

## Nuclear Testing on Christmas Island, 1962

Nineteen sixty-two was a busy year for some of us in the US military. The temperature of the cold war was rising dangerously, and The USA was being frustrated in a number of activities in the international arena. Our relatively new President Kennedy had presided over the Bay of Pigs fiasco, had watched as the Berlin Wall was erected, and had been roughed up by Soviet Premier Khrushchev in Vienna. With the economy down at home, the President's ratings were abysmal. The Soviets were pressing at every turn.

A particular annoyance was that they had resumed testing of nuclear weapons in violation of The Test Ban Treaty which had recently been negotiated. In response to that, President Kennedy announced in early 1962 that the United States would resume atmospheric testing of high-yield nuclear weapons related devices (funny, that!).

I had arrived at Patrol Squadron 28 (VP-28), Barber's Point, Hawaii, in October 1961 the week of my 20<sup>th</sup> birthday. VP squadrons were called ASW (Anti-Submarine Warfare) units, but were just as often assigned to intelligence missions, airborne surveillance, and to Search and Rescue operations. We flew the P2V Neptunes, predecessor of the P3 Orion which is still in use. I wanted to fly as a crew member and I set about satisfying the requirements for that assignment.

One needed to be a Petty Officer to fly and I got my AT3 (Aviation Electronics Technician Third Class) ranking in November of 1961. There was qualifying with a pistol on the range (For airborne sailors, that meant managing to loose off a few rounds without shooting yourself or someone else!), and there was Survival School (a considerably more rigorous affair). Other familiarization matters of a less formal nature were accomplished routinely, and by early 1962, I had qualified.

I was assigned as understudy to one W. R. (Billy) Lynch, AT2, in the Captain's Crew. Billy was due to be discharged shortly and I was expected to be his replacement as Radio Operator in the Skipper's crew. Like most hi-tech jobs in the US military services, most of the time is spent training. We flew as crew to train new pilots, at the same time getting new crew members trained or more proficient, as the case might be. After some few flights with Billy, he signed off on my qualifications and shortly after that, we were deployed to Johnston Island, 700 miles southwest of Honolulu, to watch and support testing of some of the early ground based missiles. Then, in April, our crew was sent to Christmas Island near the Equator, some 1300 miles south of Honolulu. We guessed that the purpose of our assignment to Christmas Island was somehow associated with the upcoming nuclear testing.

This was a big deal. It had been headline news for weeks and all over the world, people were protesting. It was to be, by far, the biggest operation involving nuclear weapons in history. We were somewhat in awe of whatever it was we were being sent to do. We knew from the newspapers that "H-Bombs" were going to be tested, but we really had only a vague idea what that meant. We thought maybe we were to be the tethered goats (in the final analysis, not too far from the truth).

For enlisted personnel, this was made worse by the fact that, formally, we had been given almost no information. I was more fortunate than most in that our Plane Commander for this deployment, Lt. David Warnock (The Captain had an experienced second pilot who flew most of his crew's operations), was a good communicator and he passed along enough to make some sense out of the jobs to which we were eventually assigned. Once we arrived at Christmas Island, we had seen our last newspaper for a while. We didn't know it at the time, but they censored our mail to and from the island and for some future period.

The rumor mill is a valuable source of information for enlisted men in the military services. In the Navy, this is called "scuttlebutt." One would hear it said that "Scuttlebutt has it that...." etc;. More often than not, scuttlebutt got it right and one learned quickly how to evaluate information received by this medium.

For much of our information, we relied on the senior enlisted men in our crew, Hank Miller AT1 and Sam Bass AO1. Sam Bass was old, about 28. Hank was really old (late thirties). They seemed to be able to get accurate information from sources that were anything but obvious. Hank was the crew's Chief Tech. Resembling a big, grinning bear, Hank had a lively intellect and a strong character. He knew nearly everything. Everybody (officers included) confided in Hank. In the barracks, we argued a lot about philosophy while Sam, Billy and I drank a lot of

beer. I read Harold Robbins' "The Carpetbaggers," William James' "Pragmatism," and Taylor Caldwell's "Prologue to Love" while there and Hank explained them to me. I was extremely fortunate to have those guys, along with Lt. Warnock as bosses in my crew.

Life on Christmas Island for the enlisted men in general, was not unpleasant. We worked on only about half the days. The weather was tropical and always the same, so there were no doors on the barracks. The showers were outside stalls in which sea water fell by gravity from giant tanks nearby. One simply wrapped a towel about one's middle and set off across the burning sands to shower in public, much like is seen in some of the old western movies.

The food was excellent. They had made an extraordinary effort in this regard, so much so that the meals actually became boring. Even the food on the airplanes was good. Near the end, I wanted more than anything else, a baloney sandwich instead of the endless diet of steaks, hams and tropical fruits. I vowed that when I got back to Barber's Point, that would be the first thing I would eat. I didn't know it then, but you couldn't get a baloney sandwich in Hawaii, either.

With no doors on the barracks, critters could wander into the quarters. Christmas Island is heavily populated with giant Crabs---these characters have legs 12-14 inches long and they walk with them extended so that the body of the crab is that far from the ground---a truly menacing creature to contemplate, but as far as I know, pretty harmless. They were so populous that sometimes there would be enough of them on the runway that a pending takeoff would have to be delayed while they were thinned. They wandered into the barracks from time to time and even managed to get into a lower bunk once in a while (they may have had a little help in that!). There, they lurked, waiting for the assigned occupant to return. Good reason to drink in moderation!

Any difficulties which arose were because of the need for something to do on the days while not flying or working on aircraft. The first thing one would think about on a tropical island would be that the beaches would offer a measure of distraction. Not true on Christmas Island. The beaches were rocky with coral formations that cut like a razor. The water was only knee deep out a long way and schools of sand sharks could always be seen from shore. On that tropical island, the ocean was inaccessible.

The only formal entertainment on the island, of which I was aware, was daily bingo at the club. All male bingo with the average age of the players being in the early 20's, and booze plentiful and cheap. Whew!

Bingo finished early, so we played a lot of poker and pinochle in the barracks. There were no restrictions on bringing alcohol to the barracks, and almost everyone drank a lot on off-duty days. The usual derivatives from that occurred from time to time, but for the most part, harmony prevailed. As far as I knew, this lifestyle was normal for a bunch of sailors placed on an equatorial island in the middle of the Pacific. Life there did become a little tedious for the older guys (an older guy, except for Hank Miller and Sam Bass, was about 22). I read books voraciously, so I hardly noticed the tedium.

One guy, Gene Challengren, didn't drink and didn't smoke, resisting any and all temptations to act like the rest of us. He was clean-cut, was good at his job, and except for not drinking and smoking, seemed to be normal. He devoted his entire time away from work to writing letters to some girl back in the Midwest, mailing two or three every day. I admired the guy and thought his liver and kidneys were probably in pretty good shape.

There was a tribe of aborigines living somewhere nearby and theirs were the only women on the island. The men worked in the commissary and in the caretaking of the grounds, earning a livelihood that was orders of magnitude greater than their customary lifestyle. Although contact was forbidden, there were some conversations that occurred between aborigine men and some of our guys. The natives were strictly forbidden to have any booze. They wanted booze. We had enough booze to float the Queen Mary from Memphis to New Orleans. As seen by some, this was a natural commercial opportunity. A sailor would supply a quantity of booze to a native and the native would promise to introduce the sailor to a maiden. I know that some liquor passed hands, but I don't think the other part of any deal ever got consummated.

(Toward the end of the deployment, some white woman dignitary did visit the island and made a speech about something or other, but enlisted personnel weren't invited. We never knew what position she held or why she was

brought there. Some of the guys thought it a bit demeaning that she had been sheltered from exposure to the enlisted ranks.....but most of us were ambivalent about the matter.....)

One day I returned to the barracks from working on the flight line in the middle of the afternoon. I met Gene Challgren staggering and reeling around the corner of our building. His eyes were out of focus, his facial muscles slack, speech slurred, gait unmanageable. He had a half bottle of vodka in one hand and a lit cigarette in the other. I knew something had happened with that girl back home. Didn't even need to ask. Sometime later that evening (after bingo I think), he was still ambulatory and I saw him trying to negotiate something or other with an aborigine.

Whatever official information got to us came from our Plane Commanders. Official word came to them through the base radio or by military courier, and they passed pertinent material on to us in pre-flight briefings. They eventually told us that the USA would be detonating nuclear weapons and that it would be our job to keep any ships, boats and submarines from entering the area either by accident or by design. The manner in which this was to be accomplished would be to conduct reconnaissance flights on each day before there would be a blast. The flights each traversed the perimeter of one leaf of an imaginary four leaf clover with the island at its center. Search for errant surface craft was by radar and visual. The capabilities of the P2V-5 we flew that summer allowed us to easily cover a range out to a radius of about 900 miles with each of the four flights overlapping somewhat. Whenever we found an unauthorized ship in the area (I don't think there were any authorized ships in the area), we identified them, took pictures and dropped leaflets in 7 languages telling them (I guess) to remove themselves.

The British, under whose administration the island functioned at that time, flew high altitude surveillance in Canberra aircraft, but their function was more at monitoring and photographing the blasts than excluding wayward seagoing vessels.

Our flights would take off at mid-afternoon on the day before a scheduled event. The nuclear devices were to be dropped from high flying aircraft (B-52's) and would explode above the ocean somewhere near the island. The detonations were always scheduled for daybreak and all reconnaissance flights were required to be back before the blast could go forward. Each flight was 12-14 hours and there were never any delays in the drops because of patrol aircraft tardiness (although one of ours did drag in with both props feathered, barely making the runway on jets only!).

There were loudspeakers everywhere on the island that anyone was likely to be. Countdown for a blast started at 24 hours with updates every hour at first; then every half hour, then every minute, then every half-minute etc; until in the last sixty seconds, every second.

The procedure before a blast was to gather us into a designated compound---a fenced area maybe 150 yards in diameter. All the military personnel were together. There were probably 70-80 persons from our squadron on the island and a like number of other support and military personnel from the British and other American outfits. I don't remember whether the aborigines were officially assigned with us or whether they were supposed to be gathered separately. A few of them, but certainly not all, were with us. All in all, there were probably 300 people who saw some of the events.

For each blast, we were issued dark goggles, through which one could look directly at the noonday equatorial sun and barely be able to discern that there was some dim light there. As the event approached, we were instructed to seat ourselves on the ground, backs to the (intended) blast site, knees raised, arms on knees, face buried in arms. The count proceeding by seconds: 60, 59, 58..... By now, of course, the device had already left the bomb bay and the bomber was scurrying the other way. When the count reached 3, 2, 1, DETONATION!...., the flash appeared. Every time! With my back to the blast, my eyes closed and wearing nearly opaque glasses, my recollection is that when the flash occurred, I could plainly see the bones in my arms. There's more to be said about this....

After the flash, we would stand and look in the direction from which it had come. It was maybe 45 seconds, maybe more, before we got a low rumble followed by a blast of hot air. We felt the tremor underfoot. This would cause the ground to move (not shake---it actually moved laterally) causing us to stagger and sometimes fall. In the same time frame, the mushroom cloud would begin to form---truly one of the most provoking things one can witness. Many accounts have been written about the power, the fear-inspiring might of these things. They are all understatements.

We exploded quite a number (more than 10, I think) of devices ranging in size up to a few megatons, maybe as much as 10 megatons (one megaton is 50 times the size of the yield over Hiroshima). As far as I know, I saw'em all. Billy left for discharge during our time there, so I got my baptism in real operations.

They let us take pictures freely and some great images were captured of the mushrooms. Then when it was time to pack up and go home, they confiscated all photos, all film, cameras etc; They did a thorough body search when we got on our planes and I don't think a single unofficial photographic record survived.

We had worn dosimeters to measure the cumulative radiation we received while on the island. These things were black wafers about 1 cm. thick and the size of a silver dollar. They were otherwise non-descript, in that they had no serial numbers, no identification whatsoever. We swapped them around and any personalization there might have been (There wasn't any!) was thereby lost. They were collected as we boarded our planes to leave the island. We were told that they would be sent off for analysis. In six weeks, or so, the results came back: All exposure within acceptable limits. Right! Those who believe that might want to look at a bridge I have for sale up in Brooklyn.....

When we returned to Hawaii, we were debriefed and essentially told not to say anything about the experience to anyone who hadn't been on Christmas Island. This included sending anything in the mail to our families. So I wrote to my Mom and asked her to send me a baloney sandwich. Believe me, she knew something had happened.....

Nevertheless, those of us who had been there, did a lot of talking amongst ourselves and the talk was, for the most part, as serious as anything I experienced in the Navy. We unanimously agreed on two things: We all thought we had seen the bones in our arms during the flashes; and we knew we had looked in the face of something that could produce universal death.

Within a few months of our return, the Cuban missile crisis erupted. We were placed on alert---but that is another story. A month after that, we deployed to Iwakuni, Japan----and I had started the year with Survival School.....Whew!!

A note or two: I may have been the youngest person there. If not, certainly I was one of the youngest. After separation from active duty in 1964, I did 7 years of full time university study with the principal field of study being Physics. The choice of Physics as a discipline was not influenced by my experiences on Christmas Island, and only when I was an advanced graduate student did I start to knowledgeably ponder explanations for some of the phenomena. While The Nobel Prize is probably safe, I can say that I am eminently qualified in this area of Nuclear Physics and I keep up with the literature. I do, now, understand much more about what happened on Christmas Island. Nevertheless, I have tried to make this flow as it did then---as a 20 year old saw things. The scientist can maybe write the next chapter.....

Sam Cyrus  
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