(As published in The Oak Ridger's Historically Speaking column the week of February 24, 2020)

Bill Wilcox would be proud! His favorite part of the amazing Oak Ridge story was the enormous K-25 Gaseous Diffusion Process Building. He literally spent much of the last few years of his life devoted to finding a way to preserve that history for future generations.

Bill led the Partnership for K-25 Preservation (PKP) efforts of the Oak Ridge Heritage & Preservation Association. He led the group to develop as many as eight different proposals for consideration by the Department of Energy to preserve that amazing history.

The K-25 site was built as part of the Manhattan Project and turned out to be the most effective means at the time to enrich uranium by separating the uranium 235 isotope from the more abundant uranium 238. By March of 1945 the K-25 gaseous diffusion process was able to supply enriched uranium to the Beta Calutrons at the Y-12 electromagnetic separation plant.

This combination of processes along with the S-50 thermal diffusion process provided sufficient weapons grade uranium 235 for Little Boy, the first atomic bomb ever used in warfare, that was dropped on Hiroshima, Japan, on August 6, 1945.

By December 1946, the K-25 Gaseous Diffusion Plant was producing weapons grade uranium 235 and thus the much more expensive Y-12 batch process was shut down. The exception being Building 9731 and Building 9204-3, which remain today as part of the Manhattan Project National Historical Park along with the X-10 Graphite Reactor, the footprint of the K-25 Building and the Alexander Guest House.

The K-25 Building continued to operate until 1964, along with other gaseous diffusion buildings added, K-27, K-29, K-31 and K-33, as well as the Paducah and Portsmouth gaseous diffusion plants. This enormous and complex continuous operation provided not only the fuel for the nuclear weapons program that helped end the Cold War, but also the fuel for nuclear power reactors and the nuclear navy.

The final K-25 gaseous diffusion process was shut down in 1987. Paducah operated from 1952 - 2013 and Portsmouth operated from 1954 to 2001. Portsmouth was also capable of producing nuclear weapons grade uranium 235.

Bill Wilcox was fond of saying, "K-25 was the 'biggest' secret of the Manhattan Project" meaning it was the largest building and also the costliest to construct. Of course, more important secrets existed, but Bill's stressed the size of K-25 as one of our Heritage Tourism jewels. He also knew it was in international importance for the contribution to nuclear power and the winning of the Cold War.

His book on the history of K-25, A Brief History of the Manhattan Project's "Biggest" Secret, is the most complete documentation of the history and was the result of my request of him to write weekly columns for *The Oak Ridge Observer* newspaper. He wrote 18 weekly articles and by the end of the series realized that a he had the makings of a book.

He had finished the book except for the final chapter when he passed away, September 2, 2013, with the manuscript in his lap! I am proud that we were able to publish his fine work. It was my honor to announce the publication of the book at a ceremony unveiling plans for the K-25 History Center. Now the legacy of Bill Wilcox, who has been hailed as the "father of K-25 historic preservation," will live on at the K-25 History Center.

The massive K-25 Gaseous Diffusion Process Building, one of eight significant Manhattan Project Signature Facilities, and one of three in Oak Ridge, was not feasible to maintain and has been demolished. The concrete pad footprint remains and has been included in the Manhattan Project National Historical Park, established in November 2015.

(As published in The Oak Ridger's Historically Speaking column the week of February 24, 2020)

Since the original structure could not be preserved, the Department of Energy signed a multi-project agreement to commemorate the history of the site. One of the first efforts was a \$500,000 grant that saved a local landmark by stabilizing the Guest House/Alexander Inn, which was in danger of being lost because of excessive deterioration. This enabled the building to be converted into the grand Alexander Guest House and also to be included in the Manhattan Project National Historical Park.

The new K-25 History Center is another component of that 2012 agreement. Located at the south end of the u-shaped footprint of the K-25 Building, the K-25 History Center is going to be opened to the public with a grand opening at 10:30 AM on Thursday, February 27, 2020. You are encouraged to come and see for yourself what Bill Wilcox was talking about. The history of the "Biggest" secret of the Manhattan Project is well-told by the museum-quality exhibits, artifacts and numerous displays never before seen by the public.

I have been privileged to assist with the details of the exhibits, videos and displays in the K-25 History Center. In every case, I have been well pleased with the quality of the content.

Imagine what it was like to live in a "hutment!" You can see a replica of one complete with the stove in the center and beds around the walls.

Imagine how large was "Little Boy" the first atomic bomb ever used in warfare! You can stand beside a full-sized model of one and get your picture taken.

And you can even get up close to the large yellow Criticality Unit No. 1 vehicle, designed to respond to a nuclear incident. A "selfie" here will look amazing to your friends on social media.

The new history center will be managed by the staff of the American Museum of Science and Energy. The K-25 History Center will also be included in the public tours that start and finish at the AMSE museum that also include the Y-12 History Center and the X-10 Graphite Reactor. You may sign up online for these tours, which begin in March, at: https://amse.org/bus-tours/

Heritage Tourism is growing in Oak Ridge! The opening of the AMSE museum in a new Main Street Oak Ridge location at 115 E. Main St. is attracting new visitors. The opening of the Oak Ridge History Museum at 102 Robertsville Road in the Manhattan Project era recreation hall, the Midtown Community Center, has filled the gap of the history of the city left when AMSE moved and could not include all of the history of the city.

There are numerous special programs at various locations within the city presented by the Manhattan Project National Historical Park. The Visitor Center for the Park is located in the Children's Museum of Oak Ridge at 461 West Outer Drive where the Flat Top house is now located that was at the old AMSE location. Having our own National Park also contributes to increased visitors.

The plans for an exciting "downtown" to be located on Wilson Street will bring even more focus on the center of our city. The new K-25 History Center, the Y-12 History Center, the Graphite Reactor are all "spokes" in the Heritage Tourism "wheel" with its "hub" at the center of the city.

Make your plans now to take advantage of these Heritage Tourism locations for yourself, your family and your visitors. And be very sure and bring your family to this new K-25 History Center on Thursday. You will be amazed just as Bill Wilcox said you would!

(As published in The Oak Ridger's Historically Speaking column the week of February 24, 2020)



Bill Wilcox would be proud of the K-25 History Center (seen accepting a state of Tennessee proclamation for his K-25 historic preservation efforts)



Get your picture made with Little Boy!

(As published in The Oak Ridger's Historically Speaking column the week of February 24, 2020)



See the unusual incident response vehicle



Imagine living in a hutment