



Hands Across History



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

Volume II, Letter II

June 2006

Foundation & Pioneers Throw Birthday Bash

On July 14, the White Sands Historical Foundation and the White Sands Pioneer Group will sponsor a 61st birthday luncheon at the Frontier Club on post. The luncheon will begin, like all White Sands luncheons, at 11:30 a.m.

You are encouraged to come early and stay late to visit with old friends.

The luncheon will feature Tim Gormley as the guest speaker. Gormley is the Chief Operating Officer of the Rocket Racing League that will soon start racing out of Las Cruces.

The league is an aerospace sports and entertainment organization that combines the competition of racing with the excitement of rocketry. The league's stated mission is to

"serve as a technology accelerator in the areas of airframe, propulsion and spacecraft design, and reach for the future to inspire the next generation of spaceflight enthusiasts."

Gormley will explain how all this will work.

In addition, Tom Berard, the missile range's first "director" will welcome everyone and offer a few comments.

Door prizes will be given out and there will be birthday cake for dessert.

The cost is \$12 for the luncheon. Please make your reservation before July 11 by contacting Pam Vick at (505) 522-4179 or Jon Gibson at (505) 382-8292 or WSMR Protocol at 678-1408. Also, you can email Pam at pvick@zianet.com and Jon at Gibson_Jon@msn.com.

Birthday Bash Will Include A Golf Scramble

In addition to the luncheon on July 14, there will be a team, 11 hole-golf scramble on the WSMR course that will tee off at 8:30 a.m. and conclude in time for the 11:30 a.m. luncheon. In fact, the \$50 per person entry fee includes a luncheon ticket.

For those with lots of energy, you can make a tee time for after lunch and hit the course for another round at your own leisure.

This team scramble will be limited to 48 players to

make sure play moves along at a reasonable rate. Everyone will play the course's 11 holes and then adjourn for lunch.

The event is a fund raiser for the White Sands Historical Foundation with proceeds going to support the range museum. Sponsors for the event are welcome and will help defray the overhead costs.

To register your team or yourself, contact Austin Vick at (505) 522-4179 or Mike Courtney at 678-1919. You can contact Austin by email at avick@zianet.com.

Thank You Birthday Sponsors

As the newsletter went to press, the following organizations and companies have generously kicked in to support our July 14 activities. Thanks.

Association of the United States Army
International Test and Evaluation Association
NewTec
Energetic Materials Research and Testing Center
MIRATEK Corporation

Museum Shows Large Number Of Visitors

By Terrie Cornell, Director
White Sands Missile Range Museum

Your Museum is enjoying continuing success. Visitation statistics reflect some of it: in 2005 we had 49,775 visitors. While this is not a record for us, it's certainly healthy for a small museum.

Donations to our collections are also increasing. In 2005, 101 people gave us artifacts, documents or photos. Donations have climbed annually at a gratifying rate: from 30 in 2000, to 89 in 2004. The generosity of our donors provides us with good exhibit items and photographs to show the history of the Range.

Some of our donors are WSMR employees cleaning out shops and buildings. We often hear a statement like this, "I wish I'd talked to you last year before I turned in a bunch of old equipment." In an effort to stem that tide going to DRMO, WSMR's Director, Tom Berard, issued a memorandum to all White Sands Test Center directors, asking that the museum be given right of first refusal for obsolete or historical equipment prior to disposal. Equipment is easily transferred to the museum's separate hand receipt for obsolete equipment.

Rick Shea, the museum's Registrar, accepted his "dream job" as Wing Historian at Holloman Air Force Base, starting on March 20. We all enjoyed working with Rick for the last two years and we hated to see him leave, but we wish him all the best.

Welcome to our new Thursday volunteer! He is Don Champ, who served at White Sands in the Army in the Safeguard System Evaluation Agency (SAFSEA) in the 1970s, associated with the Sprint Missile. With his computer expertise, Don is helping immensely by entering data about photographs into the archival database so we can search and find them.

Our dedicated volunteers continue to contribute much to archiving WSMR's history: Terry Chappell, John Douds, Dick Dysart, Bill Jones, Glenn Moore, Bob Nichols, Doyle

Piland, Roger Roenfeldt, Robert Watkins, Debbie and Fred Walters. If you are interested in joining this crew, call me at 505-678-2250 or email me at cornellt@wsmr.army.mil

Our volunteers and staff are accomplishing great things in salvaging the history of the Range, which has been allowed to hemorrhage away over the years. We need the help of you former employees to maintain our momentum. Please go through your WSMR papers and pictures and bring them out or send them to the museum at P.O. Box 400, WSMR, NM 88002-0400.

I couldn't help but notice that Chris Heath, the museum gift shop manager, is now selling pieces of V-2 skin and oxygen piping for the Foundation. Pieces, mounted and loose, are on display in the gift shop and will probably make wonderful souvenirs veterans of White Sands Proving Ground. The pieces were cut from the scrap created when our display V-2 was restored with the opening running from top to bottom.

Veterans Invited To Dinner

El Caldito's Annual Veterans Appreciation Dinner will be held on Saturday, June 24, from noon to 2 p.m. at El Caldito Soup Kitchen located at 999 West Amador Community of Hope Complex in Las Cruces.

All Veterans and Spouses, from all military branches, war time and peace time, are cordially invited to enjoy lunch with fellow veterans as El Caldito honors them for the service they have rendered to our country.

The menu includes beef brisket with all the trimmings, drinks and dessert. Table service for guests will be available by volunteer cadets from Las Cruces High School and the Echo Band will provide our live entertainment.

This year's dinner is entirely underwritten by Curtis Rosemond, manager of Walmart Supercenter located on Walton Blvd. in Las Cruces.

For more info contact Dan Farren at (505) 521-1749.

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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White Sands Historical Foundation
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Navy Celebrates 60 Years On White Sands

By George Helfrich

On June 15, 1946, Secretary of the Navy James Forrestal signed the order establishing a Navy Unit at the White Sands Proving Ground. The newly assigned Officer in Charge, Cdr. Robert McLaughlin, would later admit that the Navy accepted an invitation from the Army to come to White Sands knowing only that it needed to get into the guided missile business.

Years later, on a return visit, he said he never imagined the amount of progress that would be achieved here. What started as a temporary Quonset Hut village has grown into an impressive array of missile test and launch facilities used to support fleet air defense missile development, research rocket experiments and laser beam pointing technology. During the last sixty years, the V-2 high altitude research activity progressed to the Viking project, forerunner of the Vanguard space program, and the Aerobee program proposed by Dr James VanAllen.

Today a number of high altitude research vehicles are still launched by the Navy in support of NASA and various Universities.

The Navy's first fleet air defense missiles, Talos, Terrier, and Tartar have evolved into the Standard Missile, deployed today on all Aegis cruisers, destroyers and frigates. Research and development of NATO missiles such as RAM and Evolved SeaSparrow have taken place at WSMR.

Tests in support of the Joint Cruise Missile Program started at WSMR in 1974 to demonstrate guidance data

processing of altitude data soon followed by guidance system source selection and finally the actual flight of the first Navy Cruise Missile, the Tomahawk, prior to fleet deployment.

While many people are surprised that the Navy has a presence here, they are even more so when told that fleet defense testing is conducted from the USS Desert Ship located ten miles east of the main base on Nike Avenue. Although it has often been stated that the Desert Ship is a commissioned Naval ship, it is not and never has been. The myth originated in 1954 when some of the construction workers held a mock christening ceremony at the time the building was turned over to the Navy. However, special Congressional authorization was required just to label it as the "USS Desert Ship." It is also known as the LLS-1 or Land Locked Ship Number One.

Having a Navy facility located in the middle of a desert presents some challenges but when it is also in the middle of an Army base some unusual things can happen. When the annual Army / Navy football game is played it was not unusual for the Army's howitzer in front of the Army Headquarters Building or the Navy display missile located in front of their headquarters to mysteriously disappear for several days.

When President Kennedy visited WSMR and a large "ARMY" sign was painted on the Army blockhouse an additional sign in identical lettering was later placed above the original, which then proclaimed "Navy beat Army."

There was a time in 1959 when nearly all Navy vehicles could count on an MP escort wherever they went. It seems the Army Military Police took exception to the Navy Test Officer stopping one of them and issuing him a traffic ticket from his own book.

However, for the most part there is a great deal of respect and cooperation between the two services. Having an inland facility allows the Navy to provide its personnel with shore duty where they can spend time with their families while participating in some of the latest research and development work that the Navy is pursuing.

The civilians working with the Navy personnel often must learn a new language, as the floor becomes the deck, the ceiling the overhead, the restroom the head, and, of



A double Talos missile launch from the Navy's Desert Ship, LC-35.

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Way Back When

Nike Testing Once Buzzed On Nike Avenue

By Doyle Piland
From the WSMR Museum Archives

If you head out Nike Avenue, past LC-32, LC-33, on past the Navy Launch areas LC-35 and LC-36, you will come to a sign for LC-37. A half mile or so further and you'll find another LC-37 sign. This second sign is at Range Road 15 (RR-15), which continues north and intersects with U.S. Highway 70 across from the entrance to the High Energy Laser System Test Facility (HELSTF).

If you explore the area of LC-37, you won't find much there. There are a few buildings at the north end of the first LC-37 road and a few buildings off to the east of RR-15. That's it!

Well, *Way Back When* it was significantly different. It was one of the most active test areas on White Sands Proving Ground/White Sands Missile Range (WSPG/WSMR). It isn't clear when this area first started as the Nike Test area, which at the time was known as Army Launch Area (ALA) 3, but it was in the early to mid 1950s.

Gradually the Nike testing migrated from LC-33 (ALA-1) to ALA-3. This included Nike Ajax, the first version of the Nike Air Defense missile systems, as well as, the follow-on Nike Hercules and Improved Nike Hercules systems. In total, firing records indicate that from 1946 through 1959, a total of 3945 Nike Ajax were fired. From 1956 through 1967, 646 Nike Hercules missiles were fired at White Sands. This includes those from LC-33 and LC-37, with the vast majority from LC-37. The last Nike Hercules firing from LC-37 by the contractor was in August 1967.

A couple hundred yards or so north of Nike Avenue, there is a road that runs parallel to Nike Avenue between the first LC-37 road and RR-15 and then on east to the remaining buildings there. Along this road west of RR-15, the

Integrated Fire Control (IFC) area for a system belonging to The Continental Army Command's Board Four system, which was operated by Fort Bliss soldiers who commuted from Fort Bliss daily.

The Board Four was the user's testing representative and played a significant roll in the testing of Nike Systems at WSPG/WSMR. One can still see various concrete foundations and pads where this system was located.

About a half mile north of Nike Ave. is another road that runs essentially from the west side of LC-37 to the east side and on into LC-38, formerly known as ALA-5. Along the south side of this road there were seven Nike launching sections. Some were the bare minimum needed to launch a Nike missile, while others were fairly elaborate with large bunkers to the rear for the launch crews. Remnants of these launch sections remain today.

At the north end of the road along the west of LC-37, there are some Quonset-type buildings on the west side of the road and one cinder block building on the right. The cinder block building was the Nike Assembly and Test building. It was of the same design and construction as more than two hundred such buildings at Nike sites across the United States and at overseas locations.

Just north of the Assembly and Test building, as the road bends to the east, there are the remains of two Nike Ajax fueling facilities. They are concrete slabs built so that they slope to the center along the length and with concrete sides to channel any spilled fuel to a central location. These fueling facilities originally had a structure with a roof and each had a shower to wash fuel/oxidizer off personnel if a mishap occurred. The structure, roof, and showers are no longer there.

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NIKE — CONTINUED FROM PAGE 4

East of RR-15, along the road near Nike Avenue, was where the Nike Contractor (Bell Labs/Western Electric) IFC System was located. This is where buildings remain today.

Over the years this system changed from Nike Ajax, to Nike Hercules, to Improved Nike Hercules. The photo on the previous page was taken looking east-northeast and shows the Improved Nike Hercules IFC area as it looked about the time it was closed.

The dark oblong antenna at left is the Low Power Acquisition Radar (LOPAR). The white ball to the right of the LOPAR is the Target Tracking Radar (TTR), with the Target Ranging Radar (TRR) just to the right of the TTR. The white ball beyond and left of the buildings is the Missile Tracking Radar (MTR). The large dome on the tower is the High Power Acquisition Radar (HIPAR). The HIPAR transmitter and receiver equipment was located in the building at the base of the tower.

Seen at the near side of the HIPAR building are two vans positioned against the wall. They are the Radar Control (RC) van on the left and the Battery Control (BC) van on the right. The RC van houses the tracking radar controls and part of their receiver equipment. The BC van has the controls for the LOPAR and HIPAR, plotting boards, analog computer, switchboard, and the control console. Just beyond and to the left of the HIPAR building is the Generator building with the generators to power the equipment.

The HIPAR building remained there until a few years ago, when it was removed. Most likely disassembled and moved to another location on White Sands.

The building beyond the tower is still there along with one other small building. The HIPAR tower was disassembled and apparently moved to LC-34 for some period of time. There are photos in the Archives showing it being moved from LC-34, apparently to its current location along the west side of RR-15 several miles north of Nike Avenue.

One other note of interest, shortly after passing the Nike Assembly and Test building, there is a road going off to the left. This road goes out to what was originally the HIBEX (High Boost Experiment) launch site. This launch was where 10 HIBEX missiles were launched -- nine in 1965 and one in 1966. The HIBEX launch area has been converted to the Theater High Altitude Area Defense (THAAD) launch area.

There is a note of tragedy associated with ALA-3. In December 1956, an L-19 airplane with two Army lieutenants on board crashed and the occupants were both killed. It is believed that they had been out locating debris after a Nike firing. Witnesses indicate that upon their return, the pilot made a pass over ALA-3, tried to do a barrel roll, caught a wing on a sand dune, and crashed.

And, that's the way it was, *Way Back When*.



Nike Hercules launch from White Sands Missile Range.

Stay Tuned For Next Issue

Many readers have donated stories and information for these newsletters. Thank you and keep them coming. I think you can see they add a lot to the publication.

In the next issue we will have a piece by Joe Gold about Clyde Tombaugh, the discoverer of Pluto and an original White Sands Hall of Fame inductee, and, appropriately enough, the story of the Little Bright Eyes tracking telescope by Ken Bellinger. If there is room, I'll throw in my story about when Audie Murphy visited White Sands.

Jim Eckles, Editor

Remote Oscura Range Camp Recalled

By Don Lee

Tech NCOIC at Oscura Range Camp - 1950s

I was a GI with a Radar Repair MOS. I was fortunate to have been assigned uprange. at Oscura Range Camp (ORC). This was during some of the glory years of White Sands Proving Grounds.

It is somewhat disappointing to find that a great amount of the history of the uprange camps is being lost. Many people are of the opinion that ORC was used only as an Ordinance camp that flew Radio Controlled Air Targets, (RCAT's) for Nike training firings from Red Canyon Range Camp. In reality ORC was a Signal Corps Camp used to provide radar tracking and camera coverage of the 50- and 70-mile impact areas before the RCAT units moved in. The host organization to the Ordinance contingent from Ft. Bliss was the Signal Corp throughout the service life of the camp.

ORC was originally a depression era Civilian Conservation Corp facility consisting of four tar paper shacks and another small building used as a latrine. The site was about 11 miles west off U.S. Highway 54 at Oscura . When the site was selected as an instrumentation site the shacks were largely uninhabitable, having been abandoned and left to the elements for many years.

Fred Sweet was a Civil Service employee who related much of the history of the uprange camps to me. I can only say that I hope my memory is correct.

When the site was selected as the location of the radars the reasons were access roads were in place and the view of the impact areas was unencumbered. The radars and plotting facilities were in vans. The radars were SCR 584's modified for rocket tracking and were, of course, WWII vintage systems.

One of the tar paper shacks was made usable as an office and supply room. The other buildings were ignored. The crew that manned the station was quartered in Carrizozo at the El Cibola hotel. It was 25 miles, 11 of them a dirt road that took some real turns through the malpais. The men were on per diem and ate at Yucca Grill for the most part. The steak house across the street was used for a change of pace. They had it made but there was little shade was the word.

A name I recall from conversation with Fred was Capt. Cossart. He was the military commander. From what I heard he had a miraculous way of making things that were needed appear somewhere within two days. He was a "can do" kind of guy. If you needed it he got it!

Another name was Leroy Warra, a warrant officer. Leroy could be a buddy to the guys in the Yucca bar at night but the boss at a 3 a.m. station call the next day. I had the pleasure of meeting him once. He was assigned to ORC in the early days of the camp.

A permanent technical building was planned and started. The radars would be in a permanent building rather than vans. The station was expected to grow some.

Leroy sensed that if those buildings were available someone would get the bright idea to use them to quarter the troops, at that time numbering about 11 but expected to be more when the stations role in range operations was increased. One of the old buildings was used as a supply room and an office.

He made arrangements to have fire trucks come up from Holloman AFB one Saturday with a plan to water down the one building he wanted to save and torch the rest. The trucks were on their way when a colonel from Post Engineers at White Sands came flying in an L19 to the recently completed air strip. He was hopping mad. They had plans to renovate those buildings and save lots of money. The fire trucks returned to Holloman.

After that the renovation was speeded up considerably. Paint, two small butane space heaters and some cots made a barracks. A walk in cooler was added to a porch on one of the buildings and a mess hall was born.

I was at ORC from early 1954 to 1959. I took part in retiring the van installations and getting operations going in the new building. The operations did grow as ORC was used as a control station for many air to air missile firings and as a drone control facility for a large number of missions before my discharge.

I will never forget a couple of incidents. The impact areas had camera stations at roughly each corner. An Honest John firing had a little problem and the impact was dangerously close to one of the camera stations. The cam operator had acquired the missile and tracked it right to impact. Being larger than life scared him a little. He called out "Impact" as the shock knocked him flat. A loud boom came across the radio. It was a couple of anxious minutes before the radio crackled ."I want hazardous duty pay!" Everyone was quite relieved to hear that guy. It was close.

Another was a Matador that was being stubborn, refusing to take commands. It was a ground-hugger mission. It was nearly off range but still within safe parameters. Missile Flight Safety was watching closely. That thing with a chase plane flew at about 50 feet over the garbage dump. A truck with two guys on it was unloading trash. They did some Olympics class dives off that truck into the garbage pit. The flight was terminated without incident after that. The guys were unhurt.

DreamWorks Hits WSMR

For the first time since the mid 1970s, a major motion picture company has come to WSMR to film a few scenes. The film is being produced by DreamWorks and is based on the Transformer toys and cartoons from the 1980s.

The company filmed live actors in the missile range's sand dunes and at the Small Missile Range during the last week of May. Giant robots will be added later by the studio using computer graphics. The film, still untitled, is supposed to be released in July 2007.

Future Combat Systems Will Be Next Challenge For White Sands, Plus A Chance For Growth

By Eddie Kennedy

The crown jewel of the Army's force transformation efforts will undergo early testing at WSMR/Ft Bliss. Future Combat Systems (FCS) is a family of 18 networked warfighting systems, including both manned and unmanned platforms, that will be more lethal, survivable and deployable than existing combat systems such as Strykers or the M1 tank.

FCS utilizes information superiority and synchronized operations as enablers for a radically transformed "system of systems" warfighting doctrine that prioritizes agility, speed and information dominance over mass and size. Boeing and Science Applications International Corporation (SAIC) are the Lead System Integrators (LSI) for developing and integrating the FCS for the Army.

An Evaluation Brigade Combat Team (EBCT) will soon be formed to evaluate leading-edge technologies utilized by the FCS. Fort Bliss was selected on January 6th as the host for the EBCT because of its access to WSMR land and airspace.

"We think the first elements of the support team for the evaluation BCT will arrive this summer and in 2007 a

battalion-size unit will be running through the experiments for the Future Combat Systems," said Brig. Gen. (P) Robert P. Maddox, Fort Bliss Commander.

Among the first experiments will be Experiment 1.1, a series of experiments culminating with a Field Demonstration Experiment to be conducted at WSMR that will be a precursor to future Technical Field Tests. The EBCT will be created from one of the heavy brigade combat teams currently assigned to the 1st Armored Division in Germany and will eventually be made up of about 3,500 soldiers.

Future Combat Systems is not just a modernization program but a material solution for a new network-centric American way of war. It brings with it new vocabularies and mindsets that are harbingers of a cultural change for WSMR, one that requires a melding of WSMR's technical prowess with an awareness of the complexities of the contemporary battlespace.

This is not unlike similar challenges in the past, from early innovations in two-stage rocket developments (e.g. Project Bumper) to more recent contributions involving lasers in the battlefield.

Personnel at White Sands are on point and ready to move FCS forward.

NAVY ——— CONTINUED FROM PAGE 3

course. left and right are port and starboard. The Navy personnel also bring interesting and colorful activities to the desert such as retirement and change of command ceremonies where the principal participants are piped aboard the platform or stage with a boatswain's whistle and the appropriate time is struck on the Navy bell across from the Quarterdeck (entrance to the Navy Headquarters Building).

There was a time when the Quarterdeck was manned 24 hours a day by sailors and the Navy bell was struck hourly and on the half hour as is done aboard ship. If one is interested in the history of the Navy at White Sands, a visit should be paid to the Quarterdeck to view the mural painted there by artist Royce Vann in 1993 depicting nearly fifty years of testing by the Navy at White Sands.

The mural however does not depict some of the very early activities of the Navy personnel such as an incident reported in the Las Cruces Sun News on Oct. 24, 1946 that "Military and city police broke up what gave promise of being a major battle between a group of sailors and a group of Las Cruces shortly after midnight last night on Main Street in the center of the city. Eight to ten military police and two city patrolmen nipped the fray in the bud, before it reached casualty proportions, tear gas being used effectively, it is reported ——— sailors ——— newly stationed ——— in

custody of military police ——— details lacking ——— left north of city cafe with the expressed intention of 'taking the town.'"

Years later, when asked about this, Captain McLaughlin (Retired) indicated there was friction between the sailors and the local police because of propositions made to the sailor's wives when they went to town for drivers licenses. He also told of a Sunday afternoon commotion involving some sailors he encountered in Las Cruces. Upon investigating he discovered they had one of the two local policeman on duty tied to a tree. The policeman was released and he sent the sailors back to the base where they were dealt with later.

Fortunately, relations improved and the Navy personnel pursued more peaceful activities as evidenced by their adoption of an orphaned baby deer whose mother was killed. The Game Warden soon learned about it and relieved them of it.

Later they befriended a stray mutt, which they named Guns (short for Gunner). It was for years their mascot until it died and was given a formal burial, including a headstone, outside the enlisted men's barracks.

Many Navy personnel have left White Sands to continue their careers only to return to the desert upon retirement, having found that the beauty and lifestyle of the Land of Enchantment was to their liking.

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

The Back Page



You can now buy small pieces of the White Sands V-2 as souvenirs. The White Sands Missile Range Historical Foundation is making this offer to raise funds to support the range's museum.

When the V-2 was restored with a cutaway on one side, there were parts and pieces (mostly skin) left over from the process. Museum officials have made some of it available to the Foundation to use in fund raising.

Pictured to the left on, a small block of maple, is a piece of an oxygen pipe that carried liquid oxygen from the turbo pump to the engine. Most of the other pieces are small rectangles of the outer skin - each larger than one square inch.

Prices vary by size and interest. An unmounted piece of skin or tubing is \$100. Mounted they are \$125. There is a unique and large, interesting piece of skin in the museum gift shop with a ripped edge - very arty. It is mounted on a block of oak and is selling for \$250.

Currently pieces are available through the museum gift shop. Each comes with a letter of authenticity that explains the rocket's history.