Brian England The Gulf War



Mr. England chose to review photos prior to his interview in order to refer back to them during the interview. His explanations and photos are below.

Can you tell us about these photos?

"Yeah, I wanted to show you and tell you about all the photos so you can have an understanding about what I talk about later in the interview."



"This is a photo of when I qualified submarines and they pin your dolphins. When you qualify you get a pair of dolphins and I will show you those. That was actually on the submarine. This is the mess deck in the submarine. That's actually what's around right there and it's where we ate."



"This is right before I got out of the navy. This is my uniform, I was an E6. Each of these hash marks is four years of service, and good conduct."

What does E6 stand for?

"That's the rank. You start out E1, you go E2-E3-E4. E1-E3 are fireman or seaman in the navy. E4 you become petty officer, E5 is petty officer second class and E6 is petty officer first class. After that you become a chief petty officer and once you get to chief petty officer above that are two roles chief petty officer, senior chief and master chief then after that there are officers so this is one of the higher enlisted positions you can achieve. This was the dolphins I was talking about on top. These are ribbons with medals. This is a boomer pin which shows how many patrols you have done and I can show you that later."



"This is when I got my first good conduct medal. This was actually done on the pier where our submarine was on the water. We were all wearing our work uniforms rather than our dress uniforms."



"This was my machinist mate A school class. I went to be a machinist mate A in the navy so you go to school and the first school I went to was a machinist mate A school this was my class I am in the top of the picture."



This was we actually fired two missile, test missiles. These were ICBMs, intercontinental ballistic missiles; we test shot two of them. I will tell you a story about that later. We were under the water and this is us shooting them."



"This was when I got a navy achievement medal that's the captain giving me the medal."

QUALIFIED IN SUBMARINES
To all who shall see these presents, greetings:
Know ye, that reposing special trust in the fidelity and abilities of
machinise's made second class (SS) Brian Scott England
I do this 8th day of September nineteen hundred and ninety
on board United States Submarine FLORIDA (SSBN728) designate him QUALIFIED IN SUBMARINES OF THE UNITED STATES NAVY
This designation is tendered in recognition of having the initiative, perserverence and possession of those special qualities inherent in all submariners by having demonstrated his ability and enthusiasm in a rigorous qualification program, requiring knowledge and skill in all phases of submarine operation. I do proudly present him with this Certificate of Qualification. 6. E. KEEFE, Captain, United States Navil Commanding Officer
USS FLORIDA (SSBN 728) (GOED)

"This is the certificate you get when you qualify in submarines and you get your dolphins. It has when I qualified and my name."



"This was when I reenlisted and was in the officer's mess, where the officers ate. These were battle lanterns that were all over the submarine. This was a plug breathing emergency air breathing these plugs right here. When you qualify submarines these are very important."



"That was actually my submarine the USS Florida."

How long was it? Do you know the dimensions of it?



"That's another picture with the Florida in it."

"This is an article. They did an article for the base about me so I included a copy here. It talks about what I was doing at the time and what I liked to do there."



"I just wanted to show you what was on here and we will talk about these pictures as we go through the interview."

When did you enter the military and how old were you?

"I went into the navy on March 21^{st} 1988 and I was 19 years old."

How long did you stay in the military?

"I was in 9 years and 2 months."

What boot camp did you go to?

"I went to a boot camp in the Navy in Orlando Florida"

How long was it?

"It was eight weeks."

Did you go to a second boot camp?

"No I only went to one boot camp but I went in the navy to be Nuclear Machinist mate so when I got out of boot camp I then had to go to machinist mate a school which was also in Orlando and that was twelve weeks. Then I had to go to naval nuclear power school which was six months. Then I had to go to another school in Idaho which was a prototype nuclear power plant and I was there for about six months."

Did you join voluntary?

"Sort of"

Like how so?

"When I was younger I was getting in a lot of trouble and I was highly encouraged by several individuals to join the military to get away from the people I was hanging around with and the things I was doing. So I went and took the ASVAB the armed services vocational aptitude test. I did very well on the test. I scored I believe 96 or 98 out of 100. So that's why I joined."

What made you join the navy?

"After I took the ASVAB (Armed Services Vocational Aptitude Battery) I went to see a Marine recruiter because obviously I was getting in a lot of trouble and I wanted to do the hardest thing I could do just because of my attitude at the time. So I went to see the Marines and told them I wanted to join the Marines. The Marine recruiter was very short he was probably 5 feet tall. I had pretty long hair at the time. The Marine recruiter didn't believe me that I had gotten 96 or 98 on the ASVAB and he told me "I don't believe you there is no way you scored that". I told him to get the test records and they will show it. He said "I still don't believe you what makes you think you can be a Marine?" I said "why not I scored high why couldn't I be a Marine there is no issue with me being a Marine". He said "well I don't think you could be a Marine". It went back and forth like that for several minutes and he finally

said again "what makes you think you can be a Marine?" and I said "well your sitting right here and if you could do it there is no reason why I couldn't do it". He didn't like that answer and said I had a bad attitude. I said "That's ok I'll go next store to the navy and see how they like my attitude".

I walked out of his office and went right around the corner to the navy office I walked in there and said "I wanted to join the Marines but the guy in the Marine office was a jerk". Everybody in the Navy office laughed and they thought that was pretty funny. They said "ok come talk to me. Have you taken the ASVAB" and I told them what I got and they were all.... same thing they seemed pretty surprised at what I got. They said "well we have a little test here that has like ten questions. Why don't you take that and it will give us a good idea of what you got". I scored all ten questions correct, and they conceded that "okay maybe you did get a 96 on the ASVAB". They said, "well have we got a program for you" and there I was."

What equipment did you use on a daily basis?

"Once I got out of school and I was a nuclear machinist mate I went to my submarine and I was on submarines. I was a machinist mate which means I worked on a power plant. I worked on steam valves and water valves and pumps basically anything that would be on a mechanical plant; we had big air conditioners anything mechanical like that that's what I worked on. I also worked on the nuclear power plant pumps and all of the stuff with the primary. So tools and all the things like that."

What rank did you achieve?

"When I got out of the navy I was an E6 which is also machinist mate first class/ petty officer first class."

Were you wounded while in the military?

"Only once, but it was not from military action. The only time I was actually injured I was working on this stem valve and it was operating... the steam valves where probably around 360 degrees. I was working on a steam valve that I had to crawl over a pipe. I was almost upside down working on a valve. The boat shifted, obviously a submarine is in the water so it moves, the boat shifted and I slid down and my forehead ended up against the steam valve. I was trying to pull myself away. I didn't have hands because I was holding the tools. I was trying to pull my head off of the steam valve and I burnt part of the...... basically when I finally got loose it peeled all of the skin

off were it was stuck to the steam valve off my forehead. That was the only time I really got hurt."

Where you in any famous campaigns or battles?

"We were, my submarine was alert during the first Persian Gulf War. When you are alert that means... I was on a trident submarine that carries missiles, when you are alert your job is to hide and aim missiles at whoever you are directed to aim missiles at, and to hide and not be found. You have to be ready to launch whenever you are told. "

Did you receive any awards or medals for your service?

"I got two good conduct medals because I was in for, every four years that you are in and you don't get into trouble you get a good conduct medal the dark red ribbon and there is a medal that goes with it. There is a star and that means that I got a second one. I was in for 9 years which means so over 8 years I got two good conduct medals. I got a Battle "E". This is a ribbon. A Battle "E" is called battle Efficiency Award. It is given to a ship or submarine that exhibits the highest level of readiness. They score high on certain tests; shooting missiles shooting torpedoes and things like that. So we scored high and got a Battle "E". I also got, this is a campaign medal for being in for the Persian Gulf. This is a navy achievement medal and the gold star is a second navy achievement medal. This first one was because I did procedures for a steam generator inspection. We had to inspect a part of our nuclear power plant and I spent probably 80-120 hours writing procedures. Everything you did had to be written down step by step so I got a navy achievement medal for doing that. I got a second one when I was an instructor teaching new people how to operate nuclear power plants. After I left the submarine I was an instructor. They taught civilians and new guys coming in how to operate power plants. I also got a couple of commander submarine group 9 awards and commendations. I think the chief of naval and technical training; I got a couple of commendations from him."

What was a normal or average day while in the military?

"When I was in school, nuclear power school and prototype, we worked twelve hour days. Nuclear power school they tried to cram two years of engineering school into 6 months. It was pretty tough. Prototype we did the same thing; you worked twelve hour shifts and it was rotating shifts. Once I got to the submarine, your regular day when you were in port it was like a

regular job. You would go in about 7:00 in the morning and you would get out about four in the afternoon. We would go to training; you always had to train to learn how to do things. We had to do physical training; you still had to do PT and things like that since it was the military.

When you were at sea you worked six hours on watch and then you were either six or twelve hours off. If you were six on and six off they called it port and starboard. This means you stood watch for six hours and then for six hours you didn't stand watch. If you were not port and starboard you were three sections. You stood watch for six hours and then you were off for twelve hours. Then you stood watch for six hours, and it kept going on and on. Because it was every six yours your day became shifted. If I went on watch at 6 am to noon then you were back on watch at twelve midnight. Your day rotated all the time. It was kind of an 18 hour day on a submarine but your clocks all worked on a twenty four hour basis. When you stood watch you would take logs on all the equipment. Every hour you had to monitor all the equipment then when you were off watch you would do maintenance on any broken equipment you would go to training, you would run drills. We constantly rand drills five days a week for probably four to five hours each day. That was because you had to be prepared for everything so each day we had different types of drills we would run. Hopefully you would get some sleep before you had to go back on watch again. It just depended upon what the cycle was."

What was your normal routine while you were at war or battle?

"When we were at war our job was to be alert. We would stand watch for six hours and be off for twelve hours. We had to be quite for a lot of that time. At one point, they would.... There would be soviet "fishing "boats that would hang outside the harbor were would pull out and they were "fishing". What they were really doing was trying to keep track of when our submarines would come in and go out. We had to be very quite when we passed underneath them in the water. One time during the Persian gulf there was a soviet... they called them bears; a type of air craft that hunts for submarines. They were hunting for subs in our area where we were operating and we had to stay what they called ultra quite for two days. When you are on ultra-quite if you are not standing watch you are required to be in your rack, your bunk and you can't be doing anything else; so you are either on watch or in your bunk. Let me tell you two days of that is very boring."

What type of fire arms did you use if any?

"My job didn't involve any firearms. We qualified engineering booty petty officer in port at certain times one of the watch stations would qualify to carry a small arm a 45. But that was all I had to use as part of my job."

Did you ever use any heavy artillery?

"We carried ICBMs. I didn't personally do it but in the pictures, we fired two missiles as a test once and we actually shot intercontinental ballistic missiles from our submarine which is as about as big an artillery as you can get."

While at war what helped you pass the time?

"It's probably a little different now because times have changes. But when I was on a submarine the internet didn't really exist because it was brand new. On a submarine you wouldn't have internet anyway because you wouldn't have contact. Really all we had if we weren't standing watch training or working we could read books. We took books with us. We listened to cassette tapes because they didn't have CD's yet. We would listen to those we had a library with VHS movies so we would watch movies. Where we ate dinners we also had a screen that we could pull down so we could watch movies in there. We played a lot of cards. That's all you had to do to pass the time. You would write letters but you couldn't actually mail them."

While at war what helped you get through the hard times?

"The only thing we got in the way of information when we were at sea was called family grams. It was a short, fifty or seventy five words long. Your family would write a message and it could only be fifty or seventy five words long that would get sent to the navy, the commander of the subgroup. They would actually send that out as radio traffic to the submarine. They would do that probably once every three weeks or so. You could get, each person got four family grams the whole time you were out of sea. That was really the only information you would get. The navy would send out some radio news, you could get football scores, but other than that family grams were the only information that you got. A lot of times our family members or wives or girlfriends would write letters and put them in envelopes and seal them and write a date on the envelop so you go to sea and when that date came you could open the envelope and you would have a letter in there. Obviously the letter was written before you even went to sea."

Did you have a girlfriend while you were in the military?

"When I first went to the submarine I was married. We ended up getting a divorce after I was on the submarine about a year. This was very common. When you are gone six months out of the year and you have no contact with the outside world what so ever it is very difficult to be married or have a girlfriend. After that I did have a couple of girlfriends but it is very difficult. You don't have contact with people. When you come back...when we went to sea we were gone from the shortest I was gone was 62 days and the longest I was gone was 88 days. When you come back after that long, for me time didn't change. I would go and come back and it was just like the day I left. For everybody else who didn't go to sea with me their lives moved on for three months. They were a different person. You change after three months and you don't realize that. So it's very difficult because you come back and you think everything is the same. But everyone else has gone on with their lives and changed."

What books and music did you listen to read?

"All sorts, from my own choice I would read any science fiction or adventure books but we would read anything."

Was there any movie that you watched a lot?

"We watched all movies but one of the things we liked to do... the submarine had its own library of movies and they would always try to have the newer movies that you,,, not ones in the theatres obviously. But a lot of us that had wives or kids used to take Disney cartoons. I had every Disney cartoon ever made and we would take them to sea and watch them all the time; because we missed our kids or our families and so we would go and watch them those were our favorite movies to watch. My favorite movie like that was probably the rescuers."

After you came home from war did your perspective on anything change?

"Not about the war its self. We did our same job no matter what so I didn't really have a perspective on the war. My perspective had more to do with being gone like that on the submarine. Certain things meant a lot more. The submarine would be under water for several months and then come up. The first time you could walk up off the submarine topside...The sunlight... the air smelt different; it didn't smell like a submarine, like diesel fuel, oil or steam. You actually smelled fresh air. Sunlight was very different. I was stationed in Banger Washington; which is across from Seattle. It was very

green, and had a lot of pine trees and mountains. You could see MT. Reiner from where I lived and from where the submarine pulled in. We would come up and see all this green from the trees and the snow on the mountains and you hadn't seen anything like it in so long. All you had seen was industrial machinery for months. So things like that you had a much larger appreciation for. Communication and news are two things we appreciated. I remember one thing that happened after I got back from one of my patrols. I was actually originally from Texas and I used to go see Stevie Ray Vaughn play in Austin some times when he was pretty young. I remember we got back from one patrol and the first thing my wife told me when she came down to the boat to see me was that Stevie Ray Vaughn had died while I was out to see and we had no ides. Things like that you come back and the rest of the world already knows. So she told me he was killed. You get an appreciation for actually hearing things and knowing what is going on."

Did you carry anything with you after the war?

"My attitude about a lot of things I carried with me. I joined because I got in a lot of trouble when I was younger. The navy fixed that. When I left the military I became a lot more hard working than before. Doing the right thing became very important to me. In Naval nuclear power they always stressed that integrity was a big thing. Your word was important... it was <u>nuclear power</u>. Things like that I carried with me. I have a few things I had. I have a radiation suite, the yellow suit that I wore when working on the plant. My pins, these pins are called dolphins.

To qualify submarines, you go to the submarine and you have 6 months to learn every major piece of equipment on the submarine; whether you work with it or not, every hydraulic valve every high pressure air valve. It would be a lot like if you opened the hood of your car you would have to be able to name every item you could see. We had to do that on the submarine. The reason we had to do that was if you ever had a casualty. A casualty means if something bad happened, if something broke if there was a fire, if a high pressured hydraulic line ruptured, you had to immediately call the controlling place and tell them what happened. You couldn't say "you have to send someone here to figure out what's broken; or there's something bad happening here send some who can figure out what was happening here." You had to know. You had to know exactly what it was, report what it was and depending upon what it was do something about it.

When I say high pressure we had hydraulic lines that had 45,000 pounds of hydraulic fluids in it. We had hydraulic line rupture once and I had

forgotten about this but when it ruptured it filled a space probably the size of this room (the VFW meeting room) with a mist of hydraulic fluid almost instantaneously. That's very explosive and the person who was working in that space had to know what to do. Another time I was on the submarine we had several fires. When you have a fire on the submarine the only air you have to breathe is what's around you, you are under water. When there is smoke you put on a breathing mask, which is a lot like what the fire department uses except we didn't have packs. We did have some but those were very limited and you didn't have a lot of space so you couldn't carry a lot of bottles. We had these high pressured air lines that were all over the submarine. I showed you in one of the pictures and you can go back and look but these are the emergency air plugs. When you qualify to submarines you had to take a mask and put the mask on. You had a tube that was about three feet long and it plugged into those breathing stations. They had those breathing stations about every fifteen or twenty feet; everywhere on the submarine. Below each breathing stations they would put a square of sandpaper to help you find it. When you qualified submarines one of the things you had to do was to put the mask on and when they covered that mask with a black screen and they took you to the very front highest point on the submarine. Now with the mask covered, walk through every single compartment in this submarine, top to bottom, front to back without taking that mask off. So you had to unplug and go find the next station where you needed to breath and plug in and unplug and go to the next station plug in so you could breath. When you were unplugged you could not breathe. You had no air. When you qualified you had to learn where every one of those stations was. You also learned how to feel where the sandpaper was on the deck. With that mask covered in black you would go to where you thought the next stations was and feel with foot for the sand paper to know that it was the station and you could plug in. I had to go through the entire sub like that. When I had a couple of fires, you had smoke and had we not known how to do that we wouldn't have been able to breathe.

Some other things you had to learn was every hole opening. A submarine hull was the outer shell of the submarine. You had to learn where every single hole was because where there was a hole there was a valve. That valve could be shut so that you isolated the submarine. The reason you did that was that if anything broke in the lines of the submarine you didn't want seawater coming into the submarine.

I think we had five fires and I was never afraid during a fire because I knew how to breathe and I knew how to fight a fire that was something we practiced. Three days a week we practiced fire fighting, so I knew how to do

that. The one time I can say I was actually very scared on a submarine, we were at about 400 feet early one morning and we came up to get message traffic. To come up to message traffic we didn't have radio communication you had a wire and you would basically get bits of news that would come in. We came up to 200 feet depth we were looking for message traffic, pulling in radio messages. I was actually the drill coordinator at the time and we were getting ready to run drills and I am the person who ran the drills so I know if I am running a practice drill because I am the one running it. I was sitting getting the things together to run drills about an hour later and there came over the announcement, it was about 5am so most guys were still asleep. It came over the announcement flooding in machinery one....flooding in machinery one???? I can tell you I was scared. We took on about eighty thousand pounds of water in about thirty seconds. That's the one time I will tell you, I was scared. Fires you can put out but flooding? If you don't stop flooding the submarine goes to the bottom I knew it was real because II wasn't running the drill. Because we were at 200 feet we took on 80,000 lbs of water, that's about 8 pounds per gallon. As a submarine you learn a lot of this, we took on 10,000 lbs of water, that's a swimming pool to give you an idea. As you go down in the ocean the pressure goes up. So from 200 feet to 400 feet the pressure would have been about ten times more which means we could have easily taken on 100 thousand gallons of water which is 800,000 pounds."

Did the fires influence you to become a fireman?

"The fires on the submarine didn't. Later on I went on to be an instructor and teach new guys on the navy how to operate a power plant. We were at the prototype which was a pretend ship and you taught guys how to run the power plant but you also taught them how to do damage control: working on fires and flooding and how you fought them. One of the things you taught was shipboard firefighting. I had to teach guys how to fight fires on a ship or submarine because I didn't know what they were going to. If they were going to go to a surface ship or submarine. You taught them the different types of fires that you might have on a ship and what to use to fight those fires. For example we had lots of big electrical cabinets and you didn't spray a big stream of water into an electrical cabinet. You would electrocute yourself. One of the things when I moved to Northvale later, I knew I had a lot of experience with that. I knew a lot of men who went on to be firefighters because we had a lot of experience. I knew they needed volunteers for our department and I had experience with that. Fighting fires in a house or building is different than a ship or sub but a lot of things are the same."

You are talking about all this knowledge you have, how much time did you go to school?

"I talked about this initially. Machinist school was 12 weeks you learned the all the tools the real names, all the pumps anything mechanical valves pumps fans anything like that you learned how they operated how to fix them. Then after that I spent six months in nuclear power school which was all the engineering behind how a power plant works how hydraulic pressure works and things like that. Then I spent 6 months at prototype so it was about a year and four months that I spent in school."

What you are saying, it could take people five years to learn all that.

"Our nuclear power school they crammed two years of mechanical and nuclear engineering in six months. I went to school the regular school was 730 in the morning till 330 in afternoon and you would have lunch. I would go in usually about five in the morning and spend an hour and a half or two hours before school started studying. After we go out at three thirty I would go home about an hour or two just to give myself a break. Then I would go back after dinner about six o'clock at night till ten o'clock to just study and I would do that Monday through Friday and then Saturday I would spend about eight hours in school studying so I could remember everything that I had to learn. Sometimes on Sunday I would do two or three hours. I probably spent 80 or 90 hours a week at school so that I could make it through. Some guys didn't have to do, some guys were smarter I guess than I was."

They were able to retain things easier?

"Even the guys, the really smart guys, it was not simple when you cram that much in six months is has hard. When you start a class, the average class about 35% of the people who start the class fail out and end up doing a different job within the Navy. My particular class the failure rate was 44-46% so almost half of the people, if I looked at the begging almost half of the people were not there when I finished. They had to go on to do other jobs. "

Can you hold up the hat and explain the awards?

"The dolphins I already explained what's involved with that. I learned all this stuff in school but when you go to your submarine you had six months to learn about that particular boat. At the end of that when I think I am ready I tell them I am ready for my Qual board. It's a qualification board three guys and one officer you get together you sit a t a table like this and they spend

about three hours asking you questions about the sub. Whatever question they ask you, you have to answer. They may ask where a valve is. It could be any one of a thousand valves on the submarine. You had to tell them where that valve was. Then they might ask you how you isolate that valve. You had to tell them what two things you could shut that would isolate that valve if it failed.

This comes into play in instances like the flooding I was talking about. The reason we had the flooding, we had a sea water pump and it had a quarter inch packing layer. It lets a little bit of water on the packing of the pump to keep it moist and cool so it doesn't dry up and not work. The packing in the packing gland blew out. So the hole, were we took that 80,000 pounds of water, was about a quarter inch diameter and it happened in about thirty seconds."

How did you stop the water?

"I didn't do it, but when they called the person in that department when they called flooding in machinery one, one of the people in that compartment did it. Every compartment in a submarine has a little bank of valves and you could shut that valve and that would shut the openings in the hull.

When anyone sits for the submarine qualification board they have to know how to do this. The Qualification board could ask me "where is this sea water pump?" and I would say "that's in machinery one". He would say" what do you do if that pump fails and we are taking in flooding from that pump?". I would have to say "I would go to machinery one second level port side about twenty feet forward of the compartment door there s a bank of valves and the rear two valves would isolate that sea water system to isolate that pump and stop the water from coming into the submarine."

When they called that flooding over the intercom somebody went to run to the bank of valves and shut the valves for that particular pump and stopped the water from coming into the submarine. Once I could go through and explain all that, that's what they call earning your dolphins. I was qualified for submarine. They pin the dolphins on your chest and you are qualified in submarines.

What are the rest of the awards for?

"This doesn't really have awards on it. This is a trident patrol or boomer patrol pin. We got awarded for every patrol that I went to sea and we went on alert status. Alert status means we were aiming missiles and we had to be ready to shoot missiles at whatever they told us. For the first one I got the pin and then these stars, each gold star is one additional run and then a silver star

for five runs. That's how many patrols you were on. The dolphin was for anyone who stayed on a submarine. We had to earn that. Surface ships had something similar it was called surface warfare. It was similar but not quite as involved. One of the things I did while on the submarine, I was nuclear machinist mate so I worked on the nuclear power plant, but I had allot of friends who worked in other divisions. One very good friend worked in Sonar. So I actually went and used to sit sonar and learned how to sit sonar, and listen and pick out what the ships were. You could listen and you could tell by the sound of the screws on the ship what type of ship it was. If it was a military ship, a lot of times you could name the exact ship. You knew by the sound what ship it was or what submarine it was. So I learned to do that.

One of the other things I qualified in the submarine was called engineering watch supervisor. In the submarine if you learned the entire power plant, everything about the power plant and you could direct all the watch standards what they were supposed to do for everything that was your supervisory watch station and you were in charge of everyone. There is control where they drive the boat. They move the boat up and down, look through the periscope, they operate the boat. Then there is maneuvering. Maneuvering is where they operate the power plant and operate the screw and make the boat go forward and backward and everything like that. So when you qualified as engineering watch supervisor, one of the things you could do, you could sit in maneuvering and you directed all of the operation of the power plant which was pretty neat. I remember the first time I actually did it. There are three guys that sit in front of you. One guy operates the throttle. That's what makes the boat goes forward. He controls how fast the boat goes. Then there is a person in the middle. He is the reactor operator and he controls how much power the reactor plant makes. Then the person next to him was the electrical operator. He controls where the electricity went all over the ship; how you controlled the electrical power all over the ship. Then there was the engineering watch supervisor. Normally that person was an officer. On a submarine the officer could go on a tour of the engine room if he wanted and the engineer watch supervisor had to sit there and control maneuvering. That was kind of a big thing.

I remember the first time I ever did that and I sat in his seat behind the three guys. Next to the seat where I sat was a whole big panel with alarms. The throttle man set off one of the alarms on purpose. So the alarm went off and it had about a hundred alarms and I had a heart attack. I had to figure out what alarm it was how to isolate and what to tell people to do and what direction I had to do all three of them were laughing because I jumped out of

my skin trying to figure out o god what should I do. They used to mess with you, how they mess with you in the fire department is nothing compared to how they would mess with you in the navy.

The navy could really give you a hard time. I was a machinist mate so we made all the water. You only had little water tanks. When you take a shower on the submarine you would go in get wet and turn the water off, soap up, turn the water on and rinse and get out. You only used maybe two minutes of water the entire shower. That's what you wanted to do because you didn't want to use a lot of water. A lot of guys up forward would take what we called Hollywood showers where they let the water run the entire time. Since I was in the division that made the water we used to get a little annoyed at that. So you could do one of two things. The water on a submarine is an instant on water heater and it was really hot. So we would either decide, depending upon who it was and if we liked them; we would either turn off the hot water, so that the water got really cold on them or the cold water so it got really hot. The outside water temperature was usually about 36 degrees. We operated off the Gulf of Alaska and the northern pacific so the water was very cold 45-50 degrees. So if you turned off their hot water all of a sudden they had a 45-50 degree shower and it was really cold. That was someone you liked. If it was someone you didn't like you turned off the cold water. All of a sudden the water was about 140 degrees. If you did that then people would stop taking Hollywood showers. That was my point. Don't use my water."

So just to clarify, If the boys are taking a Hollywood shower I can turn off the hot water?

"You bet, water is a precious commodity. You have to teach them. Alright, we were talking about the showers and we turn the water off if someone was taking a long shower we would turn the hot or cold water off on them...um but we would used to call those showers Hollywood, and that was someone taking a Hollywood shower."

Why would they call them Hollywood showers?

"It was a Hollywood because whoever was taking it had to be a movie star or something because they must have been getting ready to look awfully pretty. Let me tell you there were a hundred and ten guys on that submarine and none of us cared how you looked so you had to be a movie star to be taking a Hollywood.

I was also talking about how cold the water was. A lot of times the water where we operated was 35 36 degrees. I remember my first patrol, the first time I went to sea and I was brand new on the boat. When you're new on the boat you stand watch at the worst spot and I had to stand watch at the engine room lower level. I was at the very bottom of the submarine in the very back where the bulges are. We operated all the way up to the Gulf of Alaska. Sea water injection temperature, the temperature of the water coming in to the submarine from those hull penetrations was 28 degrees. You might ask if it was 28 degrees how come the water isn't frozen. This is because sea water is salt water; salt water won't freeze at 28 degrees it has to be colder. Also when you operate deeper below the surface it has to be even colder. We would operate water that was well below freezing. So I was standing watch down in the Engine room lower level. You had to stand watch for six hours and be off six hours. It was probably 40 – 45 degrees and I would stand watch and spend six hours and it was so cold. I remember we had a lube oil purifier down there. In order to purify lube oil you had to heat it up first. The way to heat it up was to run it through a little heater. The heater was about the size of a barrel. I would go sit, take logs, monitor my equipment and then I would have about a half hour before I had to do anything else so I would go sit on the heather because that was the only way I could stay warm for those six hours.

There would be water; you would get little bits of water in the bilge. Because the water temperature was twenty eight degrees the water in the bilge was thin. It wasn't as much sea water and so it would freeze and you would see ice sloshing back and forth in the bilge as the submarine moved along. That's how cold we were down there.

I told you about the time we shot missiles. We went down off the cost of San Diego and we did war games. They had P-3 Orions (Lockheed P-3 Orion is a four-engine used for the magnetic detection of submarines) and surface ships hunting our submarine. Our job was to hide. March 22 1991 at about 4 in the morning we were playing war games and two P-3 Orions were trading places and they ran into each other looking for us. Both planes went down and we spent two days off the coast of San Diego bobbing in the water looking for survivors. We never found anyone, but we pulled four or five exposure suits that were in the P-3 Orions out of the water as well as some of the wreckage. I remember looking through the periscope and it felt like any of the old movies you see with periscopes, with a ship in the middle of the cross hairs. I was looking at an aircraft carrier and two destroyers and a couple of other ships and that was the one time I ever got to see all those other ships at sea. When you look through the periscope you call things targets because they look like

they are getting ready to get shot. Anyway we spent two days looking for these survivors, but we never found them.

From there we had to go further down of the coast of Baja California and that's when we shot the missiles. We shot two missiles from about eighty feet down. We shot one missile and then we shot the second missile five minutes later. There were a bunch of surface ships there recording it. Each missile had its own trajectory it had to follow. When you fire a missile the whole submarine moves and you can feel it. The middle of the submarine actually bows a little from the force. So we felt the submarine move and five minutes later fired the second missile. I found out later we actually almost got ourselves in trouble. When we fired the missiles we lost contact with the surface ships. It is radios, radio traffic is not easy. The missile we were supposed to fire first, there was an error in the firing sequence and so they fired the second missile first. The surface ships thought the missile was going in the wrong trajectory so they were radioing that the missile has the wrong trajectory. "should we detonate". They can detonate in case of a problem. So it doesn't hit something it shouldn't hit. We weren't responding to the calls because we had lost radio contact. They were about to detonate the missile because it was on the wrong path when we re-contacted. The problem was the missile they were going to detonate was still on board because we had fired the second missile. So they came very close to detonating the missile we still had on board because they didn't know." The dolphin award, did you have a certain amount of time that you had

"You had to complete it within six months. If you didn't get your dophins within six months you were off the submarine. I think it was six months it might have been eight. Its been a long time. I fyou weren't ready within that time period you were sent to a surface ship. You weren't good enough for a

to fulfill and then take the test?

Is there anything else that you would like to add that I missed or is there anything you would like to talk about?

submarine. I did mine about two months before I was supposed to."

I think I told you a lot of stories. I will give you something else. I printed out this list I found called suggestions for the ex-Samaritans who misses the good old days on the boat. I had forgotten a lot of things that happened on the submarine. You can read these later and include them if you wish. There are about 118 things and talks about what it was like living on the submarine. For example the first one

If you miss the submarine and want to remember what it was like in the good old days go sleep on a shelf in your closet, replace the closet door with a curtain and then two to three hours after you fall asleep have your wife come in whip the curtain open shine a light in your eyes and say Oh Sorry Wrong Rack". That's how you were woken up. You didn't have alarms; someone would come around and wake you up. They were supposed to knock on your curtain but I can tell you most times they didn't. They just pulled open the curtain shined a light in your eyes and said time to get up. So you were often woken by mistake someone would whip back the curtain shine a light in your eyes and say "oops sorry wrong rack".

When communicating in the navy you repeated everything back. Close this valve and you would have to say "close this valve aye". You had to repeat the exact words so no one would ever make mistakes. Put lube oil in your humidifier at home instead of water and set it to high. This was because the submarine inside smelt like lube oil. I haven't been on a submarine. I left in 1993. I still have stuff that smells like the sub the smell doesn't go away. You would go home and put your clothes in the laundry, when you walk back into the room you still smelt the boat. There's a lot of stuff in here and you can go through and see what it is like to be on a submarine."

"On a submarine when you go to the bathroom you go into a tank. Periodically they have to blow that tank out with high-pressured air, its 700 pound air. One of the things you never want to do when you are blowing the tank with high pressured air is to flush the toilet; because if you flush the toilet you open the valve and now the high pressured air and whatever its blowing overboard blows back through the toilet into the room."

Did that ever happen?

"Oh absolutely, there were guys that did that."

When they did that did they get in trouble?

"They had to clean it up"

Did they at least get to take Hollywood showers?

"I am thinking for that time you would make an exception and let them take longer to get that cleaned up. You can read through these there are a lot of stories. 110 guys and you got tired of being with the same guys and looking at the same faces for eighty days."

Thank you Mr. England for your service and time