



Hands Across History



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

Volume XII, Letter II

May 2016

Doyle Piland Passing The Torch At Archives

By Jim Eckles, editor

Doyle Piland, the first archivist for the White Sands Missile Range Archives, is gradually giving up control of the facility this year to Debbie Walters, a longtime volunteer there. Doyle was responsible for setting up the historical archives in 1999, luring volunteers to work at it, and keeping the work moving smoothly through lead paint scares and floods. To date, Doyle's volunteers have filled a publicly accessible database with over 20,000 entries covering more than 75,000 items stored in Building 1833 at White Sands.

White Sands has a rich history that started in 1945 and continues today. One of Doyle's laments is that we have done a much better job capturing the history from the 40s and 50s than anytime after. In fact, in today's digital world very little of what is currently going on at White Sands is being saved. When test programs conclude, it is very, very easy to simply wipe the computer storage units clean instead of devising a way to permanently store the information.

The missile range's archives are part of the White Sands Museum and, at the same time, aren't. Ultimately, the museum falls under the auspices of the Army Center for Military History (CMH). In fact, all the artifacts in the WSMR Museum and Missile Park belong to CMH and not White Sands. The system used to catalog and arrange the museum artifacts is the Army-wide one instigated by CMH.

On the other hand, CMH's museum branch doesn't control the missile range's archive of paper documents, photographs, films and videotapes. Indications are that if CMH wanted to move the missile range's museum artifacts to another location, they could but they would leave the archives at WSMR. That means the archive is a local function, supported and controlled by the White Sands commander.

The White Sands Missile Range

Historical Foundation is a supporter of the archive providing financial assistance for equipment. For example, old ¾" videotapes have to be copied to digital formats and the machinery is hard to find and is often in need of repair.

To some the separation of the museum and the archives makes little sense since it probably requires the information found in the archives to tell an artifact's story. To simply have a cinetheodolite or Honest John carcass or model of the Large Blast Thermal Simulator on display without meaning-

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Doyle Piland

WSMR Was Lucky To Get Hank Mabry

By Jim Eckles, editor

At nearly 90 years of age, Hank Mabry is just as dapper and as sharp as he was when he was chief of the Land Combat Division of the Army Material Test and Evaluation Directorate at White Sands. When I interviewed him in April, he showed up neatly dressed and wearing silver and turquoise jewelry he made himself. Sometimes the dates and names didn't immediately pop out but the details from decades of work at WSMR were readily available in our talk. It was hard to imagine he has been retired nearly 30 years.

Hank was born on Sept. 8, 1926 in a little Texas hill-country community called Center Point. After his junior year in high school he moved to Washington, D.C. in 1943 to live

with his older sister who worked for the General Accounting Office (GAO). She got him a job at the GAO as a messenger and then as a worker assembling contracts.

In Washington, Hank showed his ability for hard work. In addition to the GAO job he worked another job and ushered at a theater. At the same time, he took classes to get his high school diploma.

Also, he showed an aptitude for taking advantage of systems. In his messenger job, for example, he was given two bus tokens to deliver a contract to the Pentagon and return. He immediately realized that if he got a transfer from the first bus, he could take a different line back to the office using the transfer. He could then use the second token for his own trips.

When he finished his classwork for high school in Washington, he ran into a problem. The Arlington, Virginia high school wouldn't accept some of his credits from Texas. The school found a solution however. It turns out his Texas high school would accept his D.C. classes and that he could graduate from his home school.

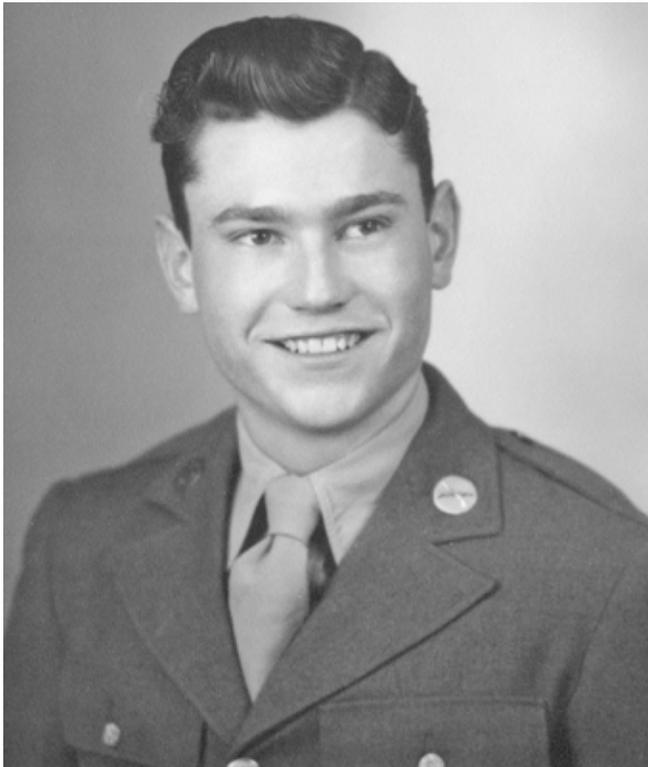
The paperwork was processed and Hank graduated from Center Point but he didn't actually attend the ceremony. His father picked up his diploma.

With his high school days over, Hank knew military service wasn't far off. He really wanted to be a pilot so he went to the Army Air Force, Navy, Coast Guard and Marine recruiters to see if he could get into their aviator programs.

He said they really wanted him but it turns out Hank is color blind. He couldn't pass the test. He said they even took the chart outside so it would be in sunlight for him to look at. Didn't help.

After this disappointment, Hank returned to Texas to await his draft notice. He did some work as a grease monkey at an airport but eventually ended up as a bellboy at the St. Anthony Hotel in San Antonio – the city's first luxury hotel.

In February 1945 he received his notice and reported for a physical in San Antonio. At the induction center, with



Private Eli H. Mabry - Summer 1945

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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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ful explanations seems silly and pointless. The information for good interpretative signs can usually be found in the 75,000 items now in the archive's storage.

Until you see the rows of file cabinets in Bldg. 1833, the thousands of items may not sound like much. It is. The big question with all that material is how do you find anything. You can't waste your life going through drawer after drawer looking for a single letter from a past commander to the Atomic Energy Commission concerning Trinity Site.

It was John Douds who invited Doyle to step in and organize a WSMR historical archive so material would be safe and individual items would be easy to find. Part of the requirement was to also find a way to keep the donations from individuals intact and not scattered across dozens of different file cabinets.

Doyle had searched for material in other archives and knew what he found useful and what he found burdensome. One of the biggest problems with archives is that you often have to visit the facility – maybe in another state – and spend days going through documents to find what you want. It could cost you hundreds, maybe thousands of dollars in travel and then hundreds more for reproduction of the material.

For Doyle, the key was setting up a computer system and using an Amazon approach to storing material. They use the CMH numbering system for the materials so it matches up with the artifacts in the museum. Each document or

record is then given a series of codes to describe where it is and a description of what it is.

For instance, I've given something like 17 boxes of materials to the archive. The volunteers will go through and catalog each item. My 17 boxes will then be stored in one area of file cabinets. As Doyle jokingly says, "If you have a strong emotional attachment to your stuff, we can easily get it out and let you bond with it all day if you wish."

Later, for example, if someone wants to research Green River, Utah launches, they can search the database on line. The documents, photos, brochures and videos will be listed, along with each item's location, including some my 17 boxes. Then it is simply a matter of going to the correct file cabinet and drawer.

It is similar to how Amazon stores goods in their distribution centers. Shovels can be next to auto parts which are next to flashlights. The location of every item is known and the computer can tell you where to find it. To have discrete areas dedicated to the hundreds or thousands of items in stock would be a huge waste of space. To have file drawers in an archive divided up for the innumerable programs and details in WSMR's history would require a few more unobtainable buildings.

When I interviewed Doyle, he pointed out a large box of documents he had pulled for a researcher looking into

see Debbie Taking Over, page 7



Adriana Salas took this group photo at the archive in 2015 for her story in the Missile Ranger. This is the core group of volunteers working at the WSMR Archive. From left: Joe Marlin, Glenn Moore, Doyle Piland, Lutisha Piland, Debbie Walters, John Douds, Gene Dirk and Bill Jones.

Not Expected To Live — CONTINUED FROM PAGE 2

men being examined like items in an assembly line, Hank was able to pass the color vision test. As they stood in line to approach the table where the test was being conducted, Hank asked the person behind him to tell him what the number was on the window – it was the same for each person. He passed.

He was then herded into a room with many other recruits. The NCO asked each their birthdate. It turned out that 11 others had earlier birthdays and the Navy only wanted 11 guys. Hank, being the 12th, was put into the Army. It was another example of how serendipity can influence the rest of one's life.

When Hank reported for basic training at Camp Hood, he was known as “baldy.” He said he'd paid for a haircut a few days before induction and then found out it wasn't good enough. He was miffed that he'd wasted his money. Instead of getting the normal crew cut, he told the barber to take it all off. The barber obliged.

At Hood he was in a replacement battalion. It meant that after basic training he'd probably be headed for Pacific or the European theater. Fortunately for Hank and White Sands, he got sick – more serendipity.

In the sixth week of basic training the troops were sent out on a 50-mile hike with full gear. He says he wasn't feeling very good that morning but went anyway – it wasn't something you got out of by claiming you had a cold.

He got sicker and sicker as the day wore on. Only because of his mates did he finish. They ended up carrying most of his gear and helped him to the end.

When he crashed into bed instead of hitting the mess hall like everyone else, his sergeant sent him to the dispensary. Hank told the medic he felt terrible and had funny bumps in his mouth. They diagnosed mumps and sent him off to an isolation ward.

When he really started to sink and was unconscious, they looked closer. It turned out Hank had a case of spinal meningitis, a disease that can kill you in a few days. Luckily, it turned out to be a mild case. However, the Army medical staff, thru the Red Cross, sent a telegram to his parents saying “the patient is not expected to survive.” Hank survived but

experienced another downturn with the disease and his parents received another telegram from the Red Cross informing them again that “the patient is not expected to survive.” Hank obviously survived.

Once he began to recover, Hank was put on convalescent leave for 30 days. He missed the first shipment of his training class headed for Iwo Jima. That was followed by three months of rehabilitation and he missed a shipment of troops headed for Europe and the Battle of the Bulge.

Finally, in the fall of 1945 he received orders for Fort Bliss. When he reported for duty he was assigned to the First Guided Missile Battalion that later became a brigade. He said life was pretty much like Camp Hood except there were German POWs to pull KP and make their beds and do house keeping chores.

He was asked what he wanted to do. He said “electronics” and he went through the school learning to wire, solder, build circuits and maintain and operate radars.

In early 1946 his group, along with another group to be trained as Askania (a German company) camera operators, were loaded on a railroad sleeper car in El Paso and headed to Aberdeen Proving Ground in Maryland. Hank's group was to bring back SCR-584 radars for White Sands Proving Grounds.

Originally these radars were used during WWII to track enemy airplanes and point anti-aircraft guns at the aircraft. These are the radars with a dish on top of a trailer that show up in early photos of White Sands. Unfortunately upon arrival they learned that the Signal Corps had already shipped the radars to WSPG with trained operators.

Hank was moved over to work on a brand new system called DOVAP that is an acronym for “Doppler Velocity and Position System.” The Germans developed it during WWII and the U.S. quickly took advantage of the new technology for White Sands. The system was used to precisely determine a missile's velocity and position. The only problem was that it took several months to reduce the data after a test.



One of the most prominent systems Hank worked on was the Pershing. Here a missile is being prepared for a shot from Black Mesa, just west of Blanding, Utah, in the 1960s.

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Pickering Interview — CONTINUED FROM PAGE 4

Hank's group flew to White Sands from Maryland with the new units aboard a C-47. The system needs several stations or units to work correctly and Hank ended up assigned to A Battery, 1st Guided Missile Bn., WSPG. His first action was to set up and man a DOVAP receiver at White Sands National Monument with two other soldiers. That lasted a month or two.

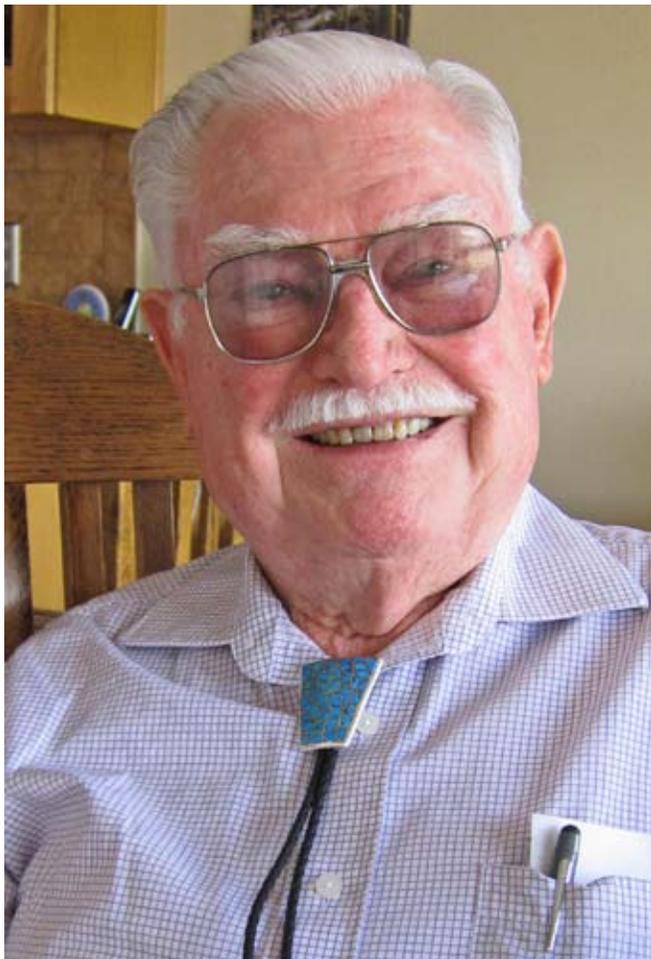
Hank said life at White Sands as a young soldier was great. As long as you did your job, you had a lot of freedom.

He slept in one of the six-man hutments that are seen in those early aerial photos of the main post. It turns out, the spring winds were tough on the hutments. He remembers huge winds one night where several other hutments lost their tops and sides, leaving the occupants staring up at the stars.

Because the war had just ended, Hank said the place was overstaffed. He ran into master sergeants doing rather menial work because there were just so many of them.

Hank was discharged from the Army in Oct. 1946 as a Technician Fifth Grade which is abbreviated as T/5 or TEC 5. He was addressed as "corporal."

He took a couple of months to recharge and get used to civilian life again. Then in Jan. 1947 he was hired back at White Sands as a technician by Wayne Roemersberger – the



Hank Mabry today.

engineer responsible to setting up DOVAP at White Sands.

Not too far into his career at White Sands, Hank decided to go to college and get his degree. He sent a letter to Dr. Gardner at NMSU about getting in there but never heard back. He resigned from White Sands in Sept. 1947 and ended going to a prep school/junior college called Schreiner Institute in Kerrville, Texas and then the University of Texas in Austin. He graduated in 1951, majoring in physics with a minor in math.

While going to school, he married Mae Jean Gilmore of Bayside, Texas.

After graduation, Hank called Frank Hemingway at White Sands and asked about jobs. He was asked to send in an application and transcript and was hired as a GS-5 in the DOVAP section where Hemingway was in charge.

He worked at the radar lab at EML and on the Nike Ajax, America's first antiaircraft missile system. Apparently folks liked him and other organizations sought him out. With a young family, his early job decisions were driven by the salary – the more the better. In 1952, he again resigned from the government and went to work for the Jet Propulsion Lab.

Getting the job at JPL required an interview with the great Dr. Bill Pickering who went on to head the group that built America's first satellite Explorer I. At one point in our talk, Hank talked about how lucky he was in those early years. He thought it was something special to actually meet and know men like Pickering, Wernher von Braun and Clyde Tombaugh.

Hank's job with JPL was to remain at White Sands and help field America's first tactical guided missile, the Corporal. He was part of the Field Operations and Training Section.

It wasn't long before his job with JPL dried up because the organization no longer had a need for an office at White Sands. JPL offered Hank a job at either the Cape in Florida or in California. He didn't want to move his family to either place so he resigned and went to work for Gilfillan Brothers, the company responsible for the electronics in the Corporal.

That job lasted for two years and he was hired back to White Sands as a GS-13 engineer in the Land Combat Division of the Army Material Test and Evaluation Directorate. At first he worked the static firings for the Redstone propulsion system at the 500K Static Test Stand.

One thing he distinctly remembers about 500K was the huge hole that was developing under the test stand due to exfoliation – and was getting bigger with each test. He said they were afraid that enough granite could spall off the mountainside to undermine the facility and that it might cave in on itself. Experts were invited in and said they were still safe but needed to prevent further damage.

Hank said they tried filling the hole with concrete but that did not help. Finally, they placed large, thick steel armor plating over the rock and hole. It shunted the hot gases away

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from the mountainside. Unfortunately this came near the end of the test program but did avert further damage to the 500K facility.

But the Redstone missile was having a problem of its own. To solve it, the project wanted to fire a long-range shot over land so they could collect data on the whole flight. They didn't want to fire over the Atlantic from the Cape nor conduct a shortened flight at White Sands as they had done before. To accomplish this, Hank went to Fort Wingate, N.M. to look at launching the big missile from there to impact at White Sands. It would have used most of the range capability of a Redstone missile.

Hank said nobody in Washington was talking and nobody wanted to make the decision to actually conduct the tests. Such firings, over the public's heads, had never been done before and it seemed no one up the chain of command wanted to endorse the effort.



A man of many talents, this is one of "jeweler" Hank's many pieces of silver and turquoise jewelry.

So, Hank and crew continued to work on a launch facility at Wingate without real authorization from the Pentagon. The Army Ordinance Missile Command at Huntsville went out on the limb with White Sands and provided funds to prepare the launch site at Ft. Wingate Army Depot east of Gallup. Hank said it is something that would never happen today.

Ft. Wingate is still used today by White Sands to launch target missiles for such defensive systems at the PAC-3. PAC-3 stands for Patriot Advanced Capability-3 and is a hit-to-kill weapon designed to bring down enemy ballistic missiles.

Eventually, Redstone engineers found their problem and solved it. It left White Sands with a developing launch facility in northwest New Mexico that was quickly given over to the Pershing missile system, Redstone's replacement.

Hank was in the right place at the right time. He served as a project manager, branch chief and, eventually, division chief of Land Combat during the entire run of the Pershing missiles – Pershing, P1A and PII. He was involved in launches from not only from Fort Wingate, but also the Utah sites at Green River, Black Mesa and Gilson Butte.

He distinctly remembers the night shots from off range. He said the light from the warhead coming into White Sands would start off as a red streak and then go to white hot. Then there was a huge impact and the flash of light would light up the mountains on either side of the Tularosa Basin.

Work on the Pershing and many other systems during the Cold War was gratifying to Hank. He said the missile range's part in the very ambitious test schedule for the Pershing II made a big difference in dealing with the Soviet Union. When the U.S. was able to deploy the PII very quickly to counter Soviet missiles targeting Western Europe, it gave NATO a strong bargaining chip. Eventually, the Soviets removed and destroyed their SS20s while we destroyed the Pershing IIs. It was the beginning of the end of the Cold War and Hank played a role in it.

Hank retired at the very end of 1986 with the actual date in Jan. 1987. He was at White Sands for the build up of the Cold War and when it was hottest. Those years turned out to be the golden years for White Sands activity.

Although Hank hasn't lifted a brush in several years, he is an accomplished painter who studied under Carl Cogar. Hank paints landscapes and has had a few one-man shows. Not bad for someone who is color blind.

He is also a silversmith – see the accompanying photo of one of his rings. Also, he sang in a barbershop quartet when he was with JPL. The group called themselves the "Miss Guided Four."

Hank lost his wife Jean in 2008 but continues to live on his own in Las Cruces.

Editor's Job Now Available

I've been editor of this newsletter and its immediate predecessor for something like 14 years now. It is probably time for a fresh point of view or for someone to bring the newsletter into the 21st century.

If you are interested, I'd be happy to talk to you about what is required. You can look at all the past issues of *Hands Across History* at the Foundation's website:

<http://www.wsmr-history.org/foundation.htm>

I can be reached at the Foundation's mailing address: P.O. Box 171, White Sands, NM 88002 or by email at: nebraska1950@comcast.net

Jim Eckles

Debbie Taking Over — CONTINUED FROM PAGE 3

the Utah launch areas. He was in the process of providing the customer a cost estimate to copy everything and ship it. Doyle said he thought it was going to run around \$300 which is incredibly cheaper than the researcher traveling cross country to visit White Sands and look through the file cabinets.

Of course, the trick, now that everything is in place, is to actually record and catalog all the material as it continues to come in. And Doyle encourages everyone to donate his or her White Sands materials. He noted they are getting a collection of WSMR related items from the estate of Paul and Joy Arthur.

To do this work there has been a core group of volunteers who have been at it for years. See the accompanying group photo. There are others like Jim Andress who are on call and don't come in regularly. They have offered their expertise in a particular area to help identify or explain an item.

The volunteers work at the archive on Thursdays for six hours so it is not a fulltime job. Also, they are retired and not bound by clocks and timetables. It seems that every time I visit Bldg. 1833 they are snacking at their conference table. This last time they were eating peach cobbler because, of course, it was peach cobbler day. The bottom line is that it is a good group to work with and they could use a few more helping souls.

The transition from Doyle to Debbie will be a slow process. Doyle's wife Lutisha, another volunteer, is busy recording everything her husband knows

about how the system works so there will always be a "go-to" book of reference.

If you would like to volunteer, you can contact Doyle Piland at archivist@wsmr-history.org and/or Debbie Walters at debbiedo10@tularosa.net. According to Doyle in a Missile Ranger article by Adriana Salas, to volunteer, "you need some basic understanding of WSMR – how it works and how it used to work." You don't have to be an expert in anything particular. It is more about willing to put in some hours at a computer.

To view the online database, visit <http://www.wsmr-history.org/archives.htm>. This database exists on the WSMR Historical Foundation's website.



Debbie Walters, Doyle's successor, checks database entries for accuracy.

THANK YOU

- ✓ **TRAX International has made a donation of \$8,000 to the White Sands Historical Foundation in support of the WSMR Museum. The check brings the total amount of donations from TRAX to \$20,050.**
- ✓ **Arthur and Rebecca Berkson made a \$200 donation honoring Jon Gibson.**
- ✓ **Frances Williams donated \$50 in memory of Bob Lechtenberg.**
- ✓ **Laura Supp made a \$35 donation honoring Raymond Supp.**

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The Back Page



DISTANT RUNNER TEST --- News media and guests examine what is left (only the floor) of an Air Force airplane shelter on Nov. 18, 1981 at Queen Site 15, near S.W. 70, on the northern portion of White Sands. Inside the concrete shelter, the Defense Nuclear Agency placed a F-101 jet fighter (Voodoo) and 48 MK-82 general purpose bombs - about 10,000 lbs. of high explosives - and detonated the package to see how the shelter would perform. The shelter and the airplane disappeared. Holes punched through the shelter floor, where pallets of bombs were placed, filled with water.