

Autobiography  
of

*Donald Leslie Collins*

Chapter Seven

*Recollections of Nagasaki*  
**1945**

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## **CHAPTER SEVEN**

### **1945**

# **RECOLLECTIONS OF NAGASAKI**

This is a personal account of my experiences related to the atomic bomb which brought an abrupt end to the war with Japan.

### **THE BOMB IS DROPPED**

On the morning of August Th 1945, President Harry S. Truman's proclamation "A bomb with the explosive power of more than 20,000 tons of TNT has just been dropped on Hiroshima, Japan, an important Army Base. It is an atomic bomb. It is harnessing the basic powers of the universe. The force from which the sun draws it's power has now been loosed against those who brought war to the Far East".

Just a few days later, when Japan had not shown evidence of their intention to surrender, unconditionally, a second bomb was dropped on Nagasaki Japan.

Although we were expecting it to happen, any day, we were not aware of the specific time schedule or of the target city. The first atomic bomb on Japan occurred at fifteen minutes past eight a.m., Japanese time.

When the announcement came, over the radio, I happened to be at the University of Chicago, Metallurgical Laboratory, on the third floor of Echart Hall. I shouted with joy as I leaped over the stair railing to the landing below. Rushing into the lab, I was anxious to hear the rest of the report and to share the jubilation with my colleagues. Now at last, the knowledge of and the responsibility for this awesome nuclear potential will be shared with the world. The future of nuclear energy will be determined by the democratic process. It will no longer be the sole responsibility of our relatively small group of scientists and Military people.

I rushed to the telephone to call Helen. "Turn on the radio" I said "you asked what I was working on. Now you will know".

People working on the Manhattan Engineer District Project and its contractors, including consultants were given security clearance only on a basis of a "need to Know" as related to their individual responsibilities. My security was "TOP SECRET" plus the special "Q clearance," the highest in the district.. That hung heavy on my conscience. Accomplishing the task at hand without revealing the importance attached to it, complicated the effort. It also led to some interesting assignments as well as confrontations with military security personnel.

Prior to the President Truman's news release, Capt. Parsons estimated that approximately two hundred people were officially knowledgeable of the true nature of the Manhattan project operations. These were mostly scientists who's work was critical to the success of the project.

After the successful completion of the first test of the bomb at Almagordo, New Mexico, there was much soul searching, regarding the morality of the use of the bomb.

Originally, our conscience was soothed. The moral justification for working on the super explosive was the knowledge that German Scientists had started working on it two years before we did and would use it against us.

Following the end of the war in Europe, there was no longer a threat from Germany. Actually, we were surprised how little progress the Germans had made with their "Uranium machine". A group of top scientists entered occupied Germany with the advanced troops, to ferret out their scientific records. Very few even high officials even knew of the project at the time. Code named "Alsos", It was headed by Dr. Samuel A. Goldsmith, an internationally acclaimed American physicist of Dutch background. Alsos exploded the myth of German scientific superiority, at least as it was related the atomic bomb.

Secret meetings, limited to persons with security Clearance, were held by scientists, to discuss the morality of using the Atomic Bomb. Major Peterson, my immediate superior, told me that I should not attend these meetings because a few of the scientists knew that I was a military officer and they might think that the military had sent me there to spy on their meeting. I informed him that I am a scientist and that they would expect an explanation if I did not attend. Pete concurred and I attended the meetings when I was in town. There was no agreement among the scientists regarding the use of the bomb.

One proposal was to warn the Japanese and give them a reasonable time in which to surrender. The Japanese government could not be expected to believe such an announcement and would probably consider it a propaganda threat.

Another proposal was to stage a demonstration on a deserted island, inviting the Japanese to observe the awful destruction and give them time in which to surrender. If they did not surrender, then proceed to drop the bomb on military targets. What if the first one was a dud? What if the Japanese believed that we had only one bomb? We would lose the element of surprise. They would then actively defend against a single airplane flying over their territory?

Could we justify accepting responsibility for the great number of daily casualties on both sides, while we awaited the Japanese reply?

A minority of the scientists at Chicago favored one or more of the several alternatives rather than immediate use of the bomb. At Oak Ridge, where the uranium fuel was produced, most of the scientists favored using the bomb as soon as possible. At Los Alamos, where the bomb was assembled, a few very vocal scientists advocated restraint.

Dr. Lisa Meitner, a German Jewish physicist and mathematician had worked on the atomic project in Germany and had escaped the Nazi persecution. She now headed a large group of mathematicians who spent many long hours cranking out data for the evaluation of various proposed configurations of nuclear reactors for producing the nuclear fuel, uranium and plutonium. I recall that Lisa expressed the feeling that the bomb should be used to end the war as soon as possible.

Dr. Robert Oppenheimer, director of the Los Alamos Scientific Laboratory was reported to be in favor of using the bomb directly. However with due respect for those of his trusted co-workers, he took their case to General Leslie Groves and argued for their right to be heard. "Oppie" was not in favor of proceeding with the development of the much more powerful Hydrogen fusion bomb.

Dr. Edward Teller, was born and raised in Yugoslavia, he had experienced the cruelty of the Nazi occupation and much of the same from the Soviets. He adamantly promoted the immediate use of the bombs as well as the continued development of the much more powerful hydrogen fusion bomb.

Dr. Arthur Compton, a very religious man, Nobel laureate in Physics and head of the Metallurgical Laboratory at the University of Chicago, was calm and deliberate as he admonished participants of the meeting to carefully search our conscience. "We are giving mankind and our posterity the most powerful force in the universe. It is amoral. Whether it is used for good or evil, depends upon it's users." Dr. Compton expressed the opinion that the bomb should be used at the earliest possible time in order to bring a halt to the war.

The arguments were presented, not only to General Leslie R. Groves and General George C. Marshall at the pentagon but also to the President of the United States. Harry S. Truman listened to the many arguments and proposals. He discussed them with General Groves and Mr. Burns, Secretary of State, as well as with other top government officials. Then in his typical "The buck stops here" mood, with deep concern for all, ordered the bomb to be dropped on Japan.

The scientists who met in secret during those last days, later organized an association called The American Association of Atomic Scientists. They published a monthly magazine for the purpose of warning people of the dangers of atomic warfare.

The Research division the Manhattan District Engineers had been transferred from the University of Chicago to the new district headquarters office at Oak Ridge Tennessee. My Instrument section was included in the move. However a part of my operation, which included the calibration of radiation instruments remained in Chicago under the able direction of Sgt. Robert J. Smith. That meant that I was moved to Oak Ridge but was required to make frequent trips to Chicago.

I had written my own orders to return to Chicago on temporary duty, officially to attend a scientific meeting and to move my family from Chicago to our new apartment in Lenoir City, Tennessee.

On the 9th of August. The second atomic bomb was dropped on Nagasaki. Certainly the war will be over very soon. However it will probably be quite some time before I will be released from active duty in the army. Therefore we continued our plan to move to Tennessee.

## ON THE MOVE

Rather than wait an indefinite time for official orders to be cut to move our belongings, we decided on a "do it yourself" project. An old trailer with thread bare tires, hauled behind our 1940 Pontiac coupe, also with thread bare tires was to be our mode of transportation. The best two of the seven tires, I put on the trailer. Then I petitioned the rationing board for four new tiers for the car, with which to make the trip. reluctantly, the ration board issued to me, a coupon for one new tire. I took my request to the boss of the local office. He extended the coupon to two new tires. He said that I had gotten along without them thus far, and that I should be grateful for two. My pleading for two more was to no avail. Then I took the matter to the regional headquarters of the rationing board in down town Chicago. After much waiting and cajoling in the outer office, The head honcho finally consented to see me. I explained the problem to him in detail, showing him my official orders for transfer. His reply was the same. "You have gotten along without them so far. Two new ones should get you by. Eventually, after repeating my story, he relented and gave me the authorization for a third tire.

Eventually, I persuaded him to go down to the street and tell me which tire would make the thousand mile trip to Tennessee. Surprisingly he did. One look at the threadbare tires, two of which had gone flat while I was in his office, and he asked "How did you get here on those tires". My reply was "Two blowouts in the three miles were patched on the way". Without hesitation, he extended my coupon to four new tires.

At the Sears & Roebuck automotive store, I presented my order for four new tires, along with the necessary ration coupon. Flabbergasted, the clerk called the manager. The whole staff gathered around, they had never seen such a thing in their years of rationing. They suspected forgery, theft or some other shenanigans. The difficulty came in attempting to prove the validity of the coupon without mention of my connection to the military. Eventually the manager called his superior. He called the ration board at the regional headquarters, to verify the validity of my coupons. At first, he was told that the ration board never issues coupons for more than two tires to anyone. It was not until I convinced him to call the head honcho at the ration board that the matter was cleared. Then they wanted to know how I did it. I simply replied "That information is classified".

They still suspected skulduggery. However they had no choice but to put four new tires on my little ol' '40 Pontiac business coupe.

Helen's sister, Joyce Watson, came from Avoca, Michigan to help out with our new twin daughters, Joyce Ann and Janice Kay. Joyce is usually mentioned first because she is the older, by all of five minutes. The four of them, Helen, Joyce Watson and the twins, took a train to Knoxville. I drove to Knoxville with the car and trailer loaded with all of our worldly possessions. I was to pick them up at the railway station upon their arrival, a little after seven in the evening. It seemed like a good plan. That way they would put up with the crowded little Pontiac business coupe for only the few miles to our apartment in Lenoir City.

Another problem was that our rickety little old trailer had been sitting idle for so long that we had not renewed her license plates. There was no time to do it now. Anyhow, she should be licensed in Tennessee rather than in Illinois. The Tennessee authorities were reported to be on the alert for people at Oak Ridge who were driving on their out-of-state licenses.

All went well at first. In La Fayette, Indiana, I spotted a state police car. Conscious of the expired Michigan license plates on the trailer, I quickly turned into a side street to avoid them. The trailer, loaded high with furniture etc. might attract their attention. It worked. They cruised right on by. At this time, I saw no reason that they might be on the look out for me. In the hills of Kentucky, my little blue Pontiac began to complain. She sputtered for a mile or so. Then she went on strike, refusing to climb any farther. Fortunately, traffic was light. Fortunately also, no police came cruising by during that time. After some time under the hood, I discovered a loose wire to the distributor. Once diagnosed, the trouble was easily corrected. This trip is taking much longer than we had planned. No way will I reach Knoxville at the appointed time. The same maneuver, around the block to elude the state police, happened again in Kentucky and a third time in Knoxville. Finally, I arrived at the railway station at midnight, more than four hours late. Where would I find my family? Try the Red Cross at the station. Would they still be open? No they were not. Lady luck was still with us. The family was sacked out on the hard benches in the waiting room at the station. They were not too happy about the situation but glad to be moving on to unknown new quarters.



Our apartment at Lenoir City was on the second floor of an old hotel building which had been converted to small apartments. First, we hauled the two baby cribs and mattresses up the narrow stairway and got the twins settled. Then a struggle to get a large mattress up there. We were so tired that we flopped on the mattress, fully clothed and slept soundly until dawn.

### AWOL!

After a long day and late night, we slept in. We awoke in time to horridly dress and go to church. Unloading the trailer can wait until after church and after brunch.

We were startled by a firm wrap on our door. Was someone complaining about our trailer out front? Three impressive military policemen stood at attention. "Lieutenant Collins? Sir" "Yes" "Sir, we have orders to tell you to pack your clothes for a three week trip. Be ready in fifteen minutes". Nonplused, I said "You can see that there is no way that I can be ready in fifteen minutes". The big one spoke firmly. "Those are our orders sir". The inevitability of the situation struck me with an idea. "I'll make a deal with you". I said "I can be ready in fifteen minutes, if y'all will bring the rest of our things from the trailer, up here to the apartment".

I outranked them but they had their orders to take me in. They conferred then concurred. Thus, I was off on another unknown but undoubtedly exciting adventure. It was very difficult to leave my family. But I knew that Lt. Colonel Peterson and Captain James Cox would see that their needs would be met.

The MP's took me directly to the office of General Kenneth D. Nicholls. Lt. Colonel Arthur V. Peterson, my immediate superior officer, was there. An unusually stern expression covered his face. It bode no good for me.

General Nicholls asked "Where were you? AWOL?" My reply was "Yes Sir" (This was no time for explanations or excuses) Red faced, the General turned to Lt. Colonel Peterson, "Get this man out of here before I loose my temper."

Lt. Colonel Peterson took me aside and told me how lucky I was that Nick did not throw the book at me. They had the state police of Illinois, Kentucky and Tennessee searching for me. Pete informed me that I was to be part of a team headed for Japan. There was only thirty minutes for me to pick up any radiation Measuring instruments which I might need. That would allow me time to dash out to X-10, The Clinton Laboratories.

Fortunately that trip was not necessary because in my office was my personal Geiger counter survey meter which I had developed and constructed while at the Metallurgical Laboratory of the University of Chicago. It was the prototype for those being manufactured by The Victoreen Instrument Company, model 263. Two Victoreen model 263 survey meters were also in my office as well as, a new Landsverk quartz fiber electroscope, and several Landsverk pocket dosimeters. The survey meters measure the rate of radiation intensity. The dosimeters measure the accumulated dose. (Rate x Time = Dose) It is analogous to the speedometer and odometer on an automobile, speed, mph x time, hours = distance, miles. I also took two Cobalt radiation sources, a one milligram and a ten milligram radium source for calibration of the instruments.

There was no time for planning the details, a plane was waiting at the airport in Knoxville. I was to report to our friend, Colonel Stafford L. Warren. At least there would be a familiar face in this unknown adventure. Often, temporary duty assignments are later revised to become permanent ones. I was quite apprehensive about the whole adventure.

Lt. Colonel Peterson handed me a packet containing my orders and briefing papers, which I was to read en route. I was not to inform anyone of this mission, not even my wife Helen. On the inner envelope was stamped, in large bold red letters, the word "SECRET". This meant that I could not read it in the presence of anyone who was not cleared for this mission. At the Knoxville airport, a Douglas C-54, was on line, warmed up, ready for takeoff. It was from the 509th Air Force Squadron. An impressive emblem of a Flying Jackass was emblazoned near the nose of the aircraft. There were also several small flying jackass plaques pasted under the pilot's window. Later, I learned that each of these small ones represented a transoceanic flight for that individual airplane.

The nonstop flight to Oakland, California was mostly uneventful, except for my orders. The pilot was a friendly chap. He allowed me to sit in his seat while he took my photograph.

Imagine the excitement that arose within me when I opened the packet which Pete had handed to me. I was to report to Colonel Stafford L. Warren, head of the Medical Division of the Manhattan District. He had already arrived at the Oakland Army Base.

Colonel Warren had been appointed, by General Groves, to head the new official Atomic Bomb Investigating Committee.

At the Oakland airport, I was met by Captain Robert Buettner. Bob was a professional medical administrator whose job it was to pick up the pieces of red tape broken by Colonel Warren. Stafford Warren was my kind of guy. He worked very hard, was pragmatic. Getting the job done took precedence over proper red tape procedures. Our temporary quarters were at the Oakland Army base. Thus Bob had his work cut out for him and a promising career ahead. Bob handed me more written orders which included orders for eight vaccination injections. Eight shots in one day? They are normally required for military people in the Pacific theater of operations. Normally these would have been administered over a period of at least three weeks. However there was only twenty four hours before our scheduled departure. I protested the accelerated schedule.

"Why should I take cholera shots?" I asked. "We are not going to the Philippines. besides, Dean Ward Giltner cured hog cholera in the Philippines twenty years ago." "Tetanus and Typhoid are OK with me. Forget the others" I said.

I knew that I had a right to insist on the prescribed time schedule for the shots and that our departure schedule did not allow that time. Col. Warren came to my rescue. In his inimitable diplomatic way, he waved the requirement for what I considered unnecessary shots.

"Staff" Warren as we called him, took the whole crew of eight military officers and seven enlisted men to dinner at Spanger's, his favorite seafood restaurant, located under the Oakland bay bridge. That became my favorite also as I visited there many times in later years.

Our mission was to survey the bombed cities of Hiroshima and Nagasaki, Japan. And to assist the Japanese doctors in treating the injured. I was to be in charge of radiation measurements at the bombed site and surrounding area. The purpose of my measurements was to provide a detailed map with the radiation contour lines and to provide estimated radiation exposure of the victims, for use by the medical officers in treating the casualties.

## **THE FLYING JACKASS**

Another C-54, from the 509th Air Force Squadron picked up our little task force at Oakland Army Base. The C-54 is the military version of the famous Douglass DC-3. This plane was outfitted for evacuating the wounded. There were no conventional seats, only stretchers for bunk beds horizontally along the bulkheads. By folding the top bunks up, we could sit, most uncomfortably on the bottom bunks.

Excitement ran high as we speculated on what the mission held in store for us. Colonel Warren briefed us on our mission. We were officially, the Atomic Bomb Investigating Committee. The mission had a dual purpose. First it was to be a humanitarian effort to assist the Japanese victims and to teach the Japanese medical personnel what little we knew about how to handle radiation sickness. Equally important, we were a scientific mission to learn as much as possible about the effects of a nuclear blast on people, buildings and the environment.

## **THE ATOMIC BOMB INVESTIGATING COMMITTEE**

Half of our conglomerate group were medical officers, the others consisted of support specialists.

Colonel Stafford L. Warren, was in command of the investigating committee. He is a renowned Radiologist and former head of the Radiology Department of the University of Rochester. His military appointment is Chief of the Medical Division of the Manhattan Engineers District.

Colonel Albert De Lorimer, a Medical Corps officer, was second in command, under Col. Warren.

Captain Robert Buettner Medical Corps administrator from Los Alamos Scientific Laboratory, was our specialist who valiantly attempted to have us do everything according to regulations.

Captain Robert Brundage, M.D. from U. of Rochester, via Los Alamos Scientific Laboratory, was a pediatrician before the war. Some of the enlisted men called him "Captain Bandage, Sir." The Sir was to soften the bandage. A genial and understanding, Dr. Brundage went along without protest. Actually he was highly respected by the men.

Captain Barnett was also a pediatrician from the university of Rochester, via Los Alamos, with a lot of experience in radiation. He was at times a no nonsense member of the team. At off times he was a jovial chap.

Captain Harry Whipple, M.D. from U. of Rochester, via Los Alamos was a jovial character off duty but very serious about the mission when on duty.

Captain Joseph Howland, M.D. a radiologist from the University of Rochester, via Los Alamos Scientific Laboratory (Joc's secretary at Los Alamos was Laura Fermi, a well trained physicist in her own right, the wife of the famous Dr. Enrico Fermi)

I, Lieutenant Donald L. Collins, chief of the instrument section of the research division of the Manhattan District. Was the district's specialist in the measurement of radioactivity. H, P

Captain <sup>WALTER</sup> Young was a Civil Engineer with experience at Oak Ridge. His assignment was focused on the structural damage due to the blast and the heat.

Lt. Richard Tybot, a Chemical Engineer investigated some curious effects of the very high heat and light from the bomb.

Corporal Seymore Block, from the X-10 laboratory at Oak Ridge, Tennessee.

Corporal -?- Bernstein, from X-10, Oak Ridge, Tennessee was a very intelligent, ambitious and willing worker.

Corporal -?- from the Los Alamos scientific Laboratory, Los Alamos, New Mexico.

Much to our disappointment, we flew right over the Hawaiian Islands at 40,000 ft. The little island of Tinian, west-northwest of Hawaii was our destination.

Radio communications kept us informed of current events. The war was over. The war was not over, Was, Was not. It was all so indecisive. We looked down at some tiny islands which were still held by the Japanese. Do they know that the war is over?

Colonel Warren advised us to get as much sleep as possible because very soon, we would be too busy to sleep. The bunks were occupied so I stretched out, flat on my stomach, on the oak flooring, in the center of the plane. With my eyes closed, thoughts of what to do after the war occupied my mind.

Suddenly, in a clear blue sky, the plane dropped, leaving me suspended in mid air at window level. I opened my eyes and looked out just in time to see the right wing flop down. Almost immediately, the floor came up with such force that it knocked the wind out of me. I saw people, knocked from their bunks and scrambling to retrieve their personal belongings which had been strewn about the floor. Our first reaction was to prepare for another jolt. We suspected that it might be Japanese anti-aircraft flack from a tiny island, twenty some thousand feet below us. They may not believe that the war is over. However we saw no puffs of smoke and there were no further bumps. Our pilot assured us that it was only an unusual weather front through which we had passed. There was not a cloud in sight. The pilot said that he had no advanced warning of the weather front.

Eventually one gets bored with staring out the window at ever changing cloud formations. A crap game was started in the back of the plane. After many of our group moved back there, I realized that the captain had re-trimmed the controls for the automatic pilot. When I mentioned this to one of my friends, he was skeptical that the movement of a few people could effect the attitude of this big C-54. Another form of mischief occurred to me. I said "watch" "Hey gang! The Colonel has

maps of Japan spread out up there. Lets have a look". Almost everyone in the back moved forward to see what was up. The ship nosed down slightly.

After the captain re-trimmed the plane for level flight, I said "Lets get back to the crazy crap game". They did so. The plane nosed up slightly. Once again the pilot trimmed for level flight. This time, he left the controls to the co-pilot and came back to talk to Col. Warren. We were promptly requested to take seats and fasten seat belts.

#### TINNIAN ISLAND

The late afternoon sun lit the small, picturesque Island of Tinnian as we approached. Apparently, the only level spot on the island was the runway. It took up the full width of the island. There was plenty of runway for our C-54 to land. However we observed that there was wreckage of giant B-29 planes at both ends of the runway. We learned that some had too much of a load and not enough power to lift off before the end of the runway. Some come in too high and could not stop before running out of runway. Others miscalculated, landing too short in an effort to make sure that they did not overshoot. Some had hit a down draft at a critical moment just before touchdown.

Over to one side was what was known as the "elephants graveyard". There was the resting place for these unfortunate giants of the sky. Wrecked B-29s were hauled there to clear the runway. On the other side of the runway, the beautiful coral reefs and sandy beaches looked inviting.

Several newly famous airplanes were at the 509th hangers here. They included the Enola Gay that dropped the bomb on Hiroshima: Bocks Car that dropped the bomb on Nagasaki and the Great Artist noted observation weather plane.

Shortly after landing on Tinnian we were welcomed by Colonel Paul Tibbitts's famous crew. Paul had left for Washington to report to President Truman. They gave us a close up look at the famous B-29. Splashed across the nose of the ship were the words "Enola Gay", the name of Colonel Tibbetts mother. It was in her honor that he dedicated his historic mission. They called our attention to the very large bomb bay doors which had been enlarged to make room for it's unusually large cargo. The Enola Gay with Colonel Tibbitts at the controls had carried the "Thin Man" to it's destination. It was dropped on Hiroshima on that fateful morning, August sixth.

The "Thin Man" used Uranium 235 as its fission explosive. We were also allowed to inspect mockups of both the "Thin Man" and the "Fat Boy" which had been used in practice drills by the 509th crew.

The second bomb was called "Fat Boy", or "Fat Man". It was fueled with Plutonium. Small charges of the plutonium were arranged around the periphery of a sphere. These were imploded by charges of conventional explosives, designed to blow them into the center of the sphere at the same fraction of a second, to form a critical mass, thus causing the chain reaction and the explosion. Fat boy caused the tremendous devastation on Nagasaki.

Brigadier General T. F. Farrell was General Groves deputy in charge of the operations at Tinnian. General Farrell briefed us on our mission which he said was "to prove that there was no radioactivity in Hiroshima and Nagasaki". When he asked if there were any questions, I said "Pardon me General, but it is my understanding that my mission is to measure the radioactivity in these areas. There is radioactivity everywhere". He sputtered and stammered then said that it was probably not too much.

Colonel Warren, a civilian at heart, cautioned me that I already had a reputation of talking back to superior officers and that I should use caution to avoid getting into serious trouble with professional military men.

General Farrell introduced us to Major William "Bud" Uanna, a military intelligence officer who was to be in charge of security for our little task force. The thought occurred to me that "This boy could cramp our style".

We were also introduced to Bunny D. Yoshimoto. Bunny is an American citizen, a Nisi, having been born in Hawaii of Japanese parents. He joined us as our official interpreter. Bunny was in U.S. Army uniform but I wondered on which side of the war his heart had been and where his loyalties would be when we reached Japan.

Tinnian was a fascinating island to explore while awaiting transportation to our destination. A large part of the island, including the coral caves, were off limits. Nevertheless there were many opportunities to satisfy our curiosity. We explored the beautiful coral reefs and small exclusive sandy beaches. Tide pools were teeming with unusual forms of life. Strange, tiny creatures populated these pools, awaiting the next high tide. The coral reefs were treacherous.

They had sharp, jagged edges which could tear clothing and gouge the skin. The churning sea made it especially hazardous to swim near the coral.

Lt. Jacob Beser warned us to stay out of hidden caves in the rock. Staff Sergeant Shug Crawford had been shot by a Japanese who did not know that the war was over. Some Japanese would rather die and take with them as many Americans as possible than to surrender.

Captain Young and I visited the Elephant's graveyard. Huge hulks of wreckage were lifted by crane and unceremoniously dumped in a pile in a ravine near the runway. We sat in the cockpit of one of the B-29s, the nose of which protruded above the rest. For a brief moment I was with my heroes, Jack Armstrong the all American boy, Sky King, Charles Lindberg, and Wrong Way Corrigan. I could imagine that we were rocketing upward to new adventures, into the wild blue yonder. Captain Young brought me back to reality by his remark about the vast amount of electronics on board. Earlier, I had discussed this with Lt. Jake Beser the electronics specialist of the 509th squadron.



Jake told me that there are so many vacuum tubes and other sensitive components in a B-29 that there is a definite probability that one or more of them would fail before the craft lifted off of the runway. There are many redundant systems used in an attempt to minimize this problem.

Lt. Jacob Beser was my favorite among the crew of the Enola Gay. He talked my language. He was a recent Harvard graduate in electronics. Jake was familiar with the new television circuitry, including the mono-stable flip flop circuit which I used in my portable Geiger counter. There are many people that we both know, including Dr. James Conant, president of Harvard University, Dr. VanDervier Bush, Dr. Karl Compton, president of MIT.

For security reasons, the boys of the 509th Air Squadron had remained pretty much to themselves. Some crew members, from other squadrons, jibed them for making only practice sorties. They asked "When are you going to join the war and fly missions against real Japanese targets?".

Their perception of "goof offs" and "playboys" turned to awe and admiration when the news of the 509th's real mission was revealed by President Truman, over the radio.

## SHIPS AT SEA

The Flying Jackass of the 509th returned to the U.S.A. with some of the heroes as well as valuable records, leaving us stranded on the little Island of Tinnian. Undaunted, Col. Warren persuaded the Navy to give us berth on a ship bound for Zamboango, in the Philippines. Zamboango is not really closer to our destination but it is a much busier harbor and more likely to have ships leaving in our direction. On the other hand, we may be stuck there for quite some time. Should I have taken those shots after all?

The large ship pitched, yawed and rolled as she plied the waters of the stormy sea. This was a new experience for most of us. It was easier for me to maintain equilibrium by keeping my knees slightly bent so that I could react quickly in any direction, reminiscent of the posture used when standing on a moving farm wagon. Once we got our "Sea legs", Lt. Tybot and I decided to try our skill at ping pong. There was a ping pong table, of sorts, in the officer's lounge. It was close quarters for such a game and we bent the rules to allow playing the ball off the bulkhead. A part of the challenge was to anticipate the motion of the ship which did modify our shots considerably. Sometimes it caused us to pong when we wanted to ping.

Colonel Warren was busy on the radio, attempting to arrange for transportation to get us closer to our destination, Hiroshima or Nagasaki. Lady Luck was on our side when he persuaded the Navy to transfer us to a destroyer headed for Buckner Bay in Okinawa.

The transfer from the large ship to the destroyer, in the choppy sea in mid ocean, was yet another new experience. This transfer was accomplished in what is called a breaches buoy. A light cable was strung from one ship to the other by a small craft, an LCPL. This was used to haul a heavy cable across from our ship to the destroyer. It was made fast at one end. The cable was tethered to a "Donkey", a winch to take in and play out the cable as the ships rolled. Hung from the cable was a large pulley with a hook on the bottom. From this was hung the breaches buoy, a wooden board seat which resembled a child's swing hanging from an apple tree. During the transfer, the ships continued at a speed of approximately five knots. The deck officer explained that the ships needed a forward motion to maintain control. If they drifted too far apart, the cable might break dumping the load unceremoniously into the deep. On the other hand, if the ships drifted too close together, the load would be dipped into the churning waves.

Col. Warren was the first to cross in the breaches buoy, among cheers from our group.

During our transfer, a duffle bag of one of our unfortunate crew was dumped into the briny deep. Fortunately, he was not in the breaches buoy with it. The Navy had anticipated that possibility. A small boat, an LCPL followed behind the ships, to retrieve the spilled cargo.

After that experience, the swing on the cable was replaced by a wire cage to keep the riders from falling off in the event of another such mishap. Fortunately there was no repeat of the incident. Our task force was transferred to the destroyer without further incident.

Life aboard ship was not bad, at least for a short time. We were assigned time slots at the officer's mess. The food was good. we even had "fresh Navy made" ice cream.

That reminds me of the story of the new Wave officer, a nurse who reported for duty. When being shown to her quarters, she asked "Where do we eat?". "You will mess with the officers" was the reply. She responded "Yes, I know. But where do we eat?".