Notes On Recent White Sands Museum Activities

By Darren Court, Museum Director

Fall is normally a busy time at the WSMR Museum. In addition to our normal visitors, we usually see an increase in people arriving in recreational vehicles as well as an increase in requests for tours and participation in local events. One such event is the Border Regional Archives Group’s annual bazaar.

For the second year now, the WSMR Museum developed a small exhibit of primarily archival materials to educate the public in the borderlands region of the installation’s role in the nation’s defense, and its vital importance in several important historical events. Last year’s bazaar was held at the New Mexico Farm and Ranch Museum in Las Cruces. This year, we traveled a bit south as the event was held at the student union building at the University of Texas at El Paso (UTEP) on Saturday, October 13.

About two dozen exhibitors – including local library systems and country clerk’s offices, museums, archival holdings, and universities – participated with WSMR once again standing out and setting the standard for these exhibits. This year two of our archivists, Gerry Veara and Debbie Walters, planned and designed the exhibit – as well as moving the material to UTEP, setting up, and manning the booth.

This year, we focused primarily on four topics that give a nice overview to the variety of testing on WSMR – Trinity Site and the first atomic bomb, the landing of Space Shuttle Columbia at WSMR during the STS-3 mission in 1982, the Air Force Athena missile shot from Green River, Utah that “overshot” the range and landed in Mexico, and WSMR’s testing of the atmospheric probe as part of NASA’s Galileo program to research the atmosphere of Jupiter. Volunteer Dr. Eugene Dirk worked on Galileo and it was his idea to include it to teach the public that WSMR is not just about weapons testing – a lot of valuable scientific research is conducted here, as well.

Unfortunately, this year’s attendance was down considerably due to parking issues on the UTEP campus and we only had about 100 visitors. Last year, in Las Cruces, we had several hundred visitors stop at our display.

In addition to our own outreach and educational mission, the WSMR Museum serves the installation in a number of other ways, one of which is supporting the Public Affairs Office by providing a subject matter expert for the Manhattan Project and the test at Trinity Site. As well as being open to the public twice a year, the PAO office regularly brings small groups to Trinity Site throughout the year – in particular, military units and students from a diversity of educational courses.

On October 10, the museum provided a subject matter expert for a group of students from the Air Command & Staff College School of Advanced Nuclear Deterrence Studies at Maxwell Air Force Base, Alabama.

The Battle of Hembrillo Canyon was an engagement of the Buffalo Soldiers of the 9th Cavalry Regiment with the Warm Springs and Mescalero Apache of Chief Victorio in 1880, and was the last real engagement the Army had with the Apache in New Mexico. The museum has developed, over the last few years, a

See Staff Rides To Hembrillo, page 2
Frances Williams Takes The Reins Of The Foundation

Frances F. Williams has assumed the office of President for the WSMR Historical Foundation. She has been with the Foundation for 15 years serving as Vice President and fund raiser. She is also a pioneer having worked at the Range for thirty six years.

Her assignments included Transportation Accountable Property Officer, Administrative Officer for Instrumentation Directorate, Federal Women’s Program Manager and Director of the Equal Opportunity/Equal Employment Opportunity Office. She is also a member of the Hall of Fame at WSMR, and a recipient of the Secretary of the Army’s Award for Equal Employment Opportunity.

Frances said, “This is an exciting time for the Foundation. So many people have worked for more than 20 years to replace the temporary building that houses the museum and now we are almost to the point of building that permanent facility. Foundation members have worked long and hard to see this accomplished and our day has finally arrived. We are also thankful to our membership, the support of a long line of Command Groups who have served at WSMR, the communities and contractors who have supported us in this endeavor.”

Staff Rides To Hembrillo Battlefield — CONTINUED FROM PAGE 1

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Staff Rides To Hembrillo Battlefield

comprehensive staff ride/tour of the site of the battle, which lies approximately 40 miles north of the main post area in the San Andres Mountains which make up the western boundary of the installation.

We normally do this event 6 to 8 times yearly and this past June saw the soldiers of 3/6 ADA, the test detachment on WSMR, conduct a trip for installation personnel as part of “WSMR Week.” We have conducted this event for numerous military and ROTC groups, historical societies, archeological societies, and local civic organizations.

Recently we have seen an increased interest in the site from elements of the 1st Armored Division at Ft. Bliss. We currently have requests from two units to provide materials, guidance, and a subject matter expert for trips in late November/early December. This would involve approximately 140 officers and non-commissioned officers from Ft. Bliss. We are constantly revising the material and our briefings and hope this becomes an important part of the outreach and educational opportunities we provide to the local civil and military communities, especially Ft. Bliss and 1AD.

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 editor 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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Hall Of Famer Ed Noble Also Stumbled Onto White Sands

By Jim Eckles, Editor HAH

Jim Noble recently sent me an email to say that I might like to add his father Ed Noble to the list of the White Sands Missile Range Hall of Fame members who got to the missile range by sheer luck or accident. He had read my article about Placido Trujillo being the 2018 WSMR Hall of Fame inductee and how both Placido and Austin Vick came to work at White Sands by chance. He said his father had a similar experience.

I called Ed in September and arranged to visit him at his home in historic Mesilla Park. Although Ed is now 91, he is still living on his own in the house he has called home for decades and where his two boys, Jim and John, grew up and learned to play tennis. More on tennis later.

I went to interview Ed on September 25 and we spent a couple of hours in his home office. A scientist by nature and training, Ed was very meticulous during our talk about those early days. He had records out on his desk for reference so he got the dates and titles correct. And he approached his recollections with deliberate care, making sure that whatever he told me made sense, that there was a logical progression from A to B to C. There was always a reason why something happened and he wanted me to understand what led up to that event.

First of all, Ed was born on May 1, 1927 in Liberty Hill, Texas. While Ed was still an infant, the family moved to a farm in the area around Bishop, Texas – a small town about 35 miles southwest of Corpus Christi. His father raised cotton, some grain and eventually flax.

They then moved to a farm near Kingsville, Texas, a larger town a few miles further south. He went to early grade school there. They then moved back to farm near Bishop where Ed finished grade school and graduated from high school.

He was good at math and competed in the Texas Interscholastic League’s district meet. In fact, in high school, he taught the Algebra II class. They didn’t have a certified instructor so the principal acted as the teacher in name and Ed taught it with the assistance of two girls who knew their way around the equations.

To be accredited, they had to submit copies of class test papers and other data to the Texas Education Accreditation Board. The board approved the application and all the students received college entrance credits for the class.

See From Chemistry To Physics, page 4
Ed played football in high school although he said he didn’t particularly care for it. What he liked was tennis. Unfortunately, the school didn’t have a tennis team. However he was lucky and was asked to play with a group of adult men who regularly played amongst themselves. As a youngster, he quickly learned and got much better. It was for fun but when he left for college he was a fairly skilled player, good enough to hold his own against serious adults.

His good grades in high school earned Ed a full ride (free tuition and books) at Texas College of Arts and Industries in Kingsville. The school is now part of the Texas A&M system.

Ed majored in chemistry and tacked on a minor in physics. To earn spending money, he tutored others in both subjects. He said the money was quite good.

When Ed was in school WWII was raging on two huge fronts. He told me about his efforts to have enough college credits when he turned 18 so he would qualify for Air Force pilot training. This part of the story was important because it affected his start at White Sands some years later.

Basically, Ed’s call-up date for the military was going to be May 30, 1945. In talking to officials, he learned that if he was a college junior when he entered the service, he could be considered for pilot school. So he worked hard carrying all kinds of extra hours to make sure he had enough credits by then.

In the end, his efforts were futile because they found out he was partially color blind. He was told he could be a gunner or a bombardier, but he wasn’t going to be a pilot. After he completed his basic training he was assigned to become a cryptographer. This got him a top-secret clearance which proved valuable later. He then spent about eight months at Langley Air Force Base before receiving an early-out discharge in September 1946. The war was over and they really didn’t need any more new recruits.

Ed hustled back to Texas A&I to finish work on his degree. He almost didn’t make it. As he was driving to campus from Fort Sam Houston, near San Antonio, to enroll on the last day to register for classes, he was delayed by flooded roads. When he got to the administration building they were just locking the door. Luckily it was the college registrar, who Ed knew, and he took the time to reopen the building and register Ed for the fall semester.

In May 1948, Ed graduated with his degree in chemistry. He married Marjorie Ann Smith in August and went to work teaching high school science in September at PSJA High School in Pharr, Texas, a small town about 55 miles northwest of Brownsville. Marge taught in the PSJA system as well.

After Ed completed the requirements for the chemistry degree, he started working seriously on his physics education. His interests had shifted and he would look to physics as his specialty after 1948. He earned a master’s degree in physics and education administration in 1951.

Ed taught at Pharr for four years. In addition to his teaching duties he coached the school’s tennis team. He is proud that in each of those four years some of his tennis kids went to the state championships – they won three times and were runner-up once.

In the summer of 1952, Ed’s life took an abrupt turn. Looking for more pay, he’d applied for and been offered a job at a Louisiana oil refinery to work as a chemist. It was going to pay $6,000 a year.

Before formally accepting the new job, he was asked by Bart Goode to drive him to his new job at White Sands Proving Ground, over 750 miles away.

See Offered A Job That Day, page 5
Offered A Job That Day

Goode was carless and was following Randy Becker, another Texas local, to the New Mex. proving ground.

Becker had left the area a few years before to work at the McDonald Observatory near Fort Davis, Texas. His experience working with telescopes at the observatory then landed him a job at White Sands where optical tracking using telescopes was just beginning. Becker was friends with Goode and told him he liked White Sands and encouraged Goode to apply.

Goode got a job and was to report the first workday in June 1952. Ed drove him to New Mexico and then to the proving ground on the morning of Monday, June 2. While Goode was checked in, Ed talked to the personnel people about possible jobs. When Ed explained his background was in physics – he'd pretty much disowned chemistry by then – the specialist sent him to talk to Ben Billups.

Billups, one of the missile range’s original six hall of fame members, was associate director for planning in the old Flight Determination Laboratory. It didn’t take long before Billups offered Ed a job that day.

The job offer wasn’t very good financially. The government didn’t count his four years of teaching as work-related experience. He was going to have to start at the bottom as a GS-5 - much less pay than that chemist job back in Texas. However, Billups said he would quickly go through the steps and would be a GS-9 in no time. More importantly to Ed was the fact that Billups promised him he would be using his physics education on the job. That sold Ed and he signed on.

Since this was totally unexpected for Ed, he had to tend to details back home before he could physically start. Billups told him there wouldn’t be a problem. They signed up Ed to begin his government job on June 3, 1952 and then put him on 30 days of leave without pay. Billups explained that while he took care of moving, he wouldn’t be getting paid but he would be earning time as an employee. Ed actually showed up for work on July 7, after the Fourth of July weekend.

When Ed arrived, he found out he’d be sharing office space with Billups and Clyde Tombaugh, both members of the original class of White Sands Missile Range hall of fame members. Next door was Frank Hemingway, another of the original six.

See Raining Loki’s At SMR, page 6
He was immediately put to work supervising the construction of the Small Missile Range that was being built to test the new Loki rocket. The SMR included a launch area and down-range instrumentation sites.

Loki was a shotgun approach to air defense based on a WWII German design. The idea was to simultaneously launch dozens of smallish (3 inches by 63 inches) unguided rockets at a formation of bombers. Each rocket was equipped with a small warhead designed to explode on impact. The rockets were to be housed in a magazine that initially would hold 64 rockets, later reduced to 46 units.

According to Ed, when that many rockets were launched as a salvo in close proximity to each other, they often collided which deflected some into other rockets and it turned into a chaotic mess with rockets going almost anywhere. Because of this, the camera bunkers and crew shelter for the Loki tests were hefty concrete structures to provide protection from stray rockets. You didn’t want to be standing outside anywhere nearby during one of the mass launches. In calendar year 1953, 1,157 Lokis were fired at White Sands.

Because of the heavy workload, the field crews were often short handed in those early days. Ed sometimes worked extra overtime shifts for Loki firings with Jed Durrenberger and his camera crews. Jed was inducted into the WSMR Hall of Fame in 2004.

The Loki was never fielded as a weapon but all of those Loki boosters were used for decades around the world. They were used to dispense chaff at high altitudes and tracked by radar to determine upper wind directions and speeds. At White Sands they were also used for decades to collect upper atmospheric data – up to an altitude of about 40 miles.

Ed immediately went to work on the Loki project because he already had a top-secret clearance. All the White Sands security people had to do was resurrect it. Poor Bart Goode, on the other hand, had been at White Sands for over a month when Ed came back to start work but was stuck flying a desk. His clearance was still being processed and he was miserably pushing paper.

What is remarkable about Ed’s career at White Sands is how fast he advanced. He basically worked his way up through the optical side of what is now National Range. The organization and the titles were in constant flux in the 50s as the test range was truly being built. It is a laundry list that is irrelevant to this story. What is important is that Ed Noble steadily advanced and was promoted to GS-15 on September 12, 1961. In nine short years he rose like a rocket through the ranks to the top, regular government salary level at White Sands. It is believed to be a record for advancement at the missile range.

I asked him what he thought made for such rapid advancement – why him. He thought a bit and said he wasn’t afraid to speak his mind. And when he did speak up, those above him seemed to like what he had to say. He told me when he was still a GS-11 employee, the commanding general liked his briefing style and insisted that Ed give a number of important briefings. This included briefing at Aberdeen Proving Ground Headquarters, the proving ground’s higher headquarters.

As he thought about it, Ed said his four years of teaching probably trained him for standing in front of a group and to speak with confidence and authority.

Another plus was that he was loyal to the organization and looked out for its best interests.

Finally, he said he seemed to have a knack for leadership. It didn’t bother him to be the boss and that when he went home each night, the problems of the range stayed behind on his desk.

If the rapid rise was one proof of Ed’s leadership qualities, what he did in Las Cruces is another example. His first house was in the Dale Bellamah subdivision in town. He felt the subdivision was poorly planned and executed, that the city didn’t provide enough control over how subdivisions were built within city limits. He advocated for a civic league to get the streets and sidewalks improved.

This quickly led to his election to the Las Cruces city commission in 1958. In 1962 his fellow commissioners chose him as mayor of the town. In addition to passing ordinances to organize and improve development in Las Cruces, he also went to work on the relationship between the missile range and the city.

According to Ed, there was a bit of bad blood between the two entities. People in town feared what was going on at the range. They saw contrails in the air and they believed missiles were flying over their heads. The Las Cruces Sun-News even published editorials condemning the “secret” missile firings over the town.

Also many residents didn’t seem to notice the huge economic boom happening in Las Cruces because of the hundreds of White Sands employees calling the town home or that contracts were being let to local firms.

See WSMR Hall Of Fame Induction, page 7
Ed set about to remedy that with simple communication. He arranged to have the commanding general and other missile range officials invited downtown to explain what was going on and to point out how much money was being pumped into the local economy. He became a facilitator between the two sides.

In this same time frame he was one of the leaders at White Sands working with ranchers in the northern call-up area – called the FIX for “firing in extension.” The idea was to expand the range’s footprint for temporary periods by having agreements with ranchers to evacuate them occasionally. The agreements went into effect in 1960 and effectively added a 40x40-mile area to WSMR for 12-hour periods. The ranchers were reimbursed for their cooperation.

Ed said talking to the ranchers and connecting with them came naturally. After all, he grew up on a farm and understood what it was to be dependent on agriculture for a living. At the same time, he had that knack for briefing decision makers and was able to sell the program idea to officials in Washington.

In 1964, Ed and Marjorie moved into an early adobe house in Mesilla Park that had an old tennis court on the property. He obviously loved the game and the competition because he went to NMSU and asked if he could practice with the tennis team. The coach wasn’t burning with enthusiasm but he let Ed play doubles with the team.

It turned out that Ed was good enough that no matter who he was partnered with, they won. He admits he wasn’t a strong enough player to defeat the college players in singles, but in doubles, with less court to cover, he had the shots that made the difference.

In 1970, Lou Henson, athletic director at NMSU asked Ed to help with the school’s tennis program, to basically get it going again. During the 1969/70 season, there was no tennis coach. On top of that, top players were graduating and no one had done any recruiting. Henson asked Ed to find some good quality players for the team and to help find a full-time coach.

In May, Ed set about his task and by the start of school that fall, the mission was accomplished. He found Van Hill to coach and he recruited a couple of junior college transfers to immediately help the program and three freshman on which to build the program.

By the way, both of Ed’s sons – Jim and John – were pretty good tennis players themselves. Both went to the New Mexico high school state championships and received scholarships to play at NMSU.

One of the last things Ed did at White Sands was lead the effort to get the High Energy Laser Systems Test Facility located at the missile range. He said the competition was between WSMR and a Navy installation. Turns out the missile range and the old MAR Radar building sold themselves.

For starters, the missile range had the physical space and airspace for the kind of testing involving high energy lasers. Secondly, the range had the necessary instrumentation to cover any test planned for laser testing. And, thirdly, the old Multifunction Array Radar building, just north of Highway 70, was already there and ready to retrofit as a laser test control center.

Ed retired from White Sands in 1980 at the very tender age of 52. He said he wanted to enjoy life and his hobbies like tennis and collecting jazz recordings.

I asked him how different was White Sands in 1980 compared to 1952. He replied that it was like day and night. In the 1950s, the missile range was still being invented and built. In those times you could propose and implement actions very, very quickly.

By 1980, he said the overhead administrative burden had mushroomed to be a heavy weight on forward movement. He thought it was becoming very difficult for any individual to make a difference, to stand out above the committees and organizational structure.

In the end, the missile range obviously benefited from Ed Noble’s accidental trip to New Mexico. Also, Las Cruces and New Mexico State University were made better for his leadership and practical approach to problem solving. Ed was inducted into the White Sands Missile Range Hall of Fame in 1992.
This is a photo of base camp at Trinity Site taken in the summer of 1945. The camp is where scientists, technicians and military personnel lived while supporting the test of the first atomic bomb test on July 16, 1945. It is 10 miles from Ground Zero. Many writers and reporters and, in turn, many visitors will tell you the Manhattan Project scientists didn’t know what was going to happen. However, when you study the history, you see all of the nitpicking, tiny details they planned for. For instance, all of the long, narrow buildings (barracks and offices) in this photo are all laid out to present the smallest surface area possible to the incoming shock wave from GZ. You can draw a line on Google Earth from Ground Zero over several foundations still visible on the space views and they are in alignment to minimize damage to the structures.