



# Hands Across History

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



Volume VIII, Letter III

August 2012

## WSMR Will Induct Two Into Hall Of Fame

By Jim Eckles, Editor

White Sands Missile Range has elected two men from totally different backgrounds to its Hall of Fame for 2012. One is a civilian with a very technical background he used in modernizing equipment and improving the processing of data about missile range tests. The other is an Army officer who, while on active duty, served in a series of management positions during an unprecedented 9.5 years at White Sands.

Doctor Eugene Dirk joined the missile range in 1963 as a physicist. His credentials included a bachelor's degree in physics from Penn State University and then a master's and doctorate in physics from New Mexico State University.

Colonel Dan Duggan attended the University of Oklahoma and studied business management. In 1961, as a young Army captain, he joined White Sands as the liaison officer between the missile range and Bell Laboratories, one of the prime contractors for the Nike Zeus missile system.

### *Doctor Gene Dirk*

In the early days of White Sands, a great deal of missile test data was captured on film. Even radars produced film in the form of video showing the blips of missiles and targets on an illuminated scope – the kind you saw in movies from the 1950s and 60s. The data on the film revealed the location of the target in space at a given time and it could also tell observers other things about the target if you knew what to look for.

To read those strips of film and gather the information locked in each frame required a small army of personnel and a great deal of time. That added up to high costs and delayed data reports for customers.

Through the efforts of Dirk and his team, the process was partially automated. Suddenly, what took three years to read by hand could be done in just a few days.

Later Dirk would be a leader in automating the reading of film from cinetheodolites. These complex instruments not only filmed the action in a missile test, each frame of film recorded timing data and the elevation and azimuth angles of the camera lens. For decades the position data provided by cinetheodolites was the most accurate measure available.

Like the radar-scope films, extracting cine data from the film was again tedious and time consuming. With Dirk's proposals, film reading speeds jumped dramatically. It was



**Gene Dirk's Hall of Fame Portrait**

so dramatic the idea was exported to other U.S. test ranges.

In addition to his work in extracting test data after a mission, Dirk supervised management of real-time operations at White Sands. It is the real-time information that is needed by Range Safety to make sure every missile and target stays within its prescribed footprint.

Toward the end of his government career, White Sands was returning to off-range missile launches from sites like Ft. Wingate. Dirk "provided technical management and guidance for design of hardware and applications software" for the return to missile flights along the northwest corridor.

In 1995 Dirk retired from the government. He joined NewTec at White Sands in 1999 and became project manager for various test support services. With all his early work in the film business it may be a bit ironic that Dirk was asked to play a major role in the Film Elimination Program at White Sands. Who better to look at the problem than someone who spent decades figuring out how to digitize film data? He was considered "one of the country's leading experts" in this area.

In 2005 Dirk joined a select committee to look at eliminating film and film processing at WSMR. In just two weeks they prepared a paper that eventually won the range Congressional funding of \$7.5 million to start the process.

**see Dirk And Duggan Are In, page 3**

# If You Plan To Go To Hall Of Fame Luncheon, Let Us Know So We Can Reserve Your Seat

We have Gene Dirk and Dan Duggan elected to join the White Sands Missile Range Hall of Fame but no date yet for the induction/luncheon ceremony. The reason is the uncertainty right now at White Sands because they are in the process of changing commanders.

Basically, when Brig. Gen. John Ferrari approved the election of the two men for the hall of fame, the time between then and his departure was much too short to adequately prepare the ceremony. In addition the last-minute demands on his time were too unpredictable to schedule a ceremony and actually have him be there.

The new commander, Brig. Gen. Gwendolyn Bingham, is scheduled to arrive in mid-September. Trying to pin down a date before she arrives is pretty much impossible because nobody knows what demands there will be on her schedule those first few weeks.

Since many of you get your news for such things from this newsletter which comes out quarterly, we have a problem notifying you in a timely fashion so you can make reservations for the event. We and Public Affairs are guessing the ceremony may get scheduled for sometime in October. If you are planning on attending the induction ceremony, we have a plan to notify you so you can make a reservation.

Provide Jim Eckles, editor, with your email address and/or phone number and we will contact you when the range finally schedules the event. Send your contact information to his email address at: [nebraska1950@comcast.net](mailto:nebraska1950@comcast.net) or give him a call at 575-521-8771. You can also contact Lisa Blevins at the White Sands Public Affairs Office in the same way and she will contact you. Lisa's email address is: [ednamaya.e.blevins.civ@mail.mil](mailto:ednamaya.e.blevins.civ@mail.mil) and her phone number is: 575-678-1134.

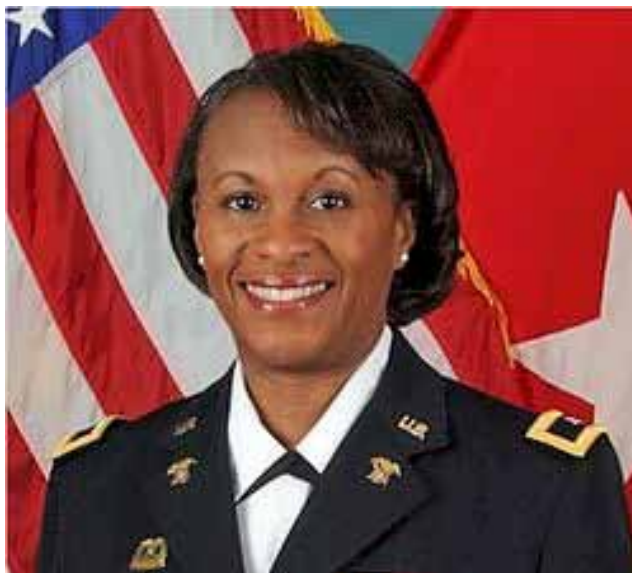
## BG Bingham Will Be First Woman Commander At WSMR

In June the Department of Army announced Brig. Gen. Gwendolyn Bingham will take command of White Sands Missile Range. Bingham will be the first woman to lead the missile range.

Bingham is currently the commandant, U.S. Army Quartermaster School, Fort Lee, Va. She was the first woman commander at Ft. Lee.

She is a native of Troy, Alabama. She graduated from Army ROTC as a Distinguished Military Graduate from the University of Alabama in August 1981 with a Bachelor of Science degree in General Business Management. She was commissioned a second lieutenant in the Quartermaster Corps. In addition, Bingham has a Masters degree in Administration from Central Michigan University and a Masters degree in National Security Strategy and Resources from the National Defense University.

Bingham is married to Dr. Patrick J. Bingham and they have two children, Tava and Phillip.



## 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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# Dirk And Duggan Are In — CONTINUED FROM PAGE 1

From 2006 through 2008 all film cameras and development laboratories were replaced with digital equipment. Just getting rid of the labs saved a ton of money.

Of course, the film equipment had to be replaced with something else. Digital sensors were being acquired during the same time and generated some unusual challenges. Sometimes it is the simple stuff that can foul the best-laid plans. For instance, digital cameras have backlit displays that can be very hard, if not impossible, to read in bright sunshine – an obvious problem here in sunny New Mexico. Dirk was involved in a successful program to overcome this and find digital displays that would work in the field.

He retired from NewTec/TRAX in 2011 and lives in Las Cruces.

## *Colonel Dan Duggan*

In Duggan's first position at WSMR with Nike Zeus, he frequently gave briefings on the system. He was good at it. He was soon added as a command group briefer which quickly turned into a long stint as the chief briefer.

When President Kennedy visited White Sands on June 5, 1963 Duggan was tasked to prepare the LC-37 viewing area for the president's party, provide the Zeus shot-of-the-day briefing and then give a private, 20-minute classified briefing for JFK. It all went off without a hitch except Kennedy balked at the 20-minute formal briefing and suggested they just sit and talk about the Nike Zeus. Duggan demonstrated his adaptability by jettisoning his canned briefing and simply answering the president's questions.

He was praised for his "tactful initiative and tenaciousness" as he left Nike Zeus to take on management of the Anti-Tank Test Branch. There he quickly saved the test schedule and a wad of money for the SHILLELAGH program. When safety requirements called for a barricade, instead of wasting weeks going through the bureaucratic and costly process of building one, Duggan led an effort where his soldiers erected a barricade made of sandbags in a matter of days. There was little cost and no delay in the program.

In 1980 Duggan found himself with orders for Fort Huachuca, Ariz. Maj. Gen. Duard Ball, then WSMR commander, found out about his assignment and requested Duggan come to White Sands to be Ball's deputy instead.

When Duggan arrived he was immediately tasked with resetting the range's commitment to the equal employment opportunity program. He was so successful that in 1985 he was named WSMR's EEO Manager of the Year.

In 1982, as deputy commander, Duggan found himself in charge of the "plan" for the landing and public viewing of the Space Shuttle Columbia on March 30. This was bigger than the president's visit as well over 1,000 WSMR personnel were involved in the shuttle landing preparation and execution.

One thing Duggan did in the pressure cooker days

leading up to the landing was to look out for other people's interests as well as WSMR's. For instance with the public driving through the little village of Tularosa to get to the range's viewing area, he was concerned about the possibility of thousands of vehicles mobbing the community. He pushed the NM State Police and others to support the village.

Afterward, instead of blaming White Sands for the crowds, the Tularosa Village mayor thanked Duggan saying, "I don't know how I and my community will ever be able to pay you back for being so outstanding to us."

For his efforts, Duggan was awarded the Legion of Merit which is given in peacetime for service "in the nature of a special requirement or of an extremely difficult duty per-



**Dan Duggan's Hall of Fame Portrait**

formed in an unprecedented and clearly exceptional manner."

When Maj. Gen. Niles Fulwyler assumed command of WSMR in Sept. 1982, he insisted Duggan stay on as his deputy. In this phase of Duggan's tenure he dealt with many rancher issues.

Ranchers were complaining about Air Force pilots buzzing their ranches and spooking cattle and horses. When the Air Force failed to respond to command complaints, Duggan invited himself to Holloman to brief pilots on the rules. In response the Air Force quickly tightened up their training and stressed the flight restrictions already in place.

Then, on Oct. 16, 1982, rancher Dave McDonald snuck onto WSMR to camp at his old ranch house. Duggan was the official who made contact with McDonald and his gun-toting niece and set the tone for a non-violent resolution to the event that made international news.

Duggan moved on to be Director of National Range Operation in 1984 and then retired from active duty in Nov. 1985. At retirement he was awarded his second Legion of Merit for his work at White Sands.

He and his wife Wilba live in Las Cruces.

# Arriving At White Sands Proving Ground in '49

By Aniceto Bagley

It was Labor Day weekend in 1949 and the train from Los Angeles was nearing El Paso. It had been a long hot ride through some of the hottest sections of the country such as Yuma, Arizona where the temperature had been over 100 degrees.

Three months earlier, I had left the Philippines, fresh out of the Philippine Scouts headed for the US with the sole intention of joining the regular US Army. After I was issued my Alien Registration Card I was accepted into the Army. I processed through Fort Ord, California and was now headed to my first assignment which was White Sands Proving Ground.

As the train neared El Paso, I contacted the conductor and reminded him that my ticket was for Oro Grande, New Mexico. He told me that he was leaving the train at El Paso and that I should contact the next conductor as soon as the train left El Paso. He didn't tell me how close Oro Grande was to El Paso so I took my time before I tried to find the new conductor.

When I located him and gave him my message, he said something like, "Oh, my gosh!" and headed off somewhere on the train. A few minutes later he came back, told me to grab my belongings and be ready to get off the train. And not too soon. The next thing I knew, the train came to a screeching halt and I got off.

When the train left, I found myself and my duffel bag beside the tracks in the middle of the desert. What a lonely feeling that was for a guy who had just left the tropics a few months earlier.

Fortunately, I was not completely alone. There was a wooden train station nearby occupied by a lone station master. I approached him and told him I needed to report to my station at White Sands Proving Ground. When I asked him how far it was to the post he took me outside and pointed to some mountains to the west and said, "See them thar mountains? It's at the base of them mountains and it's 28 miles from here."

I asked how I was supposed to get on post. He said there was a phone on the wall that connected directly to the motor pool and to give them a call and someone would pick me up. The phone was a EE8, a WWII type field telephone. A few cranks on the handle and I was in touch with the motor pool. About 45 minutes later, a jeep materialized in a cloud of dust and I was well on my way to my first Stateside assignment.

The jeep driver was a young Private or PFC, I don't remember which or his name. Heading into White Sands, there was a short stretch of pavement at Oro Grande Range Camp, then nothing but dirt (mostly dust) road until the Army Blockhouse.

The driver and I exchanged small talk and as we got on the paved road at the Army Blockhouse I got out my tie and started to put it on. The driver said, "You don't need to do

that. We don't wear ties here."

I had been discharged from the Philippine Scouts as a Master Sergeant (E-7). There weren't any E-8s or 9s yet. Because I was out more than 90 days, Army Regs said I couldn't retain my rank but another Army Reg came into play that allowed me to come back in as a Sergeant First Class (E-6).

As a senior NCO I thought it was fitting to report to my first assignment properly attired so I ignored the driver and put on the tie. Looking back I can see how ridiculous this was with all the dust and the heat.

We finally got the cantonment area and I entered the Orderly Room. There was a tall, good looking soldier there in khaki pants and white tee shirt rooting around in a filing cabinet. I assumed he was the Charge of Quarters and told him who was and why I was there. He said, "Well, we need to find you a place to sleep until Monday" then grabbed my duffel bag and took me up to one of the barracks.

He knew of a Sergeant who was gone for the weekend so he said I could use his bunk until Monday. After he left I asked the driver who was still tagging along who the soldier was. The driver said, "That was Captain (I think it was Stone), the CO."

Welcome to White Sands!



**Aniceto I. Bagley (left) and Robert E. Williams at WSPG in 1951. Bagley stayed in the Army and retired a CW4 at Redstone Arsenal, Alabama 1976 after 30 years service. Williams retired from Civil Service also at Redstone Arsenal. Both currently reside in Huntsville, Alabama.**



# White Sands Proving Ground Linked These Two Veterans 63 Years Ago



**Aniceto Bagley (left) and Robert Williams posing for a photo in Huntsville on July 11, 2012**

By Aniceto Bagley

Aniceto I. Bagley and Robert E. Williams met at White Sands Proving Ground in September 1949. Both were WWII veterans, Bagley having been in the Philippine Army guerrillas and later the Philippine Scouts while Williams enlisted in the US Navy in 1949. Williams served in the Admiralty Islands and the Philippines before being discharged in 1946. He then joined the Illinois Army National Guard but in 1949 enlisted in the Regular Army. That is when both were assigned to White Sands Proving Ground.

In early 1950, both men were selected along with about two dozen other soldiers to become the nucleus of fledgling missile maintenance units which were being formed to support the growing arsenal of Army missile weaponry. There being no missile maintenance courses at the time, the two

were sent to a 39-week radar repair and maintenance course at Ft. Bliss. Here they were roommates and became lasting friends.

Upon returning to White Sands they were both assigned to the Corporal missile project.

In 1953, at the end of his enlistment Williams decided to leave the service and went to work for Firestone in their Corporal division. Bagley stayed in the Army and took a direct appointment to Warrant Officer in 1956.

In 1976, Bagley retired from the Army at Redstone Arsenal, Alabama and took up residence in Huntsville, Alabama. In the meantime, Williams had taken a job with Civil Service in 1962 at Redstone Arsenal. He retired there in 1986 and also remained in Huntsville. The two friends make it a point to attend monthly VFW meetings together.

# Excerpts From MG Laidlaw's Oral History

*Editor's Note: What follows are excerpts from an oral history made by Maj. Gen. W.E. Laidlaw, the 5th commander of White Sands. He served from 1956 to 1960. The version we have was prepared by Robert H. Mackintosh, the general's son-in-law. We'll share part 2 in our next issue.*

I found that my new command consisted of about 2 million acres and 3,000 enlisted men and civilians. Although missiles are ammunition, this was certainly an entirely new field for me. I soon learned that missiles didn't always go when you wanted them to nor where you wanted them to go.

My quarters were a former duplex that had been made into one set of quarters. We had two bedrooms and a bath on one side and two bedrooms and a bath on the other. They had knocked the middle wall down that had divided the two living rooms and made one living room out of the two. One kitchen had been made into a dining room. It was a very comfortable place to live and near my work, too.

I soon found out that General Bell (previous commander) was more of a technician than an administrative type man, which I knew I had to be, since I was not qualified to do much technically about the missiles themselves. We had lots of civilian engineers from the developer companies such as Raytheon, and I knew I couldn't add much to their knowledge, as they were specialists in their particular fields.

But I found that administratively there was plenty that I could do. In fact, I got an order from the Chief of Ordnance that I should concentrate on building up White Sands administratively. White Sands was started when we got the German V-2 missiles that had been brought by General



**Maj. Gen. Laidlaw's White Sands command portrait.**

Toftoy from Germany to White Sands for testing. The Germans were all settled in barracks behind barbed wire at Fort Bliss which is contiguous to White Sands. The Army took over 2½ million acres to fire these V-2 missiles and to test missiles for our Army. General Toftoy was by far the leading technician in the missile business. He had been a classmate of mine at West Point.

By the time I got to White Sands all the Germans had been made American citizens and were not confined in any way in their living or where they went. In fact, the leading technicians had then moved to Huntsville, Alabama, where the Missile Command was set up. But there were still some Germans in the technical side in the Army setup.

My domain was so vast in size that I had to use a helicopter to get around. Also, if I went from one end of the range to the other end, I would issue my own travel orders and go overnight, since I'd go by car. I decided that I would inspect every building on White Sands. Believe me, that was a task. I set up every day a few hours to go around and see all the buildings on the range. I was able to visit every building twice except a few remote instrumentation stations.

I even went up in the mountains and saw some of those, too. White Sands was originally taken over for firing the first atomic device. I visited that site which was on the range, and it was interesting to see how the explosion of the atomic device had actually melted the sand which later became solidified. Hunks of it could be picked up from thin layers on the top and carried away. I took some home as a souvenir but I don't know what became of it. The trench where the testers took shelter when the device was fired was still at the site. One of our Signal Corps establishments was stationed on top of the peak that overlooked the atomic site. There was quite a view when one drove up to that station.

On Easter Sunday of 1956 Lois (daughter) brought three of her college classmates to spend their Easter Holidays with me. Wilma (wife) was still in Panama with Steve (son). They were a welcome sight in my lonely domicile. I had been preparing my own meals or eating at the Navy Mess which was quite handy. I had gotten Lois a Chevrolet her second year of college and the girls drove in her car. They seemed to have a wonderful time while they were there and I thoroughly enjoyed them.

In June of 1956 Steve graduated from Amador High School in Panama as an honor student and he and Wilma flew to El Paso. I certainly was delighted to see them again. Wilma soon made our house a home.

I can't remember the exact date, but I know it was my second year at White Sands that the Russians put up their first Sputnik. This was in 1957. That immediately aroused the interest of the whole country. We knew then the Russians were way ahead of us. The missile business became mighty important to the United States, and of course, the Army was the primary one to have missiles.

**see Sputnik Boosts Missile Biz, page 7**

## Sputnik Boosts Missile Biz — CONTINUED FROM PAGE 6

General Toftoy was the leader for missiles in the Army. He had fought for money and recognition of the missile business when others wouldn't listen to him.

I remember Colonel Les Skinner of the Ordnance Department who got one time about \$300 for his experiments with rockets at Aberdeen Proving Grounds. That was the total authorization for the missile business for the U.S. Army in the 1930s.

With the advent of Sputnik, everybody in the country wanted to see a missile fired. And the only place they were firing them was at White Sands. So everybody came to White Sands to see them.

At that time missiles were very unreliable. The oldest anti aircraft missile, the Nike Ajax (later there was the Nike Hercules) had been fired by the time I got to White sands reasonably successfully, but not reliably.

We were working on several different types of missiles. The Navy had the Talos missile which was to be launched from the deck of a cruiser. The Army had the Lacrosse missile, the Honest John, a reasonably reliable missile, the Corporal missile which had been around for a long time and was fairly reliable, and the Dart, an anti-tank missile and others.

At one time, a Corporal missile fell near the Talos missile launching site where Lois was working. We also launched a Corporal that went over the mountains on the side of the range, but it apparently did no damage. Numerous missiles failed to meet their objectives, but practically no damage resulted.

We also tested the first anti-missile missile, the Nike Zeus. The Zeus' testing was started while I was in command at White Sands and was so important that it seemed that everybody wanted to hear the results of the first firing. The Secretary of the Army, Wilbur Brucker, had a direct telephone connection from Washington to me to learn the results of the firing. Fortunately, the firing was satisfactory.

The Air Force had a Matador missile which went astray. There were two destruct systems on the missile, but unfortunately, both of them ended up going through the same switch which malfunctioned and we couldn't bring the missile down. We got all sorts of reports as to where it landed, even from a woman in Michigan who said it landed near her. Actually, the missile went up east of Albuquerque and fortunately landed in the desert and did no harm.

We had one very scary thing that happened to us. We fired a Nike Hercules at a B-17 which was radio controlled. We just winged the airplane and lost control of it, and it kept circling overhead. We sent up a couple of fighters, but they couldn't bring it down either. Every time that airplane circled over the housing area with its load of gas I shuddered. It circled for sometime, then much to our relief it crashed out in the desert and did no harm. The burst of flame that rose when it landed gave us an idea of what could have happened.

At another time we fired a Nike Hercules with a full warhead. We never did fire any missiles with nuclear

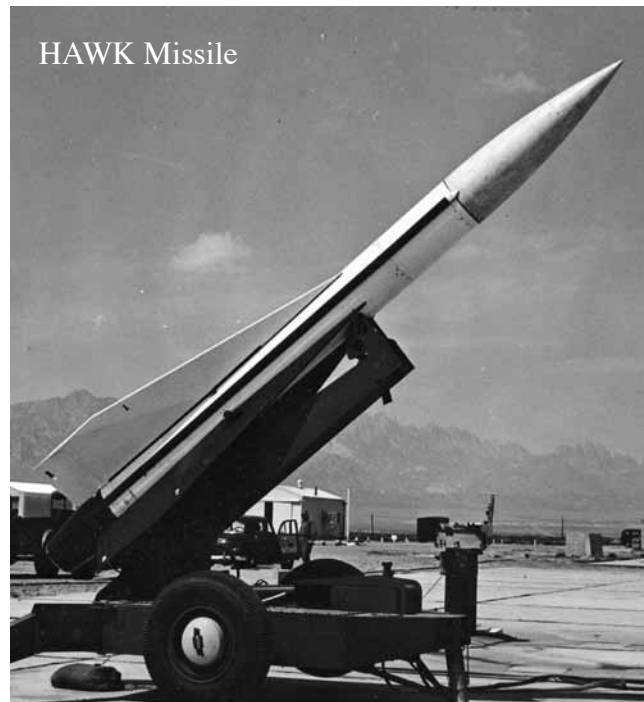
warheads at White Sands. When armed, all missiles had explosive, but not nuclear, warheads.

This Nike was to be fired with a full warhead, so we could see how it would operate. At the occasion of this firing I had the British Ambassador and the Canadian Ambassador to the United States with me out on the firing line. The missile fired and went straight up, as it usually does, but something malfunctioned. It had a self-destruct system on it that blew it up at 800 feet. It was a terrific roar. Pieces of the serrated warhead fell within a few yards of us on the firing line, and were hot when I picked them up.

After that scare, I moved the observation point back for that type of firing.

The Chief of Ordnance, General Cummings, came out to see the first firing of the Hawk anti-aircraft missile. The missile was set up on a pedestal mount at zero elevation and pointed down the range. Just before firing, it was supposed to elevate itself and fire at an aerial target. Unfortunately, we got some ground feedback that fired the missile at zero elevation.

It hit some boondocks in front of us and squirted around like a balloon does when you blow it up and let go without tying it. I always wished that I had a moving picture of General Cummings' and my actions at those moments. The missile kept going around through the air in various directions until the motor burned out. We were dodging everywhere to avoid it!



HAWK Missile

### Dannenberg Honored With Donation

Dawn and Stephen Wallenhaupt from Charlotte, North Carolina have made a generous donation to the White Sands Historical Foundation in honor of Konrad Dannenberg.

Thank you.

**Hands Across History  
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## **The Back Page**



**This image of Space Shuttle Columbia landing at White Sands on March 30, 1982 will be featured on a new roadside historical marker the Foundation is having fabricated. The sign will point out the Space Harbor and give a short history of NASA's shuttle program at WSMR. The sign will be planted next to Range Road 7, west of Space Harbor.**