

Y-12 and the National Park Service study, part 1

On Monday, 1/25/10, a somewhat unusual and potentially very important visit for interpreting our history was made to portions of Y-12. We entertained representatives of the National Park Service's Manhattan Project National Historical Park Study Team who are working on a Special Resources Study to determine the feasibility of establishing a National Historical Park to commemorate the seminal event of the 20th century, the Manhattan Project. Members of the Atomic Heritage Foundation who are working to preserve that history nationwide also accompanied the National Park Services representatives.

Y-12's role in that historic event was, as you may know but I am convinced many others don't know, the primary reason for General Groves quickly selecting this 90 square mile site (59,000 acres) in East Tennessee. The site had already been investigated months before, but when he took charge, he realized he needed a plant site right away to get things really moving. Oak Ridge is the result of that decision made by a man who knew how to make things happen. The rest is history ... or is it?

These individuals from the National Park Service are accustomed to seeing historical artifacts, they routinely interpret the history of those artifacts for people who are unaware of their significance. They know how to do that well and are entrusted by the nation with the responsibility to pass our heritage on to future generations.

Their visit to Y-12 (and typically to all of Oak Ridge, including in addition to Y-12's Beta 3 Calutrons and Building 9731, the Graphite Reactor, K-25 and the city's historic Jackson Square) seemed to cause them to realize, maybe for the first time, the true magnitude of the world-changing events that took place here in Oak Ridge. It was good to see the awe in their eyes when they saw the actual Manhattan Project equipment and facilities. It was good to answer really pertinent questions about what our plans are for "preserving these truly magnificent historical items for future generations."

The National Park Service is adept at determining what small part of something historical can be used to represent a larger story of the whole history being interpreted. It was with that experience and eye to detail that they examined the Beta 3 Calutrons. It was with that knowledge that they fully appreciated the single set of Alpha Calutron magnets in Building 9731 — the ONLY SUCH ARTIFACTS IN THE WORLD.

While written materials, videos, animated storytelling, and emotional appeal or even citing certain impressive facts often, may have some success in getting our history documented and told, nothing compares to the actual visual effects of being there where the real thing took place. Only by emotional and mental engagement with realistic and accurate details on display does the visitor get the full impact.

There is NO substitute for the truth and the tangible evidence of seeing, touching, smelling and experiencing the exact same visual atmosphere and the precise equipment used to accomplish that monumental achievement that was the Manhattan Project. The National Park Service personnel know this and their focus is on devising a way to take that experience to visitors to their parks.

When a person first steps through the small access route to the east control room in Beta 3 and stands between the double row of "cubicles" stretching to the end of the building, it is easy to visualize where the Calutron Girls sat on their stools at the controls hour after hour. It is readily apparent that the large meters and the red and black control knobs with their odd elongated shapes are just as they were in 1945.

The red incandescent lamps that warned when the calutron was going out of controlled operation are still there. The hooks for the telephones are there. The grounding rods for working on the controls are still hanging in place. There are even log books still in the slots by a number of the cubicles.

The visitor to Beta 3 has just stepped back in time 65 years! Nothing has changed but the women are no longer there. A display shows Gladys Owens seated on her stool in 1945 (she is the young lady in the foreground of the famous Ed Westcott image of the Calutron Girls sitting on stools in front of the control panels in Beta 1). An inset in the poster shows Gladys in 2004 when she again visited Y-12, and we

staged a photograph of her again seated on an authentic Calutron stool (a stool that had been hidden away in safe keeping for over 15 years!).

Another display shows Connie Bolling, who is over 100 years old and still “Y-12’s Ambassador” when we have public tours during the Secret City Festival each year. Connie was the supervisor of the Calutron Girls in Beta 1 when the famous photograph was taken. He is standing in the background.

The National Park Service representatives indicated that they found Beta 3, Building 9731, The Graphite Reactor and K-25 to be precisely the type of historical artifacts and facilities they are looking for when they interpret history. Authenticity is a key element and we have that in spades!

Of course, we are fast losing the historic K-25 building as it is being demolished as this is written. When we visited the historic K-25 site on Monday, the entire ½ mile long west wing was already gone. The “U” shape is no more. The single wing, the east wing, seems so lonely without its partner west wing.

The representatives remarked that even with that wing missing, they were still amazed at the immensity of the building and the huge amount of equipment that was necessary to complete the uranium enrichment project. While they may not fully understand the technology, they do appreciate the size of the facility, the largest single structure under one roof in the world in 1945, over 40 acres.