

Clifton Truman Daniel's visit to Oak Ridge and Y-12, part 1

Richard Cook, local resident and aspiring screenwriter (he has a manuscript, "Forgiven," that is a story about Oak Ridge), called me several weeks ago to state that he had initiated contact with President Harry S. Truman's grandson and that he was anxious to visit Oak Ridge. That was exciting news and I immediately began to think about what we might do to ensure Clifton Truman Daniel's visit was the most productive it could be.

Richard also told me that Daniel had visited Japan and was at Hiroshima and Nagasaki during a recent anniversary of the dropping of atomic bombs on Japan. This made it even more imperative in my mind for Daniel to see Oak Ridge firsthand and to experience the history of the Manhattan Project from the perspective of the people and places where the material for one of the atomic bombs originated.

Obviously, he should visit all three government sites in Oak Ridge and, for sure, I should take him to visit the Beta 3 calutrons that actually helped separate the uranium 235 used in Little Boy, the world's first atomic bomb used in warfare. This seemed to me to be something significant that the grandson of the man who made the decision to drop the atomic bomb on Japan should see to make a physical connection to something his grandfather had used to end that awful World War II that took at least 50 million lives.

The more I thought about that, the more excited I became. For, you see, I have taken several people "back to 1945" by showing them the cubicles where the young girls right out of high school that we now call "Calutron Girls," then known simply as "cubicle operators," sat for eight hours a day keeping a series of meters pointing to the locations they had been trained to monitor.

The Beta 3 calutron control room remains as it was in 1945 and is truly authentic with only the young girls and their stools missing. Even the somewhat worn appearance of the equipment and its characteristic musky and oily scent contribute to the feeling of "being there" where history was made.

The Beta 3 calutron racetrack is also unique and an astounding sight. People are amazed when they learn that these exact calutrons were operated until 1998 separating all the elements in the periodic table that have stable isotopes. They are even more amazed when they learn that these calutrons remain in standby today as the nation's only domestic source to separate some 140 stable isotopes that can only be obtained through the use of electromagnetic separation such as done in calutrons.

When I show people the control room for the Beta 3 calutron racetrack, they invariably react with awe and amazement to be in the actual location where the young women spoken of in Denise Kiernan's recently published New York Times Best Seller book, "The Girls of Atomic City," did their part to help win the "greatest war the world has ever known," to quote John Hendrix, The Prophet of Oak Ridge's prediction.

We have an amazing story here in the City of Oak Ridge, the Oak Ridge National Laboratory, East Tennessee Technology Park and at Y-12. The Manhattan Project National Historical Park, now being considered in Congress, is intended to interpret this history.

I am continually astounded by the reaction of visitors who come to the New Hope Center's Y-12 History Center seeking to learn about our history. They express appreciation for the information that is provided there. They learn about the Manhattan Project history and also the history of Y-12's support

to the nation that helped win the Cold War, support to the National Aeronautics and Space Administration and support to the United States Navy, among others. Clifton Daniel was just as amazed as other visitors have been to learn of the scope of our history.

A part of Clifton Truman Daniel's visit to Oak Ridge included a three-hour discussion with Oak Ridge City Historian Bill Wilcox, after touring the East Tennessee Technology Park's K-25 building footprint and other aspects of East Tennessee Technology Park. Clifton told me he was most appreciative of our city historian's great breadth of knowledge of the history of the Manhattan Project and Oak Ridge.

Of course, Bill retired as the Technical Director of K-25 and Y-12, so it is no wonder that he is very knowledgeable of the things Daniel was interested in learning about. They obviously had a great visit.

The Oak Ridge National Laboratory also hosted Daniel for a day. He was provided tours of the laboratory's impressive facilities to include the Graphite Reactor, where the world's first significant quantities of plutonium were created.

Clifton told me that seeing the Graphite Reactor made him understand for the first time how simple a nuclear reactor design can be. He said, "You just need to get enough uranium close enough together and it just happens." We, in Oak Ridge, take that knowledge for granted, many in the rest of the world are just like Clifton. The light bulb comes on when they see the real thing.

This "seeing the real thing" is one of the key elements of the Manhattan Project National Historical Park. Visitors will experience authentic Manhattan Project facilities and experiences at each of the three sites, Los Alamos, NM; Hanford, WA; and Oak Ridge, TN.

Next week I will share with you the final day of Clifton's visit to the Oak Ridge sites when he visited Y-12.