Chapter 12

Back to Work

In several instances we have mentioned the tundra. As it decays, it forms peat. The dictionary defines peat as "semicarbonized vegetable tissue formed by partial decomposition in water, of various plants". Whatever that's saying – we had it. Precipitation of some kind was recorded over 90% of the days, creating a twenty-four hour a day peat factory. In fact, we had peat in some areas up to ten feet thick – but in most areas it was three to four feet.

This made very unstable conditions for construction. It was necessary to remove the tundra/peat covering before any construction could begin. Sound simple? It wasn't. Remember the "natural lakes" – everything was just about floating on Amchitka most of the time. Whatever was to be constructed had to be not only graded to below the peat level, but also had to be filled in with a base material to an elevation above the tundra. This made it capable of shedding the constant precipitation. Right away I saw the difference between constructing on Amchitka and Oklahoma.

The first item to be constructed was a "pad" to set up a rig to drill the hole which would be used for our nuclear test shot. This pad had to include an open tank for the drillers mud as well as a yard to house machinery, office, drilling supplies, and vehicle parking – a pretty good sized area.

We started with an over-the-top of the tundra road, to get enough equipment moved in to begin clearing the tundra, not too far from our plywood camp. A bulldozer was moved into

the site, and as it started moving, the whole site turned to jelly. The more he moved, the more water and mud there was to move, until he was trying to move slush – while being submerged three or four feet deep. Eventually, it was decided to displace the slush by dumping in base material until a firm starting point could be had. I believe the depth of the peat at this site was around six feet. This worked, and Project Long Shot was on the way.

The office was buzzing now. Our architect and engineers were getting the plans and specifications adapted to the building sites. Preliminary work had begun on our new camp to be constructed just a short distance from the "airport". Our roads were now mostly cleared of nails and other debris, so flats were now at a minimum. Barges had arrived with additional equipment, vehicles, trailer units for our new camp, and other construction items.

Our camp was to be constructed of double-wide trailers assembled to form a hall down the middle of the units and designed as an "H" building. Anchors of four inch H-beams were set into very large masses of concrete six feet deep. The H-beams were welded to the trailers which were designed with overhead beams to connect to these anchors. The roof was then spotted with sand bags to protect it from the high winds. The interiors were panelled, each room had two half beds, a desk, a couple of nice chairs, and a lavatory. Shelves were placed over the beds, and a small corner closet finished the facility. The two adjoining rooms on either side of the hall, were separated by a bath (shower only) – and in our new camp, we had plenty of hot water. All in all, not too bad.

We all had private rooms until near the end of the project, then there were two to a room. We were separated from the contractor personnel who sometime got quite rowdy, and also the military/scientific residents who liked to play "superior".

Other construction items included two large oil storage tanks, an electric power plant, a clinic (complete with doctor), a small movie theater, a PX, – later we added an indoor target range (pellet guns), mess hall, and of course an office complex. Our Corps of Engineers Office was slightly segregated from the large open office for all others. The military offices

(the Navy Captain and his assistant had private offices), and the scientific offices surrounded the office pool in the middle of the building. From early on we had representatives from the Atomic Energy Commission, and Sandia Corporation. Later most every testing firm in the country had representatives at the project.

"PERT Charts" were on every wall. These scheduled times for completion of certain projects and at that date, materials peculiar to that portion of the site were scheduled to arrive on the island. Our contractor was faced with very heavy "liquidated damages", if each portion of the construction contract was not completed on time. Every item was top priority. Remember, we had to have the "shot" by a certain day in order to clear the island before winter, or we would have to postpone completion until the next spring — a very costly delay. Later schedules would be required accordingly.

On one barge carrying some large equipment, a bulldozer was lost over the side at sea, somewhere between Seattle and Amchitka. Somewhere out in the Pacific Ocean there are several items of unused construction equipment being enjoyed by the fish.

On another occasion, several barges "broke loose" from their tug during heavy seas, but after several days they were all rounded up and reclaimed.

The mere fact of this intense schedule created problems. Of course, "problems" meant we, Corps of Engineers employees, *had* to generate solutions. These were not always easy.

Sometimes a contractor would get around liquidated damages by doing unacceptable construction practices — knowing he would be required to correct them afterward at his own expense.

One such incident occurred during the construction of the wharf. This required completion prior to the arrival of barges already nearing the island. Obviously, delay of unloading would be very costly, as well as the need for the materials themselves was critical. Maritime law, as well as our plans and specifications did not allow any material to be placed in water which at any future date could cause a hazard to shipping. The wharf was to be constructed of pilings configured to hold dirt and gravel — compacted sufficiently to support

a large crane for unloading.

As the barges got closer to the island, the contractor determined he could not meet the construction deadline for completion under the terms of the contract. It was to his advantage as well as to the government to be prepared to unload them immediately upon their arrival. Delay in completion of the wharf would not only start liquidated damages on the wharf, but would start a domino effect on all other construction items from that point on. This would kick in very high liquidated damages on each bid item, which would bankrupt a "rich" man.

About two a.m. one night, a knock on my door, woke me from deep sleep. Col. Barwick and the head of the construction division on the island were there requesting that I immediately get dressed and head for the office. (We were in our new office building now.) How could I refuse a request like this?

When reaching the office, I learned that the contractor had – during the night, but while our own Corps of Engineers Inspector was watching – decided to "bury" as many of the discarded vehicles and equipment he could move in a short time, to speed up the "fill" of the wharf. This he knew would allow completion before the arrival of the barges – eliminating the liquidated damages and allowing the project to continue on schedule.

When ordered by the construction inspector to stop dumping the scrap equipment in the bay, he ignored the order and continued the practice with much haste. Thus, Col. Barwick and our construction division head had been summoned by the inspector – and rightly so. Col. Barwick's verbal order had been ignored also. This brought about my early summons to work.

In the government, everything must be recorded on paper. Without paper I'm sure the entire government would collapse. At any rate, a letter of some magnitude and intensity was written to the contractor's representative that night, detailing violations of most everything in existence. Not entirely friendly.

Col. Barwick was a man of admirable character, and in control of himself, so; having written everything down, he held the letter until the next morning. He said he had written it while being "disturbed", and would not hand it to the contractor until he could read it with a

cool head. This is a mark of a good man, however, the next morning it was delivered as had been written.

At this point, the wharf was almost usable and the barges were in sight. They were brought in and unloaded on schedule, *then,* the contractor began talking to us.

We had issued an order to remove all the metal equipment by tearing out the wharf and pulling out all the foreign objects – then rebuilding the wharf according to specifications. Negotiations became very difficult, and eventually broke down entirely. What happened at this point almost started the second civil war.

Our head of the engineering division on the island in cahoots with the head of our construction division and Col. Barwick composed a telegram for me to send to the head office of each corporation *and* their bonding companies. (Construction contracts require bonds of sufficient amounts to protect the government from any losses due to non-performance of the contract. They were quite large on this contract). These telegrams indicated non-performance outlining what had happened, and requested the bonding companies to respond by a set date. The repercussions of this telegram might have been heard around the world – these were very large, influential contractors.

About an hour after our wires were sent, Congressmen had called so many Generals that if you had congregated all the stars on their shoulder pads on a black night you might think you were looking into the heavens. The chewing started at the top, and each layer got a little more – on down to our District Engineer in Anchorage who was immediately summoned to the Division Office in Seattle, for his turn. Our Chief of Engineering Division on the island was also called to Seattle to assist him.

The same day we sent the wires, the bonding companies responded – urging us to show restraint, indicating something could be worked out. The head of the contractor's office on the island was called in to his home office. I'm sure we can all imagine what went on there.

Let's not leave our District Engineer nor Division Engineer stranded in this situation. After having their conference and requesting additional information, and having discussed everything with our Chief of Engineering, both the Division Engineer and our District

Engineer decided they would back our action. Having passed this up the ladder it was decided all would stand by our actions, and require the contractor to remove all foreign objects from the bay.

By the time this word made it back to Washington, the contractor began talking with us. In the final analysis, it was determined we would let the contractor use the wharf as built for the duration of this project, but that before they left the island after the shot he would rebuild the wharf to the contract specifications at his own expense, and we would forego any liquidated damages incurred by non-completion of the wharf on time. Everyone was smiling. I think both the government *and* the contractor got what they wanted.

We had another amusing incident that I'm sure pilots of the major airlines flying the northern route to Tokyo have enjoyed all these years – that is, if they have *ever* flown over Amchitka when it was clear.

Part of the work we were doing was connected to Project Long Shot but was also preparing the island for Project Milrow – the second phase of testing on Amchitka we did a couple of years later. One of these tasks was runway striping.

I have never heard an excuse that entirely *worked* for what happened. You know the stripes I mean – the wide white lines at the end of the runway on an angle toward the center line and pointing in the direction the plane should land. There were many difficulties in finding a time when the runway was dry enough to allow painting. I believe they finally used some method of heat drying to allow the painting to be done. But that's not the story. Motorized painting equipment was used to line up and paint the wide stripes to a point where they would stop, be squared off to the runway, then it would be moved forward several feet to the next stripe. They would paint up one side for fifteen or twenty stripes (I don't remember just how many), then moved to the other side to paint the corresponding stripes.

While painting the stripes on one side of the runway, the machine either didn't automatically cut off, *or* the operator failed to stop it. Either way, one stripe was twenty feet longer than any other stripe on the runway. Everything else was in perfect position except

this one stripe. From that point on, when landing west to east, there was that stripe highlighted on the approach.

I doubt if the picture of this job reached their company brochures.

Construction in general went along remarkably well considering the extreme weather conditions. Winds of more than 100 miles per hour (we measured them on our next project on Amchitka recorded in Part III), coupled with rain, hail, pellet snow, and just constant dreariness were all items to be overcome.

On one occasion, the wind had blown the power line loose at the weatherhead on the H wing parallel to our barracks. This knocked the power out to most of the camp. Our new camp was all electric, so heat and lights went at the same time. Maintenance of the camp and facilities required several personnel working full time on that alone.

At the time of this incident, the wind was very strong and heavy snow was falling. The camp buildings were all metal, and pockets of water stood over the roof -- all causing electrical work to be very hazardous. Our Corps of Engineers architect accompanied the contractor electrician (named Harry -- watch for this story later) to the top of the barracks to repair the broken power line. While crouched in the water with very high winds occurring they repaired the line while "hot", getting power back in our camp.

One more incident regarding the weather during this period of construction, then we will move on. We were now living and working in our new camp, only the drilling crews remained up at the old plywood buildings.

The winds were howling, probably in the 100 mile per hour category and a heavy snow was blowing. Ice covered the ground, and the wind chill factor was off the scale. I heard a knock on the end of our hall door just outside my room. This door was never used, and served only as an emergency exit and remained locked from the outside. I went to the door and tried to open it, but the wind was so strong I had to go for help. Together we pushed it aside just enough to allow Col. Barwick and our head of construction division to squeeze through. They

had very nearly frozen to death.

They related to us that they had ventured outside – the reason has slipped by me – and could not get back in where they were. It was necessary for them to go around the end of one of the H wings to attain a door they could open. As they turned the corner, the wind caught them on the ice blowing them several hundred feet away from the camp – and the road. This was an area where no one ever went, therefore, they knew *they must save themselves,* or they would freeze in the intense cold. Every time they would attempt to get up, they were blown down again, at times even farther away from safety than they were before. They told us they decided they must hold on to each other, as their chances of surviving were better together rather than separate.

Finally, they were able to crawl to the exit door adjacent to my room, where we got them in safely.

We learned to be very alert to the weather – it could kill you very quickly.