



# Hands Across History



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

Volume XIV, Letter II

May 2018

## Schmidt/McDonald Ranch House Gets Much Needed Work

By Bill Godby

In 2017 the historic McDonald ranch house at White Sands Missile Range received some overdue restorations and repair.

The ranch house is a contributing element of the Trinity Site National Historic Landmark, where the detonation of the first atomic bomb took place. The ranch house was utilized by the Manhattan Project scientists to assemble the plutonium hemispheres of the weapon in July 1945.

It was built by Franz Schmidt, a German immigrant, in 1913. George McDonald acquired the house in the 1930s. McDonald's brothers Dave and Ross owned the nearby ranch utilized as Base Camp for the test. Both ranches were occupied until approximately 1942, when all the ranches were vacated to allow for the area to be utilized by the Alamogordo Bombing Range for target practice. Following the Manhattan Project, the ranch was abandoned, suffering major deterioration.

In 1982, Maj. Gen. Niles Fulwyler visited the ranch house and recognized its historic value. Fulwyler vowed to restore the ranch house, which was completed in 1984. In 1995, the 50th anniversary of the atomic test, efforts were made to again restore and repair a decade of weathering.

Since 1995 only minor work has been done due to a struggle for funding. In recognition, the WSMR Garrison provided funding to proceed with necessary repairs. Project lead Bill Godby utilized the Cooperative Ecosystem Studies Units network, administered by the Fort Worth Corps of Engineers, to contract CESU member Cornerstones Community Partnerships of Santa Fe. Cornerstones historic restoration expert Jean Fulton took on the project with the assistance of Cornerstones training coordinator Nicole Kliebert.

The scope of the project included reconstruction of an entry ramp, built by the Manhattan Project, the porch, railings and banisters, windows, stucco repair and replacement, rock wall repair and implementing a site drainage plan.

Fulton spent many hours going through historic photos and previous restoration records to ensure historic accuracy for repairs, with particular attention to the stucco. She performed many tests to find a suitable color and texture to match.

Cornerstones, a nonprofit, is organized to provide workshops that incorporate interns and individual volunteers, working alongside experts, to perform cost-effective restorations and repair to historic structures in a learning environment. Both Fulton and Kliebert reached out to identify support for the project between 2016 and 2017. Partners included students from New Mexico State University Department of Engineering and Survey Technology, led by professor Sonya Cooper, providing the site drainage plan. Cottonwood Gulch Expeditions, an outdoor educational program in New Mexico, provided a single day of volunteer labor, 17 strong, to execute the drainage plan. Last, and perhaps most important to the project, were the dedicated team of interns and volunteers.

The ranch house is several hours north of the base cantonment and an hour from Socorro. Most of Fulton's crew stayed uprange three to four days at a time while completing the work, enduring multiple range evacuations for missile tests that began as early as 4 a.m. Weather during the project workshops, summer and fall, was extreme, often exceeding 100 degrees and included snow flurries, high winds and rain. Despite the challenges, spirits remained high and the work got done. Visitors to the ranch during the last open house got to see it.

# Three More Pioneers Are Taken From Us

By Frances Williams

**In Memoriam:** We have just lost three more of our pioneers - Carlos Bustamante, Christopher (Chris) McDonald and Austin Vick. They worked at White Sands Missile Range for many years, and made many significant contributions in the fields of engineering and safety and security in the operation of the missile range.

**Carlos Bustamante**, served as the Chief of the Data Collections Division of National Range, and was also a member of the White Sands Missile Range Hall of Fame. He worked to establish the White Sands off-range flight corridor which allowed for the launching of test missiles from places like northwest New Mexico and southern Utah. One of his biggest challenges came as the negotiator between White Sands Missile Range and the Mexican government when two missiles strayed off course and landed in Mexico. His fluency in Spanish as well and his high level management expertise, technical knowledge of the missile range and diplomatic skills ended in successful negotiation in retrieval of the missiles.

**Chris McDonald** initially served as a security specialist at WSMR, advancing to the position of Information Systems Security Manager. He was considered one of the top specialists and analysts in his field, providing support to WSMR as an advisor to the commanding general and his staff, but also to other Army organizations, the Navy and Department of Energy. His expertise was often called upon to resolve highly technical issues

regarding safety and security in the resolution of problems in these areas. He and his wife Mary Bochman, who served as the Federal Women's Program Manager for WSMR were both generous supporters of the WSMR Museum Foundation.

**Austin Vick** is another outstanding WSMR pioneer who passed away in April. Austin came to work at WSMR in 1950 as an ordinance engineer with the Ballistics Research Lab. He enthusiastically plunged into his work and made many significant contributions during his years there. His dedication helped make WSMR the leading test facility in the United States.

The big foot print he left included his directions, management, planning and inventiveness in Data Collection. Using missile range optical instrumentation he participated in photographing the Soviet Union's Sputnik as well as using various types of instrumentation during other missions involving missile and rocket testing. He was a leader in planning off site testing providing the Range expansion of testing to Ft. Wingate, New Mexico, Green River, Utah and Mountain Home, Idaho. He also participated with New Mexico State University in the development of the cooperative education program for engineers and scientists, which provided the skills that would be necessary to meet the personnel requirements badly needed for the continued operation of WSMR's mission. Many of these graduates went on to hold top management positions at the Range.

**See Help Needed To Honor These Men, 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](mailto: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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## Help Needed To Honor These Men ——— CONTINUED FROM PAGE 2

He cofounded the Pioneer Group and served as President for eleven years. For his work in recruiting and mentoring women and minorities he received the Secretary of the Army's Equal Opportunity Award. Notably he designed the Logo for WSMR, and also helped to establish the missile range's Hall of Fame, honoring those who had made outstanding contributions in their fields while working at WSMR. Austin was inducted into the Hall of Fame in 2001.

**The WSMR Museum:** A contribution has been made to the WSMR Historical Foundation, which supports the missile range Museum, to honor these three pioneers and their commitment to our nation and WSMR.

I would like to encourage the White Sands Pioneers and those working or who have worked at WSMR to make a contribution to the Museum's Historical Foundation. Working together we can

## Miss America Visited WSMR On Oct. 31, 1965

On Oct. 31, 1965, Vonda Kay Van Dyke, Miss America for 1965, visited White Sands. She gave a talk at the Post Chapel in the afternoon about her experiences leading up to winning the title and what happened to her afterward. That evening she gave an hour-long show in the Post Theater singing and performing her ventriloquist act.

Van Dyke grew up in Phoenix where, as a teen, she was runner-up two years for the title of Miss Phoenix. In an interview with the *Wind and Sand* newspaper she said she was discouraged and thought she might quit entering pageants.

When she was asked to compete in the Miss Tempe, Ariz. contest she was planning to say no. She said with a smile, "I went out anyway and won hands down. I was the only contestant."

That win triggered something and she went on to take the Miss Arizona title and then the Miss America pageant in September 1964. At the big event, not only did she win the crown, she was also named Miss Congeniality, the only person to ever take both honors in the Miss America contest.

Her sense of humor must have been a major factor in winning the congeniality prize. In addition to the story about the Miss Tempe title, she

continue to provide support and assistance to tell the story of those who came before and point out what a bright future White Sands has. We are a 501(c)3, so your donation is tax deductible.

The Foundation is staffed by volunteers, and we want to continue our education and other programs in reaching out to those who should be aware that WSMR is one of the most historic places in the world -- the birthplace of the Atomic, Space and Missile Ages. It was because of those who are members of the Foundation, and those who provided donations that we are now able to build the new addition to the museum.

The museum is visited by 65,000 people in a year. That is a large number of people we able to reach and touch with our story. Only your help can let us continue our work. Please send you donations to: White Sands Missile Range Historical Foundation, P. O. Box 171, WSMR. NM 88002.

told the *Wind and Sand* that after being crowned Miss America she was very nervous. They arranged her first autograph session where she sat under a big banner and people lined up to get her to sign a photo. She related there were a lot of teenaged boys in the queue. One came up and politely said, "Can I have your autograph Miss America?" She wrote out her whole name and gave the photo back to the young man. He stared at her signature and read it out loud to his friend. He then nudged his friend and said, "I told you her last name wasn't America."



**Miss America Vonda Kay Van Dyke being interviewed by a WSMR *Wind and Sand* reporter.**

# Laser Research Relics Still Standing

By Jim Eckles

**NOTE: I wrote about the Atmospheric Sciences Laboratory laser domes while working in Public Affairs. I then took the material and reworked it for “Pocketful of Rockets” which is reproduced here. Thanks to missile range archaeologist Bill Godby, a few months ago I got to visit the second ASL dome which is located on Mule Peak in the Sacramento Mountains. I tagged along when he went to the peak to check on the range’s T4 telescope that is still up there. He is making arrangements to remove it and bring it to the WSMR Museum. You’ll note in the article I had a little trouble with security when the piece first appeared in the newspaper.**

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At White Sands the use of lasers varies from pointers used in conference rooms to laser weapons capable of shooting down jets and missiles. My first encounter with lasers was an abandoned research facility in the Organ Mountains behind the main post.

Four thousand feet above the WSMR main post sits a moldering Atmospheric Sciences Lab (ASL) research station. It has no name and is situated on a high point south of Sugarloaf Peak and east-northeast of Organ Peak. In the 1970s, ASL scientists and technicians used the facility to monitor and study the atmosphere.

According to Alex Blomerth, a former ASL division chief, the site was abandoned in 1977. However, there are still two buildings, some debris and what appears to be miles of cable and wire left on the mountain.

For years, the old optics dome that was left behind was visible from the main post early in the morning. The white paint reflected the low sunlight and made it easy to see. The paint has peeled now, bushes have grown up around it, and most people need a pair of binoculars to pick it out.

The dome is eight feet in diameter and weighs about 4,000 pounds. It was airlifted to the mountaintop in May 1970 by a CH-54A helicopter, also known as a “skyhook.”

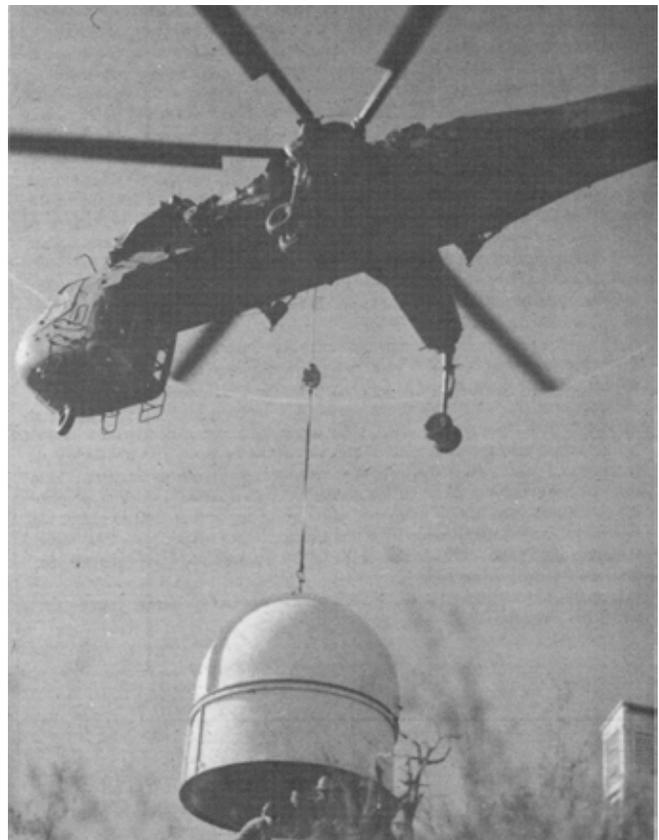
The chopper was assigned to Fort Sill, Okla.

and was flown in for the job because it had a payload capability at sea level of something like 20,000 lbs. and an operational ceiling of more than 18,000 feet. It easily handled the task at around 8,400 feet.

The researchers placed a larger 16-foot dome across the Tularosa Basin on Mule Peak in the Sacramento Mountains. The domes sheltered helium-neon lasers and associated equipment. At night the scientists flashed laser beams back and forth across the 80 miles of desert air above the basin. The operation was done to study the effects of the atmosphere on laser beams.

Specifically, they looked at how much the beam spread traveling 80 miles and the amount of scintillation. Scintillation refers to rapid changes in the brightness of a light source due to the atmosphere. Most people have seen this phenomenon at night when they see stars appear to flicker or blink.

**See Lightning And Deer Problems, page 5**



**CH-54 chopper delivers astro-dome to the ridge just west of the main post. ASL photo.**

# Lightning And Deer Problems — CONTINUED FROM PAGE 4

A quarter of a mile from the dome in the Organs is the second building, a small shack once used to house instrumentation. When the site was not manned, recorders kept track of data for the scientists. The equipment was powered by a thermoelectric generator which converted the heat from burning propane directly into electricity without any moving parts. When manned, power came from a gasoline generator.

In addition to the laser research, Radon Loveland used the site to look at the flow of electrical current between the air and the ground during a storm. Four remote instrumentation sites were set up on the ridges radiating from the shack. Data was fed back to the recorders in the shack via cables.

The study came with a number of special problems. Lightning strikes often burned up equipment plus deer liked to nibble on the cables. The cable insulation was polyvinyl chloride that had a salty taste and was attractive to deer and rodents. Loveland said he always made sure there was a salt lick on the mountain to deter deer from eating his wiring.

Other studies on the mountain included cloud physics research and the effects of lightning on radio communications. The latter study was done by Oklahoma State University. Radio receivers set at different frequencies were placed in an airplane and then flown around thunderstorms when they were active over the Organs. Transmissions were made from the mountain sites through the storms to the airplane.

Some experiments never quite got off the ground. Personnel worked to put up a small wind

powered generator but it was blown down in the first storm.

As part of their lightning studies, Oklahoma State scientists wanted to build a ring of silver tipped brass rods on top of the mountain. They asked for a volunteer from ASL to sit in the middle of the ring during a thunderstorm and record lightning strikes. No one raised their hand.

Because there are no roads or trails within

miles of the mountain facility and the slopes are incredibly steep in places, men and equipment were usually helicoptered back and forth. Skyhooks from Fort Sill carried the concrete for foundations and the heavy equipment to the site.

On one of those ferrying

flights, one of the two engines that power a skyhook stalled. Luckily for the crew and passengers, the pilot was quickly able to restart the engine and get down safely.

The ASL personnel learned very quickly about one electrifying hazard involving the helicopters. As the helicopter blades churned through the dry air, they and the body of the chopper built up a large static electrical charge. If someone on the ground grabbed the cable hanging from the helicopter before it touched the ground, the electrical charge would travel through their body to the ground. It could be quite large - enough to knock a person on their rear end. It was a very rude awakening.

Sometimes the men had to walk off the mountain. Loveland hiked out once just to see if it was possible. Others walked down because weather grounded the helicopters.

**See Walking Down From The Top, page 6**



**The abandoned ASL astrodome near Sugarloaf Peak in the Organ Mountains. Photo by the author.**

## Walking Down From The Top — CONTINUED FROM PAGE 5

It was a rough trip because of the steep slopes covered with loose rock in places and brush in others. Then there was always cholla and prickly pear cactus ready to stab ankles and legs, leaving whole clumps of cactus to be gingerly removed. It was the kind of trip that required care and caution to negotiate safely.

Eventually the high cost of airlifting men and materials and the difficulties in getting the needed equipment killed the mountain top facility. Now, the only people who see the buildings and debris are those willing to make the long climb up from the BLM's Aguirre Springs Recreation Area.

Technically the site is just inside the northwest corner of Fort Bliss. Very few people at Bliss know about their boundary in the Organ Mountains. Years ago lightning struck in the vicinity of Organ Peak and started a brush fire.

The public assumes those peaks are on the missile range. When we got calls from the news media about fighting the fire, I pointed out that the land actually belonged to Bliss. Initially when called by reporters, Bliss officials denied it was their property or problem. Eventually someone at the base found the right map and they began dealing with the fire and answering questions.

Writing about this laser facility in the 1980s earned me a visit by someone from the WSMR security office. He wanted to know where I'd gotten the information about the laser site and what else I knew.

I asked why he was investigating and he explained the word "laser" was on their alert list and they were required to investigate anyone's use of it. It all seemed rather silly since ASL wasn't in the business of developing or testing some new laser technology and, by then, the effort was ancient history. Certainly the data might have been sensitive but nobody was talking results.

I suspect security's interest was a result of the big push in the 1980s to actually develop laser weapons as part of the Strategic Defense Initiative (SDI), commonly referred to as the Star Wars effort. New weapons are normally kept under wraps for sometime until their bugs are worked out. That was not the case with Star Wars.

Sometimes there are reasons to publicize a weapon's capabilities especially if it is doing well in testing. In my experience, that is done mostly when the program needs more money or is in some danger of being cancelled. The Pentagon is hoping to gather enough positive publicity to make it unpopular to cut the funding.

Of course, there can be other reasons like strategic political ones. However, when you think about what happened, the Stars Wars programs were calculated to be a very public effort. At our level at White Sands, most things were classified but there was a steady stream of information gushing out of Washington about these fantastic new weapons America would soon have to defend against Soviet missiles.

It turned into one of the great examples of "perception equals reality." The great publicity that surrounded the various laser and missile programs that made up SDI basically pushed the Soviets to the point they had to cry "uncle."



**The Mule Peak astrodome today. Photo by the author.**

# The Way It Was According To Our Pioneers

*Editor's Note: The following letter came in from Charlie Moss after our last newsletter.*

Jim,

While surfing the net I ran across a report televised on one of the TV stations in El Paso that showed one of their reporters near the top of San Augustine pass reporting on the high winds that the area was experiencing. It must have been a slow news day because, as you know, high winds are not new to this area of NM.

Anyway, whether the wind is worse now than when I was stationed at WSMR in the mid 1960's, the TV report reminded me of one of my WSMR memories of long ago. As follows: On 15 Oct 65, a man named Harpin was pulling an Air Stream trailer behind his pickup truck while traveling in the direction of Alamogordo, down hill from the top of the Pass. On the way down the mountain at a location about one third from the top of the Pass to the Hwy 70 exit to WSMR, a gust of wind pushed the truck and trailer off the roadway, causing both to crash, coming to rest on WSMR property.

As was standard procedure in those days, if a traffic accident occurred on Hwy 70 between the Pass and the entrance to White Sands Nat'l Monument, the WSMR Military Police assisted NM State Police in the accident investigation. The accident resulted in the death of Mr. Harpin who was transported by ambulance to McAfee Army Hospital.

Sp 4 George Davis was the MP Traffic Investigator for WSMR at the time and he took a series of army photos of the roadway and where the truck and trailer came to rest on WSMR property. One of the photos is a photo of the deceased Mr. Harpin as he lay on a gurney at McAfee.

As stated, the reason for this recollection is the wind report from atop the pass by the TV reporter, but the essence of the recollection is to note the history of the cooperation that the Army "city" of WSMR had with the state police and county emergency agencies in those days. It is probable that this cooperation between WSMR and civilian agencies was due in part to the isolated area of

Hwy 70 as it ran through the Tularosa Basin, and the fact that WSMR was located in an area where it could provide quicker emergency services than civilian agencies.

SP4 Davis was a resident of NM and after his separation from the Army, he came back to WSMR and worked for the security agency that was a part of the Security Division at WSMR in the 60's. The last time I talked with him in the early 1990's, he was still employed in security at WSMR and I assume he retired from his job at WSMR. At the time he was a permanent resident of Las Cruces. I'm sure, if he is still alive, that he has many MP/Security recollections of his time spent at WSMR.

Of course mine is just one recollection of the many, many thousands of recollections that the people who served and worked at WSMR had over the years...especially during the time when WSMR was a very active Army post.

While I didn't know it at the time, I think this fatal accident occurred not too far from the home place of Pat Garrett who lived on the other side of what is now Hwy 70. This tidbit about Garrett's residence, I learned from your book.

Best Regards,  
Charlie

**Note:** Instead of being identified as Military Police attached to Hq & Hq, USAG, WSMR, a Military Police Company was stood up by DA in early 1965 and became the 259th Military Police Company (Service) in the summer of 1965. I think the official date was 1 July 65. Somewhere in my personal memorabilia I have a partial set of orders stating the official date of the beginning of the 259th at WSMR.

**In 1965, the missile range was hooked into AUTOVON or Automatic Voice Network. It was the start of direct in and out dialing tying WSMR to other military installations and government facilities throughout the world.**

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## **The Back Page**



**Missile range archaeologist Bill Godby demonstrates that his crank still works on the T4 telescope up on Mule Peak in the Sacramento Mtns. Godby is working to have the derelict instrument transplanted to the WSMR Museum. If you know anything about the telescope and the operation of site, call Bill at 575-678-6003.**