



Hands Across History



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

Volume XI, Letter III

August 2015

WSMR's 70th Anniversary Quietly Passes

Editor's Note: The missile range's 70th anniversary passed by in July without great fanfare. Officials felt the upcoming 75th anniversary would be a bigger deal and they will pursue some kind of activity to commemorate the range then. Fifty years ago, on WSMR's 20th anniversary (July 9, 1965), the post newspaper published the following article about missile flight safety. The article is unaccredited but is in an interesting style - not something you see in a military pub. I think you'll enjoy it because it talks about what a pioneering institution White Sands was during those early decades. Note that Nat Wagner is listed as the father of missile flight safety for the country not just southern New Mexico. Also note the date for Wagner's start up - 1947. His approach was much needed because in May 1947, V-2s crashed near Alamogordo, N.M. and Juarez, Mexico.

"All progress is change – all change is not progress."

With this credo, the Missile Flight Safety Office of White Sands Missile Range guides its activities.

Born of necessity, nurtured in a totally unexplored environment, and matured to a state of the art where the child is father of the man – Missile Flight Safety is the conscience of the missile fraternity.

Nathan Wagner, chief of WSMR Flight Surveillance Office and Senior U.S. missile safety man, was first handed the job of making good on a "guess" and developing a total safety program in the missilery dawn of 1947. Working under the first missile safety man, Herbert L. Karsh, Mr. Wagner had by the fall of 1947, organized the initial technical group charged with missile flight safety.

Departing from the then accepted practices of launch crew responsibility for all phases of flight from lift-off to impact, Mr. Wagner began the development of a new concept for safety. He followed the rules of the "simplest, most reliable and reasonable" approach to the problem. This took a step forward in reverse by preparing a "bunch of solutions looking for a problem."

It is easy enough to push a destruct button when a missile strays off course, but the job of the safety man, according to Wagner, is to assure a good test, rather than to insure destruction of valuable vehicles, wasted man-hours, and loss of irreplaceable data. With these aims the Missile Flight Surveillance Officer became the most interested and, at the same time, the most disinterested man during every launch.

With man as the ultimate machine, the building of a total flight safety team began – technical, engineering and psychological talents were merged. Take a man with education (all MFSO employees here hold at least one engineering degree), add interest, imagination, initiative, an open mind, and a stable personality, and you have all the ingredients to develop a successful missile flight safety officer.

Let him live with missiles until he knows each purchase and performance. Let him watch the plotting boards and senior safety men until his responses beat computers. Let him design, develop, test and install his own equipment and tear it out and redesign, retest and reinstall until the safety system is many times more reliable than the missile that carries it.



Nat Wagner's White Sands Missile Range Hall of Fame portrait.

Let him watch, study, and learn in the charged atmosphere of hypersonic flight operations and millisecond responses until the man and the environment are one, and then and only then do you let him "ride the switch" on every-increasing responsible flights and, finally, after long testing and proving, do you rate him – Missile flight Safety Officer.

With the widest possible variety of testing programs and the "first" in many areas, including flight over populated areas, White Sands became the pace-setter in problem solving. There was no job description for Missile Flight Surveillance Officers – because never before in history had there been a Missile Flight Surveillance Officer. There were no training schools. Theory became fact and fact became policy.

see WSMR Taught Other Ranges, page 3

WSMR Museum Archives Are Proving Valuable



Doyle Piland, left, accepts a check for \$250 from Philip Esser of Epsilon Systems Solutions, Inc. Doyle is with the White Sands Historical Foundation and is the leader of the gang of volunteers recording material in the Museum Archives. Bottom line - he is the missile range's archivist.

Phil's company uses the archives frequently in doing architectural history studies and compiling reports for the missile range. It is source material found nowhere else. Phil said, "We can't thank the Foundation (Doyle and all his terrific volunteers) for all the friendly assistance they provide for our efforts."

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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WSMR Taught Other Ranges — CONTINUED FROM PAGE 1

From the ground up and back to the ground again there was an integrated and comprehensive missile flight safety program. Soon the later-day ranges were calling WSMR for assistance and a start toward solving their problems.

The MFSSO and other WSMR personnel flew the first two-stage rockets, Bumper No. 7 and Bumper No. 8, at Patrick Air Force Base in 1949 (now the Air Force Eastern Test Range). A steady procession of officers, some 900 in all, studied the Wagner concept of safety before they sat in launch complexes of the nation's many Hercules anti-aircraft installations.

Not all effort was expended in the United States. Teams of safety men traveled overseas to set up and organize ranges for foreign countries and for U.S. troops to use to keep their missile skills current.

White Sands has the only all civilian Missile Flight Safety organization – other ranges employ military and civilians. This, in Mr. Wagner's opinion, gives an opportunity to develop the overall safety team concept and provides for a greater gathering of experience because of the stability of civilian assignments over the necessarily transient military personnel.

As the oldest national range in the U.S., White Sands has had more varied operations over a longer span of time than its sister ranges. As the first flight test site of many untried missiles, WSMR had to have solutions to the flight safety problems. Here concepts now standard for all missile range were developed and the flight of missile over populated areas into the range has become an extension of the missile flight test path.

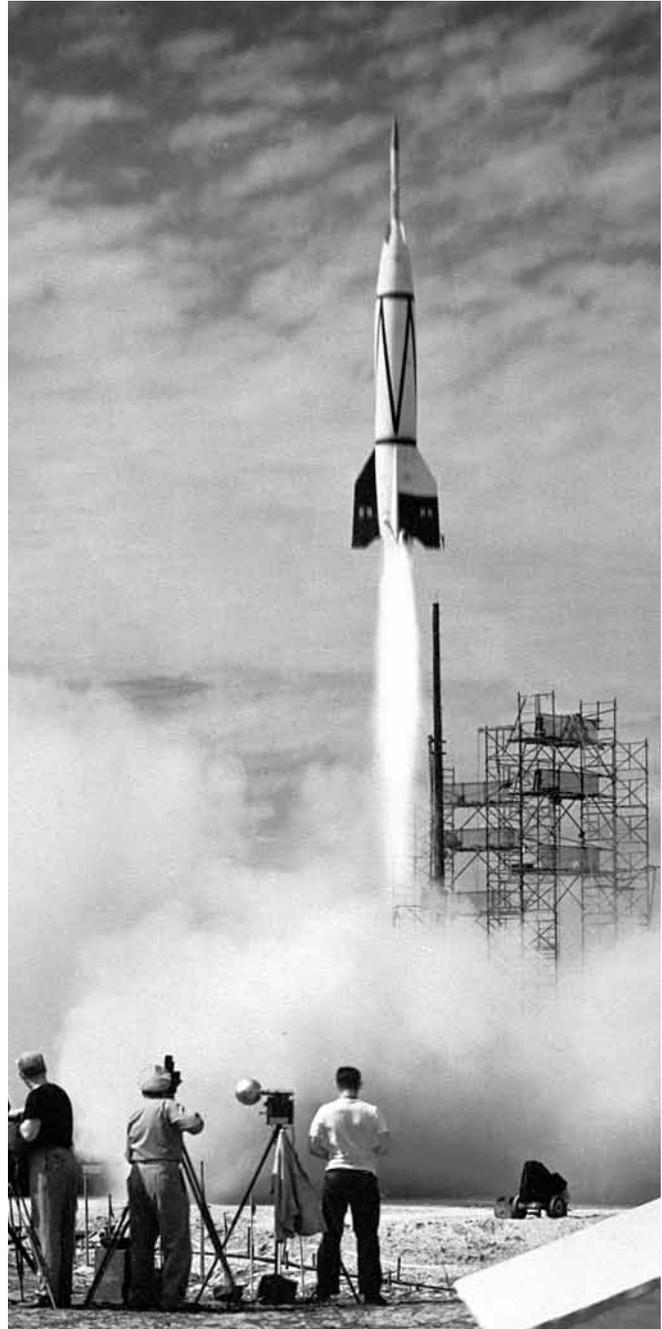
Under the guidance of Nathan Wagner for the past 18 years, WSMR's missile flight safety team has yet to record an injury or death from an errant missile. This accomplishment is made even more impressive by the record. WSMR launches more than 3,000 missiles a year and many of them are launched from sites as remote as 450 miles from the range.

As the third decade of missile testing at White Sands opens, Mr. Wagner and his team are planning important changes in the missile flight safety program. There will be, as more sophisticated and higher velocity vehicles are introduced, continued reliance on preprogrammed control devices. But the main and continuing control will be in the mind of the man – control over the most reliable, rapid, and fantastic system ever imagined.

Address Change For WSPG

Probably none of you noticed but on page 2, under the "Statement of Purpose and Membership," there is a new mailing address for the Pioneer Group. It is now P.O. Box 171 at WSMR - the same address as the White Sands Historical Foundation.

The two organizations already share this newsletter, it just made sense to share the same mailbox too. In the long run, it will save some money as well.



Bumper launch in Florida in 1949. WSMR personnel assisted the Air Force in conducting a safe launch and insuring valuable data was properly collected.

WSMR Army Personnel - Mid 60s

Military - 2,823

Civilian - 4,292

Contractor - 1,921

Don Risinger Was Early Photo Pioneer

By Jim Eckles, Editor

Don Risinger is one of those White Sands pioneers who arrived at the beginning - when the fledgling facility was learning how to test missiles and then build an appropriate organization to accomplish the task. He was there to be part of the effort and during 40 years he got to see how it all came out.

Don is a native of St. Louis where, after high school, he went to work with his brothers in the jewelry business. It must not have appealed to him because one day, walking down the street at the age of 20, he dropped into a Army recruiter's office and enlisted.

He traveled to Ft. Bliss and went through basic training as part of the Guided Missile Battalion. It was 1948 and the German V-2 scientists were still living at Bliss. In fact their housing area was right next to the battalion's.

According to Don, the Germans were all around them. They shared facilities like the swimming pool and PX but were told they could not talk to the Germans.

In November Don finished basic training and was shipped with other graduates to White Sands Proving Ground as part of "I Battery" - instrumentation. He said their job was to provide support for photography, optics, electronics sites, fueling, etc. Basically, the soldiers provided unskilled labor for the civilians who manned cameras, optics, telemetry sites, timing stations and other data collection instrumentation on the range.

Being a young workforce they could also be used for whatever command needed. For instance, Don said they once were shipped to the Gila National Forest to help fight a forest fire.

Don ended up as a photographer and film processor. He distinctly remembers having to march to work each day from the barracks.

The V-2 launch photo with this article was taken by Don at Army Launch Area No. 1, now Launch Complex 33. It stands out for two reasons - the dramatic dark sky and presence of the blockhouse, V-2 gantry and WAC Corporal tower in a nice launch photo. He said he managed the dark sky by

using a red filter over the lens of the camera. Capturing all the important elements was a matter of being aware of what was important and then finding the right spot to shoot from.

Soon Don made a permanent place for himself in the film processing side of the house. This is one of those areas invisible to most and unappreciated. Yet the still images and motion picture footage of missile tests are what grabs the most attention at White Sands. Everyone from the visiting school kids to the project managers to the congressional staffers loves those images. Not only are they filled with fire, smoke and unbelievable action, they also provide some of the best data an engineer could ever ask for in developing a weapon system worthy of the American serviceman.

All those images, all the thousands of feet of high-speed film, had to be developed somewhere safe and secure. At first it was done by hand on post. Don said in 1948 they were processing about 1,200 feet of 16mm and 35mm black and white film a week. By 1954 the lab was developing several million feet of film a year. In just the next two years, film processing jumped another 1.5 million feet. At its height, Don said the lab was developing over 20 million feet of motion picture film every year.

Those images and that footage appeared everywhere - from movie news reels, to television news broadcasts to the newspapers and magazines that most homes enjoyed.

see Trumpet Player Too, page 5



Major General Niles Fulwyler, left, presents Don with his certificate and pin for 35 years of Federal service. On the right is Don's wife Stella. Those of you who knew Fulwyler will remember how he loved to personalize and autograph photos for employees. It was always nice to get a compliment from the top boss. Courtesy photo.

Trumpet Player Too — CONTINUED FROM PAGE 4

In 1951 Don was discharged from the Army and needed a job. He inquired at White Sands and was immediately hired back as a civilian to work in the film-processing lab. In fact, in just a couple of years he was made chief of the lab.

As the use of film grew, the lab needed to acquire more and newer machinery to handle the load. Don was in the middle of that buildup. In the mid-50s color film was intro-

duced, much to the delight of higher ups, but it created problems for the lab and data reduction folks. The film required a two-step process that the lab's machinery couldn't handle. After one step, the film would have to be shipped to a commercial outfit for further work. The wait to get the film back was sometimes weeks.

Such a delay was intolerable as the involved project would need the film's data before they could continue with their next test. Sitting on their thumbs for a month was not what the Cold War was about.

Don and crew came up with a solution allowing them to fully develop the film in less than 48 hours using the equipment they had. It meant seeing results in a timely manner and everyone was happy. For the effort, Don and his team received cash from the Incentive Awards Program.

While still a soldier at White Sands, Don crossed paths with his future wife Stella Sanchez, a native of Las Cruces. They met at the opening of the new Enlisted Man's Club at White Sands in 1949. Ted Weems and his band played at the event.

Weems was a bit of a big deal for White Sands. His band was quite popular in the 1930s and 40s with many hit records. Perry Como sang with the group at the beginning of his career and Jack Benny was a friend of Weems. You can find Ted Weems music on iTunes now.

Growing up in St. Louis, Don learned to play the trumpet and played in small groups. Somehow he got to know Weems who was in Chicago. At the Enlisted Man's Club grand opening, Don went up to Stella and asked her if

she wanted to meet Weems. She said yes and he took her up to talk to him and that began their relationship. They were married in 1951.

Don hasn't stopped playing that trumpet. While at White Sands he played with various groups, one was called the "Cavaliers," and sometimes just for fun. He remembers playing at the opening of the Navy Club at White Sands

and playing for the New Mexico State dance band called the "Varsity 11." He also remembers one group rehearsing in a chemical storage room at the lab – they called themselves the "Toxic Chemicals."

Today Don doesn't play with a band but he volunteers to play Taps at



Don's V-2 launch photo. The WAC Corporal tower is about hidden next to the gantry.

the funerals of veterans.

Don started the White Sands archery club in the 50s but, at 87 years of age, has given that up. He says he can't pull those big bows anymore.

After he retired from White Sands in 1988, Don got serious about his woodworking hobby. He specialized in building big wooden toys for kids. For about 12 years his wooden trains were quite popular with the visitors to the Las Cruces Farmer's Market.

Don still lives in Las Cruces in the same house where he and Stella raised four kids.

**WSMR Complex
Air Force Personnel
Mid 60s**

Military - 2,671 (Holloman)
Military - 0 (WSMR)
Civilian - 1,636 (Holloman)
Civilian - 85 (WSMR)
Contractor - 656 (Holloman)
Contractor - 273 (WSMR)

WSMR Should Be Rich Ground For TDY Stories

Editor's Note: Bruce Kennedy has suggested that many of us working at White Sands Missile Range traveled because of our jobs.....and that we probably have some interesting stories to tell. I think he is right. So, to start the ball rolling, Bruce has written up a short piece on a couple of his TDY trips.

If you have a TDY story or many to tell, send them to me and I'll run them in the next few newsletters. I may take some liberty in editing your submission.

I can tell you right now that travel for a public affairs specialist like myself was totally different from those of you in the technical world. Where Bruce was off to India, I was off to Deming to baby sit and drive the WSMR float in their 4th of July parade.

Of course, the interesting part of that TDY was transporting the float to Deming on a flatbed trailer. Going through Las Cruces, the driver wasn't paying attention and the umbrella of Nike rockets on the float caught in a tree on Picacho bending one up in the vertical position. That rocket then hit the stop light at Alameda immediately rendering it dark. After a visit by the police we got to Deming and Jim Bryant and I hung on the rocket to bend it back into position for the parade.

During my time in Public Affairs, others went across the country running horse adoptions when we got rid of the wild feral horses on WSMR. Don't get me started on people showing up at adoptions wanting to put a horse in the backseat of their convertible.

Anyway, there must be a million good stories out there. Send them to me by snail mail or email or call me and relate them to me (I'll take notes) and we'll set aside some space for them.

By Bruce Kennedy

Temporary duty. TDY. Some are an adventure. Some are downright awful. Most are routine, business as usual. Thinking back, I can bring up examples of each during my almost 30 year career at White Sands Missile Range.

My first TDY was when I worked in the Attitude and Events Section (tracking telescopes) in the engineering office. My boss, Harold Shoppach, sent me to a Society of Photographic Instrumentation Engineers conference in Santa Monica, Calif. My room at the luxury hotel was a private bungalow outside of the main tower that cost a whopping \$12 a night. Otherwise, I don't remember much about the conference.

It was Christmas 1971, and like many employees at WSMR I took two weeks of use-or-lose annual leave. The range was closed to operations for annual maintenance. When I returned to work after the holidays, my boss told me that I was scheduled to take a site surveying trip to India. In two weeks.

I had been working as a supervisory general engineer at the Atmospheric Sciences Laboratory since 1965 in

the Upper Atmospheric Research Division. We conducted research projects using small rockets, standard meteorological balloons, and very large balloons. Part of our mission was participation in the National Meteorological Rocket Network, conducting 3-per-week launchings of Loki and Super Loki rockets at Small Missile Range.

Several other countries also conducted routine upper air measurements, but their data and ours displayed some major differences. The World Meteorological Organization and their Committee on Instrumentation and Methods of Observation recommended that all participating countries gather at an appropriate location to conduct and intercomparison test. So, a site selection process began, and I was selected as one of the search team.

It was led by Mr. Robert Leviton of the Air Force Cambridge Research Laboratory. Our first assignment: visit the Thumba Equatorial Rocket Launch facility in southern India.

What were we looking for at a test site? Multiple launch facilities, multiple radar instrumentation, rocket storage, command and control, communications systems, assembly areas, hotels, restaurants, transportation, and a nearby airport. Simple.

Then the fun began. In a two week period I had to get vaccinations for yellow fever, bubonic plague, typhoid, small pox, and various other dread diseases. I had to get a passport. My organization had to get theater clearance for my destination, a task that normally would take many weeks.

To get a quick passport I went to the U.S. consulate in Juarez where I obtained a temporary passport, good for six months. The day that I was to pick up the passport I was so sick from the inoculations that my wife had to go to Juarez. Finally, with everything done, I had coordinated travel arrangements with Mr. Leviton, and we were to meet in Frankfurt, Germany, for our final flight to Delhi.

Our flight schedules were changed because of weather, and we finally met up in Delhi.

We were met by a representative of the Indian meteorological office who showed us around. We went to a tent-covered restaurant in the old city and had chicken hand roasted over an open in-ground oven. Having a free weekend before heading south, Mr. Leviton and I hired a taxi for a trip to Agra and the Taj Majal. It was beautiful. I have a picture of a lawn mower being pulled by oxen, very high tech.

Back in Delhi we checked in at the military desk at the American Embassy. We boarded an Indian Airlines flight headed to Madras for an overnight stay. We were met at the airport by an Indian Met service representative who had a taxi waiting for the trip to a hotel.

On the way the driver turned off the engine at every stop light, supposedly to conserve on fuel. Wrong! He was low on gas, and we ran out about two blocks from the hotel.

The next day we boarded a flight to Trivandrum, the nearest city to the test site. Our hotel was, uh, somewhat

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Visiting Russian Villa

— CONTINUED FROM PAGE 6

Spartan. We did have a bathroom in the room, but they turned the water off at night. Roaches and ghekos graced the premises.

The rocket launching station was a disappointment. It only had one radar and very limited facilities. It truly was not an acceptable location in many aspects.

There was a Russian research team on site to conduct routine weekly upper atmosphere soundings. They launched at night, and we were fortunate to witness a launch. They had 10 team members who rented a large villa overlooking a beautiful beach. They invited us to their quarters for a swim and a wonderful fish dinner.

Another Claim That Space Aliens Regularly Visited WSMR

Here we go again. Just a few weeks ago, former NASA astronaut Edgar Mitchell made a big splash in the tabloids and with the “aliens are here” camps when he said friendly space aliens observed missiles being tested at White Sands Proving Ground in the 1940s. He was quoted in the *Daily Mail* and *The Mirror* saying that the aliens were trying to prevent earthlings from destroying themselves in a nuclear holocaust.

I guess it worked because we are still here.

Here is what *The Mirror* said: “The sixth man to walk on the surface of the moon has made the astonishing claim that aliens came to Earth to stop a nuclear war between America and Russia.

“Edgar Mitchell, a veteran of the Apollo 14 mission in 1971, told Mirror Online that top-ranking military sources spotted UFOs during weapons tests.

“The astronaut has been outspoken about his belief in aliens ever since he landed on the surface of the moon, becoming one of the most prominent figures in the worldwide UFO community.

He told us military insiders had seen strange crafts flying over missile bases and the famous White Sands facility,



Former Apollo astronaut Edgar Mitchell in his official NASA portrait. Courtesy photo.

One of the team members, Natasha, was built like a Green Bay Packer defensive lineman. I wrote my wife a letter about our Russian hosts with a description of Natasha. I also took a picture of her on the beach. Later, back home, I showed my wife, Linda, slides of my trip. When she saw the photo of Natasha, well, she looked pretty nice in her black swim suit.

On subsequent site surveys Mr. Leviton and I visited Wallops Island, Virginia, the French Guiana launch facility near Kourou, and the Brazilian facility at Natal. Part of the intercomparison program was conducted at Wallops with the remainder performed in French Guiana.

where the world’s first ever nuclear bomb was detonated in 1945.

“Mitchell grew up in New Mexico near both the bomb testing zone and Roswell, where believers think one of the world’s most famous UFO encounters took place.

“You don’t know the area like I do,” he said in an interview with Mirror Online.

“White Sands was a testing ground for atomic weapons - and that’s what the extraterrestrials were interested in.”

To your editor, this sounds suspiciously like Daniel Fry and his attempt in 1954 to save humans from themselves.

Stats Courtesy Of Charlie Moss

The various WSMR statistics in the newsletter this quarter are from a fact sheet supplied by Charlie Moss who was stationed at the missile range in the mid 60s. In those days, officials used to bump up the numbers by talking about the WSMR/Holloman complex and add the populations together. That is why the Air Force numbers are rather large.

Of course, by today’s standards, personnel strength at the height of the Cold War was huge.

If they wanted really BIG numbers, they’d add Fort Bliss to the mix and talk about the WSMR/Holloman/Bliss complex.

Some other tidbits of info from Charlie’s factsheet: The payroll was \$110,000,000. When you looked at WSMR and Holloman together, 33% of personnel lived on post. That left 22% in Las Cruces, 20% in El Paso and 15% in Alamogordo.

WSMR Navy Personnel - Mid 60s

Military - 241

Civilian - 83

Contractor - 68

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The Back Page



Don Risinger had this photo in his collection. He doesn't remember much about it except the person on the right, facing the camera, is Clyde Tombaugh. We guess the men are soldiers, maybe assigned to Clyde. Don't know about the women. It looks like they might be at the national monument listening for a countdown. Also, the cans on the table look like beer. Anybody have any information about the photo??? Contact the editor.