

THE LOUISVILLE HISTORIAN

Summer 2003

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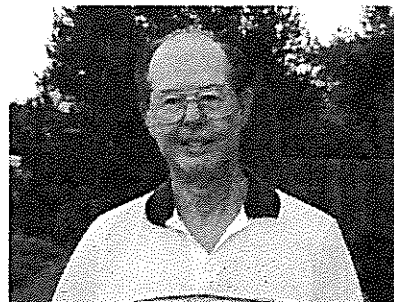
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Atomic Veteran

Jim Vinson graduated from Louisville High School in the spring of 1956 and entered the United States Navy soon thereafter. Those facts, in and of themselves, have been shared by countless others and are seemingly unremarkable. After a four year tour of duty in the Pacific, Caribbean, and Mediterranean Jim would come home to Louisville and continue to work in the family concrete business, an enterprise that he carries on with today. Now the story takes on more meaning and the geographic areas mentioned beg of questions to be asked, experiences to share, and lessons to be learned. The incredible story of Jim Vinson is that he is an Atomic Veteran and while aboard the aircraft carrier U.S.S. Boxer in 1958 personally witnessed 35 atomic bomb test detonations.



Jim Vinson

After sixteen weeks of basic training in San Diego, and specialized work as a Radar Technician, Jim was assigned to the U.S.S. Boxer then with the 7th Fleet and operating out of Sasebo, Japan. This carrier, built in 1945 had seen much action in the Korean War and was, in 1957, being utilized in defense against Chinese Communist aggressions. Throughout much of 1956-1957 the Boxer was participating in naval exercises in the Formosa Straits and lending support to retreating Nationalist Chinese forces.

In January of 1958 the Boxer and its 5,000 man compliment would participate in a most unusual and controversial mission: **Operation Hardtack**. In the midst of a dramatic nuclear weapons build-up the United States needed to test a variety of atomic devices and the Bikini Islands in the Pacific would provide the testing grounds. It was

decided that the Boxer would be a part of this "Nuclear Task Force" and its crew members would be the official observers of the tests. In total Jim would witness 33 atomic detonations in the Bikini Island vicinity and 2 hydrogen bomb explosions in the Johnston Island area 900 miles south of Hawaii.

When a test was scheduled the Boxer would be stationed at a specific distance from the detonation site. These distances varied in order to analyze the effects of radiation but the procedure was nearly always the same. Sailors not on station were required to report to the carrier deck dressed in whites and line up facing the direction of the bomb blast without eye protection. Around their neck each sailor carried a dosimeter (to measure radiation levels) and proceeded to watch the explosion. During one detonation the Boxer was 1.5 miles from ground zero, while another time a device was tested underwater. Typically the tests were done early in the morning (4:00 a.m.) and, according to Vinson, the

Louisville Historical Commission Members

- Elle Cabbage
- Virginia Caranci
- Robert Enrietto
- David Ferguson
- Donna Hauswald
- Allce Koerner
- Diane Marino
- Patricia Seader
- Aline Steinbaugh
- William Unrau

Atomic Veteran (continued from page 1)

explosions were eerily beautiful with night turning to day. The observer would see the explosion and then see and feel the shock wave followed by a tremendous wind. Again, all hands on deck stayed until the totality of the test was finished. Sailors who received abnormal doses of radiation were sent immediately to showers. In one of the hydrogen bomb tests at Johnston Island a Redstone rocket carried the warhead 35 miles upward and was then detonated. In that exercise, crew members couldn't face the direct explosion but, instead, were turned away with a white sheet over their head. Vinson recalls opening his eyes and being able to see the bones in his arm, much like an x-ray. After this particular test the ship was turned toward the direction of the blast and steamed its way through the radiation cloud. For an hour after the detonation small explosions could still be heard in the sky.

At the age of 19-20 most of the men on the observation ships had little idea of the consequences of radiation poisoning. While the military did provide information it was given in such a manner so as not to frighten

and panic the men. In some cases education about the effects were non-existent. What was important was the absolute secrecy that the sailors were sworn to regarding their observations and mission. Before the Boxer left for Operation Hardtack men were cleared by the government and once on the cruise all letters were heavily censored. Only years later, when many sailors reported a high incidence of cancer (Vinson has skin cancer), and other medical problems did the men make the connection with the bomb blasts. Interestingly, Jim Vinson has had difficulty proving that he was with the Navy in 1958. After his discharge and subsequent bouts with cancer the military does not have his records (destroyed in a fire) and therefore no proof of social security or service credit during that year. It is as if he didn't exist during one year of his 4 year military commitment.

Jim Vinson's life story suddenly becomes remarkable. Most of us have only seen film footage of the atomic tests of the 1950's; Jim participated in them. Of the hundreds of nuclear tests done in the that decade one can't help but wonder how many of the devices were made at the Rocky Flats Nuclear Weapons Plant.

Silent Auction

Saturday,

August 30

The Jordinelli House

The Summer Kitchen has been leveled on its pad and will require extensive work on the floor and sidewalls. Both structures have had their roof shingles removed, necessary repairs made, and new shingles installed.

Work has started on the interior renovation by volunteers. The bathroom has been cleared of all fixtures, the ceiling repaired, and the wall enclosing the space removed. The sliding glass doors will be removed and a wood door installed to closely match existing entry units and the existing picture window will also be replaced by a new window, donated by Roger Cabbage, which will also match existing units.

After these tasks are completed work will start on repairing cracks in the drywall and the next task will be to replace the flooring through the building.

A donation was received from the Downtown Business Association [DBA] in the amount of \$480 from the proceeds of the beer garden during last years Downtown Street Faire, and also included a personal donation of \$500 from Mr. Arlin Lehman of the DBA. We wish to express our deepest thank you to the DBA and Roger Cabbage. The balance in the Jordinelli Renovation account as of July 9th is \$4,965.30



THE MUSEUM CORNER

Carol Gleeson

Museum Coordinator

The Louisville Historical Museum continues to develop and grow on both the outside and the inside of its buildings. On the outside, there are new roofs on the Jordinelli House and the summer kitchen. A newly paved parking lot sits to the west of the Jordinelli House. On the inside of the buildings, the museum's core activities of collecting, documenting, preserving, and interpreting the collections are done with public access in mind. Staff members are constantly creating new research tools, public tours, and exhibitions to engage visitors in the use of historical materials to explore Louisville's history and its pioneer families. Two recently displayed maps in the mining room provide an abundance of information on the Colorado coal mines. The 2001 USGS map of Colorado's northern coal field shows the location of 163 coal mines and their dates of operation. The 1907 map of

Colorado shows the coal and metalliferous areas of the state. These two newly displayed maps are excellent research tools for visitors of the museum.

The Louisville Historical Commission remains active in promoting public awareness of the history of Louisville. On May 14th, the Commission hosted the Historical Society Membership Meeting. Jim Hutchison, former co-director of the Lafayette Miners Museum, was the guest speaker. Mr. Hutchison's slide lecture on Colorado's northern coal field was well received.

On June 14th, Commission members opened the museum for tours and homemade pizzelles during the Taste of Louisville. On July 4th, Commission members hosted an exhibit table at Memory Square Park to promote local history and to share current museum projects. Look for Historical

Commission members on August 30th during the Fall Festival. They will be hosting their annual silent auction.

The continued growth of the Louisville Historical Museum is largely dependent on the strengths and talents of volunteer staff members. Volunteers perform a variety of tasks including renovating the interior of the Jordinelli House, preserving artifacts, organizing historical photographs, guiding historical tours, and writing articles for the *Louisville Historian*. The museum presently has volunteer opportunities in two areas. The museum is looking for friendly and energetic volunteers to provide historical tours for visitors and to manage collections databases. Training will be provided. If you have 3 to 6 hours per month on weekdays or weekends to volunteer, please contact the museum at 303-665-9048 or museum@ci.louisville.co.us.

DONATIONS

The Louisville Historical Museum has received the following donations during the months of May through mid-July. We sincerely appreciate these recent donations.

- Donald Ross-----Photographs of City Market and Fireside Mine
- Joan Robinson-----Spats, wooden pens with metal nibs, sales tax tokens, Foresters of America emblem, & 1916 building materials book
- City of Louisville-----Reproduction of a 1941 aerial map of Louisville
- Gene Soppeland-----Railroad lantern and tokens from George Stoiber's pool hall
- Monarch High School-----Mosaic 2003, Volume 5
- Charles Robinson-----Shoe stretcher, early 1900s
- Nick Hozduke-----Photographs of Louisville Public School's 1934 teachers and 1922-1923 1st grade students
- Errol F. Salter-----Photograph Edward A. Salter & family

LOUISVILLE HISTORICAL MUSEUM

1001 Main Street
 Louisville, CO 80027
 303-665-9048
museum@ci.louisville.co.us

MUSEUM HOURS

Tues., Wed., & Thurs.
 10AM to 3PM
 First Sat. of Month
 10 a.m.--3 p.m.

Thanks to New and Renewing Members!

New Members

- Kathleen Norris
- Leannah Baron
- Jim Ensign
- Stuart Clayton
- Karlin Gose
- Betty Lee
- Patricia Lester
- Ed Mihevc

Kevin & Sue Sessa

Renewing Members

- Rose Maxine Canady
- Doris Clements

The above names consist of recent memberships and renewals in the Louisville Historical Society during the months of May through mid-July. We apologize for any omissions or misspellings. Please contact the museum with corrections to the above list of names.

Rocky Flats, Louisville, and Nuclear Weapons Production

Background

In 1952, amidst the uncertainty and fear of the Cold War the \$45 million Rocky Flats nuclear weapons plant began operations and would produce triggering devices for America's atomic arsenal. With clock like regularity workers from Louisville would meet with their carpools and partake of the economic prosperity while simultaneously creating the most powerful country in the world. From congressional approval for the site, construction of the facility, manufacturing, the inevitable accidents, and eventual clean-up, the impact of nuclear weapons production on Louisville and surrounding communities would be significant for the term of the Cold War era.

The Atomic Energy Commission (AEC) was created in 1946 during the Truman administration in an effort to better manage nuclear weapons production and oversee commercial applications. The AEC was made up of civilian members appointed by the president with Senate approval. In addition to the AEC there was a congressional Joint Committee on Atomic Energy (JCAE) that held considerable power in determining the location and funding of nuclear operations. The two Colorado senators, "Big" Ed Johnson and Eugene Milliken held two of the JCAE seats and because of them Colorado would receive its share of defense contracts including the Air Force Academy, NORAD, the Rocky Mountain Arsenal, and Rocky Flats.

In 1947 the major nuclear weapons production sites in the United States were Oak Ridge, Tennessee, Los Alamos, New Mexico, and Hanford, Washington having produced up to that time no more than eleven or twelve bombs. The alarming interest of Soviet intentions in Eastern Europe opened the eyes of the Truman administration and, without hesitation, the National Security Act was passed that created the National Security Agency (NSA), the Central Intelligence Agency (CIA), separated the Air Force from the Army, and replaced the War Department with the Department of Defense. It is important to note that while the Soviet Union did not possess the atomic bomb (they would develop it in 1949) the American government saw a clear threat to U.S. security and decisions were made to begin a greatly expanded weapons program. Crucial to weapons production was the acquisition of uranium and it just so happened that the Western slope of Colorado possessed large quantities of the element. Senators Johnson and Millikin saw a two-fold opportunity in the find, employment for miners and construction of a weapons facility with accompanying jobs. In the next five years the two senators would lobby for a weapons facility in Colorado and, with the increased Soviet nuclear build-up the American Congress would appropriate upwards of \$800 million for a program that would see the development of the hydrogen bomb.

Choosing Rocky Flats

One of the first Colorado communities interested in a new nuclear facility was Alamosa. The local officials there promoted the Great Sand Dunes as a possible location with an adequate water supply and isolated from a possible Soviet attack. Durango also expressed interest in acquiring the facility but ultimately the community of Ellenstown, South Carolina would become the home of the new plant, Savannah River. Ultimately, the JCAE would appropriate more funds for an increased nuclear arsenal and would necessitate the evaluation of another site that met the criteria of possessing a dry moderate climate, good transportation facilities, and attractive living conditions and community facilities. It was also important that a population base was nearby that could provide workers. Louisville, Arvada, Lafayette, Broomfield, Golden, and Boulder were the most likely to supply the needed work force.

On March 23, 1951 the Rocky Flats site was chosen as the location of the newest American nuclear weapons plant. The last negotiations to take place involved acquisition of the land (4,000 acres) which had been long owned by the Marcus Church family and was used as pastureland for cattle. Church was offered 18 cents an acre by the government and he promptly rejected the offer. Later, Church would be granted access to pastureland on the plant site but, in the mean time, construction of the \$45 million plant would begin.

Construction and Manufacturing

In July, 1951 construction began on Building D an assembly building for atomic weapons. Dow Chemical, based in Michigan, was given the government contract for construction of the plant headed by Francis Henry Langell. Building D would produce "pits" from plutonium, uranium, and stainless steel. These three components would be manufactured in a variety of other buildings throughout the plant site. In constructing the plant site over fifty local companies were subcontracted and design of the unique buildings would take place in a number of locations throughout Denver. Because of the highly sensitive nature of the project it was vital that workers, from laborers to engineers, focus only on their specific responsibility and not be privy to the whole picture.

Undoubtedly the most important structure to the complex was Building C later known as 771. This facility would be responsible for processing plutonium (beginning in 1953) into components for the bomb pits and would utilize work spaces that held self-contained glove boxes so that workers could safely work on the highly radioactive plutonium. 771 would be the location of the first major fire at Rocky Flats in 1957.

Rocky Flats (continued from page 4)

Building A (later known as 444) and Building B (later known as 881) would work primarily with uranium as a bomb core component with Building 881 containing foundries and machine shops to process the uranium. Uranium was not seen in the same dangerous light as plutonium, therefore glove boxes weren't seen as necessary for the protection of workers. Machinists routinely shaped uranium using chemicals on the cutting heads to avoid combustion and then disposed the contaminated chemicals and cleanup materials in barrels. Ventilation systems important for the evacuation of airborne residue contributed to hearing problems for workers because of the lack of ear protection.

By 1957 Rocky Flats was firmly rooted in the nuclear military industrial complex of the United States. By this time the Cold War was fully underway fueled by the Korean War in 1950-1953, McCarthyism, the Rosenbergs, and the development of the hydrogen bomb by the U.S. in 1952 and the Soviets in 1953. With U.S. nuclear strength based on air power, submarines, and battlefield use, there was an increasing need for more warheads and the demands upon the nuclear weapons community became substantial. Thousands of Soviet targets had already been predetermined by military strategists and production at Rocky Flats would increase dramatically.

Broken Arrows

"Broken Arrow" is the term used to define nuclear accidents. Throughout the production span of Rocky Flats there would be a number of fires including some involving plutonium. In the life of Rocky Flats two major events occurred that had potentially long term consequences.

In September of 1957 a fire started in Building 71 (771) in Room 180 when plutonium residue in a storage box ignited spontaneously and breached the glove box. When firefighters arrived, flames were visible above the glove box and attempts to douse the fire with carbon dioxide were unsuccessful. A catastrophe was nearing and a risky decision was quickly made to use water keeping it as far from the burning plutonium as possible. The firefighters were successful in containing the fire by using water. A decision was made to turn up the exhaust system at full speed and, subsequently, contaminated smoke was ejected from the building smokestack. Fortunately, the exhaust system exploded, the electricity went out and the ventilation system shut down thereby keeping contamination from escaping the building. There were no deaths or injuries associated with the fire but as of 1994 some workers associated with the event were still being evaluated for exposure problems. With the end of the fire (13 hours later) came the painstaking clean up. Room 180 was left as is but the remaining

contaminated parts of 71 were scrubbed and wiped down and by October 7 plutonium processing commenced. The cost of the fire would be over \$800,000 and Room 180 wouldn't be fully cleaned until 1960.

On Mothers Day, 1969 another nuclear accident occurred at Rocky Flats but this time in a different complex: 776-777. Beginning in 1965 plutonium was being used in considerable quantities in Building 776-777 with 7,000 lbs. residing in the building at any given time. At approximately 2:30 p.m. on May 11, 1969 a fire was discovered in the two story building apparently started by oily rags that had been contaminated by plutonium. The fire from the rags helped to ignite a plutonium briquette that was in a storage cabinet and subsequently ignited more plutonium. The fire continued to burn in the glove box line for approximately two hours before it was detected. Heat detectors had been dismantled during the previous two years to make room for new equipment so any idea of containing the fire in its early stages was impossible. Once firefighters made their way to the fire an attempt was made to use carbon dioxide (much like the 1957 fire) but after a short time resorted to water. The fire, by this time, had spread beyond the glove boxes and flammable gases were gathering in the ceiling areas. Additionally, ventilation fans were now bringing flames into the exhaust system thereby burning the paper filters and introducing the real possibility of plutonium exiting the building. Once again, as in the 1957 fire, the power went down in the building and the potential contaminants were contained in the building. Eventually forty-one employees received doses of radiation some ingesting significant amounts. This accident would eventually cost \$70.7 million in lost plutonium and building damage.



Building 771

Rocky Flats Nuclear Weapons Plant (continued from page 5)

Clean-Up

With the end of the Cold War the new mission for Rocky Flats would be the massive and complex task of cleaning the site of hazardous materials. 1992 would mark the year in which weapons production ceased and a new company, Kaiser-Hill, would be contracted to conduct new operations. As of 2000 the estimated cost for clean up was \$7.7 billion and the projected finish date is 2006. Kaiser-Hill will see a \$350 million bonus if the clean up goal is met. Because of ground storage leaks and the resulting contaminated soil, tens of thousands of cubic meters of waste have been excavated and sent to dump sites in other parts of the United States.

For forty years the Rocky Flats Nuclear Weapons Plant produced more than 70,000 nuclear devices and processed over 100 tons of plutonium. Many of the weapons produced at Rocky Flats are still part of the nuclear weapons arsenal of the United States

Managed under government contract by Dow Chemical, Rockwell, E.G.&G., and lastly by Kaiser-Hill the facility saw protest groups outside of the gates, scandal in the model shop, an F.B.I. raid, and accidents that left their mark on a number of people then and now. Claims are being made by individuals who have experienced a variety of health problems as the result of working with plutonium, uranium, and beryllium and numerous health studies continue to investigate long term medical problems. Importantly, the workers at Rocky Flats (truly Cold Warriors) took their jobs seriously, upheld the confidentiality of their mission, and performed with great skill during an uncertain period in world history.

(Source: Making a Real Killing by Len Ackland)



Protestors at Rocky Flats

Share the Gift of History

Share the gift of history by sharing the gift of membership in the Louisville Historical Society. Your gift will be the one remembered throughout the year. A yearly membership is \$15.00 for an individual, \$25.00 for a family, and \$100.00 for a business. Membership means receiving our newsletters and an invitation to our Annual Historical Society Meeting. Membership also means helping to ensure the preservation of Louisville's unique history and cultural character.

Visit our web site at museum@ci.louisville.co.us/museum.htm for a membership form or call the museum at 303-665-9048. You may also write to us at Louisville Historical Museum, 749 Main Street, Louisville, Colorado, 80027. Please remember to communicate your name, address, and telephone number as well as the name, address, and telephone number of the person(s) to whom you wish to give the gift of membership. We accept cash or checks. Please make checks payable to Louisville Historical Society.

Museum Wish List

We wish to extend a special thank you to Historical Society Member, Don Ross, who recently donated to the museum. His donation is a wonderful addition to the museum's collection. If you would be willing to donate any of the items listed below, please call 303-665-9048 and let us know. All donations to the museum, a non-profit institution, are tax deductible. Thank you for your support!

- Louisville High School Yearbooks (Cargos)
1954, 1961, 1964, 1965, 1966, 1968, 1969, 1970, 1971, & 1972
- Photographs of Louisville High School's graduating classes
1939, 1953, 1954, 1955, 1956, 1958, 1960, 1961, 1962, and 1964 through 1971



MEMBERSHIP OPPORTUNITIES

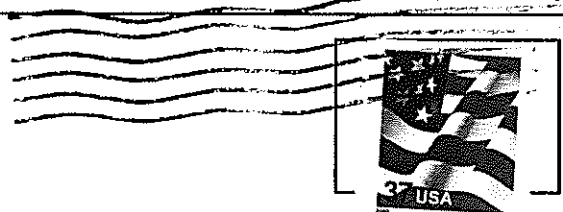
Thank you for your membership in the Louisville Historical Society. Your membership entitles you to a quarterly newsletter and an invitation to the Annual Membership Meeting. Each member contributes to the teaching, collecting, preserving, and interpreting of Louisville's unique history.

Letters with renewal notices will be mailed during the month of November. We hope you will continue your membership in the Louisville Historical Society. Annual membership dues as of November 2002 are as follows:

Individual membership	\$15.00
Family/Group membership	\$25.00
Business membership	\$100.00

Lifetime memberships are not available.

Louisville Historical Commission
1001 Main Street
Louisville, CO 80027



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950 Spruce Street
Louisville CO 80027