Chapter Five

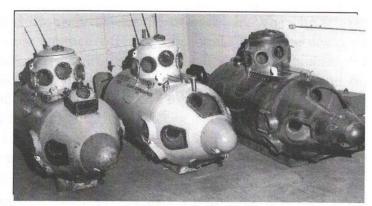
Accident & Catalina Island

The greatest depth of an actual escape without any equipment has been from 225 ft. by Richard A. Slater from the rammed submersible Nekton Beta off Catalina Island, California on Sept. 28, 1970.

—Guinness Book of World Records (2010)

I RENTED A BEACH apartment in Newport Beach, after returning from Alaska, and needed to make a decision for my future. Larry was General Oceanographics' senior employee, and I knew they were not going to need two full-time marine geologists on their payroll. I was thinking about applying for a University teaching position but everything changed a few weeks later during a dive off Catalina Island.

Doug Privitt had finished construction of two more Nekton class submersibles, Nekton Beta and Nekton Gamma. The first Nekton was now called Nekton Alpha. During the summer, while we were in Alaska, Jim Vernon had found a sunken pleasure boat off Catalina Island, using the new Nekton Beta, in 225 feet of water. The twenty-seven-foot speedboat with two Corvette engines had flipped at high speed. An insurance company paid for the search, thinking there might be drugs on the boat, and General Oceanographics had acquired the rights to the wreck itself. Jim was anxious to recover this boat but waited until we had returned from Alaska as he needed Nekton Alpha, the Oil City, and Larry and me for the recovery. A local LA underwater photographer was going to film the episode for a TV show.



Nekton's Alpha, Beta, and Gamma



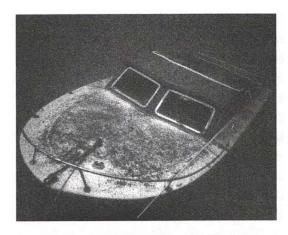
Beta and Alpha underway to Catalina Island



Beta and Alpha, Catalina Island, September 21, 1970

On Monday September 21, 1970, both Nekton's Alpha and Beta were onboard the Oil City when we arrived around 10:00 a.m. at the Catalina dive site, a few miles east of Avalon, off the rock quarry. There were several guests on board including a good friend who brought his teenage son along to observe the recovery operation. The Oil City captain Tom Crawford and Larry made the first dive, in Alpha, to decide the best approach for the recovery. We then held a one-hour discussion where everyone agreed that Larry and I would dive in Beta to carry down a recovery line with a snap-hook to the wreck. Doug and

Dick Anderson, the local underwater photographer, would be in Alpha. My job was to use Beta's arm to snap hook the heavy nylon line, connected to the Oil City winch, to the sunken vessel. Larry would be the pilot. It would be the first time the two submersibles were diving together, the first time Larry and I had dove together, and the first dive in Beta for both Larry and me. After rough cold-water dives in Alaska, this was going to be enjoyable.



Sunken speedboat, 225'

It only took a few minutes to locate the sunken speedboat that was sitting on the seafloor near some rocks. I snapped the hook to the speedboat's bow and then decided to rearrange a line to help distribute the boat's weight while it was lifted up.

After I tied a few knots with Beta's mechanical arm, Larry was eager to have a turn, so we switched places. This was difficult in the limited space. After Larry tied some knots, he continued playing with the arm and I remained the pilot. I moved Beta about 200 feet away from the wreck as we did not want to be under the Oil City during the recovery. The winch on the Oil City then hauled the speedboat quickly to the surface and it was secured to the tire mat.

Meanwhile, the speedboat's owner arrived in his water-ski boat to retrieve personal items from his wrecked speedboat. The Oil City's crane, holding the speedboat, was not available to lift us on board so we had to wait on the seafloor for the okay to surface. We started up very slowly, after receiving a message from Jim Vernon, on the Oil City, that everything was ready for us.

Someone decided to retie a line securing the speedboat to the Oil City. Suddenly, the speedboat broke loose from the tire mat and sank quickly, stern first, toward the seafloor. It did not travel straight down but sliced through the water column at a sharp angle. Both submersibles were in mid-water, around 150 feet, and slowly rising to the surface. Larry and I were talking when suddenly there was a crash—a tremendous crash! The three-ton speedboat had smashed into us. The quarter-inch stainless-steel trim tab, connected to the speedboat's stern, struck Beta's starboard conning tower port only inches from the right side of my head. In an instant the port cracked in several places and a triangular piece of Plexiglas from the center of the port imploded into the submersible, shattering my right cheekbone. It also sliced through my upper lip, cheek, and along the right side of my head, opening up wounds that bled

profusely. The implosion, caused by the five-fold difference in pressure between the ocean at 150 feet and the inside of the submersible, destroyed our eardrums and instantly knocked us both out. It also buckled Beta's quarter- inch steel plate floor that sealed off the batteries located in the keel. We sank rapidly as Beta quickly filled with water.

When I came to about a minute later, Beta, nearly full of cold water, was lying on the seafloor in the dark. It had crashed onto the steeply sloping seafioor between 225 and 240 feet and was leaning over about forty-five degrees. I stuck my nose into the air pocket forced up into the conning tower, above the broken port, by the incoming water. My first thought was to escape quickly but I had to wait a few more seconds until Beta completely filled with water. I could not open the hatch until the pressure was equal on the inside and outside of the submersible. I wrenched open the hatch, stood on the pilot's seat with my torso outside the submersible, and tried to jump free but I could not move. I was facing the stern and my Levi's rear pocket had snagged on the protruding rudder control knob. I could feel Larry's hands on my legs but there was no panic as I gave a mighty effort which resulted in ripping off my pocket by popping out the rivets. The pocket was found later in Beta after it was recovered.

There were two sets of emergency scuba gear in Beta but neither Larry nor I, the two most experienced Nekton pilots, grabbed them. Some people later wondered why we did not use the scuba gear. I have no idea, but it just never occurred to me. I was wearing a dark T-shirt, Levi's, and running shoes as I swam toward the surface. It was very peaceful, quiet and dreamlike—everything seemed to be in slow motion. I had to exhale all the way to the surface. If I had held my breath, even for a moment, it might have resulted in a fatal air embolism. The urge to take a breath is caused by carbon dioxide build-up in your lungs. Halfway up is the toughest time in a free ascent; once you pass it the urge to take another breath lessons. My last breath of air, while in Beta, was from the trapped air pocket where the pressure equaled the outside sea pressure. My lungs, holding six or seven times the usual amount of air, were still normal size as this air was compressed by the pressure. The pressure decreased as I headed to the surface so the air in my lungs increased in volume, and I had to expel this air at roughly the same rate as my lungs were expanding.

Even though I was semi-conscious, I remember saying over and over to keep blowing out. My free ascent probably took about two minutes, and I blacked out somewhere along the way, probably near the ocean surface. I have read that ninety-five percent of free diver blackouts occur in the last fifteen feet. The blackout can last for nearly two minutes, after that your body will take a breath and if you are still underwater it will cause instant death. Later, I mentioned seeing a bright green light during my ascent. This caused a stir as some people in near-death experiences have reported seeing a bright light. In my case, I was probably on or near the ocean surface. Clear shallow ocean water, on a sunny day, usually looks bright blue or green.

My friend and his son, on board the Oil City, had borrowed the small wooden rowboat to go fishing in the nearby kelp beds during our dive. When rowing to a new location they noticed a fountain of rising air bubbles in the water. They moved over to investigate and found me floating face down in the water. I was cut so badly they did not recognize me but held my head out of the water and started shouting for help. I was not breathing. Hearing their yells, the Oil City engineer Bob Parks jumped into the water-ski

boat, still tied to the Oil City, and directed the owner over to the dinghy. Bob and the owner lifted me into the ski boat, and we sped off for nearby Avalon. Bob told me later, "Although we were good friends, I did not give you artificial respiration because I could not locate your mouth with all the blood and gore." I was lying face down, unconscious, and not breathing on the boat floor when we hit a large swell. I went up into the air a few inches, came down hard on my stomach, vomited, and started to breathe.

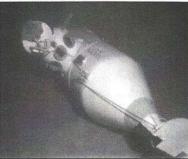
Several timely events probably saved my life. What if Larry and I had not changed places in the submersible? What if the speedboat owner had not arrived in his water-ski boat to claim his gear? What if my friend and his son had not rowed over to a kelp bed near where I eventually surfaced? What if the water- ski boat had not hit the swell that caused me to start breathing again? What if the ship's engineer had not reacted quickly when he saw that there was a problem? What if I had not been close to the Avalon hospital that was well known for treating diving accident victims?

I was offloaded at the end of the Avalon pier where large game fish are usually weighed. A crowd gathered as I was placed into an ambulance and transported to the hospital. I awoke, nearly one hour after the accident, on the operating table where a doctor was sewing up my wounds. Jim Vernon and some of the Oil City crew were standing around me. I asked about Larry, and someone said he did not survive. I was shocked and could not comprehend what had happened. I thought maybe we had come up under the Oil City, which would have been my error as pilot.

Doug, piloting Alpha, saw us sinking rapidly and realized something was wrong. He immediately descended and landed near us with Beta enveloped in a cloud of dirty water stirred up when we crashed. When the water finally cleared, a minute or so later, Beta's hatch was open, and Larry and I were gone. Doug was searching for us when he heard on Alpha's UQC that I was on the surface, but Larry was still missing. He kept searching until he found Larry nearby on the seafloor. After grabbing him with Alpha's arm they surfaced immediately, less than ten minutes after the accident. For nearly an hour the Captain and Mate applied artificial respiration but could not revive Larry. Later, his knee-high rubber boots were found together on the seafloor. They probably filled with water when he tried to swim to the surface. It was assumed that he landed back on the seafloor, took his rubber boots off, and tried to swim up again but this delay proved fatal.

I was in the hospital for a few days with a tablespoon of water in one lung, and I was almost deaf due to my ruptured eardrums. They eventually grew back from tiny nubs, so I did not have the planned operation to put in new ones from my neck skin. My hearing is fine except for occasional tinnitus, a ringing in my ears. Doctors told me the cheekbone is the strongest bone in your face. If the Plexiglas chunk had hit me an inch higher, in my temple, I probably would have died instantly. If it had hit me an inch lower, it could have ripped my jaw off. I was very fortunate not to lose my eye.





Beta on the seafloor, 240' (starfish on hatch)

Beta and the speedboat were recovered a few weeks later. Doug completely restored Beta and it was soon ready to dive. He also repaired the damaged speedboat and sold it. Everyone said I was lucky, but I always thought my son Stephen, born ten months after the accident, was really the luckiest one. I decided to stay with General Oceanographics and bought a home in Mission Viejo, just a short commute to the office in Newport Beach.

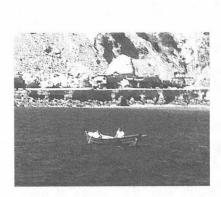
My ascent is listed in the Guinness Book of World Records. They have the date wrong, and the depth was just an estimate.



Submersibles after Beta recovery



Broken conning tower port



Wooden rowboat at time of accident



Recovered speedboat