

# Hands Across History

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

Volume VI, Letter III August 2010

# **Reception To Thank Museum Supporters**

On June 8, in the White Sands Museum Main Hall, the historical foundation held a "thank you" reception for Foundation and Pioneer Group members and corporate sponsors for their support of the museum.

Museum Director Darren Court briefed the crowd on future plans for the museum and thanked everyone for their support. Also, he asked for all members to consider donating their records, photos and any artifacts to the museum.

Lieutenant Colonel Vincent Navarre, Deputy Garrison Commander for Transformation at WSMR, talked about the partnership between White Sands and the Foundation and Pioneer Group. He thanked us for our support.

As part of the event, Navarre and Sharon Reese, Foundation president, unveiled the new donor's recognition display that rests in the museum's entrance.



NEWTEC President and CEO Charlie Garcia points to the plaque for his company on the Foundation's recognition board. NEWTEC has donated thousands of dollars to improve the WSMR Museum.



Marion (Ball) Mills poses beside the recognition display where the plaque hangs honoring her and her husband, Col. (ret) Robert Mills.



WSMR Hall of Famer Paul Arthur, left, discusses the museum with Dan Duggan, former missile range deputy commander and a Foundation board member.

## Hall of Fame and Pioneer Group Update

By Dolores Archuleta & Austin Vick

Since 1980 there have been four years when the WSMR Hall of Fame did not have an induction, either because there were no nominations or because the nominations submitted did not qualify for induction. This year is another year when there will be no inductions.

The Pioneer Group supports the Hall of Fame process by chairing the Hall of Fame Review Committee, and each year we strive to maintain the same high entry standards that were established early on for the Hall of Fame program. We cannot accept anything less.

We recognize that there are still a large number of qualified potential inductees that should be nominated and considered. Guidelines for the nominations are included in WSMR Information Pamphlet 672-1. Even though there is no criteria for a minimum or maximum number of inductees each year, we think at least two inductees annually is a viable goal.

There are many former civilian, military, and contractor personnel who did an outstanding job during their tenure at White Sands Missile Range, but the Hall of Fame was established to recognize those who made a really significant difference at White Sands.

Please, in your mind, go back in time and put a name to that face you are thinking about who deserves recognition for significant deeds, acts, or achievements. Nominations must be submitted by March 31 each year and adhere to the guidelines in Information Pamphlet 672-1. Copies of the WSMR Information Pamphlet 672-1 can be obtained from the Awards Program Administrator, Human Resources, 575-678-3221 or contact Terry Garcia by email at: terry.garcia@us.army.mil

A big, BIG "thanks" goes out to our WSPG members for sending in dues and donations. These funds will enable us to continue to partner with the WSMR Historical Foundation to publish the newsletter "Hand Across History" quarterly. Additionally, the Pioneer Group continues to support WSMR with programs of "Then and Now," conducting the

Review Committee for the Hall of Fame, and support for Darren Court, Director of The Museum & Learning Center at WSMR, for his outstanding work to portray the history of the missile range and the people who have lived and worked there.

Finally, the current officers of the Pioneer Group are seeking nominations for the positions of President, Vice-President, and Treasurer/Secretary. Please consider lending some of your time to support the Pioneer Group. The group has done great things in the past and is still doing so much to support the people of White Sands Missile Range. Please contact the White Sands Pioneer Group at PO Box 318, WSMR, NM 88002, or call Austin Vick at 575-522-4179.

# Order A Personalized Brick For Someone Who Has It All

Pretty soon you are going to be wondering what to get for that relative or friend this holiday season who just doesn't seem to need anything. The Historical Foundation has the perfect solution - one that will not break the bank.

Make a donation to the Foundation in support of the WSMR Museum, and get a personalized brick installed in the Museum's Signature Plaza. There are already close to 400 bricks in the plaza representing individuals, families, companies and government organizations.

The cost for a regular 4x8 inch brick is only \$65. On the top of the brick you get three lines of text with a limit of 14 characters per line. Put just about anything on there that will fit. Larger bricks are available with a larger donation. On the larger bricks, logos and much more text can be engraved.

It takes a couple of months to get the bricks ordered, fabricated and returned to the Foundation for placing. So, place your order soon so it is complete by Christmas.

Out of town? We'll send a photo of your brick to you. For more information, contact Bob Lipinski at 575-678-1644 or Sharon Reese at 575-532-9422.

### **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.

White Sands Pioneer Group P.O. Box 318 White Sands, N.M. 88002 White Sands Historical Foundation P.O. Box 171 White Sands, N.M. 88002

# Gold Recalls Pentagon Sightseeing in 1963

By WSMR Hall of Famer Joe Gold

During February 1963 I was called to the office of my boss and was shown a teletype. It requested someone from WSMR who was familiar with the range, missile testing, range instrumentation, and targets to go to Paris, France, to participate in a NATO Users Conference on the proposed NATO training range to be built on the island of Crete. My boss said, "It sounds as if they are describing you." He asked if I would go. I said 'yes', and the next week I was off to Europe.

This was a most interesting and enlightening experience. The NATO users of the proposed range were to be most of the NATO nations, such as Britain, France, Germany, Greece and others. The purpose of the meeting was to develop the draft technical specifications for the instrumentation and target services for the range to be built on Crete. This was one of those meetings where there were earphones for everyone so that they could hear the proceedings in their own language..

My first trip to Paris three years earlier was in July, and this one was in February. When the plane landed at Paris, the weather was cold, snow was on the ground and traffic was a problem.

After finding my hotel, I called my contact in the part of NATO known as U.S. Command in Europe. This was a Navy commander by the name of Harper. I had remembered his name by association; there is a brand of American whiskey called "I.W. Harper."

The next morning a car picked me up at my hotel and delivered me to the office of the U. S. Command in Europe. I expected some involved procedure to properly identify myself and assure them I was, indeed, who I said I was. During that period of the Cold War tight security was the usual thing. But when I arrived in Harper's office and inquired if he was Harper, "as in I.W.?" He smiled and said, "Come in Mr. Gold, we've been expecting you." I had found the accent was a good identifier of Americans to other Americans and went a long way in identification in this particular situation.

At the meeting of the user nations representatives, we put together a draft set of specifications to use for contracting the building of a range on the Greek island of Crete; this range would be used for training troops to fire missiles that the NATO nations would be using., mostly Nike and Hawk. My input was on range instrumentation and targets.

When completed, each nation received several copies of the draft specifications package marked "NATO Confidential." The representatives were to take copies home, provide technical comments, and return them for the NATO Range User's Conference in Paris that was scheduled in about two months.

Back in Harper's office, he noted that two months wasn't much time to get comments back, and further explained that because of the time difference between Paris and Washington, both he and his boss in Washington would

rarely be in their offices at the same time. Furthermore phone lines were extremely busy and it was hard to make contact.

He asked me to deliver the documents to his boss in the Office of the Joint Chefs of Staff in the Pentagon, a Navy Captain so-and-so, and tell him what was needed. I replied I would but asked if the following Monday would be acceptable as we were approaching the weekend. He said that would be fine and had the documents packaged for me.

The package of 12 books was about 12 inches thick so I could carry it all right, but it was classified and I was in a foreign country and wanted to be on a Sunday flight to Washington. His office would be closed on Sunday, so he suggested the U.S. Embassy could probably hold them for me.

In my previous trip to Paris, three years earlier, I had met a young French engineer with a French aircraft company who had capably escorted us around Paris. I wanted to use the weekend to see more of Paris, so I called him and he quickly agreed. I went to the U.S. Embassy, identified myself, and asked if I could temporarily store some classified documents. The Marine guards were very accommodating, and I was soon free to sightsee.

My French friend, Robert Wimphen, picked me up at my hotel the next day and we spent the weekend seeing Paris. As I said, it was winter and Paris was very cold, but other than that it was fine. At the flea market I found a nice pair of delicate figurines for my mother. Robert had said to me, "If you see something you want, say not one word to them. Tell me and I will buy it for you."

So that's the way I bought these nice items. Robert said, "Oh they are good, from Louis XVIII." That's the way French people tell the age of things, which meant these figurines were quite old.

After a very interesting and enjoyable day in Paris, my French friend picked me up at the hotel on Sunday morning, went with me to the Embassy where I picked up my documents, and took me to the airport.

So on Monday morning I went to the Pentagon, up to the Joint Chiefs of Staff Office (by this time I had visited the Pentagon many times and could find my way around) and located this Navy Captain "So-and-so." (Wish I could remember names better). I introduced myself, put the package on his desk and told him that Commander Harper in Paris had asked me to deliver these to him and why. Up to this point the experience had been very interesting; but now it became rather remarkable.

Obviously Harper had not communicated with him, which I could understand, so this was something for which he had no warning. He asked me a few questions about the situation and said, "This is a job for the Army."

He asked if I would take the documents to the Department of the Army and deliver them to a Colonel suchand-such and promised by the time I got there they would have conversed so I would be expected.

see Go Here, Now Go There, page 6

#### Way Back When

# **Artifact Donated From V-2 Payload**

By Doyle Piland From the WSMR Museum Archives

Now days, the knowledge about the upper atmosphere is quite extensive. There isn't much of a mystery about the characteristics of the atmosphere as you go higher and higher. Atmospheric scientists have documented these characteristics for many years now. That is not the way it was Way Back When......

At the end of World War II, the knowledge of the atmosphere was limited to what could be gained from balloons and airplanes, which had obvious limitations. With the advent of rockets and missiles, researchers at universities and laboratories immediately saw an opportunity to expand their knowledge of the upper atmosphere as never before.

After the war was over, the United States came into possession of enough parts and assemblies from the German V-2 rocket program to put together nearly 100 V-2 rockets. These parts and assemblies eventually made their way to the newly formed White Sands Proving Ground.

Of course, one of the objectives for these V-2s was to learn and gain experience assembling, testing, and launching large rockets. But, scientist saw a much broader application for these launches.

General Electric (GE) was awarded a somewhat vaguely defined contract that was referred to as the Hermes Project. The Hermes Project evolved into several things, to include the assembly, testing, and launch of the V-2s at White Sands Proving Ground.

In addition to the V-2 components, there were originally 118 German rocket scientists that agreed to come to the United States to continue their work on rocket technology. This group came to be known as the "Paperclip Scientists." The Paperclip Scientists, headed up by Dr.. Werhner von Braun, was stationed at Fort Bliss.

While most of the German scientists was working on various rocket research projects at Fort Bliss, by March 1946 there were 39 Germans assigned to work with GE at White Sands on the V-2 program. As GE gained experience, the number of German scientists was gradually reduced until there were none working with the V-2 at White Sands by the spring 1947. Although some of the Germans remained at White Sands in other capacities, the bulk of German activity was at Fort Bliss until around 1950 when most of them moved to Redstone Arsenal, Ala. to form what would eventually become the National Aeronautics and Space Administration (NASA).

Early in the program, an unofficial group called the "V-2 Rocket Research Panel" was formed. The original panel included members from the Naval Research Laboratory, General Electric Co., University of Michigan, U.S. Army Signal Corps, Princeton University, Applied Physics Laboratory, Johns Hopkins University, and Harvard University. The

job of this panel was to allocate resources and coordinate experiments and the space available for them within the payload for various experiments by the various interested organizations.

Because of all these experiments, it is reasonable to say that no two V-2s launched at White Sands were configured the same. Each carried a payload that contained various experiments and was configured according to the priorities of the V-2 Rocket Research Panel. The first launch of the V-2 program was on April 16, 1946 and the last one was on September 19, 1952.

A few months ago, the Museum Archives was contacted by Gilbert Moore, who forwarded some photos of items that were purported to be from the V-2 program. These items were in the possession of Brian Horais, the son of an individual who had been stationed at White Sands while in the military and worked with the V-2 program.

Moore had worked with the V-2 program doing data collection/reduction for the various V-2 experiments. He was a student at New Mexico Agriculture and Mechanic Arts (NMA&MA), now New Mexico State University, in what was to become the Physical Science Laboratory (PSL). The question was if these items were associated with the V-2 program, and if so, was the Museum interested in having them for display? One of the items was a slightly bent "Pitot Tube" shown in the photo below.

Well, it just so happened that not too long before, the Archive volunteers who were in the process of migrating



**Pitot Tube** 

video from videotape to DVD came across one that had a short portion showing one of the V-2 payloads being tested prior to being installed on the V-2. This payload had four of these pitot tubes that were being thrust forward and retracted several times. I recognized the bent tube as one of these pitot tubes.

Moore has an unbelievable memory. I tell him he remembers way too much. Once you get him started, he can go on for long periods of time with details, names, times, locations, etc. that the average person would have forgotten years ago.

See Yankee Screwdriver, page 5

### Yankee Screwdriver

Anyway, when I mentioned that we have video of the payload with four of these pitot tubes, Moore immediately recalled that the payload was nicknamed the "Yankee Screwdriver" and was a University of Michigan (UM) experiment and gave the names of the UM scientists who were doing the experiment. He even recalled that during the first try, the circuitry for all four tubes had failed after launch and there were no data collected, much to the disappointment of the UM experimenters.

Darren Court, the Museum Director, then said that the Museum did want the items for display. I then thought that it would make the display more interesting and informative if we knew more about what the purpose of the payload was. Moore then set about trying to contact one or more of the experimenters from UM to get more information.

By this time though, these people had all passed away. But, he did manage to make contact with one of their relatives and that led to contact with the UM Archives.

Jackpot!
Through the efforts of Gilbert Moore, who by the way is a member of the WSMR Historical Foundation, we now have in the Museum Archives a copy, in pdf format, of two detailed reports that give a lot if insight into the experi-

#### — CONTINUED FROM PAGE 4

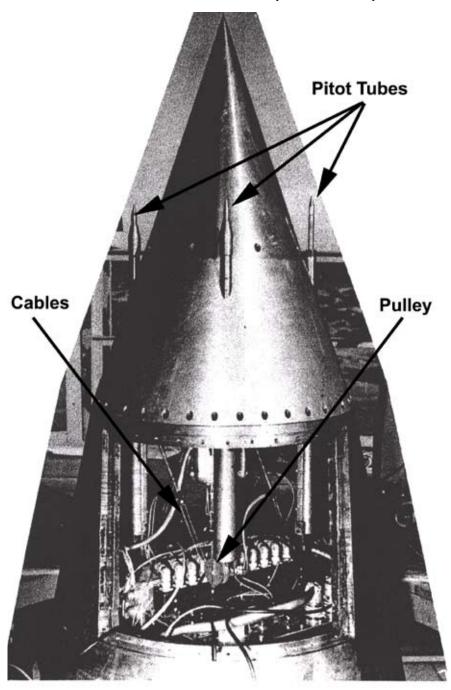
ments originally called the Yankee Screwdriver.

These reports have a lot of detailed scientific discussion and formulas that even if I understood it all there wouldn't be enough space in this article to include that information. The bottom line was the purpose of the experiments had to do with determining the air temperature at altitude based upon the angle of the shockwave created by the V-2 nosecone as it flew through the air.

By means of a set up of cables and pulleys inside the

payload section, the pitot tubes were alternately extended and retracted. all the while taking pressure readings so the experimenters could tell when the tubes passed through the edge of the shockwave. They could then calculate the angle of the shockwave and through other formulas calculate the temperature. The photo on this page shows the instrumentation section of V-2 number 56, the last V-2 to carry the Yankee Screwdriver experiments. As it turns

out, there were a total of three V-2s (numbers 33, 50, and 56 all) that carried different versions of the Yankee Screwdriver experiment. Number 56 was the most successful in obtaining the data they needed. However, the technique had not completely been proven and later testing of the concept was done using the Aerobee Sounding rocket.



Apparatus Used on V-2 Number 56

### Go Here, Now Go There

In the Department of the Army I put the stack of documents on Colonel "Such-and such's" desk saying they were from Captain "So-and-so" in the Office of the Joint Chiefs of Staff and told him who I was. (A Navy captain and an Army colonel are of equal rank although Navy people would have us believe otherwise). He said, "Yes, he just talked to me". He said, "This needs to go to the Army Materiel Command. Would you be willing to take them over there and give them to Col. "Somebody"?"

So I took the documents off his desk and went to the Army Materiel Command and put them on Col. "Somebody's" desk and repeated the message. By now I had practice and was getting the hang of it.

The colonel had talked to him. We discussed it for a while as he was trying to come up with the next move. After a bit he decided comments would be needed from White Sands Missile Range and the user range at Fort Bliss, El Paso, Texas. I couldn't disagree with the wisdom of this, as it would provide the most competent review of both development ranges (WSMR) and troop training ranges (Ft. Bliss).

He then asked if I was going back to White Sands and if so would I take the copies to both Ft. Bliss and White Sands, tell them what was needed and by when?

I said, "Look, the White Sands Commander is a two star general and I work for him. I'm not about to walk in and tell him what to do, and the Fort Bliss range is a part of the Continental Army Command, not a part of your Army Materiel Command as is WSMR so I shouldn't deliver such a message to them. If you will send a request to Fort Bliss through their headquarters asking for what we need and also a message to WSMR telling them what we need and have the messages there by the time I can get there, I'll deliver the documents for you."

He agreed that sounded reasonable, so I wrote the text of the messages for him. He looked it over to make sure it was all right from his point of view and assured me the messages would be sent. Again, I took the documents and left.

Upon arriving in El Paso I went to Fort Bliss, where I found the message had arrived, and left their copies. Then I went to White Sands Missile range with the remaining documents. By now it was Wednesday and the desired message had arrived.

I was asked what organizational inputs were needed by WSMR, and I made suggestions, which were accepted, but something else happened that I hadn't anticipated. I was appointed to chair the working group assigned to prepare comments on the proposal, which included the delegation from Fort Bliss who, traveled the 35 miles to White Sands for the job.

In the required amount of time the comments were ready for the Users Conference in Paris, which by now was moved to early May. So I went back to Paris for the review. This time there were others to be involved in the Paris meeting. The Department of the Army action officer, Nello Waldron; the WSMR flight safety representative, George Ross;

a representative of the Missile Command, an Army Captain Beavers; and I were to be part the Department of the Army delegation. We were to meet up with a couple of Continental

**CONTINUED FROM PAGE 3** 

delegation. We were to meet up with a couple of Continenta Army Command people there who were already assigned duty in Europe.

During the meeting in Paris about the first part of May (a nice time to be in Paris), the NATO conferees decided that since there was to be an Advisor Group and Users meeting in Athens on May 6-10 that we should attend. This was not a previously planned part of our itinerary but with the help of TWA we were in Athens by Sunday evening of May 5. This Athens meeting involved all the user nations as Greece was the host nation and the range was to be on Crete.

We were not needed at all sessions of the meeting so in our free time we saw Athens. One day the American delegation went to Crete via an Air Force aircraft (DC-3) for the purpose of looking at the site of the proposed range, an interesting experience for me.

On this trip to Athens I had one of several "small world, isn't it" happenings that I've experienced several times in the missile business. After arriving, about three or four of us were seated at a coffee bar discussing the day's events when a voice behind me said, "Is that Joe Gold?" I looked around and there was Frank Bermingham whom I had known when he was assigned to the Army Air Defense Board in Fort Bliss as a captain. We had worked together, made several trips together. He was now a major, assigned with a missile unit in Germany, and had been sent to this meeting as one of the troop training people previously mentioned.

To say the least, it was an interesting time.

#### Impacts In The Monument

So how many missile and target impacts have there been within the boundaries of White Sands National Monument? I (editor) always thought it just happened occasionally. In my 30 years at WSMR it was quite irregular.

However, it wasn't always like it is today. In digging through the Public Affairs files I found a map of the monument with a small chart of impacts from 1963 to 1973. There were over 250 impacts in the monument during that period. See the chart below.

No wonder the monument staff was little leery about WSMR promises to keep missiles out of their backyard.

1963	 15
1964	 27
1965	 50
1966	 42
1967	 31
1968	 25
1969	 21
1970	 18
1971	 09
1972	 10
1973	 09

#### Digital Newsletter Progress Report - Some Do, Some Don't

In the last newsletter I (editor) asked you if you would like to receive an electronic version of the newsletter instead of a paper copy. The advantages were to save the Foundation and Pioneer Group some money plus you would get to see color photos in, well....., color.

You have been mailing in the little form I devised and sending emails as well. I have the results so far - a handful of you are opting for the electronic version.

Now unlike many reporters I worked with, when I worked, I'll tell you what a "handful" means. Right now the

count is at 43 for the color version delivered instantly to the email box of your choice.

We understand that many of you don't have good enough equipment, if you have a computer at all, or that you don't feel comfortable with trying to read it on a screen or that you don't want to bother printing it yourself. You will continue to receive the paper version. In fact, everyone will still receive a paper version for an issue or two.

Thanks for your responses especially those of you claiming to be "dinosaurs."

#### **More Reception Photos**



Jon Gibson, Foundation treasurer, stands beside the plaque recognizing he and his wife, Elvia, for their financial contributions to the WSMR museum.



WSMR Hall of Famer Alex Paczynski and his wife Audrey relax before the formal part of the reception.



Foundation president Sharon Reese talks to the gathered audience as she and Lt. Col. Vincent Navarre prepare to unveil the new recognition display. The oak and walnut display was custom-built by Kowalski cabinets.



WSMR Hall of Famer Austin Vick and his wife Pam pose beside the plaque honoring their museum contributions.

Hands Across History P.O. Box 171 White Sands, NM 88002

## The Back Page



Yes, this was the missile range's parade float circa 1980 - I know because I had to afix most of that colorful plastic sheeting using a hand stapler (editor). There was a design contest and then the engineers modified the top so we, Public Affairs, could decorate it. Its an old pickup, sans the body, with a large plywood decking supported by a rebar frame. We hauled it to El Paso, Deming, Las Cruces and Truth or Consequences. The sun between the rainbows had a nice smiley face looking forward. The trick was getting the logistics guys, who hauled it, to keep their speed down so the sheeting wouldn't all blow off before we got to our destination. The driver sat inside the "treasure chest" area.