

A Submarine Incident by Frank Ball

During the late fifties (that is in the twentieth century), following my discharge from the army, I lived in the same house with a friend of mine, Wells Gowdy, his wife and their three kids for \$50 a month room and board. Besides going to school at State College (now SDSU), we were partners in a salvage operation. We would work underwater salvage in San Diego bay for scrap metals discarded by the navy repair ships. It was not very lucrative but provided enough money for us to pay the rent and buy books and tuition for school. On the plus side, we could work flexible hours that meshed with our school schedules.

On television and in book stories, the life of a salvage operator is often portrayed as being opulent and romantic, full of excitement and intrigue. This perception is perpetuated because it is only the exciting stories that are interesting enough to retell. My experience indicates the usual day to day function of a salvage diver is about as exciting as growing lawn sod. This story is one of those exceptions I think is worth telling, perhaps at the expense of perpetuating the aforementioned misconception.

Sometimes the murky waters of the bay restricted visibility so much, salvage work was rendered impractical. There were times when the only way I would know I had reached the bottom was that I stopped descending. At these times I would be unable to see the bottom coming even when I was descending face down. I believe the last forty years have improved those conditions. They are better now because there are more rules about the materials that may be dumped in the bay. On the other hand there are more rules about what divers are allowed to do in the bay. I think what we did would not now be permitted.

In those days, our boat was a wooden 25-foot motor launch. It had no deck forward of the engine room except for a triangular five-foot shelf behind the bow gunwales. It had been retired from buoy-tending duty in the Coast Guard so it came to us equipped with a rigid steel A-frame boom at the bow and a wire-rope winch amidships.



The name of the boat, probably given by the Coast Guard, was the Ballast Point. If you did not know, Ballast Point is a geographical feature in San Diego Bay. When we took possession of the boat, it seemed to us appropriate to give it a new name. We chose the expedient of painting out the last three letters of the first word. The new name, Ball Point, was never registered to my knowledge but remained on display at the back of the boat for a couple of years of our ownership.

The slip we rented for parking our boat was on Shelter Island, next to the Bali Hal restaurant. One of our boating neighbors was a bait-fishing boat. It would go out early each morning to net sardines and anchovies. The baitfish were then sold to sport fishers on day trips as they went on their way out of the channel. The workday for the bait fishing crew varied but it was often finished by mid morning. On one of the days we could not work because of the underwater visibility, we came back to the slip just as the bait fishers were tying up. In the ensuing conversation we compared our bad luck with the good luck they had that day.

The bait fishers offered to give us precise landmarks of a sunken object they knew about, outside the bay but still in shallow water. This is the reason they had taken notice of it. The object looked on their fish-finder sonar much like a dense school of small fish. At sometime in the past, they had been fooled into wrapping their net around it, only to find it was a solid object fastened firmly to the bottom. Such an eventuality usually cost them thousands of dollars in net repair. In such situations they would always record careful landmarks so they would not be tempted to repeat the mistake. Along with the recorded landmarks, we were given the following short course in making use of them. To landmark a point in the water near land, first find two pairs of recognizable points on land, each pair being aligned with the location on the water being marked. The line through each pair should be chosen to be at a large angle to the line through the other pair. To re find the location it is first necessary to see the four land features. Then move to bring one pair into alignment. Next proceed along the line defined by the alignment of the first pair until the second pair falls into line. When that happens, you are there.

The point they were marking for us was in the ocean just outside of the surf line west of the navy radio station, near the southern tip of San Diego bay. Our boat was built for qualities other than speed. We realized it would take us near two hours of travel time just to get there. We put off the search for another day when we could get an earlier start. Another day came when we would give the search a serious try. The landmarks were clear and easy to follow. We

anchored and set up our diving equipment. In those days SCUBA gear was available and we had it but high-pressure air was expensive. We used SCUBA very little. Our suits were neoprene wet suits that looked much like the SCUBA gear used today. However, I think they were much easier to tear because they did not have fabric laminated to the outer surface. Our usual breathing air supply consisted of navy shallow-water gear, a face mask connected to air from a hose to a low-pressure compressor on board the boat. We had salvaged both the mask and the compressor from the vast storehouse of navy gear at the bottom of San Diego bay.

It was usual for only one of us at a time to dive. The other stayed in the boat to tend the compressor. I recall being the first one in the water. The bottom was sand, wide expanses of flat surface with ripples a few inches deep. The plant and animal life, which is always there in shallow water, was not abundant. The visibility was not very clear for ocean water but much better than we were accustomed to in the bay. My wanderings were pretty much at random within the limits of the air-hose length. I soon came straight on to a high vertical wall. It made things seem suddenly darker, like a large blanket had covered me. It was longer and higher than I could see, in any direction. Investigation revealed the object was the hull of a submarine. Unlike the sandy ocean bottom, Its steel surface was densely covered in sea growth. It lay on the bottom, pretty much on its side but more nearly inverted than upright. It was nested so deep into the sand the sides seemed to rise vertically from the ocean bottom for much of its length. About thirty feet from the after end, one hatch was exposed. The hatch cover stood wide open. The hull diameter became smaller, football like, as the rear was approached so from that hatch rearward, the hull stood free of the bottom sand. At the back were two of the largest screws (propellers) I had ever seen under water. I went to the surface to reconnoiter. We both went down to have a look but, of the parts we could see, the most interesting to us were those brass screws. Our earlier experiences consisted of picking up small brass valves, copper tubing, used boiler tubes and poorly formed cast-brass ashtrays discarded by casting trainees. These five-and-a-half foot solid brass screws riveted our attention.

On board our boat, we discussed the lore about things being lost at sea belonging to the finder. It seemed obvious; we should spend whatever travel time was required to make enough trips to the sub to recover this prize. Each screw was held in place by one brass hex nut, threaded onto the end of the shaft. Each nut was hidden under a brass "dunce cap", a streamlined fairing at the back of the propeller hub. It was held in place with flat-head machine screws around its base. The machine screw heads were about an inch in diameter. We contrived something to use for a screwdriver with more leverage

than the biggest one we had. The machine screws came out easier than I expected. The first "dunce cap" came off and we were able to measure the size of the hex wrench we would need to construct. It would require about an eight-inch span. That was the extent of work we accomplished the first day. It was an euphoric two-hour trip back to the slip. A 30-pound brass "dunce cap" was the only increase in our tangible assets. While that was more than we might have obtained from the murky waters of the bay, we had besides this modest prize, the key too much more ambitious booty, the measure of the hex nut.

On getting home, we located a piece of steel about two inches thick and fourteen inches square. It was something we had salvaged earlier. It was not made of brass or it would have been sold. It just seemed useful for something and its time had come. We laid out a hexagonal pattern in the center of the steel. Cutting the hex hole was done using a cutting torch fueled by acetylene salvaged from the bay. A small I-beam, about three feet long, was then welded to the side of the steel plate for a wrench handle. A hole in the end of the I-beam was cut to receive a shackle for pulling on the handle. With this "wrench" we were prepared for our next trip to the sub.



After anchoring on the site, we attached our newly built wrench to the wire-rope winch line and lowered it to the focus of the work. Under water the 60-pound wrench was a little unwieldy but not worse than I expected. It fit on the exposed hex nut just fine. With the I-beam handle setting a little down from horizontal, we were ready to have the winch apply the unscrewing torque. It was necessary to ascertain the correct direction for the torque to unscrew the nut - both left and right-hand threads were in use on the two propeller shafts. The wrench had to be refitted to the nut many times before the unthreading was complete. After the first few pulls, however, it was no longer necessary to use the winch for added torque. This phase

of the operation went well and we recovered an eighty-pound brass nut. Again our workday had to close for the trip back.

Having gone this far into the liberation of the sub's screws, we began to worry about the possibility of someone, perhaps better equipped than us, slipping in to take our prize. That, with us doing the lion's share of the work and getting only a "dunce cap" for a finder fee. The next step was going to be a hard day's work. The one screw we had worked on was still attached to the sub by being jammed onto a taper on a steel shaft, five inches in diameter. We felt obliged to free it and get it loaded into the boat on the same day.

When that day came we arrived equipped with a few sticks of dynamite, some caps and a lot of waterproof fuse. Wells Gowdy, my partner had ordinance experience in the Air Force and had a fair feel for how to proceed. Most of my experience with dynamite consisted of shooting at pieces with a 0.22 caliber rifle to set off the powder for noisy fun. A couple sticks of dynamite were unwrapped and packed completely around the shaft, up against the front of the screw hub. A cap, crimped to a long fuse, was inserted into the wad of dynamite. At the surface, the fuse was cut to length and attached to a floating block of wood. We lit the fuse and moved the boat a little distance to watch what turned out to be a spectacle, more dramatic than we could have imagined. The five-or-so minutes of wait seemed like it took all morning. When the charge went off it looked like a scene from a WW2 submarine movie. The surface became instantly white and rose a couple inches in a shallow mound about twenty feet in diameter. In a few seconds the surface came alive with stunned baitfish covering a diameter of about 60 feet. At this point all of our efforts to keep our project on the quiet side were made obviously futile. Sea gulls came from all around to collect a meal of stunned fish. Sea gulls are especially noisy when they make a group effort to feed in a small space. The noise brought more seagulls and more noise until it seemed a critical mass would be reached. I thought every sea gull in San Diego County came to announce that we had just tried to take a propeller from an unclaimed ship below the waves.

While the results of the shot left room for improvement above the surface, inspection of the underwater scene revealed the shot had done just what was hoped. The screw lay flat on the bottom about five feet from the end of the shaft. In the next step we harnessed the screw, shackling it to the end of the wire rope from the winch.

That done, we both worked from on board the boat to take our prize home with us that day. The screw was as weighty a load as we had ever lifted with our boat. Before it began to clear the water surface our winch and boat seemed to handle the load pretty well. As the load made the transition from under water to out of the water, the

load on the wire rope increased by 20% or so because of the loss in buoyancy of the payload. This proved to be so close to the limits of the rigging, it became hard to predict who would win the contest. The winch clutch smoked as the engine strained to keep running. We were not able to make it easy on the clutch because the engine didn't have sufficient power to lift the load straight away. The clutch had to be disengaged repeatedly to let the engine recover. Like most winches, ours had a load-holding ratchet, for convenience in this kind of operation. However it seemed unwise to use the ratchet, in case we would have to let the load fall on short notice, as will be explained below. The winch was not the only limitation, working to bring the operation to an unsuccessful close. The back of the boat was levered clear of the water surface by the load pulling down in front of the bow. The precarious nature of this mechanical arrangement will be apparent to some, which have had lifting experience like this or are able to conceptualize, from my description, the physical form of the rigging. For others, let me tell you it is scary. It is one of the memorable moments of panic in my lifetime. Not only could the boat stern suddenly swing around to a more stable relationship to the load. But also the load would fall the twenty feet to the bottom, twisting the boat over on its side using the lever formed by the rigid boom ten feet above the bow. The chances of such a shift in stability were increased because all this was taking place, not on a calm lakebed but just outside the ocean surf line where the two-foot swells were getting ready to turn into breakers.

This would not be the story it is if the image in my mind had come to pass. We did get the screw on board, with Gowdy operating the winch and me pulling the load straight in over the bow. Before I could begin to reel in the load it had to be lifted about four feet above the water surface to clear the bow of the boat. As I pulled the load toward the boat the stability of the rigging improved. I was conscious of the fact that if I slipped before getting the load down, it would have swung out by pendulum action to aggravate the marginal stability momentarily. A moment of aggravation might well have made the difference between success and dramatic failure. We will never know what margin we had. The mathematical solution would be beyond the ken of anyone involved. As I think about this scene from time to time, I am impressed with the chances we took. If I was faced with the need to do it again I would try very hard to find a better way.

When we got the screw bedded down in the boat, we packed up to head for home. The trip was even slower than usual because our bow was drawing water about a foot below normal draft. From that point on we were able to handle the load with equipment better rated for the job and had no more scary moments until we tackled the second screw. The task of getting the second screw was an almost perfect copy of the first one. It occupied us for the next several days.

We stored the screws in the equipment yard of a friend of ours. Next we turned our attention to what we should do to continue our exploits.

Even though we never saw them, we were aware there were brass torpedo tubes 200 feet away at the other end of the sub. We thought they would make the screws seem small. The bow of the sub was buried in sand too deeply to reveal the tubes. Because we had encountered so little logistic trouble to this point, more and more we began to think of this sub as belonging to us. We visualized methods of getting at the salvage value we were convinced was contained there. We took a next step; it seems a little comical in retrospect. We made a copper plaque, perhaps half a square foot in area. With letter stamps, we embossed the date and our names, making the claim that this vessel now belonged to us. We took my brother Newton with us on a trip to the sub. He came with us, in part, to witness us attaching the claim plaque.

Now we began to investigate more details of our situation. We studied the outside of the sub. We became increasingly curious about what the inside was like. The one open hatch we could see invited us to have a look. Inside, it was hopelessly dark. Even after going in with the best battery-powered lights we had, we could not see enough to conclude anything except, there was not much room and what was there was largely occupied by oil tanks and plumbing. The part of the boat we were entering is the shaft alley, not a roomy chamber under the best of circumstances.

The exhaust of our breathing air began to collect on the upper limits of the space. This gave us the idea to attach the end of an open breathing air hose inside the space. We went to the surface and waited a couple hours with the compressor running. Our next inspection gave us precious little useful information but revealed some interesting phenomena. We noticed right away, entering and exiting through the hatch was very different. The regular swells starting to become breakers swept over us unseen at the surface. The small pressure changes would alternately compress and expand the internal air space we had developed. In doing that, considerable water needed to rush into and out of the hatch. When a diver was about to enter it was only necessary to get lined up with the hatch. The surge did the rest. The same was true for an exit. Once inside the air bubble we could remove the diving masks making the lights much more effective. However, very little of significance was revealed beside the fact the passageway to other parts of the vessel was hopelessly blocked by sand.

Of no help or hindrance to our study, another interesting physical phenomenon was revealed. The trapped air in this space was of course saturated with water vapor. Although not directly detectable

by us, the pressure was changing in fairly regular intervals corresponding to the motion of the swells sweeping across above us. During almost exactly half of the time the air was visually clear. During the other half there was a dense fog throughout the internal air space. A most unworldly feature of this situation was the speed at which the change took place. The change from foggy to clear and back again would seem to snap instantaneously. It switched so fast I could only guess at the period over which the change took place, about 20 milliseconds I think.

We soon came to the conclusion there was not much more we could do without a big change in our equipment. Our next move was more in the line of a diplomatic effort. Since the Navy seemed to be the only organization who could have any objection to our ownership claim, we contacted them with the news of the sub's location. We did not mention the screws. My memory is not clear on how the



newspaper became involved but it happened about the same time.

The Navy said

"What submarine?"

The newspaper thought the Navy should know WHAT submarine and got on the Navy's case. The Navy told us they were skeptical and thought we must have found an old torpedo in the surf. We assured the Navy it was not necessary to be in the Navy to be able to tell the difference between a torpedo and a submarine. The Navy said they had no record of such a sub but offered to send some people from the Sub Rescue team with us to verify what we were asking them to give away. There is a popular concept, if shipping equipment is abandoned at sea, it belongs to whoever finds it. A truth about Maritime law came to light at this point. Ownership only transfers for equipment that is abandoned afloat. That is, a sunken object belongs to the owner who lost it. This makes complicated international legal dilemmas for the finders of sunken historic treasure because the ownership may be poorly defined. Getting back to the central theme, three divers from the Sub Rescue ship Chantaclear came with us to the dive site. It did not take long for them to see that it was indeed a submarine.

It was several days before we received any reply to our request for ownership of the sub. Each day a fresh newspaper article would appear. The newspaper had revealed to the world, even more vividly than the seagulls, we had taken the screws. The navy seemed more interested in the egg on their face than who had taken what. New stories from people who thought they knew what submarine it was, cropped up from time to time in the newspaper. The most plausible story is that the sub is a World War One S-boat (probably S-11), active in the early months following the 1941 attack at Pearl Harbor. When a more modern replacement became available, the obsolete sub was to be towed out sea and sunk in deep water. I guess, in the wartime rush there was no time to deal with dismantling her for scrap.

The day the towing was to take place the weather turned bad. They lost the tow and had some tense moments getting some workers to safety. The hatches were open and she went down somewhere outside of San Diego bay. It most likely sank slowly, retaining enough trapped air to allow it to drift to the beach where it came to rest for the next fifteen years, and more.

A reply from the Navy came in the form of a letter announcing the request was denied. Instead, the Navy announced plans to sell the wreck for scrap. The sale was to be handled by the New York Naval Shipyard. At this point we could tell it would be a long time before there would be any more developments. We were afraid to sell the screws for scrap because of the possibility the Navy might decide to

sell the sub as a complete vessel. If that were the case, the screws would belong to the successful bidder, not likely to be us. We removed the screws to a more secluded location, the spacious back yard of my father's ranch in Alpine. There they would be away from the congestion of active marine commerce in which our friend was engaged. We put our name on the list to receive bid sheets from the New York Naval Shipyard.

For the sake of story telling, at this point a good deal of abbreviation is in order. Otherwise this starts to become an autobiography instead of a story. We muddled through life for about a year, checking the bid sheet every time it came out, to see if "our" sub would appear. Finally, just as the Navy had promised, it was there. What was stated in the "description" column was the operative piece of information. There is a statement used to indicate a successful bidder would be entitled to get only whatever was at the location. "As is where is" is the way it is stated. That is how it appeared on the bid sheet. We felt that statement released us from any moral obligation to continue possession of the screws. We took the screws to a shipyard to see if they had any value above that of scrap brass. There was no interest in them so they we disposed of them through our usual scrap-metal channel Ace Metal & Waste.

The bid sheet also gave us the opportunity to bid on the sub for scrap. We put in an official bid of \$50. At bid opening it went for \$2,000. There was a time stipulation for completing the recovery, maybe two years. For awhile we took occasional notice of what was happening in regard to the salvage job. The two years went by without any tangible progress. I doubt if they did more than look at it. As the deadline came near, it was resold for \$4,000 to someone else who did nothing to recover the salvage value except to get the deadline extended again. I am vague about how the history goes from there. I did hear that it was brought to the surface at one time. Then an accident made them loose their grip, dropping it to the bottom again. To my knowledge the sub is still a navigation hazard in substantially the same location, now forty years later.

There is one more interesting connection in this story. Sources close to the San Diego political scene at the time told us a detail after this thing was all over. Throughout the whole operation, the Navy Intelligence Branch (like the FBI of the Navy) had been watching what we did. They had binoculars on us from the navy radio station on shore. They knew we had taken the screws from the wreck. They probably knew what submarine it was. They just chose not to tell the rest of the Navy what they knew.