



Hands Across History

A joint newsletter for the White Sands Historical Foundation and the White Sands Pioneer Group.



Volume V, Letter III

August 2009

Mary Beth Reinhart And Dale Green Elected To The White Sands Hall Of Fame For 2009

White Sands Missile Range will induct Mary Beth Reinhart and Dale Green into its hall of fame on Sept. 29. They will join 39 past inductees who have received the missile range's highest honor.

Although from very different backgrounds, both inductees are noted for their ability to get the job done. During their tenures at White Sands both received high praise from their respective customers. They helped make the missile range one of the elite installations in the Army.

Mary Beth Reinhart was born in Ripley, Tenn. She graduated from high school in Morocco and earned a Bachelor of Arts degree in English from the University of Colorado.

Reinhart started her White Sands career in 1982 when she arrived to take over as Chief of the Community Recreation Division in the Directorate for Community Activities. She immediately stepped in to lead efforts to design, develop and open many new facilities that soldiers, civilians and families use.



New facilities included the Youth Services Activity, the Outdoor Recreation Equipment Issue Facility, and the lodge in Volunteer Park. In addition, she drove efforts to expand the Post Library, Bell Gymnasium and the Arts and Crafts Shop. Finally she remodeled the NCO Club, moving the recreation center program into the building, and renovated the Golf Pro Shop.

By 1994 she had made such an impact on the lives of people living and working on White Sands, she was presented the Commander's Award for Civilian Service.

In addition to facilities at the missile range, Reinhart was at the center of many new programs. When the WSMR Organization Day was first held in the 1980s, she was there to make sure it became an annual event, one that continues today.

In 1985 she worked with the Department of Army to bring the U.S. Army Soldier Show to White Sands. The popular show returns annually with the venue now at Onate High School in Las Cruces that is better suited for the crowds and makes it very accessible for the local community.

One of Reinhart's most spectacular successes is the Bataan Memorial Death March. In 1992, difficulties at NMSU endangered the small march. Reinhart led the effort to bring it to White Sands.

The first march on the missile range drew only 120 participants. In the ten years after, she was key to expanding the event. It was because of Reinhart's efforts the missile range was able to provide the hundreds of infinitesimal support details needed to host 4,000 marchers in 2002. Today it is even bigger.

Reinhart's hall of fame nomination states, "She worked 18-20 hour days in the lead-up to the event and then continued that pace throughout the March weekend. Participants and volunteers will always remember Ms. Reinhart, clipboard in hand, churning through WSMR, executing detail after detail. She led and coordinated the efforts of more than 400 staff members and volunteers. Earlier she had contacted numerous commercial firms enlisting their support for thousands of dollars in sponsorships of cash or goods and services. She garnered volunteer and staff support for water points, registration, finish line timing and water activities, t-shirts, awards and food and beverages - all crucial to the success of the March; all coordinated and managed to the Nth degree by Mary Beth Reinhart."

see Reinhart And Green, page 2

**HALL OF FAME
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Reinhart And Green ——— CONTINUED FROM PAGE 1

Reinhart retired from White Sands in January 2005. However, even in retirement she continues to play a role in the lives of people at White Sands.

She joined the Las Cruces Chamber of Commerce and was named their 2009 Volunteer of the Year. Most of her volunteer service was dedicated to the support of White Sands Missile Range and its people.

Also she is a member of the Board of the White Sands Club, an organization designed to enhance the lives of the people of WSMR and to provide scholarships for its young people. She is a past president of the White Sands Chapter of the Association of the United States Army and continues to support WSMR through AUSA activities.

Reinhart lives in Las Cruces.

Dale Green was born in McAlester, Ok. He graduated from McAlester High School in 1946 and attended both Northeastern Oklahoma A&M and Eastern Oklahoma A&M.



In 1951 Green went to work at White Sands as an electrician with the Post Engineers. In 1958 he was reassigned as a production planner in the Uprange Division. It meant moving his family to Socorro.

In 1964 he was promoted to Construction and Maintenance General Foreman and Chief of the engineers Uprange Division, a position he held until he retired. In addition, in 1972 he was appointed the commanding general's Uprange coordinator.

In his almost two decades at the helm of the Uprange engineering function, Green built and led a workforce of team players who took on priority job after priority job and made the seemingly impossible look easy. According to Col. Frank Geisel (ret), former director of WSMR's Facilities Engineers, Green pretty much always finished his projects early and under budget.

A little perspective is necessary because the Uprange engineering function in Green's time was enormous compared to today. In the 1960s and 70s, Green was responsible for roads, facilities and programs over two-thirds of White Sands, about 2,000 square miles. He had a shop at Rhodes Canyon and worked activities as far south as Northrup Strip (now White Sands Space Harbor), RATSCAT and the Sled Track at Holloman AFB. His crews were even sent TDY to do work at McGregor Range on Ft. Bliss.

At that time, with that much territory, the projects seemed endless. It wasn't unusual for a crew to work Monday thru Friday in one area and then reposition their equipment to another area to work a different project on the weekend.

To do this work Green had about 45 permanent employees and nearly 45 temporary employees.

During the 1960s and 1970s the missile range's extension areas were very busy with dozens of Pershing and Athena launches coming from Fort Wingate, N.M. and Green River, Utah. Col. Dan Duggan (ret), former WSMR director of National Range and deputy commander, says they depended on that voluntary cooperation of the ranchers to accomplish those launches.

There were often problems with jets buzzing livestock, sonic booms that broke windows and cracked walls and, occasionally, the roads were impassible in the extension areas. Duggan says Green made most of those problems invisible to him, advising him afterwards and letting him know if command involvement was necessary.

see Dale Green, page 3

Statement of Purpose and Membership

The "Hands Across History" newsletter is published by the White Sands Missile Range Historical Foundation and the White Sands Pioneer Group (WSPG). Both nonprofit organizations aim to preserve the accomplishments of White Sands Missile Range.

The newsletter is intended to keep members of both groups informed about current events and share information of common interest. The edi-

tor is Jim Eckles. He can be contacted by email at nebraska1950@comcast.net or at either address below.

Membership to either organization is open to anyone who shares their goals. However, details of membership (dues, etc.) differ between the two groups. For more information, please contact the appropriate organization and we will send it via the Post Office or email.

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Yvonne Remembers Early WSPG

Editor's Note: Earlier this year I received a very nice biographical article from Yvonne Ganske Adams about growing up at White Sands in the 1950s. I've selected sections and organized them here for you to enjoy.

By Yvonne Ganske Adams

My name is Yvonne Ganske Adams. I lived at White Sands Proving Ground / White Sands Missile Range from 1952 to 1961. My parents lived on the base till 1966 or maybe 1967.

We lived in El Paso in early 1952 after leaving Minnesota because my father heard of work at WSPG. He soon after applied and was hired as a mechanic in the automobile/truck maintenance department. He was an AAA (meaning that he was top notch with anything mechanical) mechanic by trade.

Within a few months we moved onto the base. We lived at Trailer Court 6, Space 1. We had no telephone. We weren't unusual in that, it wasn't until later, into the mid-late 50's, where most people had a telephone. My parents never had one at the base.

We got our first TV in 1953 and had 3 channels of which the quality was poor and if the wind was blowing, the reception went out. It was only on about 4 hours per day. The rest of the time we could see a test pattern. The first programs were mostly westerns and in black and white. Our television was about 15 – 18 inches in size. The set itself was big but the screen was small.

I was in the 3rd grade in a quonset hut. The new school was in process of completion and in the 4th grade I started in the new building. I continued in that school until 8th grade.

In the beginning of the 9th grade I rode the bus to Alameda Jr. High School in Las Cruces. The following year I attended Las Cruces High School and graduated in 1960. I skipped my junior year which is a story unto itself.

We were fairly isolated on the base in the early 1950's with there being only about 150 families (Army and Navy) and many many GI's as well as sailors...

Living on the desert was a new and trying experience. I missed the greenery of Minn. and the seasons were quite different. While there was rarely snow, winters were brutal

see Yvonne Remembers, page 6

Dale Green ——— CONTINUED FROM PAGE 2

As Duggan says, most of the time Green took it upon himself to simply get things done. That is typical Dale Green. He did the job without drawing any attention to himself. The Green family still remembers the Christmas Eve when Green received a call from Stallion about a problem with the propane at the mess hall.

This was when soldiers were stationed at Stallion and they lived in barracks. If the propane problem wasn't fixed, the troops weren't going to get a hot meal on Christmas. So instead of passing it onto one of his people, Green drove to Stallion from Socorro to deal with the problem himself.

Green's reputation as someone who knew what he was doing and someone who could get things done quickly was established early on. In 1970 a wayward Athena out of Green River crashed 400 miles into Mexico. To further complicate matters, the missile was carrying a radioactive source. To say the least this was a major international incident.

Green was personally picked to lead the engineering section that went by train to recover the debris and contaminated soil. Fighting rain and mud, they made quick work of the recovery. In addition they did humanitarian work in the tiny village nearby, blading roads, reinforcing a check dam and working on the primitive water system.

In the 1970s the Defense Nuclear Agency (DNA) was looking for a way to simulate nuclear blast effects using simple high explosives. They came to WSMR to conduct a series of explosions using TNT and ANFO (ammonium nitrate and fuel oil) to blast equipment.

Green's team had to prepare a blast site and areas to

place military equipment, build shelters to very strict specifications and give the data collectors appropriate pads. It was a huge undertaking that ran through several small DICE THROW tests and culminated in the 600-ton main test (one kiloton equivalent) in Oct. 1976.

The tests were so successful, DNA quickly followed with more tests like Mill Race and Direct Course. In part, because of the fantastic support provided by Green, DNA decided to establish a permanent facility (PHETS) on White Sands to continue the testing. By the time Green retired in 1983, his people had put in more than 60,000 man-hours supporting DNA.

On March 30, 1982 the space shuttle Columbia landed at White Sands. It was supposed to land on the 29th but tremendous, record-setting windstorms postponed the landing by one day. The storms on the 29th were so strong they damaged the gypsum-based runways at Northrup Strip.

Green's crews, who had already prepared the public viewing area and done much of the initial work on the runways, were called upon to fix the problem before the next morning. They worked all night filling holes, watering and reblading the two runways.

Again, Green successfully led his teams doing the preparation work that would be overshadowed by a high-visibility event.

Green retired in 1983 and lives in Socorro with his wife Alma.

For tickets to the Hall of Fame induction, Sept. 29, contact the WSMR Public Affairs Office at 575-678-1134.

Way Back When

Static Test Stand Once A Hot Spot

By Doyle Piland
From the WSMR Museum Archives

As you drive south on Headquarters Avenue, then just as the big curve to the left begins, there is a small road that goes straight ahead. This small road doesn't go far until it sort of dead-ends at some non-descript structures (see photo below). There is almost never any activity there, and certainly nothing exciting going on. Well, that's not the way it was Way Back When...



Remains of the 100,000 Pound Static Test Stand today with the black and white checkerboard block house.

This place is called the 100K (100,000 pound) Static Test Stand. The test stand was used to test fire rocket motors with up to 100,000 pounds of thrust. The first user of the 100K Test Stand was the V-2 program. The first use of the Test Stand was on March 15, 1946 with the first static firing of the V-2 at White Sands Proving Ground.

In the beginning, things didn't go all that well with the new test stand. In the Museum Archives, we have an unpublished manuscript written by Mr. Robert Bolles, a former General Electric (GE) Engineer who resigned from GE and went to work for White Sands Proving Ground. In addition to other responsibilities, Mr. Bolles was in charge of the Static Test Stand operations. From his manuscript, we get some idea of the learning curve they had to deal with. Excerpts from his manuscript follow:

"One of the major problems with the small static test stand was the fact that the blast from the missile exhaust

would melt the concrete lining of the flame bucket during each firing and it would flow out the bottom of the deflector like green lava or molten green glass.

Our first approach to saving the deflector concrete was a brute force attempt. We lined the deflector with 1/2 inch thick iron plates about 3 foot by 3 foot square. They were secured at the top of each plate with lag bolts into the concrete, and each row of plates overlapped the plates below so there was no way the exhaust gas could get under the plates (we thought). Then a water manifold was placed at the top of the deflector under the missile support structure so that the manifold was protected from the blast. A high velocity stream of water was then directed along the surface of the plates to keep them cool during a firing. This, we thought, would protect the concrete on the sides and bottom of the blast deflector from eroding during, each static firing.

see Static Test Stand, page 5



Newly constructed 100K Static Test Stand in 1946.

Static Test Stand ——— CONTINUED FROM PAGE 4

The first static firing after lining the deflector was a sight to behold. The heavy iron plates blew off and were hurled out across the desert like dried leaves in a fall breeze. The difference from leaves was that the hot iron plates set fire to every sagebrush plant they touched as they were hurled across the desert by the force of the exhaust plume.

I thought I could fix the problem since I knew all the Germans south of us at Ft. Bliss. I'd just, call them up and find out how they protected the blast deflectors at Peenemunde. Whomever I talked to, I don't remember who it was now, said they just lined the deflector with tank tracks bolted to and protected by a header up under the thrust mount. This was more of the brute force or brawny approach which we understood, so we got hold of some tank tracks and bolted them in place, checked out the water system to keep them cool and got ready for the next static firing of an engine. The tracks were only secured at the top and lay against the blast deflector. Their own weight was supposed to hold them down against the deflector surface during static firing, but to our consternation, it was a catastrophe. The tracks flapped in the exhaust like clothes on a clothesline in a windstorm, and eventually snapped off and rolled out of the deflector and into the desert.

Obviously this was not a satisfactory solution. Then it occurred to us that the Germans had probably used tank tracks because there were plenty of disabled tanks lying around during the war, and probably there were no factories making steel or iron plates other than those required for the war effort. They couldn't just order from a catalog. That may have explained why they used tank tracks but it didn't work for us and we still didn't have an answer as to how to protect the concrete.

Then we used our brains rather than following the brute force approach. We ran a number of calculations on heat transfer coefficients through various metals, expected exhaust velocity and pressure, and various water flow rates, and I went in to explain our planned approach to Lt. Col. Charles Eifler, who was the individual in charge of facility operations at the time. He questioned me repeatedly, until I realized he was just testing to see if I had confidence in my convictions. His name will come up later in another anecdote as this story progresses.

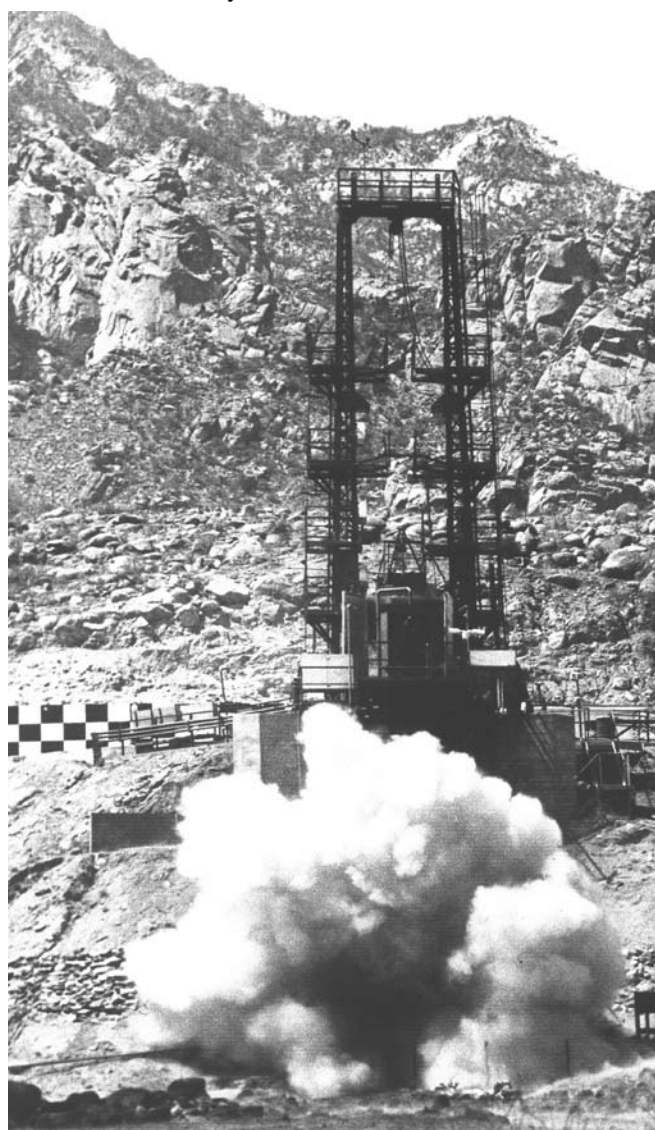
Col. Eifler finally was satisfied that I knew what I was talking about so we proceeded with our new approach. We designed, built and installed a large circular water manifold around the entrance to the flame bucket under the rocket engines, and ran 1" copper pipes from four points on the manifold, into near where the center of the exhaust would be. The pipes were orthogonally spaced or separated from each other by ninety degrees. Our theory was that since copper was a good conductor of heat, the water flow through the copper pipes would keep them from melting, and the steam generated in the center of the exhaust would break up the exhaust and dissipate its energy as well as cooling it somewhat.

It wasn't like spraying water from the outside of the exhaust plume and expecting it to penetrate. To our immense satisfaction, it worked fine. Periodically we'd go back into the flame bucket and gunnite it by spraying on a new concrete surface from a hose if need be after a number of firings.

The basic problem had been that the static test stand had been designed initially with the blast deflector too close to where the exhaust left the engine nozzles, and that was why we had been unable to get any brute force approach to work in protecting against the force of the blast, even the German's tank tracks approach."

The 100K Static Test Stand was completed in 1946 and deactivated in 1960. It was used to static fire the V-2 and later the Corporal. It could accommodate test packages measuring 8 feet in diameter and 50 feet in height. The photo below was taken in 1955 and most likely shows a Corporal motor being tested.

So, there was lots of excitement around the 100K Static Test Stand Way Back When.....



Yvonne Remembers — CONTINUED FROM PAGE 3

none the less. Not only was it cold, but the sand storms were horrible.

At that time, girls wore dresses everywhere so when we walked to school, when we could see a sand gust coming we would run to the first garage building and squat down pulling our skirts tightly around our legs. We buried our head in our laps and tried not to breath till it passed by. Then it was off to the next building, running as fast as our legs could carry us, and repeat the process.

It seems in retrospect anyway that the storms were worst in the mornings. One of my girlfriends lived in the Wherry Housing and the sand would sift through the cinder block walls. It was a fine beige powder, almost like beach sand. The kids that lived in the Navy housing didn't have as good a protection from the sand as they were in a more open area.

I recall times on War Road between WSPG and El Paso that the visibility was near zero as the blowing sand was so heavy. The sand penetrated everything. A couple times we had to park off the road and wait for a clearing to move along as the visibility was so poor. Breathing was terrible. The air was filled with dust. We often wore a kerchief cowboy style across our nose and mouth, You could feel the grit on your teeth.

On Halloween, the first year I was on the base, we kids circulated through the housing areas and among those homes where the general lived. He gave each of us a silver dollar. (I can't remember his name but I think I would recognize it if I heard it.) That was a high point. In fact I only remember only one other thing from Halloween that I received. One of our neighbors painted gourds. She lived in a trailer house near us and would start weeks ahead painting them for the kids at Halloween. We certainly went out every Halloween and begged for tricks and treats. We went all over the base. I don't think anyone worried about us being harmed to kidnapped. It was safe and no one ever questioned that.

Around the perimeter of the actual working part of the base was a 6 ft. x 6 ft x 6 ft ditch and was known as the snake ditch. Not sure what it was exactly for except that on occasion one could see a snake or two in the ditch. Also kids were cautioned to always look in our shoes before putting them on to be sure there were no critters in them. Since we lived in a trailer house, we really were not bothered by snakes and other critters in the residence, but in the housing area people did find a rattlesnake occasionally in their closet or shower. I never recall anyone being bitten, although there were likely bites at times.

After a rain storm the tarantulas would come out on the asphalt as it was warm. My father built me and a couple girl friends tall stilts to walk around on. We would walk down the road and if we came upon a tarantula we would step on them... ICK! Amazing what kids think is fun.

We also dug fox holes under the mesquite plants and played our own form of cowboys, Indians and war all at the same time. In retrospect that seems like it could have been disastrous for us, but no one was ever hurt or bitten by anything, just very dirty.

Somewhere my father got a big box of old C rations and we would take them out to our fox holes and they were our food. They came in a can like a Campbell's Soup can and on the top was a slick little can opener. Inside was usually a round of cocoa, some crackers, boullion for soup and a cookie. Of course the stuff was dry and tasteless but we thought it was great. It is amazing to me today how many people don't even know what C rations are.

In the summer there was severe, hard and fast rain storms causing flash flooding. The road off the base toward Las Cruces had numerous dips in it. Those dips had been asphalted over. The dips were actually part of the arroyos that were natural water channels during the rain storms. When the flooding would come those dips were a raging torrent of water. It came and left in a very short time, but was deadly if a car was caught in the dip.

Sometimes during a storm Dad would drive down near the dips and we would watch the water come racing and cross the road through the rest of the arroyo. It made a frightening sound and then suddenly it was over and the water drained away into the desert sand. Those dips now have bridges across them.

We had to create a lot of our own activities and one was to sweep pathways on the ground. If we swept the sand away, the ground underneath was hard and we created roads and rode our bikes on them and set up cardboard boxes as our buildings. We were about eight years old I would say. We would play for days on them.

Clamp-on roller skates were all that was available in those years and we spent endless hours skating on the roads. Most of us got to be pretty good skaters too. Of course there were the accidents where we were ripping down the road and oops, a skate clamp came off the shoe. Then there were skinned knees and elbows and hands – we still were in dresses. I never had a pair of jeans till I was an adult.



Yvonne in 1960.

see Yvonne And Bikes, page 7

Yvonne And Bikes ——— CONTINUED FROM PAGE 6

Bicycles were our biggest mode of transportation as kids. We went everywhere on bikes and most times with someone on the handlebars or carrier on the back fender. There was the occasional bike accident too, which again led to skinned legs and arms.

I learned to play cards pretty young and several of us girls played Canasta all through high school and almost every day in the morning during the summer. In the afternoons we went to the pool.

The base was pretty much self contained. There was a dispensary for most minor sickness and injuries and dental care, a commissary for grocery shopping, a PX for the purchase of everything from cameras, cigarettes, tools, dishes, and clothing. In many ways it could be compared to a small K-Mart of today.

We had a theater and for 10 cents one could see a movie complete with military news and a cartoon. Candy bars were five cents. There was an all purpose chapel and depending on the denomination, religious articles were added or taken away. There was a school which was very up date. It had everything by the standard of the day. We had a frosty freeze ice cream shop directly across from the pool.

The pool was for both the GI's and families. In the summer it was packed most every day. We had to walk through a foot bath before going into the pool area. It smelled like Lysol. I don't really know what the solution was but it was an effort to reduce the incidence of athlete's foot.

There was a bank. There was the Officers Club and a NCO club, neither of which we were part of since we were civilian personnel. There was a building called the Rocket Room and as a teenager we often had our teen club dances

there. It was really just a very fancy quonset hut.

I was raised Roman Catholic and attended Mass every day during Lent. There were five of us kids that went every morning. We would walk to church, attend Mass and then walk home to catch the bus for school in Las Cruces.

One day we just sort of developed this idea and carried it out – we went into the sacristy after the Mass (everyone was gone by then and the chapel was left open except at night) and we ate all the unconsecrated hosts. The next day of course there were no hosts.....the Chaplain was a bit mystified but never confronted us. It would have been a sure thing, as we were the only teenagers in the church in the morning. Tough call! His name was Father Lightcap. He went on to become a monsignor. He was really fun. Drove a green VW beetle convertible which was a novelty at that time.

By the time I became a teenager, some wonderful parents decided that we needed a teen club and established one. We went on picnics to the WS Monument, hiking up the Sugar Loaf mountain area, took bus trips to Carlsbad Caverns and had dances a couple of times a month. Our parents had to act as chaperons. We danced to all the great rock 'n roll of the 1955 era. In high school kids from Las Cruces could be invited to come as well, so our social circle was increased.

There really wasn't kids getting into any kind of trouble on the base. It was always very clear that trouble wasn't tolerated because it often could mean 'the end of Daddy's military career' or in my case, my parents jobs. That threat was a huge deterrent as well as motivator to behave.

We'll continue Yvonne's story in the next issue of Hands Across History.

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The Back Page



Indian bedrock mortars found above Sweetwater ranch on the south side of Salinas Peak. Photo by Jim Eckles.