

**OH NINE OH
OH NINE OH
OH NINE OH
DE NPO BT**

**With this emergency radio signal the Asiatic 7th Fleet radio operators were called To attention. The 7th Fleet Commander sent to all ships and stations from his controlling radio station NPO the following plain language message:
“O9O, O9O, O9O,V, NPO, NPO, NPO. BT JAPAN HAS STARTED HOSITILITIES GOVERN YOURSELVES ACCORDING AR.”**

**This signal from the Commander of the Asiatic fleet radio station NPO was Followed by another messages stating, PUT OPERATION ORDER 46 INTO EFFECT. The Captains of all ships and stations of the Asiatic Fleet then opened the envelope marked OP-46, which then stated:
“CONDUCT UNRESTRICTED WAR AGAINST JAPAN.” Thus the author a 2nd class radioman on the Submarine USS S-39 a World War 1 Submarine assigned to the Asiatic Fleet, receiving these messages at 3:30 AM Monday morning December 8th 1941 and alerting the Captain and ships Crew, went to war,**

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THE START OF WWII AT THE ASATIC STATION

The radio signal O9O sent from the 7th fleet headquarters radio station NPO at the Cavite Naval Station in Manila bay was a seldom-used emergency call. CW (Continuous Waves) dots and dashes in the International Morse Code was the main way of communications in the U.S. Navy at the start and during WWII. Hearing this unique hand keyed call O9O at 3:30 AM, December 8th, 1941, alerted radio operators standing by after the end of the 2:00 AM schedule broadcast from NPO, that something unique was coming. With these messages, the Asiatic Fleet was called to go to war.

We the members of the Asiatic fleet were aware that something was brewing, as The week before, on Tuesday, all commanding officers were called to the Flagship for an emergency meeting. When the Captain of the S-39 Lt. J.W. Coe returned He stated that we were going to get underway at midnight. That we were to take The exercise heads off the two exercise torpedoes, put the warheads back on, make them ready for war, and load the torpedoes tubes with torpedoes (The WWI Submarine S-39 had four torpedoes tubes in the torpedo room.) We were to go to Sangley point, (The operating and repair base for the 7th Fleet) and fill the room with torpedoes to our maximum capacity. Convert No. 3 fuel ballast tank to a fuel tank, fill it with oil at Sangley point, and get 30 days of food on board. This we did and were underway at midnight for our assigned standby area at Sorsogon Bay at the southern part of the island of Luzon.

While waiting we anchored in a cove, and Saturday morning, as nothing was going on we went to Masbate a small town that had a dock. We let a group of the crew Go ashore for a Softball Game, and picked them up in the evening. We did the same on Sunday December 7th, and in the evening anchored in the bay. I had the mid-watch from 12 midnight to 4 AM, when I received the NPO message quoted above. We departed Masbate and headed for our patrol area of off Legaspi.

Off of Legaspi several days later we saw the Japanese meeting and going into Legaspi. The next morning we got to that position, and at daybreak dived to wait. As we went down the gasket on the main induction had slipped out and we were taking water down the main induction. We blew all tanks and returned to the surface where the gasket was pushed back in place. By now it was getting light, And we saw a Japanese submarine not too far from us. A little while later came several Japanese ships heading in to Legaspi. We were able to fire two torpedoes, and one of them hit a tanker in the stern. After this we heard a lot of depth charging, but it was not on us. As I had my personal ham radio receiver on board I listened to Tokyo Rose that night, and she stated that the Imperial Japanese Navy had sunk an American Submarine that sunk one of their ships at Legaspi. This I told the Captain, and he said it was nice to have confirmation from the

Enemy. So we reported it by radio to HQ that night. Later we received instructions to return to Manila, and arrived on December 21, and tied up alongside the Canopus, our submarine tender. I was able to get liberty to turn in my motorcycle to the dealer for use by the U.S. Army. As many of the men on the Canopus were unable to go ashore since the war began, they had me take money to their girl friends and their children. As I had the motorcycle this I could easily do. The next day, December 25th, the Military Commanders and Manila Government declared Manila an open city. Therefore we had to move all military activity out of Manila. The Canopus then went out to Marvalus Bay, near Corrigdore. We followed them to get the sub ready for the next patrol. While alongside the tender trying to get some work done on the boat, the Japanese would have an air raid, and we would have to move away and sit on the bottom until it was over. This kept going on, and the Captains said enough of this, so we stayed on the bottom doing our own work, and at night went alongside the Canopus for their help and supplies.

One night we pulled in to the dock at Corrigdore to get torpedoes, and I asked the Captain if it would be possible to get one of the RAK-RAL power supplies from the Sea Lion. She was bombed and badly damaged in the first Japanese air raid on the Cavati Navy Yard, and I heard that her radio equipment was on Corrigdore. He was able to get one of the power supplies for us. The power to operate the RAK-RAL receivers came from storage batteries, which was a nuisance to keep charged from the ship 120-volt D.C. supply. We had a motor generator that provided 120 volt AC to operate the Gyro, and repeaters, and we had an outlet in the radio room. One power supply was easily capable of operating the two receivers. Another piece of equipment we had received prior to leaving Manila was a LM frequency meter. This I installed in the radio room. It was a godsend as it enabled us to accurately set our TBL transmitter and RAK-RAL receivers on frequency. Later when talking to an Australia radioman, he stated that when he was told to look on a certain frequency for our subs, he said, "by George there you were."

We left Marvelos and headed south for Surarbaya, Java to join the Dutch Navy. We jokingly said that we were now in the RAF (Retreating Asiatic Fleet.) We Left Manila bay on December 30th for our second war patrol to arrive at Surabaya the Dutch Navy yard.

It may well be in order to see how the author arrived at the position of a Navy 2nd class Radioman as the leading Radio, Sonar, and electronic maintenance man on a World War I designed submarine, required to fight back the advancement of the Japanese Navy. We will leave the S-39 on its patrol to the Dutch West Indies For a look at what we can call a flash back to see how I became involved in this action.

THE DEVELOPMENT OF A SAILOR & A NAVY RADIOMAN.

My father Otho B. Rice was born in Webster County in the western part of Kentucky. My Mother Violet Kilner was born in Manchester England, and Came to the U.S. around 1915. This move to the U.S. came about this way. My Grandfather, John, Kilner was a supervisor in a glass and mirror factory in Manchester England, and had 75 people working for him. His brother Jack Kilner became interested in the Mormon Religion in 1900 and departed to Salt Lake City, Utah. Telling his brother John, I'll be back in ten years.

During the period 1900 to 1910 hard times set in for the Kilners in Manchester, And by 1910 my grandfather was the only man working at the mirror factory, everything had been automated with him running the show. Violet being a young girl got a job in a knitting factory. She was running machines that made knitting cloth that went over beacons and hams, and could stand a lot of mistakes from a kid running the machines. She told me those were the days of spread and scrape. At that time to make ends meet they had sold just about everything in the house. At times they had only potatoes and bread and butter. Her mom would carefully butter a piece of bread, then with the edge of the knife scrape most of it off and put the butter she had scraped off on another slice for the next child. They had the taste of butter, but not much else.

For work her mom would take a piece of wax paper put some Eagle Brand milk on it and some tea leaves twist the wax paper into a small ball. With two of these My Mom went to work at 6:00 AM each day. At 8:00 they stopped for breakfast. The factory furnished a nail to hang your cup and hot water. You then scraped the tea leaves and milk into your cup add water that was your breakfast. The same routine went on at the Noon break.

Well true to his word in 1910, Jack came back to see what was going on and was appalled at the conditions, and stated I'll get you all to the states as soon as possible. He went back to Salt Lake City and started procedures for them to come to Utah. Mom said that when they left they only had a knapsack to carry with them everything was gone. The Mormon Church had them come via Canada by ship and then rail to Salt Lake City. There my Mom became a chocolate dipper as a trade.

My dad and his buddy Forest Miller were bumming around the country riding the rail on freight trains and ended up in Salt Lake City. There he met my Mom and got married in 1916. Forest Miller married Millie, Mom's younger sister at this time too. I was born on October 27, 1917, and a year later both families moved to San Francisco so the men could work in the shipyards. At this time my mom used to tell me about living out at the beach, and how she would take me to the beach and let me run and run down the beach and back. She was going to

Have another baby, and my sister Helen was born on July 17th 1919. At this time I learned that discipline could be given anywhere. Mom had to go to town, so she got me ready and Helen in her arms came out the front door and turned to the left to go to town. Me wanting to go to the beach pulled to go the right to the beach, well Mom kept dragging me along until I just started screaming and went down on the ground having a tantrum. A lady came out of her house and said, "Let me hold the baby." Mom handed her Helen and then pulled my pants down and spanked my bare bottom for the entire world to see. Since then she said that she had no trouble taking me where she had to go. I had learned Who was boss.

As the World War I had ended, dad got a job in a furniture factory, and Uncle Forrest worked on ships as a Boilermaker's Helper. At about this time we all started living together at 71 Peralta St. and this is where my first memories started. One incident that my mother told was that the combined families sat together for supper in the dining room, Helen and John were still in cribs, so I was fed in the kitchen in a high chair. This meal we had mash potatoes and peas, I did not like the peas, so my mother mixed them with the potatoes, gave them to me and left to eat in the dining room. When she came back she saw that my plate was clear so she said oh good little boy, you ate your peas. She then looked at the wall, and there stuck to the wall were the peas, I had taken the spoon and flipped every one across the room, and they stuck to the wall.

As we got older and my mom was working and I was in the first grade and Helen was in kindergarten, she would stand me on a chair at the sink and have me wash the breakfast dishes while she got Helen ready. She would leave for work, and I would take Helen to kindergarten, and then go to Le Conte School. After school I would pick her up and head for home to await the folks. We were latch key kids and had the run of the house. One time we somehow set a fire on the steps going down to the lower bedroom. This caused the fire department to arrive, and Did we get it when the folks got home? There was no damage done though.

Another incident that happened to me, and taught me a good lesson. I had a boil on my knee and walked stiff legged. I was going down the front steps, when a girl up the street taunted me about my limping, I got mad and followed her up the Street to her house, and threw a stone at her. It hit her in the eye, and blood came squirting out and she ran screaming into the house to her mother. I also followed her into the house. Her mother was able to stop the bleeding and said she would Tell my mother. When she did, my mother said that she was afraid if she told my dad, he would just kill me. She said she never did tell him, but I sure learned a lesson about throwing things. I could have blinded her. I've often wondered if there was a scar from what I did? At this time looking for a way to earn some money, I was able to get a corner selling papers, and would make a few cents each day. I would get on the streetcars and ride several blocks trying to sell papers and me in the first and second grade.

A few years later we moved to Oakland across the bay from S.F. and Uncle Forest and his family moved to Hayward just south of Oakland. They had a small farm area. And raised chickens and rabbits. There was a water tower with a room under the tank, and when we visited them we had fun sleeping in the tower.

At this time I read in a 1912 boys scout handbook a system of wireless. So I made A coil on an oatmeal box, and made a crystal set. My dad had put together a Silver Marshall radio kit while we were living in Denver Colorado, and had a pair Of Brandie's headphones that he gave me. These were a godsend as there were High Impedance phones and very sensitive. Well I wanted to also send wireless messages and talked to a neighbor who was a radio repairman, and asked him if He could help me. Well he said, "We don't use wireless any more but radio is what we use. I hadn't associated wireless as the start of radio. Well I then went to the Library borrowed books and radio magazines on radio. Boy a New World opened up to me, and I learned fast. As I was learning new things about radio, I would Tell what I learned to my cousin John Miller who was a year and 9 months younger then me. Near where John lived in Happy Valley (Hayward) we visited a Radio Ham who had a SW3 with an amplifier on it and a speaker. He was Receiving CW (code) from a ham in China, and John and I thought this was out of this world.

We moved many places in Oakland, and then moved to Castro Valley next to a dairy farm. I was 12 or 13 then and was able to get a job delivering the Hayward newspaper, but I needed a bicycle. I had learned that a shop in Hayward had one that had a rack on it to hold papers, so Dad bought it for \$12.00. I then wheeled It downs the block to the newspaper office and loaded up the bike for delivering papers in Castro Valley. The bike was so loaded that I couldn't ride it. I had to push it to the start of the paper route. So the first time I rode the bike was to start delivering papers.

We then moved back to Oakland and lived at several locations in rented houses. Each time we moved it seemed we were in another school zone and I had to make the change. I always seemed to be the new kid at school. At this time my Dad was getting science fiction magazines, and I was reading them. At a new school that I went to in one class the teacher was going to teach about the stars. So she asked A question, "Does anyone know how far away the Sun is"? No one raised there Hand so I raised mine and said 93 million miles. Oh she said. She then asked "How long does it take for light from the Sun to reach Earth?" I said 8 minutes. This went on for a while with me answering her questions. She thought she had a Genius in her class. I was just reading my Dad's Science Fiction books.

I had a great time growing up, playing sandlot football. Exploring San Leandro Creek with my cousin John Miller, and learning about the magic of radio. I still went to the Library often to check out the radio magazines to learn more.

As I got interested in building a regenerative receiver using tubes, I was in need of a power source for the tubes. At this time we lived on 72nd Ave, and up at the corner of 14th street, there was a gas station. At that time many gas stations had battery repair service, where they rebuilt batteries. The station manager let me work changing batteries out of cars, putting them on charge, just hanging around to learn what I could. One day I was playing with a hydrometer float in a crock of 1250 sulfuric acid. I was dropping a hydrometer float and watching it drop down and then rise to the surface. Well as I did this a drop of the acid flew into my eye. I turned quickly to the sink and put my face under the cold water and immediately flushed my eye. Talk about foolish thing kids can do.

For pay for helping at the station he built up a motorcycle battery for me, and a 90-volt battery of 45 test tube battery elements. This gave me a filament and plate voltage supply to run the vacuum tube set I was building.

One day he said that one of his customers had a car radio that didn't work, and a radio shop looked at it. He said that it would be too expensive to fix it, and would I look at it. Well when I took a good look, I noticed that the filter capacitor leads were cut. All that was wrong was that it needed a new filter capacitor. I got one and installed it, and the radio worked okay. He thought I was a genius. In playing with my radio equipment, I caused problems with the neighbor's radios. As I was experimenting with a Ford spark coil and it caused radio interference. I soon learned that this was a No, No.

THE END OF MY BOYHOOD

Things came to head and caused many changes. I was now in High School, in the tumbling team having several paper routes and building crystal sets and tube sets to learn about radio. One of the paper route jobs that I had was delivering advertising papers. I got 75 cents for delivering 150 papers. They had to be put on the doorknob of every house. Thus I had to go up to each door to do this. Well I was able to run between houses jumping over banisters bushes etc. to get from one house to another. The manager of the routes asked me to take two routes. He would pick me up at the end of the second route and take me to my school. Doing this and my tumbling in school I was in good shape. The tumbling team was very good, and we had a very good routine. One time we were asked to perform at a local movie house during intermission.

I listened to the hams on my radio that I built and was now learning the code. I had a shack in the back yard that used to be a chicken house that I cleaned up and had a bed and a work place. One Sunday morning as I came into the house I heard my Mom calling for me. I went into the bedroom, and there was My Dad choking my mom. When he saw me come in he dropped mom and came after me. I backed out of their bedroom to the dining room with him following me and

Clenching his fists. He made a roundhouse swing at me, and I went under it and came back at him with two blows to the face. At that instant his mother who was staying with us came from the front room to see me responding to his swing at me. Mom got me out of the house and calmed everything down.

Several weeks later Helen and I received a call to report to the Principles office. There was Dad. He said that Mom wanted us home and that he and his mother were on their way back east and that he was leaving my mom.

Well I told Mom that paper routes would not help very much and that I would see about joining the Navy. I went to the Oakland recruiting office took the Exams and was told to bring my birth certificate and my Mom for the final signing the next day. On the streetcar going to town my mom said we had a problem. She said that my birth certificate was not in the name of Rice, but in the name of Salone Howell Barbee. That they were married under the name of Barbee, and do I remember when people used to call me little Howell Barbee? She found out about it when we made the first trip back to Kentucky in 1924. the recruiter said that it would be no problem as she could state that we were the same individuals, and I would be called up soon. Why my dad did this we never knew. We surmised he was in some kind of trouble, and changed his name when He was in Salt Lake City.

A month later my Dad wrote to Mom from Southern California that he wanted to have her and Helen to come down to live with him, and he would come and get them. With this development I moved over to San Francisco to stay with my Aunt Millie and Uncle Forrest until I went into the Navy.

A SAILOR GOES TO SEA.

In December I was called up at the San Francisco office as the first super number for that month. As no one chickened out I was told that I would be first in January. I reported in to the Recruiting Office at 8:00 AM on January 12, 1935, had another physical, and was sworn in at 9:00 AM. The ten of us were told to take the rest of the day for personnel things and report to the dock for transportation on the Yale a coastal passenger ship departing south for San Diego at 6:00 PM. The ship got underway and we had supper as we went out through the Golden Gate. Well you can guess what we had to eat, Pork chops. By 7:30 we were going over the bar, and guess again. I was seasick. Only ten hours in the Navy and I was seasick. Well as we turned south the weather was smooth and I got okay. We arrived at San Diego the next evening and taken to the Naval Training Station.

The next morning we were issued uniforms, and formed into a company under a Chief Gunners Mate. We were his first group. He was a great guy. We were

issued a set of uniforms, packed up our civilian clothes for the navy to send them home. We were issued a chit book that cost us \$5.00 to use on the base. I was able to make an allotment to my mother for \$15.00. As our starting pay was \$21.00 per month, this left me just \$1.00 dollar on payday. We were then assigned to the south end of the camp for training and stayed there for a month in a quarantine status. As I wanted to be a radioman, I asked for that assignment. I was given a test at one of the schoolrooms. They put me down in front of a typewriter put a pair of headphones on me and told me to copy what I heard. Well they sent code at 16 words per minuet. This was the first time that I ever sat down to copy code on a typewriter. The instructor said I did pretty good got about 80 percent of it, but the radio class was full and I would have to go to the fleet.

Upon completion of boot camp I was assigned to the U.S.S. San Francisco a new treaty class 10,000-ton heavy cruiser. Assigned to the 2nd division and No. two turret as an upper power room-handling crewmember, we did some firing of the 8" Guns. I let it be known that I wanted to be a radioman and that I already knew the radio code, but the radio gang was full so I had to wait 9 months before I could be transferred to the radio gang. I had spent two 3 months terms as a mess-cook and 3 months as a bow hook on the No. 2 motor launch before this transfer took place. On a Sunday morning we were assigned to tie up to the forward officer's Boat boom. I heard someone calling me. "Hey are you Rice?" I said yes. He said where the hell you been, you have been assigned to the radio gang a week ago. I went to my Petty officer in the 2nd division and said, "What's going on." He said Oh yes you are transferred to the radio division. He kept me running the 40-ft motorboat and not telling me. He was a stinker.

MAKING OF A RADIOMAN

My first challenge came the first week. As a seaman radio striker I was required To make up message blanks, make coffee, deliver messages, and every two hours copy the navy radio broadcast that last approx. 45 minutes. This is the way messages are sent to ships in the Navy. Well since I was not too good copying The schedule yet, the supervisor a 2nd class radioman had to do it, with me typing At the second operators position. The third time we did this, I noticed that he got up and hung up the headphones and left. This meant that I had better get what was being sent. After the schedule ended I asked him what are you doing to me. He said you have enough to identify the messages, and if you need fills go see the signalman and get it from other ships. When you're young you learn fast. I became proficient as a radioman and as a maintenance man for our electronic equipment.

One thing we experimented with was sonar equipment. In the navy yard we had sonar equipment installed like on destroyers to see how it would work out. Well I was put in charge of it and operated and maintained it. Also I was assigned as

Bridge radio operator during maneuvers and gun firing. The problem was when The guns fired on the port side, as far astern as they could I was only 15 feet from The muzzle as that was where the bridge radio controls were. Boy was that a hot Blast when they went off. One problem as a seaman 2nd class radio striker was before going up higher in rate you must pass the exam for seaman 1st class. To do this you were in competition with all the other rating aboard ship. Well I finally passed the examination and was designated as a seaman radioman on February 27, 1937. Several of us seaman radioman were interested in Amateur Radio, and did a lot of studying so we could go up to Los Angeles to the FCC office and take The exam. We all passed, and I received the amateur radio call W6OBM

It was great fun being a navy radio operator, as I was always learning something new. As CW radio was the main form of message handling by the military, the Navy had established a world system of routing messages to all ships and stations. This consisted of Naval Districts and the California area was the 11th naval district with its headquarters in San Francisco. The big high power NPG low frequency radio transmitters as well as transmitters and antennas for the higher frequencies were located in the northern portion of San Francisco bay not far from the Mare Island Navy Yard. From here traffic (messages) were sent to all ships assigned to copy NPG, and they had the responsibility to forward traffic to the Pacific area. Two of the circuits they were responsible for were 500 KC's. The commercial merchant marine distress frequency, and the American Samoa medical unit at Pago Pago. These chores were assigned to the fleet, and ships took turn in standing guard for these circuits. We received the 500-distress frequency guard for a 6-month period, and I was one of the operators. This stood me in line for performing commercial radio service when I later applied for a first class radiotelegraph commercial radio operators licenses.

The Samoa circuit required all messages for them to be sent to us during our guard period. We would come on the assigned frequency at 2:00 AM, establish contact, send and receive messages and then secure. This was a fun time and I liked looking for the very weak signals from Samoa. I thought what a job for a radioman, chasing the native girls in their grass skirts, and only having to operate for 1 hour.

We were scheduled to go to the Bremerton Navy Yard to have an overhaul and install additional stiffeners from the bow to amidships. So on our trip to Puget Sound, the Operation Officer had me and another radioman navigate the ship by operating the direction finder. We would cruise 10 miles beyond the line that would allow us to see the lighthouses and get visual bearings. So it was up to us to plot our position by direction finder as we went from Long Beach to the Strait of Juan de Fuca. The operation officer would come in and check our plotting, nod his head and leave. When we reached the point for us to turn east into the strait, we told him that we were ready to turn it over to him. He gave us a well done.

While in the Puget Sound Navy Yard I got liberty to go to Seattle. There I looked over a communication receiver and put a down payment on it. I stayed aboard all

during the overhaul to be sure I had enough to buy the SX-17 Receiver The other radioman said I was crazy doing that and should come with them for girl chasing.

Well I saved enough and got the SX-17. I had it on the S-39 when she went aground. It's still there. After the overhaul we returned to Long Beach to continue our operations. At this time my parents were living in Fullerton, Calif. I was able to smooth things with my dad, and visit them. Dad now had an upholstery shop of his own. I was able to buy a 1929 Ford hard top coupe, which Helen my sister used at times. She managed to wreck it by looking over her shoulder at a bunch of soldiers and hit a stopped car.

I AM NOW A MAN

I was on a minority cruise, to be discharged before I turned 21 years old. I was discharged on October 26, 1938 two days before my 21st birthday. As things were smoothed over with my dad he would let me live with them and work at his shop learning the upholstery business. This I did learning the upholstery business, and earning \$1.00 per day and room and board. In the summer of 1938 we moved to Jackandara street several blocks away. On September 1st we heard the news that Germany had invaded Poland, I told my dad that there is going to be one heck of a war coming and that I would go back into the Navy.

That week I went to the recruiting office in Los Angeles to see what I could do. The officer said that they hadn't received any word from BuPers yet but gave me An examination and said they would let me know when to report.

A SAILOR AGAIN

I again enlisted in the Navy on September 18th and as I was a qualified sound operator I was sent to the USS Holland a submarine tender at The Destroyer Base at San Diego. At this time we were preparing 50 destroyers for transfer to England as lend lease to help them out in their anti submarine effort. I worked on the destroyers getting the radio equipment ready, and at night visited the submarines alongside.

The word was out that the flotilla of subs alongside the Holland, were being transferred to Pearl Harbor soon. I had met a 3rd class radioman on the USS Plunger who was in love with a local girl, and did not want to go to Pearl Harbor. So I swapped places with him. So on October 10th 1939 I was now a submarine sailor on my way to Pearl Harbor. As a new unqualified member of the crew I had a six-month period to study the boat, make drawing of all the operating equipment, And complete a logbook of my studies, and take an examination by the Executive

Officer. After two months on board, I was called to spend two months on a navy tug the Keosauka, as their 2nd class radioman had broken his leg, and I would be his temporary replacement. Well when I returned I had only two months of studying,

was gone for two months, and now only had two months before my time was up to take the examination.

The normal training for anyone going to submarines is to spend 6 month at the New London Submarine School going through submarine school before being transferred to a submarine. Then aboard a submarine you now have six months To qualify. As you can see I was shorted in this training experience. I lost two month of this schedule on the tugboat. Well I got real busy did the required work and was ready with two other men who had been to submarine school and had They're full time on the boat. We three went through with the Executive Officer Doing the examination. I passed and the other two men did not. So I was now able to wear the Dolphins on my sleeve.

Soon after the Captain called me and told me that we were going to get some new type radiotelephone equipment, and that the crew had to install it. Well we had a first class radioman named Bolten in charge and another 3rd class radioman. I started the installation doing the dirty hard work in the pump room installing Metal brackets for the motor-generator, getting cables run, stuffing tubes installed for the cable run to the radio room. On Friday I went to the radio room and found that nothing had been done in installing the equipment in the radio room. I asked the other 3rd class radioman what's going on, he said that Bolton was up at the barracks drunk, and could not be counted on to help. Well I got busy, had the foundations made at the machine shop, a hole burned in the pressure hull, a cutoff valve for the antenna run welded in place, the antenna installed, the whole thing Had to be done by Sunday afternoon as we were getting under way for tests and short range battle practice on the 5" gun. Well I was able to get everything done, and it tested out okay, and we got underway, but I had no chance to go to the barracks for clothes for the trip.

In firing the Gun on short-range battle practice I was assigned as the sight setter, and was the third man out of the hatch. When ready and going full speed submerged, we would hold the sub down below 100 ft. with the diving planes, then start the blowing of the tanks to surface. When we passed 100 ft. a stopwatch would be started to time us for how long it took us to get the first shot off. Well when we hit the surface, the hatch would be opened. The air in the boat rushing out the hatch would then blow the first two men up to the bridge. As the third man out of the hatch, the water swirling around soaked me. We did all right on Our firing but did not win any prize, or extra money.

The Captain liked the work that I had done, and told me he would write to BuPers to see if he could get me rated to 2nd class radioman. As I had enlisted with broken

Service I was restricted from promotion for a year, and the Captain wanted to get A waver for me. The answer came back no go, so I remained a 3rd class radioman. At this time I wanted to use my radio amateur license, but needed a place to stay

Off the boat. The 3rd class quartermaster on the boat was married and had a new baby, and needed a place to live. I lent him \$200.00 on a house he rented and was able to rent a room from him to set up a ham station. I had my parents send my SX-17 radio to me and got ready to build a transmitter.

Near the end of May 1940 the Captain called me to his room and asked me "How are your tonsils? I told him that I had some problems at times with sore throat. He asked me would I mind having them taken out? I asked why? He said that he just came from the Commander In Chief Pacific Headquarters. That a message will be sent to all ships, that the USS Chaumont a Navy transport ship was due. That a message would be sent that every one who had over a certain number of months to do before his enlistment ended, would be required to be transferred to The Asiatic Station. He said that if I were in the Hospital he would not have to report me. So I said okay, and was transferred to the Pearl Harbor Hospital on May 29th. I had my tonsils taken out, healed quickly, and was transferred back To the Plunger. When I reported in the Yeoman said, "I'll be dam, the Chaumont has reissued the message and I will have to report you to go." The Quartermaster friend said he would cash in his insurance to pay me the \$200.00 loan. I said no when I get settled I want you to send me my SX-17 radio. Whenever you have the money then send it to me, but don't put yourself in a bind. He sent the radio and it was two years before he was able to send me the Loan.

So off I went to the Asiatic station without my tonsils. We sailed from Pearl Harbor on June 29th 1940. When we passed the 180th meridian, we were now under the control of the Commander of the Asiatic Fleet, and had to report to him. I had the privilege of sending in the reporting message and a list of all the men being transferred to him. Thus I called NPO on the ship to shore frequency and sent a 500 group message reporting all the personnel and their ratings and assignments. I was to go to the USS Canopus. We first stopped at Manila, then to Shanghai. Then up to Chiefoo, and on 29 June 1940 I was transferred to the Canopus. We left immediately and sailed back to Manila as things were getting rough due to the Japanese activity. I was able to visit the S-boats alongside the Canopus, and talked with the skipper Of the S-39, J. W. Coe a senior Lt. the Commanding Officer, about coming aboard as a radioman. This he approved and I was transferred to the S-39 on 1 November 1940. On the 16th of November 1940 he promoted me to RM2c. Thus my pay went up to \$72.00 per month plus the \$20,00 Submarine Hazard pay. In charge of the radio gang was a 1st/c Radioman named Harris? He was an alcoholic, and had a gallon of alcohol in the radio room. He would get a cup of coffee, and spike it with the alcohol. We also had a 2nd Class Radioman Schab, who was a good operator, but not much interested in maintenance of the equipment. When the war started Harris was transferred off the boat.

I had my SX-17 radio sent to me and roomed with a ham that had a transmitter so we had a ham station on the air. We were able to talk back to the U.S when the band opened. His time on the Asiatic station was up, and he left for the states taking his transmitter with him. I got a call from naval intelligence to report to

their office in Manila. The officer I met wanted to know about the transmitter. I told him that it went back to the states. I decided to take my SX-17 on board the S-39 as a third receiver. It was a better set than the navy equipment.

Several of the S-Boat radiomen had motorcycles, and I became interested in them. I was first able to buy a small Harley Davidson model 61, but it was an overhead valve engine and very feisty, and quick on response. At one time it slipped out from under me when I started up with the rear wheel on a streetcar track. I took it back to the dealer and said it is too much for me. Well he said I got just the thing you want. Here is a new 1940 model ordered by a local man who can't pay for it. It was a beautiful job? Canary Yellow paints and lots of chromium. It was a side valve 74, with an easy clutch control. It cost \$800.00 U.S so I bought it. It was great driving around the country with the gang.

PRE WAR OPERATIONS

The normal schedule for the Asiatic Fleet was to spend the summer months at China ports, showing the flag, and doing training operations, and in the winter moving to Manila, operating in the Philippine area. In November 1940 when I got on the Canopus we went to Manila, and never again operated in China waters. We did a lot of exercises in the Philippine Islands. Part of our exercises was to show the flag that is to visit cities on the different islands in the Philippine group.

On one trip we visited Iloilo on Panay Island for the weekend. As the S-Boats were small and with a small draft. And did not draw too much water, they were able to tie up at the small landings at these small cities. Well when we tied up at Iloilo and those going ashore had left the ship. Several of us were sitting topside. Upon looking up the street we saw several Chinese men coming to see us. As we were to welcome anyone who wanted to see the Boat, we invited them onboard. They stated that they were from the Chinese Chamber of Commerce in Iloilo, and wanted to know if we would like to play a basketball game with them. We stated that we did not have a basketball team but that some of us had played basketball in high school, and we would get five guys to form some kind of a team. They said fine, it would just be a fun game. They gave us direction of where to meet them up town and to be there at 7:00 PM. We then rounded up five shipmates to make up a team. When we arrived at the location designated by them, we saw a huge crowd going into the building, and flags and bunting hung over the entrance with Chinese and Filipino writing on it. When we got inside, we saw a large basketball court with bleachers rapidly filling up with the local people. When asked what all the hell-o-blue was all about,

They said Oh; the Chinese Chamber of commerce is playing the American All Stars. We had never played together in our life, and we were dumfounded. We decided "What the Heck they can only slaughter us," so we went ahead. They only beat us by a score of 50 to 25. Their plays would not work because we had not set up a defense that they could work through. We were just all over the place. When they

scored the crowd yelled and screamed. When we were able to score we got the hell booed out of us. We figured it was all for the showing of the flag.

The six S Boats made a trip around the island of Luzon, to show the Flag, and stopping at every port that could take us. At Legaspi I got to climb Mount Myon a perfect volcano cone, which later erupted. On another trip to the southern part of the islands, we stopped at the anchorage at Tawitawi for the weekend. The cook and chief of the boat took our small boat and went fishing. When they came back in the evening they had two large Yellowtail Tuna fishes. The duty cook turned on the range, and we had a wonderful fish fry. One of the men bought a small monkey from a Filipino bumboat. On Monday when we got underway to continue our training exercises, we dove the boat. As I was off watch I took the monkey up to the small conning tower just below the bridge. As we dived and put pressure in the boat and watched the barometer rise to insure we were water tight, the monkey started screaming at me. The increased pressure in the boat was getting to him, and he thought that I was the cause of his pain. After that whenever he saw me he just squawked, and squawked at me. He was too big of a problem to keep on the submarine so he was given back to a Filipino.

During this time, when in Manila, we had to go into the bay to make a test trim Dive. When we submerged I was copying the NPO radio broadcast schedule. Well I had to stop, close the antenna trunk, and go forward to the Torpedo room and man the sound equipment. As I tuned the supersonic equipment to 19.5 KC's. I heard the NPO radio station on the sound gear, and we were submerged. This meant the radio signals were in the water. I told the Captain this, and asked permission to make a coil on the wooden spacer at top of the conning tower holding the net clearing cables. I took a hundred-ft. length of power cable wound a coil on the wooden spacer hooked it up to the two antenna emergency cables, made a matching network from a spare RAK input coil, and tried it out. I could copy submerged low frequency radio signals from as far away as Ceylon, Pearl Harbor, as well as our own NPO. This is now one of the main ways we communicate with submarines submerged, and I discovered it.

These good happy time soon came to pass, and the Asiatic Fleet Submarine force now had to be serious in what we had been trained to do. So it may be well to return to the S-39 on her second war patrol.

THE RETREATING ASIATIC FLEET

All of the Asiatic Fleet submarines were ordered to head for Soerabaja, Java. The S-36 ran aground in the Macassar Straits on a small island, and all were Picked up by a Dutch Merchant ship, and brought to the Dutch Navy Yard at Soerabaja. We didn't see any Japanese on our way south. While still in Philippine waters, the Captain gave me heck because I couldn't hear a target he was trying to see in the dark through the periscope. I could hear nothing on the Bearing that he gave me. After a while he said forget it, it is a sailboat. Off of Balikpapan, Borneo, we patrolled for a while to see what the Japanese were Doing. We could see the fires from the bombing, but no ships. We hadn't had Any star fixes in several days as it was overcast, and we were not sure where we were. As we were submerged and I was manning the sound gear, I could hear The noise of the current flowing on reefs and islands, and gave the skipper Bearings of quiet areas between, which we headed for.

We had problems with the clutches slipping for propulsion on both shafts. The starboard engine was inoperative, and we were running on the port engine at two-thirds speed, and on battery charging on the other engine. We were going slow and arrived at the Dutch Navy yard on January 22. We were able to get the necessary repairs so we could go on our next patrol. While at the Dutch Navy Yard, the Japanese started bombing runs on the airfield, the navy yard and the town. I was Up in the yard when one air raid started, and as the ship had closed up everything, I went over to a stone wall for protection and to watch. The next day the native yard workers did not show up for work. None of the yard workers, servants, clerks, Etc. reported. The way the Dutch controlled things, those who were Dutch or a Mestizo, (one with any Dutch blood in them) were the bosses and the natives who did the work got very little. The Japanese took over the island of Java in a little over a week, as the Dutch had no one to fight for them. The native army just let them come on giving little Resistance.

While at Surabaya, we were given several days at a Dutch Navy rest camp at Malang. It was up high in the mountains and cool. While there, some of the S-Boat sailors found out that they could phone to the U.S. It cost 35.00 for three Minutes. One sailor was able to call his dad in the states. He told his dad that the Japanese were not bothering us, as they were setting their depth charges at 75 feet, and the submarines were down at 150 feet. Well his dad was able to tell a congressman that "Our boys are doing great the stupid Japanese are setting depth charges at 75 ft. and they are down at 150 ft." Well the congressman got up in congress and made the same statement for record. Well guess what, about two weeks later the Japanese were setting their depth charges at 150 ft and deeper.

The Admiral put out a blistering message to all the submarines saying. “Dam You people see what you have done by opening your big mouths. There will be no More of that. From now on we will be known as the Silent Service. So keep your mouth shut.”

As things were getting rough in Java, The submarine group made arrangements To evacuate to Australia. We were given orders to patrol off Singapore. So we departed on our third patrol. While off of Singapore, we got a message that Several high ranking British Officers were on the island of Chebis, and for us to See what we could do in getting them. We sent a group to the island in our small weary, but found only beat up shacks and no British Personnel. As we left the Area a Japanese destroyer came poking around, as it was a very calm sea, and Only 100 ft of water, we just sneaked away. Later as we approached Sunda Strait We attacked a Japanese tanker, and got several good hits on her. She turned Turtle and sank stern first resting on the bottom, with the bow sticking out of the water. Soon after, I heard high-speed screws coming. It was a Japanese destroyer coming from their invasion force on Java. As we approached Sunda strait at Night, one of the lookouts started hollering that he saw something, so we made an emergency dive. As I had the radio watch, I closed up the antenna trunk shut Down the radio equipment ran to the forward torpedo room and turned on the super sonic JK equipment. As it warmed up, I made a sweep with the sound head, And heard two torpedoes coming at us and as we were now at 60 feet, they passed right over us.

We were ordered to head for Fremantle, Australia, we had to transit Sunda strait. And at this time the Japanese were invading Java, but we could not do anything As the current through the strait was over 8 knots. As we were submerged at Night going through the strait, we had trouble in steering as the current would Turn us sideways as we made our passage. We went over the Krakow volcano That blew up in the 1800’s. With this fast current, we made the longest submerged dive in the S-39’s history. When we surfaced we were in the Indian Ocean. We went by Christmas Island to look it over, but saw nothing. One of the clutches on the propeller shaft driving the screws finally gave up, and we had only one screw for driving the ship. It took us 20 days to get to Fremantle.

Alongside the tender at Fremantle, we were able to get a lot of repair work done. The Captain, J.W. Coe called me to his room, and told me that he would be advancing me to Radioman First Class on the first of April 1, 1942. He would also advance Schab and Gierhart who were 2nd class radioman, on the 15th of April, but backdate it to the first of the month so that they would receive the New pay rate. We spent several weeks in Fremantle getting a lot of repairs and supplies. We got word that the captain would be transferred to the U.S. Skipjack and we would have a new skipper. We had a change of command ceremony, and LtCmdr. R. W. Brown took over command. When everything was ready we

Departed for Brisbane, stopping at Melbourne and Sydney on the trip. At Brisbane the Army had a big base for the buildup for the advance back to the Philippines. The Submarine Force used New Farm Warf as a base with several tenders there to support the submarines. So on liberty there was lots of military people in town and at the dances. One good thing was that the army band was made up of many musicians from different big name bands in the states. They could play dance music from the bands they came from. So we had the best dance music. I got to be pretty good in jittering bugging, and had a lot of fun dancing with the Australian girls.

But good times came to an end, as we were schedule to head out on patrol. We had A lot of good repair crew people to help us get the S-39 back into good condition, and we were satisfied that she was in the best condition ever. Our patrol area was In the islands of the Solomon sea, and Guadalcanal. The Japanese were building Up forces is the area, but we never got a chance to do any damage to them? At the end of our patrol time, we got a message that there would be air bombing to soften the Guadalcanal Island for the Marine landings. We saw several ships at Florida Island, and hoped the bombing would scare them out so we could have a crack at them, but no go. We were directed to return to Brisbane. Alongside the tenders We did our best to get repairs done that would last. Each time we started on our fifth patrol, something would breakdown and we would have to return to Brisbane. At last we started out and everything held together. On our way to the Bismarck Sea area to patrol off of Rabaul, while still in the Coral Sea, the executive officer Mr. Benard got very sick with pneumonia. We sent a message, and were directed to go to the Barrier Reef off of Townsville and meet an Australian Corvette to transfer him. We were sorry to leave him, as he was a great officer. We than headed back in the Coral Sea heading for the passage way between Rosell Island and the Polickton Reef. That night we got a five star fix. All star circles crossed together, a perfect Fix. This established our position in the Coral Sea accurately. Our course was plotted to be abeam of Rosel Island in the Louisiade Archipelago at midnight.

We had a new Warrant Officer who was the OOD on the bridge. The captain Stayed below and when it was near midnight, asked him by calling up the hatch to the bridge, do you see the island? It was a moonlight night with fleecy clouds casting dark shadows on the water. The OOD said no not yet. Again at midnight the captain ask the same question. "Can you see the island?" The answer was again no. Again at 12:30 the captain, with the same response asked the same question. And at 1:00 AM. The same questions and answers. The captain then said well when you see the island call me I'm going to bed.

I had the mid watch in the radio room, and at 2:00 AM. We crashed with a loud bang onto the reef. I shouted collision and shut the water tight doors to the Forward battery. The OOD shouted down the hatch "we are aground." At this Time we didn't know the status of the Japanese on these islands, and they were considered hostile. I got all the codes that we had on board kept the current

Series for communication and took them topside in a waste basket and set them on fire. When daylight came we saw that we were on the reef next to Rosel Island and had missed the passageway by three miles. The charts of the area stated that there were dangerous unknown currents in this area? We coded up a message outlining our problem and sent it to Brisbane. We got a message that the Katoomba an Australian Corvette would be on the way to us.

In an effort for us get off the reef, we did our best to lighten ship. We fired our torpedoes up on the reef threw our ammunition over the side, and most of our food. Blew most of our fuel tanks dry as well as the ballast tanks and tried to back off the reef. All that happened was that the waves turned us about a bit. It seems that we went over a big rock and this prevented us from moving off. Not far from us we saw an old time anchor up on the reef. It was the type from the old whaler ships out of Bedford, Mass.

When the corvette arrived the Australian captain said that he would drop anchor, bring over a cable to us, pull on his anchor and back down while we also backed down and see if we could be moved off the reef. It was a good plan, but when he got close enough to the reef that the waves were pushing him in on the reef, his anchor did not hit bottom, and he was unable to proceed this way any further.

Our continuous pounding on the rocks, pitching up to 60 degrees with the waves crashing on us caused a hole in the lubricant tank. With salt water in the lubricant oil, this meant we would not be able to run the engines. One of the Officers and the head cook who were good swimmers went over the side with a heaving line and swam to the reef. They pulled a heavy rope line to the reef and attached it to one of the torpedoes that we had shot up on the reef. This was for the crew to hang on to the heavy rope when leaving the ship.

The Australian corvette left and went around Rosell island and came as close as he could on the lee side of the reef. We sent most of the crew on to the reef, and a motor whaleboat and a pulling whaleboat picked them up. 17 of us stayed on board, took our clothes and blankets, spread them through the ship, and soaked them with oil and alcohol. The electricians took the fuses out of the battery blower and put in solid copper tubes, so that the battery blowers could keep running. The rest of us went over the side and swam into the reef. The captain then fired an emergency flare pistol down the hatch and swam to the reef. As I was one of the last ones to leave the boat; the Australians had picked most of the crew on the reef. They were not able to make a second trip, as the pulling whaleboat had hit a rock and had a hole in it, and now it was too dark for the motor whaleboat to come after the rest of us. When we crashed up on the reef it was at 2:00 AM, and high tide. Now several days later, high tide was at 2:20 AM. As the water rose over the reef, and flowed over us, we wondered just how high it would get. Well the water came

up to our bellies as the water surged across the reef. One of the crew said. "Hey lets celebrate high tide, and passed around a bottle of booze he had taken with him when he swam in to the reef. With daylight the Australian whaleboat was back to Pick up the rest of us. This time they were pulling a rubber life raft, and I was able to hang on to it as we went back over the reef to the Katoomba.

We then departed heading back to Australia we could see smoke coming out of the conning tower of the S-39. We arrived at Townsville, and taken to an U.S. Army camp for the night. They gave us some army clothes and shoes for which we were grateful. We then were put on a train for the trip back to Brisbane.

Back at New Farm Warf in Brisbane Australia, most of us were to go back to the states for new construction assignments. But in the meantime I was assigned to the relief crew to take over the electronic equipment during the overhaul period. My first assignment was the U.S.S. Cravalle. She had just came in from a patrol where she ran in to trouble. Somehow in rough sea, while on the surface unexpectedly, The boat dove into a large wave and kept going down, with water poring down the bridge hatch and conning tower hatch into the control room. This happened with no diving alarm of any information over the 1mc announcing system. The hatches to the forward and after battery compartments were closed, as well as the bridge hatch, and the water stopped coming in. The ship had a large down angle and the electrician on watch in the maneuvering room not receiving any information as to what was going on, switched to battery power and went into emergency backdown power. This stopped the downward motion. The auxiliary man started blowing The main ballast tanks, putting extra banks on the line while the control room was half full of water. With the down angle, the water in the control room was from The floor of the radio room at the rear of the control room to the overhead at the front of the control room. When the down angle was stopped and the ship was backing out and blowing the tanks the attitude of the ship shifted to an up angle. This allowed the water in the control room to now shift from the top of the radio room to the floor of the forward part of the control room. Thus soaking all electronic-radio equipment, in the conning tower, and control room, and blowing All their fuses.

This was the status of the electronic equipment in the conning tower, and control room when I took over when she came in from this patrol. Well the first thing I Did was having all the radio, sound equipment, radar etc., be removed and taken out on the dock. There I got a hose hooked up and I washed the equipment Thoroughly with fresh water. The electricians took care of cleaning up the power supply circuits to the electronic equipment container boxes, and they check out With a very low ground reading. Upon reinstalling the equipment back into its container, and doing a check out and a power on, the equipment operated perfectly. We got a "Job well done."

The S-40 boat came in from its patrol, and I was transferred to Her on 11 September 1942 for the trip back to the States. Our first stop was at Noumea,

New Caledonia for a few days, then on to the Marshall Islands. We were to check if the Japanese returned after Roosevelt with the Marines made their attack on Maken Island. We were supposed to stay there about 5 days. As nothing was going on, and we could not see any activity, the skipper wanted to stay a bit longer to see what would be going on. He asked the Engineering Officer, "How long can we stay and have enough fuel to get to Pearl Harbor?" He responded with "Doing 12 knots on the engines at our most economical speed, we can stay no more than two more days. The skipper still wanted to get some action if the Japanese showed up to rebuild the defenses there. So we stayed there until the last day, and then departed for Pearl Harbor. As we got further north the sea became rougher with good swells that we would plunge into. This slowed us down to 10 knots, while the screws were turning over for 12 knots. As we got closer to Pearl Harbor, we could see that we would not have enough fuel to make it. Three days away from Pearl Harbor we ran out of food. We had nothing to serve. We still had plenty of coffee, and when in Java, we received emergency cans of honey. This had gone to sugar, so we put this into our coffee, and as we were getting close to Pearl Harbor nobody cared.

We started mixing lube oil with the fuel oil to run the engines, and keep a top off to the batteries. When we could see the tops of the mountains on Hawaii, we ran out of fuel. We switched to battery propulsion for the last part of the trip and made it in with enough battery power to keep the lights on.

We had three days R&R at the Royal Hawaiian Hotel at Waikiki, spent 2 weeks getting repairs, and started out for San Diego. When we were in the Kaiwi channel between the Island of Oahu and Molokai running on both engines, one of the drive shafts broke. The captain said "O Hell I am not going back to Pearl Harbor for repairs, so keep going on one shaft." It took us 20 days to get to San Diego, and we arrived on December 7th 1942.

As I had orders for New London, Conn. I had to check into the survivor area for evaluation. As I had my pay records, and was paid when we arrived, and had my medical record with me up to date, I was ready to move on out. In a line up to check us out, I could hear the Petty officer checking everyone ahead of me, asking questions such as, "Do you have your pay records, your medical records, full bag of clothes?" With each answer of no, he stated well, during the next several days we would get together and do these things. I could see that I would be staying there for a couple of weeks. When my time came up and he asked these questions, I answered yep got everything been paid, got shots, and have clothes. He said okay and signed me off. For my clothes, all I had was what I was wearing. I did not want to draw a full bag as was required for survivors before being reassigned. As I knew I had a good chance of making Chief and this would be a waste for me. So I was cleared and on my way. I called my parents in Fullerton; told them I was on my way and to meet me at the railway station in Los Angeles. This they did. It had been over three years since we had seen each other. As I had leave and I had until January 1st. , To be in New London. While still at the railway

station I got my ticket to New London to be sure I had a reservation. I spent December with my folks and departed on December 26 on the Santa Fe to Chicago. It took three days, and was 98% on time as it went up through the Raton Pass in New Mexico, and troop trains did not use that route. I got to spend a day and night with my Aunt Mary and Uncle Tom. He was managing a hotel in Chicago. I departed the next day for New York on the New York Limited. As we got closer to New York, the train started going slower and slower. I asked the Conductor what was the cause, and he said that troop trains was the cause? I said I would be late in getting to New York Grand Station, and will miss my train connection to New London.

Well we stopped a long time in the tunnel under the river, and when we got to Grand Central Station I had missed my train, and would be over-leave. I prayed To know that God was in control and to let it up to him. I sat there to let the people get off and slowly walked down the station platform. I could see on the adjacent track a train that started to move. The conductor that I had talked to came Running up to me and said "That's your train come with me." He led me over a ramp and to the platform where the train was moving. He shouted at the conductor on it, and he opened the door so I could jump in. I just made it as I ran to the end of the platform. The train to New London somehow was delayed, and I was able to catch it and arrive at the New London Station on time and checked in to the Sub Base, before midnight January 1, 1943.

I was told that I would be assigned to the classified Radar School on February 1st. What the heck am I going to do in the mean time I asked the Education Officer? He said go on 30 days leave. I said I just got back from leave. He said no problem, I'll make our leave papers, authorize a special payday for you and you can be out Of here tomorrow. This I did and was on my way back to the West Coast. I stayed several days with Uncle Tom, and Aunt Mary. Made a side trip to Louisville, KY. To see Aunt Frances and Aunt Effie. My Grandmother Mammy Rice was staying with Aunt Frances, so I got to visit with her also. My Grandfather Tom Rice had passed on several years ago, and Mammy Rice passed on several weeks after my Visit. I sent Aunt Frances \$50.00 for expenses. She later told me that I was the Only grandson that sent her anything to help.

I returned to Chicago for a day and got tickets to Denver to see my cousin Kerney and his wife. When a kid my family lived in Denver, and my Dad got Kerney a job doing upholstery, and this was his career. I then went back to California for the rest of January and returned to The Sub Base at New London, Conn.

I started the three-month Radar Class with several Radioman like myself from the fleet and a group of Technicians that had just finished training and assigned to Sub Duty. We were told that we had better not be missing nor do anything such as being over leave. As we were classified as having data that the enemy could use and they had to know where we were at all times. In March I learned the former captain of the S-39, J., W. Coe was putting a new construction submarine the Cisco in

commission at the Portsmouth Navy Yard. I sent him a telegram stating that I desired duty under his command, and was at the subbase School. I got a call from the subbase Personnel Officer to see him. He told me that I would be transferred to the Cisco, and to pick out a technician from the class as Coe was scheduled to have someone from this class be assigned to his ship. There were several good Technicians in the class and I asked for volunteers. A good Technician with the same name as the skippers said he would like to go. So at the end of our Radar training on the 15th of March 1943, we both were transferred to the U.S.S. Cisco SS-290 at the Portsmouth, NH. Navy Yard.

At the Cisco's offices I was able to meet the rest of the communication gang. P J Cannon RM3, and R. F. Morrissey RM3. We all went through a studying period of the new sub. Looking her over as construction went on. The skipper J.W. Coe asked me to recommend a good communication receiver for the wardroom. He said He had priority in ordering anything he wanted. I told him I thought that The National Radio Company in Malden, Mass. put out a good all band short wave radio that would fit well in the wardroom. So he ordered a National Short Wave radio from them. When it arrived, he had me set it up for a test. Upon applying power, the set started smoking, and blew a fuse. Very embarrassing for me as I had told him that the company was the best in the world. Well in checking it, I found that the H.V. secondary of the power transformer was not correctly centered tapped for a full wave rectifying circuit. The receiver had never been checked out at the factory. Boy with the wartime shortages, I went everywhere looking for a replacement power transformer. I finally located one at a radio repair shop and replaced it in the set. Everything worked okay.

The two third class radioman and I got along well, and used to go to the Portsmouth Prison Cafeteria, or go to the Navy Yard Cafeteria, for a coffee break. One day we went by the Cisco while she was in dry dock, to take a look, and we noticed that the hull had a bulge on one of the fuel tanks. We found out that somehow the fuel tank was closed up tight, and had somehow a high-pressure 3000 lb. air bank was bled into the tank. The tank only has to be tested at 15 lbs., pressure, as it is a saddle tank and will always be equalized to sea pressure. This high pressure in the fuel tank caused it to stretch until it ruptured. To repair, the outer part of the saddle tank had to be cut out, new material formed for the tank And welded back into place. But now the welding had to be done different from The normal construction procedures now making it a more difficult job. It was tested

At 15 lbs., and held, so it was checked off okay. This is what I consider the cause of the loss of the Cisco, as the welding somehow did not hold, and she started leaking oil, which the Japanese noticed and attacked her.

We were commissioned and started our testing dives of off Portsmouth. We made the first trim dive going slow, then a regular dive at 10 knots. Our third dive was A full crash-dives at top speed, and we leveled off at 100 ft. One day while doing

Trial test dives, a heavy fog set in, W. F. Coe the RT1/c and I were manning the SJ Radar and reporting bearing of what we were seeing. At this time the SJ Radar Had a manual wheel for training the antenna around. (As yet the Plan Positioning Indicator (PPI) display scope was not yet available and installed. We were using A normal scope display that only showed echoes in a straight line as the antenna Was pointed.) And this became very tiresome. Due to the fog, we had ceased our diving trials, and were just setting off of Portsmouth, when an electrician passed the word that the Gyro had broken down, and we had no way to determine our course. We had not yet calibrated the standby Magnetic Compass. So it was useless.

The RT1/c and I were manning the SJ Radar, he reporting the returns on the scope, and I was turning the training wheel. We made sweeps, reporting it to the Captain and LCDR A.W. Weinel the Executive Officer. They just acknowledged our observations, but took no action. After a while we stopped reporting and the RT1/c Coe started drawing a map of what he was seeing on the A Scope. When he got done we gave it to The Executive Officer. He looked at what we were getting from the SJ Radar, and went to the bridge to show it to the Captain. They both came down, and said "Is this what you get from that thing?" We said yes. The Executive officer placed the drawing over the chart of the entrance to Portsmouth, and it fitted perfectly. He and the skipper had a discussion, and said why not. He said we would get underway, put a lookout on the Bull Nose (Bow) of the ship. So we started in using the Bearings from the SJ. When we got so close that the returns from the entrance buoys would move into the main bang of the transmitting pulse the lookout could then visually see the buoy. We went into Portsmouth using the SJ radar steering our course between the channel buoys, through the minefield, into the inner harbor with no problem. This made a believer out of the Captain, and the Executive Officer. Later when we had radar problems, they said. "We are not going to get underway without the SJ working no matter how far we can see."

We completed our Navy Yard trials and on May 10, 1943 we held the commissioning ceremony, and soon departed for the Submarine Base at New London, Conn. Went through extensive training and departed for the South Pacific. The Captain told me that he would advance me to Chief Radioman when we return from our first patrol. When a new Submarine is commissioned, all of The crew must requalify to maintain their qualified status. This was an incentive For me so while going on the great southern circle path from Panama to Australia, I got busy did the necessary paper and drawings required, and was the first

Crew member to be requalified. Several days out of Brisbane, I became constipated

And the ship's doc. gave me Mineral Oil. This did not help, and I was bound up all the time we were at Brisbane. We left for our first patrol, going up to the Torres Strait then over to Darwin to top off for fuel. Two days out of Darwin, I was in the wash room when a sailor looked me and said? "What's the heck wrong with you Rice, you're as yellow as a Chinaman." Upon closer look sure enough, I was yellow

As heck. My skin and my eyes were very yellow. I saw the Doc. and we went to the Captain. He made up a message for a Doctor to meet us when we arrived at Darwin. The port at Darwin has very large changes between low tide, and high tide. About 30 feet or so like the Bay of Fundy. It was low tide when we came to the dock. I got the call to go topside, and when I did the Doctor standing on the dock about 30 feet up, looked at me and cupped his hands over his mouth and shouted. "Get a mattress cover and put all your personnel things, and come with me. This I did. He had a jeep and took me to a hotel room that he used for his sick bay. I asked him what it was that I had. He said it is Yellow Jaundice. I said what do you do for it. He said really not much. Just give you salts to flush you out and some medicine for the liver. I said can't you give the ship's Pharmacist the necessary medicine so I can stay on the ship? He said no, that is could be dangerous to me and the rest of the crew if it developed into something serious. We had received a message that the Captain was promoted to full commander upon completion of a physical. He came up to sick bay to see the Doctor for his physical, and also asked the Doctor if the pharmacist could take care of me as I was the only experienced radioman, and I was needed. The Doctor said no it is too big a risk for Rice and the crew.

After the Captain's physical, which now made him a full Commander, I went with him down to the curb where he had a jeep and a driver waiting for him, and said goodbye to him. As the jeep drove off, he turned around and looked at me with a quizzical look on his face until they drove out of sight. I'll always remember that look on his face. It was as he was thinking, "what's going on, I'm losing my most experienced electronics man and now heading out on patrol?" The Doctor had a cot for me to sleep on and the next day I boarded a PBY for a two day trip to Perth. As we flew, I learned that the flight crew was to keep a sharp lookout for any activity on the ground. Several times we turned to look at smoke on the ground. But nothing came of it. At that time the area from Darwin to Exmouth Bay was very desolated, no roads, no towns, just nothing. We flew over Eighty Mile Beach, and could see the waves coming in a straight line for miles and miles, a beautiful sight. Stayed overnight at Exmouth Bay, which was a fueling stopover for the submarines out of Perth going on patrol.

The next day we departed and arrived at Perth, landing on the Swan River. I was taken to the Hollywood Hospital and given treatment. Was there from September 22 to October 13 1943 released and sent to the Navy Base at Fremantle for duty.

On the tender I was standing FOX radio watches waiting for the Cisco to return from her first patrol. When the time came for her to show up at the entrance buoys I kept looking to see her. I then learned that she was considered lost.

I saw the squadron material officer and asked him to put me to work in the electronic shop working on radar's, as I was a good repairman. He agreed and I worked on the SJ Radar's on the Subs under going overhaul.

One of the problems with the SJ Radar was that of keeping the local oscillator exactly 60 megacycles above the magnetron frequency to provide a 60 megacycle difference for the IF amplification. The Oscillator would drift beyond the range of the repeller control, and no IF and dead radar. An automatic frequency control had not been developed as yet. I would ask the radioman on the Sub if his magnetron was still working okay and did he want to keep it or put in another? With the old magnetron or a replacement, I would measure the frequency, and record it. Then I took the converter unit with its local oscillator and IF strip to The shop. Set up a test station with the correct supply voltages to test it out. After Setting the McNally tube cavity plugs for continuous operation well within range Of the repeller I would then cook it in with the oscillator set at the 60-megacycle point below the magnetron. Just before the ship left on its next patrol, I would replace the converter in the radar set for final check out. On each sub that I did This procedure, when they returned from patrol they told me that they had no problem in keeping the repeller adjusted for good signal returns. The squadron material officer was so pleased, that he advanced me to Chief Radioman.

Several months later I received orders to the U.S.S Grenadier. I told the commanding officer that I had been on the Cisco and was removed by the Doctor before she departed Darwin and was lost on her first patrol. I did not feel that I was ready at this time to go on patrol again. He said okay we are still a volunteer outfit and he endorsed my orders and sent me back. The Grenadier was lost on that patrol. Most of the crew were taken prisoners of war and placed in an internment camp. Years later in talking with a survivor of her he said that the officers and radioman were tortured and given hell in trying to get information out of them.

Two months later I received orders to the U.S.S Rasher. I had no problem then And made the third and fourth patrol on her, which were very successful. I played An important part as the leading sonar, radar, and radio operator, and was awarded the Bronze Star Metal.

On these patrols my bunk was in the chief's quarters where I could hear conversations between the bridge and control room. When ever anything was said that would require the captain to the bridge, or a radar contact reported on the SD, it would wake me up and I would go to the control room to back up the SD, or to the conning tower as backup to the sonar equipment. Every time the Captain was

Called, he saw me already there backing up the operators. He thought that I never Slept. At one time in tracking a three ship convey with two planes in the air sweeping in front of the convey, we made a dive every time they came near us while on the surface speeding to get ahead of them. I was watching them on the SD radar giving mileage reports to the bridge. The Captain said holler when they get to 7 miles and closing. This I would do, and we then made a crash dive. The plane would drop a bomb near the spot were we went down, then continue his sweep. We would then raise the SD antenna, and when the plane was again 7 miles away we would surface and put all 4 engines on and scoot ahead of the convey. We did this a

dozen times before we got in position to attack. We got two of them later when we made a submerged attack.

One time at night on the surface tracking another convey, we were off the starboard quarter observing them on the SJ Radar, and noticed that they had two escorts patrolling back and forth in front of the convey ships. We noticed that every once in a while in making their sweeps ahead of the convey that both escort ships would end up either to the starboard or to the port side of the convey. The captain decided that when they were over on the port side, (to the left) we on the starboard side (to the right) we would go in and fire at the first ship. This we did and fired two torpedoes at the first ship, then steered behind him and in front of the second ship and fired two torpedoes from the after torpedo room to hit the 2nd ship on the port side. This worked out well. The two escorts on the Port side of their sweep seeing the attack on the first ship on its starboard side came rushing over to the starboard side while we were passing behind the first ship and in front of the second ship to the port side and firing two torpedoes from the after torpedo room, hitting the second ship on its port side. They must of thought that we were a wolf pack. As we cleared the sinking ships the captain said, "This is the way they do it in Hollywood."

We got a message from HQ that a raid by a Japanese Task Force could possibly form, and make a trip through the Lombok Straits to the Indian Ocean to Fremantle (Perth,) to attack our subbase there. We were assigned an area just north of the Islands of Bali and Lombok. We patrolled this approach to the Lombok Straits for 18 days. The Japanese had a Minelayer converted to anti-submarine activity to patrol this area. Every morning after we submerged I could pick him up on the sonar, pinging in his search for submarines. He was able to pick us up at approximately 4,000 yards, and turn toward us. He then would switch from automatic keying to hand keying, keying after he heard our return ping. When he did this I could tell his excitement in how he keyed his sonar, and told the captain that he has us, and is closing.

We would then go deep, and get under a thermal layer. When we did this he would then loose contact with us, and frantically search around, and I knew that he had lost us. This went on for 18 days, and he seemed determined to get us out of the

Area if he could. On the 18th day I could not hear him on sonar and told the captain that he had left the area. The captain said that he had an idea that they were going to send a convey east to some of the island east of Lombok and we were in the way. We surfaced and headed for the Kepulauan-Kangean islands just north of the Lombok Straits. We arrived at dusk, and could see several ships at anchorage. The Captain said we would move out to a line from the islands to the east and wait. The next morning here they came, three ships. We made a submerged attack and got two of them.

On our fourth patrol, we were assigned areas in the Celebes Sea and Mindanao area. On this patrol I gave Brooks one of my Radioman the primary sonar position,

and I took the secondary position to back him up. He heard a ship on his search, and we closed. We attacked a Crusier and hit him with three torpedoes. There must have been a high-ranking officer on the ship, and the escorts went alongside to pickup survivors. Brooks listening said Hark message from Japanese. "Japanese ship collided with American torpedo and destroyed same." We all god a good laugh from that.

Later we were in Davao Gulf and a heavy cruiser came out, and we made a submerged attack. They saw our periscope and turned toward us. We went deep and got out of there. That night we had trouble with our radar. The coaxial rotating joint finger was worn out, and we had new ones made by one of the ship engineman on the lathe in the Maneuvering Room. As it was night and we on the surface without a working radar, we had extra lookouts on the bridge. They saw a group of ships approaching from Davao Gulf. The Radar Technician and I were working in reinstalling the rotating joint, and trying to tune it with no luck. As the group of ships was heading south at 23 knots and we were going along with them at our best speed, they slowly overtook us. I looked through the periscope at a large ship, pointed the radar on him and we adjusted the tuning stubs on the rotating joint until we got a small pip. We then nursed it in tuning the stubs for a good signal on the radar. As we could not make an attack at the high-speed ships, we sent a message to HQ telling them of the Japanese Task Force. We later heard that they were heading for Biak island near New Guinea where Our troops had just landed. The next morning our Airforce attacked them and drove them back.

I later learned that my wife Ruth's brother was on the landing at Biak Island and they were told that to dig in as the Japanese were coming.

Later on patrol of off Ambon, we attacked a ship at night on the surface. It must have been caring aviation gas, as it blew sky high. It looked like the horizon was on fire. The skipper said anyone who wanted to come to the bridge to see it was welcomed.

In sending messages back to the base station VIX0 at Fremantle, I would keep the gain of the RAK/RAL receivers high so I could hear any breaking the base station made. As I called VIX0, I could hear him as a signal about S3 loud. Also on frequency was a very loud signal calling me and signing VIX0. I knew this was a Japanese jammer. As VIX0 in Fremantle told me to go ahead and send my message, the Japanese would then have several stations tuning and sending on frequency to jam what I was sending. Whenever I started sending they would after a few groups of my message was sent, they would then start again jamming. I had been in Darwin and knew the signal of the Australian station there. The operator told me to send my message to him. So I started. Again the Japanese went through the jamming procedure. So I stopped. They stopped jamming. I got out my speed key (Which we were not supposed to use) and sent dit dit. The Australian operator sent dit dit. I then proceeded to send about five coded groups. The Japanese hearing me

sending started to jam again. I then stopped. They stopped. I would then send a group of five letters and stop, they trying to jam me. I got the message through okay.

That night I stood watch on the ship to shore frequency and recorded five of our Submarines coming on frequency calling VIX0 turning down their volume control So that they could hear their own signal while sending, and the Japanese jamming all the while. I let the Captain know what was going on, and he put what I had done in his patrol report.

When the patrol ended and we returned to Fremantle, the Admiral called me in and asked, "How do you know so much in the operation of the fire control party. We figured that we were getting only 20 Percent efficiency from the sonar and radio operations. But with what you have done on these two patrols is approximately 95 percent efficiency. I want you to set up a school on the dock and teach what you know to other radioman. This I did, but how do you teach experience? It was not successful

As I was now taking care of a sonar-radio school on the dock at Fremantle, I had no night duties or watches. I had met a lady at Church in Perth who had a room available for me to rent. So I got to spend my time there, and able to attend the American Red Cross facility in Perth. They had taken over a yacht club on the Swan River for a meeting place for Military personnel. They had a good jukebox with plenty of good band records, and held dances all the time. They had arranged for local girls as hostess. As I was not a boozier I attended their dances. There I met some very nice girls, and had a great time dancing with them. One girl who I was able to really cut a rug with was Pearl Underwood. She was an Australian Woman Auxiliary member, and somehow was able to be qualified as a hostess. Many times I would escort her home and then walk out to my room for the night. We were never romantic, and I never even kissed her good night.

As the submarine war was now moving closer to bases nearer to Japan, it was decided to reduce the forces in Australia. Subdiv 161, my group, was to be sent back to the U.S. A troop train was made up by the Australian Army for a trip from Perth to Brisbane. The train arrived at Fremantle, and we loaded all our gear for the trip. Many of the Sailors had girl friends to see them off. We finally got ready and the train moved out to the army base on the outside of Perth to make up the rest of the troop train. While waiting there I heard my name Rice being called from up front of the train. I looked out and here came Pearl Underwood in uniform to see me off. She gave me a big Kiss while all the troops were hollering and laughing. The first and only time she kissed me.

The trip to Brisbane took seven days. At that time each Australian State had different gages for their trains. When you came to the end of the state, you had to move everything to the next train that had a different gage for that state.

We arrived in Brisbane and loaded on the Lureline a passenger ship that was converted to a troop ship. It brought 10,000 military personnel to Australia. On the trip back to San Francisco, we had 3000 aboard. I was assigned to the Submarine Facility at Hunters Point Naval Shipyard. There I worked on installing training equipment for the attack teacher. Dummying up a SJ Radar and sonar training aids for approaches. In November 1945, I was transferred to the USS Chub which finished an overhaul at the shipyard, and was stationed at Pearl Harbor. I gave up my apartment on 150 Irving Street, near to the Golden Gate park. Moved aboard the Chub and we departed for Pearl harbor, We did training exercises for a while, and then departed to the far east for a deployment as a target submarine for the destroyers stationed at Tsingtao .

At this time the Communist were active in taking over China, but Tsingtao and Peking were surrounded by the Communist, so we had some freedom there, but things were tight. At Tsingtao I was able to buy some pearls from a Chinaman who was a Amateur Radio operator, and was running a shop at the PX. He was from a family that owned a large department store in Shanghai, but had not yet received permission from the Navy to sell Jewelry. He had just gotten married and had a small apartment in town and invited me to visit him there for tea, and he would show me what he had for sale. After I arrived and we had some tea, he opened a sack and laid out on the table a pile of pearls. He said take your pick. I selected several strings for my mother and future wife if I ever got married, (which did happened later.) they cost me 52 dollars each plus several solitaire pearls for earrings and rings. At this time I got to fly to Peking for a few days. There I met a Chinaman who had a Home jewelry shop. He had a lovely Star Ruby that I wanted for my sister Helen. He wanted \$52. For it and I had only 35 bucks left so no go.

We spent the Christmas to New Years holiday at Tsingtao, then worked with the destroyers for a couple of months in training exercises and then returned to Pearl Harbor. We were scheduled for a big navy yard overhaul at the Mare Island shipyard. Upon arrival at Mare Island we started in removing everything that would be changed to make ready for new equipment. We then got the word that we would be sent to Turkey, and be a part of four submarines to be given to Turkey, and to do some training. Well we then had to reverse our steps, and restore everything back. One hell of a job, but we did it. I had to obtain a new SJ Radar from the naval storage depot in Nevada to reinstall. We had to be the same like we were before, and much of the equipment had been disposed of.

We got everything back as a WWII outfitted Submarine, and departed Mare Island for the New London, Submarine Base. There we picked up several Turkish Officer's and the Turkish Chief Radioman, who also was a Military Judge. As I was the senior Chief Radioman, he rode the Chub to Turkey, and we had a good time together, me learning some Turkish. On our trip across he said when the transfer ceremony is over we will go to a Gizno at Izmir for a good meal. We stopped at Gibraltar for a day, and stopped at a Greek Island for a day also.. I think it was the island of Cephalonia. No liberty was allowed as they were having an execution for a

communist who was caught. We then went on to Turkey and stopped at Izmir where the ceremony took place for turning over the four US. Submarines to the Turkish Navy. Most of the crews were to be sent back to the states. I was selected to stay in the training group for the nine month training period.

While still at Izmir, the Chief Judge was doing all kinds of judging, as the other senior judges did not try any cases while the chief was gone. So he was very busy. He finally said lets go to a Gazino. This we did, it was a long tram ride around the bay at Izmir, and we finally got to one. As the menu was in Turkish he explained what some of the dishes were, and when he got to one that was a fish, I said that sounds good for me. He said it will take about 45 minutes to fix. I said ok, and when it arrived it was a large fish with the head on, raw. Is was soaked in several juices to marinate it. Well I started at the tail and worked up to the neck, all the while those eyes looking at me. But it was good.

When all the change of ceremonies were over, those of us left to do the training, then stood by as the new Turkish crew took the boat up the Dardanelles across the sea of Marmara to Golcuk. There the Turkish Navy provided a small passenger ship to be our base and sleeping quarters until the Seabees completed our base camp at Golcuk. They did a super job, and within two weeks we had a fine base of Quonset Huts for us to live and work while doing the training. The training went on okay, with some differences due to the different background of the Turkish Officer and our officers.

When the mission was completed, a small tug was able to take us all to Istanbul then trucks to the Airport. We left at 5:30 in the morning of November 27 1948 To the airport at Bizerte, Tunisia. There we boarded the USS Grand Canyon a Destroyer tender. We went to a anchorage near Siracusa, and I got to visit a old Roman ruins. In the catacombs there, I visited a place that Paul had stopped and preached. We then went to Naples and loaded on the statue of Little David for the trip back to Norfolk, VA. For an exhibition in Washington. After a stop at Gibraltar, we headed back to the states. Arrived at Norfolk, and went on leave to visit my parents at Bokeelia, Fla. I then reported in to the Submarine Base at New London, CN, for duty as a Cryptographic Repairman. This was a good job, and I had time for trips to Boston to the Mother Church.

I was in the Youth Forum at the New London Christian Science Church that I attended and the youth forum group went to Boston for the annual meeting of the Mother Church. There I met Ruth Tuttle, Which I married in November 1949. I got to go to the Brooklyn Navy Yard in December 1949 and January 1950 to train on the Electronic Coding Machine (ECM), for maintenance, (Our Enigma system.) I had on the job training on our coding equipment at Pearl Harbor, and was issued a secret clearance ECM repair card, and an additional job code number. My additional duty was in the electronic repair shop as a supervisor, also as a member of the Sound Evaluation Team. We recorded the sounds that submarine made, and analyzed the results to develop quieter operating submarines

My tour of duty on the Subase at New London, Conn. was to run the ECM repair shop. This tour of duty was up in August 1951, so I was transferred to the USS Sabalo. The Sabalo was a submarine that was completed just as the War ended, and it was placed into mothballs. She was decommissioned on 7 August 1946, and placed in reserve. The Sabalo was placed back into commission on June 1, 1951 for duty in the Korean conflict. She was in New London, and as my shore duty was up, I was transferred to her on August 10, 1951 and we soon departed for Pearl Harbor. The Sabalo was assigned to the Pacific fleet, so Ruth with Linda our first daughter, came out to Pearl Harbor, where I obtained Navy Housing.

Ruth was pregnant with Beth, and I had arranged for a standby status for the delivery. On February 29 Ruth said that her time was near, and I called the ship's office for leave. Near midnight I took Ruth to The Tripler Army hospital, and Beth was born at 2:00 AM on March 1. On this day the Sabalo went to sea with lots of Media personnel aboard to be the standby submarine for the famous Pickerel emergency surface demonstration. I'm sure you have seen the picture of her coming out of the water at about a 45 degree angle.

As I now had over 16 years to my credit, I figured that I would stay on the Sabalo until retiring. We soon went into a big overhaul snorkel conversion at the Pearl Harbor Navy yard. We had a barge alongside the ship which had working spaces on the first floor, and living spaces for the duty section on the top floor. As we learned what was to take place in the conversion, and that we would be there for 9 months. The Chief of the Boat (COB) was the senior chief, and had to see to it that everything got done. He called to me and asked me "Rice do you know how to electric plate?" I said "No but I can read why?" Well the COB said, we have been allotted only \$4000 for electroplating during the overhaul, and it will be used up by chrome plating the toilet bowls in the head and plating the deck plates in the two engine rooms. We will have to figure out what to do because it will be hell to pay when we get out of the yard and have to compete with the other subs that have had many overhauls and have a lot of electroplating done to enable them to pass a good inspection. Our crew will be hard pressed to keep things shining, and we have a lot of steel fitting, valves etc. to keep up. We've got to do something. Well I went down town to the University of Hawaii Library, looked over a bunch of books on electroplating, and found one that described "Cold Electroplating" that I figured we could do.

The COB and I went to the yard electroplating shop to ask and see what could be done to help us. The supervisor said "You sailors can't do that, you're nuts." It wasn't long talking to him that we knew he didn't really know how to electroplate. He was just a production man doing a job. I also talked with the planning engineer in the yard, and he said that it was too complicated a job for plain sailors to do. This got the COB mad and we figured we had a challenge.

Well I studied the book on electroplating and figured out how we could do it. The COB called the crew together on the barge which was tied alongside the ship, and told them what we planned to do. We would need their cooperation because we would be taking over the shower room. It was made of good CRS steel, easy to keep clean, but I also saw it as a safe place to handle the chemicals and equipment needed to do the job. We used the shower stalls for electroplating and left one for showers if someone needed it. Most of the crew were living ashore and did not need the shower area on the barge anyway. With the crew's approval, the COB and I went to see the CO Savadkin and the XO Harris Warren with our plans. They gave us the go ahead. (Savadkin was a LT. on the USS Tang when her last torpedo fired was a circular run, and came back and hit the Tang in the stern. Savadkin was in the conning tower, and when the ship hit the bottom at 150 ft. and settled down, he made a free ascent following the air bubble to the surface. He was picked up the next day by the Japanese and placed in a prison camp.) ,

I scrounged a motor-generator that could provide the necessary D.C. voltage needed. We found old submarine battery cases that we could use. I got everything together in the shower room, asked the CO for a needed GSK (supply chit) to draw out the chemicals, and the cost would be \$117.00. He said OK and signed the GSK. I was able to borrow from the sub base plating shop the nickel anode necessary for the final plating procedure.

The procedure started by smoothing up the steel wheel, handle, or part that needed plating. Then cleaning it by dipping in into muriatic acid; then Electro cleaning it to get all the crud off of it. Then to the copper flash plating tank for several minutes to get a coat of copper on it; then clean it again by dipping it into a trisodium cleaner, and finally placing in into the copper plating tank. for several hours.

After this the copper plated item had to be polished by a buffer until bright. Then electro-cleanded. When ready, it was placed in the nickel plating tank for several hours to build up a nickel plating on it. What you ultimately see is the shined copper with the nickel plating over it.

I went through the procedure and got it to work okay. When I showed the COB what I had done, he said come with me. We went to the navy yard shop and went to the supervisor. The COB held the piece up in front of him and said. "We did this electroplating on the barge. See, See! Submarine Sailors can do anything, okay."

Well I held a plating class for the crew, showing them the procedure. They would take a valve or wheel or whatever that needing plating from off the ship and go through the plating and polishing procedure, and then replace in on the ship.

When the conversion was over the next boat taking over the barge knew what we were doing, and wanted us to leave the setup in the shower area. Savadkin the CO said okay but have their skipper make out a GSK to us for \$117.00. So all it cost us

was the hard work that the crew did. We figured we did about \$10,000 of electroplating during the overhaul.

One weekend when I was the Duty Chief, I took off the valve covers on my car and electroplated them. Later in the Philippines, I turned my car it to the Dodge Dealer to clean it , put a washover paint job on, and sell it for me. He said he had it in the show room and a man came in to look at it, and when he popped the hood, and saw the shining valve covers, he thought he was getting a super engine.

As the overhaul progressed and new and old equipment was being installed I started spending most of the working hours on the sub. As I was sure I would be on the Sabalo until I retired, I wanted things to be done that would give us more room.

In the control room, I would question everything that the Yard workers were doing in placing equipment back as well as the adding of new equipment. If things were not going back as I figured they should, I would tell the worker “lets go up to planning.” There I would explain why my placement of the equipment would be better when operating the sub.

Many of the yard workers would seek me out to ask me questions as to the best position to place some of the new equipment, and as I had been on a operational submarine, I could explain to them what would be the best position if they had any leeway in its placement. My primary concern was the installation of equipment in the control room where the radio room was located, but yard workers doing reinstallation of equipment as far back as the after torpedo room would ask me to help them. In the end we had everything back in place and we had more room. I give you two examples:

One morning as I came into the control room I saw a yard worker doing some layout markings on the deck near the forward periscope housing in the control room. I asked him what he was doing. He said that he was placing the new snorkel drain valve here oriented for easy access. I pointed out two tabs on the deck, and told him that is where the ladder from the conning tower was placed, and when we dove the ship, people on the bridge would come rushing down to man their diving station in the control room, and where he was placing the big valve it was right in the way and they would just kill themselves running into it. I said could we not turn it to this position, then it would not be a hazard. No I must put it here in this position. I said lets go up to planning. This we did and explained to the engineer what the problem was, and said sure in can be mounted to clear the ladder.

On another day I noticed a yard worker doing some marking on the deck next to the periscope housing in the control room. He said this will be where the SV Radar power supplies are to be mounted. I then pointed out that where they would be placed, and when we dove, there was always a lot of confusion and noise. The auxiliary man had to stand by the air manifold to see what the diving officer wanted

him to do, and mostly they do it by hand signals, and the new power supplies would block him from seeing the diving officer. I said why not place them between the two periscope housings. He said no that the 1MC equipment had to go back in there. I said the power supplies being very tall would fit easily there and the 1MC go where he was placing the Power Supplies. He said he could not do that as the cables to the 1MC would not reach that position. I said let's get a cable stretcher. He said what! I then got a big screwdriver and loosened the cable hangers on the cable-ways. I pulled on the 1MC cables. This caused the cables to make shorter turns in the cable way, and we then had plenty of room to place the 1MC where he wanted the power supplies to go and the 1MC cables would fit. Up to planning we went and explained the problem to the engineer, who approved our change. This effort on my part went on, and I was called on to help in many ways. I got more room in the radio room. Locker fronts placed under the operating positions, ventilation to the electronic storeroom that didn't have to move the TBL transmitter position, even a spare place for a extra seating position.

The Pearl Harbor Navy Yard had a poor reputation in giving overhauls. I found That they were eager to do the best they could, but as a rule there weren't any of the ship's crew to advise, so they put things as planned the best they could. Members of the crew need to be there to ensure that they get things the way they wanted.

After the overhaul I suggested to the CO that during the ship's post yard trials we should allow some of the yard workers to ride with us to see how a working submarine operated. This went over big with the yard workers, and every day we went to sea, we had 10 or 12 yard workers with us. After the post yard trials, we were getting ready to make a deployment to the far east or Western Pacific (West Pac), and I would be away for a while. So while going up to the Barrack, I heard the XO Harris-Warren calling to me to come to him. I said what's up. He said I got to transfer you. What for I asked? He said it's your dam Cryptographic Card. Bupers has sent a message to SubPac stating get that man working at his cryptographic job code, or I will. This means if we don't have you working in this assignment, he will transfer you out of the submarine service. We will transfer you to the Sperry at San Diego and you can work under that job code number there.

So I, Ruth, Linda, and Beth were transferred to San Diego on January 16, 1953. I was able to get navy housing, and was assigned an apartment at Irverson St . The Sperry was anchored in the bay and the navy landing where we caught the motor launches to the Sperry was located the Federal Communication Commission (FCC) office. I would stop there on Monday mornings and take the commercial radio operators exams for a commercial licenses. I did this over a month period and obtained my first class Radiotelegraph and Radiotelephone licenses. Living high on the hog in the Chief's Mess I gained weight to 185 lbs.

My dad now had a upholstery shop at Oceanside, Calif. about 40 miles up the coast, and as I now did not have too many years left before retiring, I started working for him on Saturdays when I did not have the Officer of the Deck duties on the Sperry.

In April 1954 Orders came to the Sperry for the Chief Radioman running the communications on the Sperry to be transferred to the far east for duty. He was having a lot of trouble with his wife, and was in a heck of a turmoil. I said if we could get a release for me on my job code number, I would swap with him, as I only had two years to do. This was arranged, and I received my orders for transfer to COMNAVFACPHIL. This would put me out of the submarine service. The way the orders were described, I would be transferred for further assignment. This would allow me to take my family to my home of record. As I had a good Cadillac car we all made a trip back to the Boston area, there I obtain a rental house for Ruth and the two girls to stay in Lynnfield Center to wait while I went to the Philippines to see what my assignment would be.

My orders allowed me to fly via Navy air to the Philippines, and I arrived at Sangley Point on June 28th 1954. There I learned that a Chief Radioman was required at the transmitter station way out in the bundocks. As I did not want to be there at Sangley Point, Headquarters, I said I'll take the assignment. I was told that it was 40 miles from Sangley Point, it was called Bagabondy, and we had VHF communication to it for control of the transmitters. This I said would be just up my alley, so I got a truck for transportation there.

Well was I surprised. Bagabondy was in Quezon City just on the out skirts of Manila. It was being developed into a Worlds Fair area, and when the Japanese invaded the Philippines, they took it over for their radio transmitter location. Well when we came back and drove them out, we also took it over for our transmitter station. I was able to locate a house compound for rent. It was the home of a Philippine lawyer who was being assigned to Japan on a reparation mission. I was able to get it for \$100. Per month. This was a good deal for me, as I now had a location and could process transportation papers for my family to travel to the Philippines.

Ruth and the Girl's arrived in August. Our house had a stone wall with broken glass bottles cemented on the top to keep things safe from anyone trying to get in. We had a separate garage with an apartment over it. There we let our maid Florenda and her husband Louie who was the chief's quarters attendant at the transmitter station. We have some pictures of the girl's there.

As the Chief Radioman in charge, I mostly did paper work, and personnel work. But we did have a bad problem. We had 50 transmitters to take care of and I and the Chief Technician found out that the many changes to frequencies resulted in the antennas not being correct for the new operating frequencies. RF was floating everywhere. You could just touch a cabinet and get a spark. Well we found in a storage hut several Rhombic antenna kits. This gives us a lot of wire and insulators to work with. We designed new three wire dipole antennas for the transmitters, had the local repairman install them. Now everything was cool, no RF floating around.

In September 1955 I was given a retirement parade review ceremony for retirement and the family and I left the Philippines for San Francisco and Treasure Island. There I was transferred on 9-26-55 to the Fleet Reserve as a retiree. Thus my active duty navy career came to an end.