

ESSAY

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# “WHAT YOU SEE HERE”: LIFE IN A SECRET CITY





Security billboard on display at Oak Ridge, TN promoting silence from all who lived in the secret city.  
(Image: US Army, public domain.)

The Manhattan Project relied upon the research and labor of over 100,000 people across the United States. While many were scientists, the scope and scale of the project required construction laborers, secretaries, security guards, cooks, janitors, along with any other occupation necessary to run an entire city. Unlike other cities, however, these project sites maintained strict security. People writing letters home could not disclose details of the work they did. To receive letters, workers lived at generic addresses, such as “Barracks Area” at Oak Ridge, or in the case of Los Alamos, thousands of residents shared the same P.O. Box address. Oftentimes, people became involved in the Manhattan Project without having any knowledge of where they were going or of what kind of work they might have to do. The secrecy of the project meant that many contributors to the Manhattan Project only learned what they had participated in after the United States dropped an atomic bomb on Hiroshima, Japan. To offer brief glimpses into the lives of those who helped make the Manhattan Project possible, here is a look at the profiles of four individuals who lived and worked in the secret cities of Oak Ridge, Hanford, and Los Alamos. Each came to participate in the Manhattan Project in different ways, and yet

each of their efforts led to the construction of the world’s first atomic bombs.

No two workers shared the same experience while living in a secret city, but their participation in the Manhattan Project had an enduring effect on their lives. As shown in the profiles of Robert Garber and Lawrence Denton, workers often continued to work at the sites after the Manhattan Project came to an end. For others, like Wilma Gray, moving to Oak Ridge helped her to meet her future spouse. To Esequiel Salazar, the nature of the work, while difficult, remained a point of pride, as he and hundreds of other Hispano workers helped make the construction of the bombs and the end of World War II possible. The effort to build the atomic bomb encompassed far more than the military project that rested at the center of life in a secret city. While workers kept what they saw, heard, and did within the confines of those work sites, the rhythm of life continued, even if steeped in secrecy.



Wilma Betty Gray headshot.  
(Image: The National WWII Museum, 2018.044.009\_1.)

## STAFF SERGEANT WILMA BETTY GRAY (WAC)

### OAK RIDGE, TENNESSEE

Wilma Gray born in Akron, Ohio, attended Kent State University before the start of World War II. Gray's older sister, Hannaleen, was in China with her husband, who was working with B.F. Goodrich in Shanghai. Hannaleen fled to Manila in response to Japanese aggression. Both Hannaleen and her husband ended up imprisoned by the Japanese as prisoners of war. Hannaleen spent her incarceration at Santo Tomas until December 1943.

Wilma Gray became involved in the war effort in response to what happened to her older sister and in a desire to serve the United States. She enlisted in August 1944 at age 23. Following her enlistment in the Women's Army Corps (WAC), she ended up on a train not knowing her destination. The secrecy surrounding the Manhattan Project work sites meant few on the train knew where they were going. The destination proved to be Oak Ridge, Tennessee. After arriving, Wilma moved into a large dormitory with other WACs. At Oak Ridge, Gray was the general secretary for the Safety, Security, and Fire Prevention Office at the K-25 building at the Oak Ridge Gaseous Diffusion Plant, which was the site and project codename for the production of enriched **uranium**. She handled classified reports and correspondence related to the project. While there, Wilma received a promotion to Staff Sergeant.

Gray found Oak Ridge a less than appealing place to live, missing her life in Akron, Ohio. She did not particularly enjoy living in a dorm with several other women, and she found Oak Ridge itself to be a "a bit dusty, and a bit muddy." While she found life and work in the secret city to be akin to living in a big cage surrounded with barbed wire, Gray still found ways to make a life for herself. Gray met her future husband, John H. Gianos, at Oak Ridge while Gianos worked in the Special Engineering Detachment in the K-25 building. Wilma Gray participated in the Manhattan Project at Oak Ridge until the war's end, and she later left the WACs in August 1946.

(Image: Wilma Betty Gray Collection, The National WWII Museum, 2018.044.)



Robert Garber headshot.  
(Image: The National WWII Museum, 2018.233.538\_1.)

## ROBERT GARBER, CHEMICAL ENGINEER (US ARMY)

### OAK RIDGE, TENNESSEE

In January 1944, Robert “Bob” Garber completed his training as a chemical engineer through the Army Specialized Training Program at Purdue University. In March of that year, Garber received orders to report to the Clinton Laboratories at Knoxville, Tennessee, where the Army Corps of Engineers worked on the Manhattan Project. Upon arrival at Clinton Laboratories, Garber received an assignment to the Special Engineer Detachment TSU 9812 to work as a chemical engineer, although the exact work remained unclear. From Knoxville, he went to Oak Ridge, where he worked in a lab running tests on a small atomic pile. Inserting slugs of **uranium** into the pile, Garber helped create small, concentrated amounts of **plutonium**.

In frequent letters to his parents, as well as other friends and family members, Bob Garber offered brief glimpses into life at Oak Ridge. He described the housing arrangements as living in barracks. He stated that workers received \$1.80 per day to pay for meals at a cafeteria located across the street from the housing. A swimming pool on site proved to be a popular attraction for Bob and his friends at Oak Ridge, and they often took trips to the pool on hot days after work. He and his friends also took occasional trips into the Tennessee wilderness to visit areas around Big Ridge, hitchhiking or taking buses in and out of the secret city.



**I SUPPOSE YOUR INTEREST HAS BEEN AROUSED BY THE SENSATIONAL HEADLINES ABOUT ‘ATOMIC BOMBS.’ WELL, SECURITY PERMITS TO SAY THAT WE ARE CONNECTED WITH THE MANHATTAN ENGINEERING DISTRICT.**

Unlike many who contributed to the Manhattan Project, Garber knew of his efforts to help construct the atomic bomb. In a letter home to his parents on August 7, 1945, he wrote, “I suppose your interest has been aroused by the sensational headlines about ‘Atomic Bombs.’ Well, security permits to say that we are connected with the Manhattan Engineering District.”

Garber continued to work at Oak Ridge until later discharged in February 1946. He then continued to work as a chemical engineer at the University of Michigan.



Main gate at Los Alamos Manhattan Project site.  
(Image: Courtesy of Los Alamos National Laboratory.)

## ESEQUIEL SALAZAR

(“VOICES OF THE MANHATTAN PROJECT,” ATOMIC HERITAGE FOUNDATION,  
WILLIE ATENCIO/DAVID SCHIFERL COLLECTION)

### LOS ALAMOS, NEW MEXICO

Born in Pojoaque, New Mexico, Esequiel Salazar became involved in the Manhattan Project as a teenager after taking a job with the Robert E. McKee Company. Salazar began working with the Manhattan Project at Los Alamos in the early days of the project site’s development. Working first as an apprentice carpenter, he made \$.56 per hour. After completing his apprenticeship, Salazar became a “carpenter helper,” making \$.86 per hour. Full carpenters made \$1.25 per hour. He later began working as a rodman assisting surveyors working at Buildings 1, 2, and 3. Building 2 was where **plutonium** testing occurred and Salazar helped dispose of contaminated fluids produced in the weapon manufacture process. Salazar recalled his work there, stating, “I got acquainted with the project. Of course, we didn’t know what they were really doing. It wasn’t up to us. But it was strange materials that we were using.”

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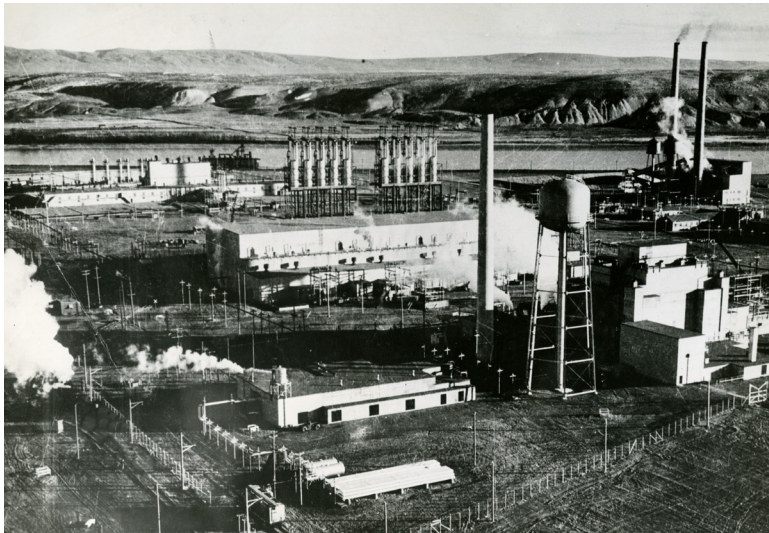
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Esequiel Salazar had to have his blood tested on occasion if dosimeters indicated high levels of radiation. Security was also a constant presence on site at Los Alamos. He described four different military police stations where he had to have his badge checked for verification. Salazar was in Los Alamos the day of the Trinity Test, and he described the celebration that followed the test. Some of the workers even traveled to Santa Fe to celebrate.

It was only after the end of World War II that Salazar learned of the nature of the work he assisted with at Los Alamos. He stated, “I think that we should all take credit for that, because we all took a part in it. I think it’s important that people realize that the scientists couldn’t do their jobs if it wasn’t for the cement workers that are putting the slabs and building their laboratories. Doing what is necessary to get rid of the contaminated fluids and liquids and all the chemicals that were being used.”

Esequiel Salazar later joined the US armed forces and went to Japan as a part of the US occupation force. While there, he saw the destructive effect of the use of atomic bombs on Japan. Even so, he maintained that the use of the bombs “was something that had to be done when they did it.”





Overhead view of the Manhattan Project site at Hanford, WA.  
(Image: The National WWII Museum, 2012.019.567\_1.)

## LAWRENCE “LARRY” DENTON

(“VOICES OF THE MANHATTAN PROJECT,” ATOMIC HERITAGE FOUNDATION)

### HANFORD, WASHINGTON

Born in Northern Idaho, Lawrence “Larry” Denton became involved in the Manhattan Project at Hanford through his father, who recruited him to work on the B Reactor. Denton had previously worked at a lumber yard, but he found the work at Hanford more steady and safe than work in lumber mills. Initially working as a shipping clerk at Hanford, he helped bring in roughly a million containers of helium and oxygen gases.



The B Reactor at Hanford today.  
(Image: Personal photo, courtesy of Jeremy Burson.)

Larry Denton lived in the barracks at Camp Hanford where he roomed with a professional welder from New York City named Otto Lowers. His roommate helped teach others how to weld parts onto the reactor. Living in Hanford at the Manhattan Project site put Denton into contact with African Americans for the first time in his life. He commented on the segregation enforced at Hanford stating, “I’d never been around black people, and they had black people segregated from the whites. That didn’t make sense to me... But that was a fact and they accepted it and the whites accepted it.”

Denton’s work moved from bringing in shipments of gas to shipping off construction materials used for milling graphite for the B Reactor. He stated that no one knew what was going on or what the nature of their work entailed, but he knew the materials brought in for the project were exceptional.

Denton described life in Hanford as an amazing experience. The site had a theater, a recreational hall, large mess halls, and the work brought in consistent pay. He continued to work on site at Hanford into the 1960s.