

People of Hanford

Enrico Fermi

Albert Einstein was one of the scientists who recommended that President Franklin Delano Roosevelt consider making atomic bombs in World War II. Enrico Fermi was one of the scientists who made it happen.

Fermi was born in Italy, but came to the United States in 1938. Like Einstein, Fermi was a brilliant man, who also won a Nobel Prize for physics.

In 1942, after President Roosevelt had ordered that an atomic weapon be made, Fermi and his team at the University of Chicago were responsible for building the first nuclear reactor. A nuclear reactor is the machine which makes plutonium, the most important ingredient of an atomic weapon. When Fermi proved that his small nuclear reactor would work, President Roosevelt ordered that much larger reactors would be built at what is now the Hanford Site.

Fermi, as the person who designed the first reactor at the University of Chicago, was also very important in building Hanford's nuclear reactors. As a matter of fact, he was so important, that he had a bodyguard assigned to protect him at all times! Just to be on the safe side, Fermi was even given a different name, called an alias, so that people wouldn't know who he really was. At Hanford, Fermi was known to most people as Mr. Farmer, not Enrico Fermi!



In September of 1944, Fermi was at Hanford when Hanford's first nuclear reactor, the B Reactor, was turned on. The B Reactor was the first, full-scale nuclear reactor ever built in the world, and because of that, scientists weren't sure it would work the way it was designed to. When the B Reactor went operational for the first time, it ran perfectly for about three hours, but then, the reactor stopped working properly. Fermi and some other scientists worked day and night to try and figure out why the B Reactor didn't work like it was supposed to and they eventually solved the problems. By December of '44, the B Reactor was working as intended and plutonium was being produced.

Fermi was also on hand when the plutonium from Hanford's B Reactor was used in the testing of the world's first atomic bomb in July of 1945. Called the Trinity Test, the bomb was blown up in the New Mexico desert. Less than a month later, the two atomic bombs produced by the United States were exploded over Japan and helped to end World War II. The first bomb blew up over Hiroshima, Japan on August 6, 1945 and was called "Little Boy". The second bomb was called "Fat Man", and it blew up over Nagasaki, Japan on August 9. Fat Man was the bomb that was made using the plutonium which came from the Hanford nuclear reactors.

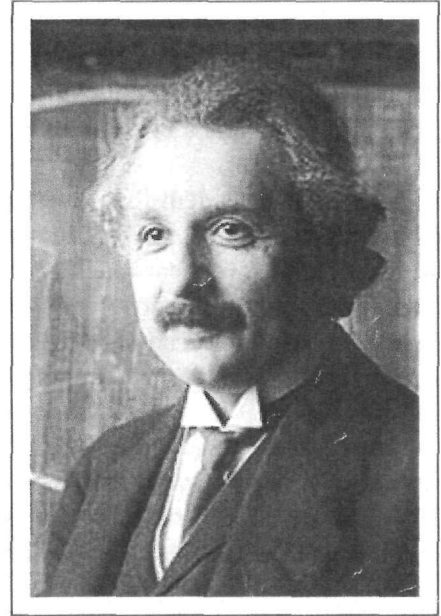
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Albert Einstein

You might have heard about Albert Einstein. He was a 20th Century scientist whose work earned him the prestigious Nobel Prize in 1921. The Nobel Prize is an award presented to people who have accomplished great things in subjects like chemistry, physics, medicine, or literature. Einstein earned his award for his theories and experiments in the area of physics.

Einstein actually never set foot on the Hanford Site, nor was he even involved in any with the work or experiments needed to produce an atomic bomb. He didn't even help to build any of Hanford's factories or facilities. Yet, he was very important to Hanford's history because of a letter he wrote in 1939.

In 1939, World War II had already started, but the United States wasn't involved yet. A lot of people from other countries were fighting in the war including people who lived in the country of Germany. The Germans wanted to win the war, and they were involved in a lot of projects to help them do that. One of their projects was to try and build an atomic bomb like the one which was eventually built by the United States.



Albert Einstein was living in the United States in 1939 and had heard about the work taking place in Germany to build an atomic bomb. Some of his friends believed that scientists in the United States should also be trying to build one of these atomic bombs, just in case America had to get involved in World War II. When friends of Einstein's didn't get anyone to listen to their ideas, Einstein himself sent a letter to the U.S. President at the time, Franklin Delano Roosevelt, and encouraged him to look into building one of those weapons. President Roosevelt sent a letter back to Einstein and thanked him for his suggestions.

More than two years passed, and in late 1941, the United States entered World War II. President Roosevelt remembered the letter that Einstein had sent him, and decided that he would follow Einstein's advice and try and make an atomic bomb.

When President Roosevelt started assigning people to build an atomic bomb, he also had to find places where this secret work could be done. On a recommendation by some of his top advisors, President Roosevelt decided that Hanford would be the place where plutonium that could be used in an atomic bomb would be made.

When the President made that decision, it started the process of bringing construction workers to the area to start construction of the buildings that would be needed to make plutonium at Hanford. Less than three years after the first workers arrived here, the Fat Man bomb, using plutonium made at Hanford, was dropped on Nagasaki, Japan in August of 1945. Five days later, World War II ended.

If Albert Einstein had not sent his letter to President Roosevelt in 1939, Hanford may never have been built! And that's how a person who never came to Hanford or worked here is very important to the history of the Hanford Site.

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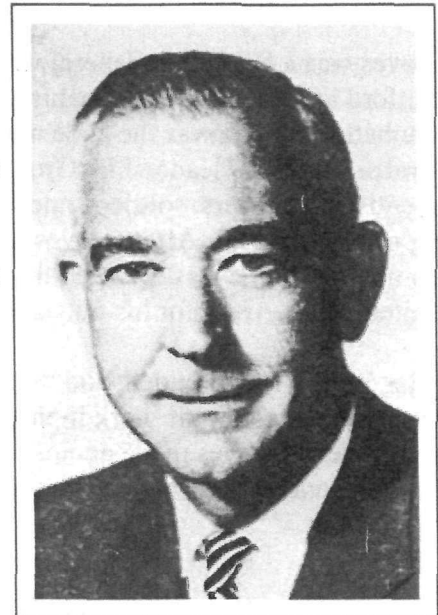
Franklin Mathias

The first person who wanted Hanford to be built here was an Army Colonel named Franklin Mathias. Colonel Mathias was given the order to find a place that was big, had lots of wide open space and plenty of water, had few people living nearby, and had lots of electrical power. Mathias took airplane rides over places in Oregon and California before flying over this part of Washington State in December of 1942. As he flew over the southeast part of Washington State, he knew that he had found the place that he was looking for.

From the airplane, Mathias saw all kinds of wide open desert. He saw the Columbia River flowing nearby. He saw the Grand Coulee Dam on the Columbia River that produced electricity. And while there were some people living in Hanford, Richland and White Bluffs in 1942, Mathias still believed that this part of Washington State had the kinds of characteristics that he needed to find for Hanford to be built.

Nicknamed "Fritz", Mathias directed the construction work at Hanford. He was in charge of building the nuclear reactors and the other facilities needed to make plutonium for atomic bombs. He supervised the construction of the places where workers would live. He organized recreational activities like baseball leagues and built auditoriums so that workers would have something to do when they weren't on the job. He make sure that businesses like barber shops, banks, and grocery stores got built, I addition to important buildings like schools and churches. Considering that he started out with very few people or stores in Hanford and White Bluffs, and within a few months he had built enough businesses and homes for over 50,000 people, he had a lot of responsibility!

When the first batch of plutonium had been made at Hanford, it had to be taken to another place in New Mexico called Los Alamos. This was a city where the atomic bombs were made. Colonel Mathias was so proud of the work that he had accomplished at Hanford t make plutonium for the atomic bombs, he decided that he would drive the plutonium himself to a train station in Portland for the trip to New Mexico.



After World War II ended, the Army awarded Colonel Mathias with the Distinguished Service Medal for his outstanding work Hanford.

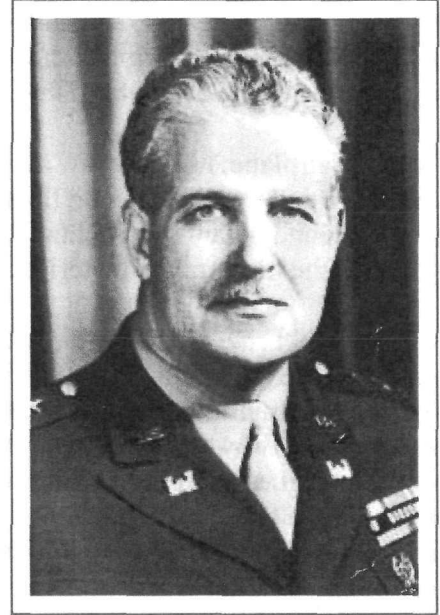
People of Hanford

Leslie Groves

Kids in Richland can ride their bikes, play basketball, soccer, or tennis, or walk along the Columbia River in Leslie Groves Park. The park is named after another important person who didn't work at Hanford but played a big role in making sure that Hanford's facilities got built and produced plutonium for atomic bombs.

Leslie Groves was an officer in the United States Army Corps of Engineers. He was named as the primary military leader in charge of the construction of Hanford and two other places where work was taking place to make bombs for World War II. It was Groves who made the final decision to build Hanford where it sits today after visiting the area in January of 1943. He gave Hanford the code name "Site W", because he didn't want very many people to know the real location of Hanford.

Groves was a Brigadier General when he took over the construction work at Hanford and the other sites making up the secret "Manhattan Project". The Manhattan Project was the code name of the program to build atomic bombs. Under his leadership, Groves managed literally thousands of scientists, engineers, soldiers, and laborers who were building these important facilities. After Groves had succeeded in his mission to develop atomic bombs, he was awarded the Distinguished Service Medal by the United States Army for his outstanding leadership during the project.



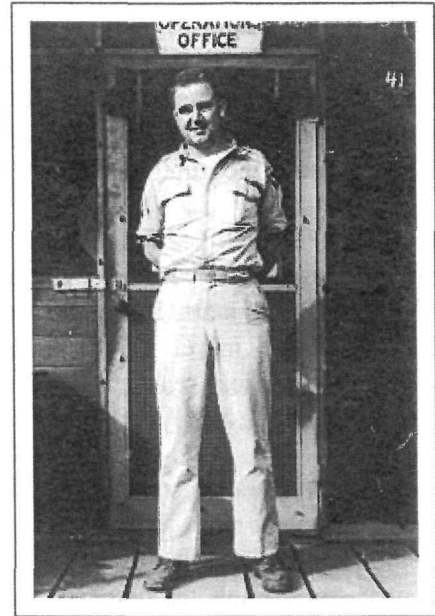
After World War II ended, and the secrets about making atomic bombs weren't secret anymore, Groves actually wrote a book about his work in the program. He titled his book "Now It Can Be Told." Besides that, there have been several movies made about Hanford and atomic weapons. In two of those movies, famous actors Paul Newman and Brian Dennehy actually played the part of Leslie Groves!

People of Hanford

Major Charles W. Sweeney

Another person who never worked at Hanford but was important to its history is Major Charles W. Sweeney. Sweeney was the man who flew the airplane named Bockscar, which dropped the atomic bomb made using Hanford plutonium on the city of Nagasaki, Japan, on August 9, 1945.

Major Sweeney was actually involved in both of the missions involving the use of atomic weapons on Japan. For the first bomb that was dropped by Colonel Paul Tibbets and the Enola Gay airplane on Hiroshima on August 6, Sweeney was flying one of the airplanes that was supporting Tibbets during the mission. Three days later, Sweeney was piloting the Bockscar airplane that was the one carrying the atomic weapon used on the city of Nagasaki.



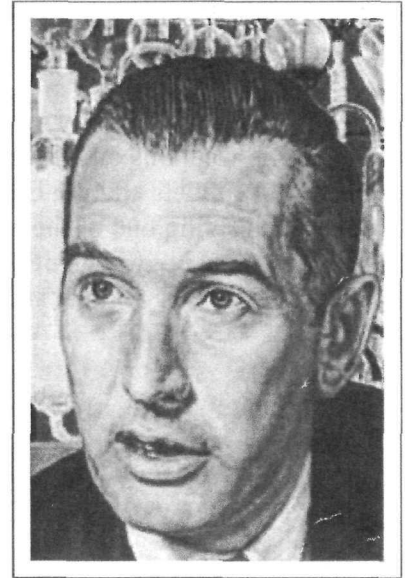
People of Hanford

Crawford Greenewalt

Before the big Hanford nuclear reactors could be built, the process for building them had to be tested to make sure that the reactors would work. Some scientists at the University of Chicago were given the job of building these small, test reactors. One of the people working on the project was named Crawford Greenewalt, who worked for the Du Pont Company. Du Pont was the company that had been picked to build the nuclear reactors and other buildings at Hanford.

When the scientists at the University of Chicago successfully built and tested a small nuclear reactor, it meant that construction on the larger nuclear reactors at Hanford could start. It was decided that somebody who worked with the scientists at the University of Chicago should also be involved with the people building the nuclear reactors at Hanford. That person was decided to be Crawford Greenewalt.

Greenewalt was a smart guy, and his job was to take the information about building nuclear reactors from the people at the University of Chicago, and explain it to the people building the facilities at Hanford. It was a tough job because sometimes, the construction workers at Hanford didn't understand what the scientists in Chicago wanted them to do. Other times, the construction workers couldn't complete the construction of the nuclear reactors in the way the scientists wanted them to. When that happened, Greenewalt was the person who had to explain to the scientists that they had to come up with another way of making the reactors. Greenewalt himself was the person who sometimes made decisions about the construction projects, based on information he'd been given by both the scientists and the construction workers.



After the war was over, Greenewalt became the President of the Du Pont Company.