In what was likely to be the last Oak Ridge meeting of the National Association of Retired Federal Employees (NARFE), Don and Emily Hunnicutt gave a tour of the building of Oak Ridge through the lens of Emily's father – famed Manhattan Project Photographer Ed Westcott.

By Russel Langley and D. Ray Smith/The Oak Ridger

Posted May. 26, 2015 at 1:41 PM

In what was likely to be the last Oak Ridge meeting of the National Association of Retired Federal Employees (NARFE), Don and Emily Hunnicutt gave a tour of the building of Oak Ridge through the lens of Emily's father – famed Manhattan Project Photographer Ed Westcott.

Westcott sat at one of the lunch tables, beaming through the presentation and clearly enjoying the event. His ability to speak clearly taken by a stroke in recent years, Westcott appeared to have written what he wanted Don to say while Emily worked the computer slide presentation.

Westcott was born in Chattanooga in 1922. His family moved to Nashville where Westcott grew up and "developed" his photography skills. He even built a backyard development lab out of a horse-drawn pie wagon.

Westcott began his photography career with the Army Corps of Engineers in Nashville, taking photos of what was to become prisoner of war camps for German and Italian soldiers in Crossville. The Corps, in 1942, told Westcott he had the choice of going to Alaska or to an unknown job in Knoxville when the Corps detachment in Nashville closed. Westcott chose the "unknown job in Knoxville."

He there became the official photographer for the Manhattan Project in what was to become Oak Ridge. He served for four years during the project and then continued to work for the Atomic Energy Commission. He was the 29th employee of the project.

"Pictures are how I saw four nuclear plants develop, the city develop, and how people lived," Westcott said through his son-in-law.

The project was so fresh and new when it started there was not even a film development lab for the photographer to use. To develop his pictures of the highly classified project he used Thompson's Photo in Knoxville.

Through black and white photos, the audience was given a landmark tour of Oak Ridge. First on the list was the Nash Copeland store which was located on what would become the Oak Ridge Turnpike, where Walgreen's is today.

Next on the tour was the Federal Administration Building, or the Castle on the Hill. It was the first building constructed in the "city behind the fence." As soon as one wing was completed, offices were set up and workers moved in. The workers gave it the unofficial title because it overlooked the city.

Y-12 had no meaning in the name. By 1945 there were more than 22,000 people on the payroll. Those workers worked around the clock to separate U-235 from U-238. They had separated only gram quantities of U-235 by the end of 1944, but by July 1945 they had succeeded in separating enough U-235 for Little Boy, the atomic bomb dropped on Hiroshima. There were 1,152 Calutrons at Y-12 including the Beta-3 Calutrons, which are still at Y-12 today. These Calutrons along with Building 9731 will eventually become a part of the Manhattan Project National Historical Park.

Perhaps one of Westcott's most famous photos was of the "Calutron Girls." The "girls" were to maintain a certain reading on their control panels. The young girls, right out of high school, did not know what they were doing, but they were trained to keep the meters on that certain reading and use certain knobs to

bring the meter back to that reading should it drift. They were constantly watched by supervisors and if they were found to not be doing their jobs they were either reprimanded or fired, Hunnicutt said.

Another major production facility at the time was X-10, which was the code name for the Graphite Reactor. It was built to prove that Plutonium could be produced in a uranium reactor. The reactor was not used to produce production quantities of Plutonium, because the reactors for that purpose were built in Hanford, Wash. However, the Graphite Reactor went on to do even more important work. It was used to produce the world's first medical isotopes introducing nuclear medicine.

When the city's gates opened in 1949, a ribbon across the road was ignited to open the city by power generated from the graphite reactor. The Graphite Reactor operated for 20 years to the day being shut down on Nov. 4, 1963. It was designated a National Historical Landmark in 1966 and will also be included in the Manhattan Project National Historical Park.

Construction of the largest building in the world at the time, the K-25 Gaseous Diffusion Building, began in 1943. The U-shaped building had over two million square feet of space and measured one-half mile by 1,000 feet. Workers used bicycles to move around the facility. K-25 enriched U-235 by using the gaseous diffusion method.

K-25's construction workers lived in the adjacent Happy Valley, a community built just across the main road from the construction site. The population of 15,000 people in Happy Valley lived mostly in trailers.

A cafeteria and dormitories were the first buildings for town site – later known as Jackson Square. The cafeteria operated around the clock and the food was high quality, according to the presentation.

The layout of the city was controlled by the contours of the land. The main roads, such as the Turnpike, ran east to west. Avenues, such as Illinois Avenue, generally ran north and south. However, this is not always the case ... for example Tennessee Avenue runs generally parallel to the Turnpike. A central railroad system ran by the Army had 37 miles of track. Trains continually brought supplies to the city and locals would comment they often saw lots of things going in, but nothing coming out.

Of Oak Ridge, people in Anderson County would say, "I don't know what they're making over there, but I believe they could buy it cheaper!"

The city boasted a bus system worthy of national standards. During the peak of activity, 840 buses operated around the clock. By 1945, 21 residential routes were also operating. Advertising was used on the outside of the buses, one of Westcott's pictures was of a bus with a "Rock City" sign prominently displayed on the side. The bus terminal was on the turnpike where Security Square is today.

The first laundry opened in June 1943 and was located on East Tyrone Road. The building, which once housed the offices of The Oak Ridger in a northeast corner, was recently torn down. Some residents may remember it as the location of the Magic Wok, the kitchen of which is still standing at the time of this writing and before that it was Eric's Diner. During Oak Ridge's peak years, the laundry business was a million dollar per year industry.

The first phone was set up in November of 1942 in the Blue Moon Cafe on the Turnpike and Administration Road. Phones were installed in the dorms and public buildings as the city grew and one photo showed the long line to use the phone. Lines weren't uncommon during those busy years. One of the pictures had another long line leading to a drug store — to buy cigarettes.

The first fire department was set up in an old barn outside the Elza Gate with four men. It was later moved to a new building on the corner of Kentucky Avenue and Tennessee Avenue. Emergency fire phones were located in town site areas and no resident was ever more than 500 feet from one. All the little shopping centers had a fire station and a fire dog named "Chief" would travel between stations and

get food from the firemen. Chief's grave is located at the fire station on east end of the Turnpike and marked by a tombstone.

Security was a major concern during the project. Individual residents and workers were recruited to report real or suspected security violations, in addition to the police and intelligence agents working in the city. Police headquarters was at Bus Terminal Road and the Turnpike in what is now General Sessions Court. In addition to cars and military vehicles, horses were used to patrol the environs of the secret city. The horses were housed in a barn on Emory Valley Road where Tennessee Tool is today.

Despite the inconveniences caused by the strictness of security, it was a major reason for the success of the project, according to Westcott. In addition to preventing espionage, the guards were busy keeping out contraband. Guns, ammunition, swords, or alcohol were not allowed on site.

"To get liquor past the guards, people would put it under dirty diapers in the backs of cars," Westcott said through Hunnicutt. "The guards didn't look under there."

Visitors were required to get passes and residents over the age of 12 had to wear identification badges. Anyone who has a child's ID badge is asked to donate it to the library's Oak Ridge room, Hunnicutt said. Housing was going up at an almost alarming rate. The cemestos houses were turned over by the contractors at a rate as quick as one every 30 minutes. Neighborhoods changed so fast that children would get lost coming home from school because their neighborhoods looked different.

Peak population in Oak Ridge was 75,000 in the summer of 1945. There still were not enough houses for all the residents and there were 4,173 trailers in trailer camps. The trailers had no bathrooms or running water and the trailer camps had outside showers. The Midtown Trailer Camp was where the Civic Center is today. The rent for Victory Cottages was \$17.50/month furnished and \$15/month unfurnished. Five men or women would share one hutment.

"S" and "H" dorms were located throughout the city and got their names from their shapes. Some are still in use today and can be seen on Tennessee Avenue and Broadway. They are used as apartments for families today and owned by private landlords or rental companies.

Temporary lodging was also in demand as workers, soldiers, and scientists moved through the town on a daily basis. The Guest House's, later the Alexander Inn, rate for a room was \$3 for a couple with a connecting bath and \$2 without a bath.

At the peak there were 10 elementary schools, one junior high, and one high school. Total enrollment for June 1946 was 11,000. The Highland View Elementary School is now The Children's Museum. Old Robertsville School became Jefferson Junior High School in 1945. In September 1954 Old Robertsville became Robertsville Junior High School and Jefferson Junior High School moved into the old high school building.

The spring of 1943 saw construction begin on a 300 bed hospital. Military doctors appointed by the Surgeon General were the medical force for Oak Ridge. Some returned, Luis Preston was one, to start practices after the war. Almost 3,000 babies were born in the Oak Ridge hospital from beginning of the project until 1946.

Most churches in the area had been torn down to make way for the city. The Chapel on the Hill was built to house all religions and dedicated in September of 1943. Despite having a church, weddings still had to be held at different locations, including the skating rink.

Town site, Jackson Square, was constructed in two phases, town site one and two. Williams drug store, now Deans Restaurant and Bakery, opened in 1943. There was an ice cream store next door and then Samuel's Men's store. Next was Hamilton National Bank, then Victory Beauty Shop and Sutton's Barber Shop.

Town Site two was finished next and Big Ed's Pizza sits at what was the end of it. Millers Department store replaced Taylor's after their contract was revoked.

Across town, Jefferson Square had E.A.T. market, a drug store, and a barber shop. J&M Butcher Shop and the Jefferson Drug Store are there now.

The well done presentation lasted for about two hours and gave a general overview of what life was like in Oak Ridge during the greatest project supporting the greatest war the world had ever known.

Ed Westcott is an icon of Oak Ridge history. Without his black and white photographs we would not be able to tell our history nearly as well as we can using them. His artistic ability made the images more effective as he was able to tell a story with a single photograph. Examples are his famous "War's End" photograph made in Jackson Square on the day the world learned of the end of World War II.

Another excellent image is the "Y-12 Shift Change" where a row of young women are walking on a hill leaving Y-12. Five of those women were identified and still living when the newly constructed Jack Case Center at Y-12 was opened in July 2007. That photographic image is featured as a mural on the wall of the cafeteria there.

The large open space walkway in the Jack Case Center is known as the "Ed Westcott Gallery" because of the many framed images of Ed's photographs that are on display there.

The new Kroger store shopping center is named "The Westcott Center" in Ed's honor. This designation was the result of the Kroger employees selecting him for the honor. Most recently Ed was awarded the Muddy Boot Award by the East Tennessee Economic Council.

Ed is a modest soul and does not seek the limelight, but is most deserving of the recognition his beloved Oak Ridge has given him during these past several years.

He is truly responsible, singlehandedly, for the rich photographic heritage we have. It is good to see his daughter and son-in-law taking the time and effort to share that rich history Ed documented with groups of people who might not know of our history.

Ray Smith, who assisted with this article, said, "Best of all, Ed Westcott is my dear friend!"

Russel Langley can be reached at (865) 220-5514.



Special to The Oak Ridger. Ray Smith, left, is pictured with Ed Westcott as Ray presented Ed with the prestigious Muddy Boot award given by the East Tennessee Economical Council