lake Tahoe. Out the window of the conference room facing the beach the sun sparkled on the water and colorful sails fluttered in the brisk wind as catamarans raced to and from.

I glanced over at Ed Berry who looked as bored as I felt. Ed and I were attending an American Meteorological Society (AMS) conference on cloud seeding in South Lake Tahoe. I was currently the Field Director of the US Bureau of Reclamation's Sierra Cooperative Pilot Project that was conducting cloud seeding research in the Sierras between Auburn, California and Lake Tahoe. He was the Project Manager for Weather Modification at the National Science Foundation in Washington, DC, responsible for evaluating and funding research proposals from universities.

It was Thursday afternoon of the summer conference and we were both saturated by lectures on the technical details of cloud seeding projects from all over the country. The conference room held about 200 conferees and was darkened to permit slides to be displayed on a screen near the front of the room. The only excitement in the room came through a series of windows along the eastern wall. I think the conference organizers were especially malicious to permit a view of the lake only feet away, outside our room.

The schedule of talks for the afternoon looked particularly unexciting. I needed a break from the conference in the worst way and the lake, the beach, and the sun were calling. Ed had told me several years before during a similar conference in Santa Barbara, California that he had been active in competitive sailing and currently was the West Coast Red Bull sailing champion. I didn't know what that entailed exactly, but I figured he should know enough about sailing to teach me (I didn't learn until many years later that the Red Bull races were highly competitive races involving boats comparable to the America's Cup boats!). I leaned over and whispered as the next speaker was being introduced, "Hey Ed, if I were to rent a Hobie Cat this afternoon, would you be willing to teach me how to sail it?"

He looked sleepily up from his notes and replied, "You bet. I need to get out of here! I'm dying here. "

"Great," I said. " Meet me at the sailboat rental hut on the beach after lunch and we'll go out for a couple of hours. "

So, after lunch I changed into a swim suit and rented a 14-ft Hobie Catamaran. I'd never been on a Hobie before, so it was a whole new experience. It looked sort of flimsy! There was an aluminum frame that held two pontoons together about eight feet apart and formed the base for a vertical pole and horizontal boom. A rudder was mounted at the back of each pontoon with a tiller that jointly controlled them both. A single colorful sail was attached to the 15-ft vertical pole and 8-ft long boom. And, to top it all off, a nylon netting to sit on was strung about a foot above the water between the two pontoons. Where was the hull? How do you keep from getting wet? You mean you just sit on the netting?

About the time I was having second thoughts about this whole venture, Ed walked up and said, "Are you ready?"

" I guess so, " I said. "I've never sailed one of these. You'll have to tell me what to do."

" No problem. You go up front near the mast and I'll take the tiller. By the way, haven't you got a shirt? It's going to be a bit chilly out there once we get beyond the breakwater. The wind is blowing about 35 knots and the water is about 45 degrees. "

"Nah, it's okay. I've got the life jacket and it's hot out here."

" OK, then. Let's go, " he said.

We pushed the Hobie off the beach, into the water, and out far enough that the rudders didn't touch the bottom and climbed on. The wind was from the west off the Sierras to our left and the sail filled immediately. We picked up speed toward greenish-blue water near the middle of the lake. As we cleared the breakwater the wind began to increase, and we were moving at a good clip. As we got farther from shore the wind continued to freshen and the waves became higher. Out about a

mile from land we were moving along about 20 knots and when riding on top of a wave we felt almost airborne!

Ed took us out and back to the shore several times and eventually let me take over the tiller. Coordinating the tiller, the boom, and direction of the Cat relative to the wind and waves took a while to master. After about an hour I thought I had it. I could tack and yaw and even reverse direction. Ed suggested when I wanted to reverse course, I should turn into the wind and bring the boat around to cross the boom over my head slowly. It took a little skill to come around fast enough so that the Hobie didn't stop in the water before completing the turn.

But, that didn't compare with reversing direction with the wind. In this maneuver everything happens so fast that you could overturn the boat or have your head wacked by the boom when the wind catches the sail and whips it across from one side of the boat to the other. With a wind of 35 knots and two-foot swells, I only tried it once. I made the reversal but got a good crack on the noggin doing so.

Ed suggested we head in and he would let me go out on my own. I thanked him for the instruction and, as he stepped off, I turned around and headed back out to play on my own. When I got back out beyond the breakwater and into the strong wind, the boat sailed completely differently than before. Without Ed's weight it flew through the water.

This was fun! It was like flying. I had never experienced anything quite like it. As the Cat sped forward I began to play with the waves. I noticed that when the pontoons sank into a trough between the wave crests, the boat slowed down, and when they rode the crests it sped up. So, I began maneuvering the boat so one pontoon stayed on the crest. I was now really starting to move!

After developing the skill to stay on the crest of the wave with one pontoon, I vaguely remembered an image of a catamaran sailing on one pontoon with the other one in the air, and guys standing on the upwind pontoon supported by guy wires from the mast. I knew I didn't have the skill or equipment to perform those aerobatics, but I thought, if I could just get one pontoon on top of the crest of a wave and the other slightly out of the water, I could really get moving!

I gingerly moved one pontoon onto the top of a wave and adjusted the tiller and the boom, so I was running parallel to the wave and lifting the weight off the other pontoon. This was harder than trying to coordinate all the actions for a clean direction reversal in a high wind. I now had a fourth variable to contend with --the shape and direction of the wave crest. But, now I was really flying!

By the time I learned how to get my "ship" moving in the right direction to reach the climactic experience, I had traveled well beyond two miles into the center of Lake Tahoe. I didn't care where I was going--I was just going to get there fast! Then, suddenly my world came crashing down--the pontoon riding on top of the crest submerged into the wave, stopped dead in the water, flipped head over heels, and threw me into the lake 30 feet ahead of the sinking Hobie Cat.

It happened so suddenly that it took several moments to realize what had happened. The first thing I realized was how cold the water was. The second was that I was miles from shore with no way I could swim back to the beach. The third was that I had to turn the Hobie back upright, so I could at least get out of the cold water and, hopefully, sail it home.

But, I had no idea how to turn the Cat over. Ed hadn't said anything about how to recover from a "Pitch Pole", the name for flipping a catamaran like I had just done. In fact, I had never heard the term or imagined such a thing could happen.

As I swam back to the boat I noticed a sheriff's boat moving toward me and experienced a surge of hope that I was going to be rescued. But, as I reached the Cat and tried to figure out what to do, I noticed he turned away and started back toward shore. I thought about shouting and waving my arms to signal him back. But, I quickly realized that would be a futile effort because he was at least a half mile away and wasn't likely to hear or see me. He must have originally planned to stop me from sailing so far out, but when I capsized, he must have thought I would turn around and come back in.

I realized at that moment I was on my own. I had to figure out how to flip this thing over, get back on board, and get out of the cold water. And, I needed to do it fast! I was beginning to shiver and would really be in trouble soon if I couldn't make it happen. I also noticed that I had sustained a long cut on my right knee. I

must have caught a sharp protrusion somewhere on the boat as I was catapulted into the water. It was bleeding profusely but there was nothing I could do about it right then. I thought, "It's a good thing I'm not in the ocean or I'd be attracting sharks."

The Hobie was completely upside down by this time. The mesh netting that I had sat on was underwater below the pontoons which now floated upside down. The mast, the sail, and the boom were completely below water with the mast pointing downward toward the bottom of the lake.

I tried pushing up on one of the pontoons. I couldn't even lift it out of the water--it was far too heavy, and I couldn't get any purchase by paddling against the water with my feet. Next, I swam under the boat between the pontoons looking for some way I could gain some leverage. As I swam around beneath the catamaran trying to figure out what to do, I discovered a rope tied between the two pontoons. At first, I didn't consider it to be helpful. But, it turned out to be the key to my dilemma.

My final thought was that if I can't lift one of the pontoons, maybe I could put my weight on one of them and rotate the Hobie over, so I could somehow get it right side up. I swam out from under the boat, reached over a pontoon, and pulled my body up onto it. Slowly the boat began to tilt, but it stopped rotating when the mast lifted horizontal to the surface of the water.

I could see I wasn't going to be able to rotate it any further unless I had even more leverage. The only thing I could think to do was to climb up on the pontoon I was grasping and attempt to grab the second pontoon now up in the air above me. However, every time I tried to climb up on the lower pontoon and grab the upper one, the weight of the mast would turn the boat upside down again.

After almost despairing of getting the Cat turned upright, I rediscovered the rope dangling between the pontoons. I decided to try one more time to bring the mast horizontal to the surface, grab the rope, and possibly have enough leverage to pull the boat completely over. As the mast slowly lifted again and the pontoon on the far side lifted almost vertical, I grabbed the rope and clambered to a position standing on the lower pontoon. I leaned back holding the rope and continued to pull to lift the mast and sail out of the water. They lifted a foot or so above the

surface but, would not rise any further because the wind was from my back forcing the sail back down. By this time, I was nearly worn out and was shivering so badly I could barely hang on to the rope.

It took me a few minutes to realize how to solve this latest setback. If I were to lean down while holding the rope so the pontoon remained upright and paddle in the water to reorient the boat with the mast pointing upwind, possibly I could get the wind to blow under the sail and help lift it. With little remaining energy left I paddled and the Hobie turned. Once I was facing upwind I leaned back as far as I could, and the mast slowly lifted. As it lifted the sail began to spill out water and the wind caught beneath the sail lifting it more quickly.

I realized suddenly that when the wind fully caught in the sail in a 35--knot wind, the boat would not only right itself, but would likely flip over in the opposite direction! I immediately attempted to reduce my weight on the rope pulling the boat over and got ready to restrain it.

What I feared would happen, did. The upper pontoon slapped the water as the mast followed, tilting the boat over right to the tipping point. It poised there for an agonizing moment and then rotated back to an upright position!

Hooray! I had done it, and everything was going to be okay! Or, at least, so I thought. Suddenly, with me under the boat still holding the rope, my Catamaran headed off on its own, almost leaving me behind. The boat accelerated pulling me about ten feet behind. At first, I couldn't believe I had another battle on my hands. I hung on for dear life as my own boat tried to drown me. I nearly lost my grasp but hung on with my head partially underwater, and slowly, inch by inch, pulled myself against the current and finally grasped the frame of the platform holding the mesh netting. With one final superhuman effort I hoisted my body onto the netting and collapsed into an inert, quivering heap.

After about five minutes I was finally able to raise my head enough to see that the Cat was headed in a southeasterly direction, about 45 degrees from the course I needed to take back to the beach where I rented this adventure. I crawled over the netting to retrieve the tiller and set a new course south. By this time, I was still about two miles out in the lake, so it would take me a good twenty minutes to tack my way upwind and home. While setting the tiller I realized why my boat had tried

to run off and leave me. I had not released the ratchet that held the rudders in place, so as soon as the boat landed on the water everything was once again set to resume my journey.

The last leg of my journey home was extremely miserable. My knee hurt from the injury, I may have lost a considerable amount of blood, I was extremely tired from all the exertion, and I was violently shivering from the dunking in ice--cold water. I wearily watched the shore grow closer and closer. Finally, the Hobie grounded on the sand and I crawled off the webbing, pulled my "Hesperus" onto the shore, returned my life jacket to the rental hut, limped to my hotel room, and crawled into bed for a 12--hour sleep.