Building 9731 – Secret City Festival's Y-12 public tour
Or: Building 9731 to be featured in Secret City Festival's public tour (title provided by *The Oak Ridger)*

In March 1943 the very first structure to be completed at the newly emerging Y-12 Electromagnetic Separation Plant was Building 9731. It was only a little over a month earlier that ground had been broken for the first of nine major buildings designed to hold cautrons (**CAL**ifornia **U**niversity Cyclo**tron)**.

But the real push had been to complete the construction of a smaller building, one with a high bay and especially designed to house four very special units of newly designed equipment using huge magnets. The Alpha Calutron magnets stand well over 20 feet tall and are still standing there today—the only ones in the world!

For the first time ever, the public will have a chance to see these huge magnets and will also be able to tour inside historic Building 9731. This historic event is a part of the Secret City Festival this year.

On Saturday, June 19, 2010, from 9:00 AM to 4:00 PM, a major part of the Y-12 public tour will include Building 9731. The public will be allowed to see inside the historic structure and view the magnets of both the two Alpha and two Beta calutrons.

These calutron magnets have been designated as Manhattan Project Signature Artifacts by the Department of Energy's Federal Preservation Officer in the DOE Office of History and Heritage Resources. The building is being submitted for Historical Landmark status on the National Register of Historic Places.

Building 9731 is one of the buildings that will not be demolished but will be preserved. Efforts are underway to renovate and protect the integrity of the historic structure. It will be used to interpret Y-12's history and the highly successful collaboration between Y-12 and the Oak Ridge National Laboratory over the years.

Many of the advances in technology we take for granted today, actually got started here in Oak Ridge. Some of the most significant ones were first achieved right here in Building 9731. We often fail to recognize Oak Ridge's role in these scientific advances!

It was here on these very calutrons that Chauncey Starr, the first Operations Manager at Y-12 decided which laboratory developments would be passed on to the production calutrons and which would not. He was the person sent here personally by Ernest O. Lawrence, inventor of the calutron, during the Manhattan Project to operate these newly invented electromagnetic separation machines.

Then later, after the war had been won with the help of Y-12's uranium-235 used to make Little Boy, the first atomic bomb ever used in warfare, and after Y-12's calutrons were no longer being used to separate uranium because K-25 was now able to do that more economically, Dr. Chris Keim, experimented with separating materials other than uranium in these very calutrons.

That experimentation led to the creation of the medical isotopes. The calutrons, first used in warfare, now were being used to separate isotopes that were then inserted in the Graphite Reactor. This

combination of Manhattan Project era equipment soon produced what has been said to be the most significant contribution Oak Ridge has made to the world—radioisotopes!

Dr. Keim served for many years as the manager of the Stable Isotope Program. Building 9731 was where the first separations of literally hundreds, maybe thousands, of new isotopes were first accomplished. The production calutrons in Beta 3 were then used to separate substantial quantities of these rare isotopes using the settings established by the calutrons in Building 9731.

An added special feature will be the actual Y-12 retirees who will serve as host and hostess for the tour: Martin Skinner and Jane Puckett, both of whom spent a lot of their time here in Building 9731. They will greet the visitors as they come through Building 9731.

Jane will tell of the time when she was taking data on the calutrons in Building 9731, and while she knew someone was watching her, only later did she come to realize that the person looking over her shoulder was General Leslie Groves.

Jane was the first female graduate from the statistics program at the University of Tennessee. She set up the process and taught the young Calutron Girls how to take statistical data on the calutrons at Y-12.

So, make your plans now to come to the Y-12 National Security Complex's New Hope Center on Saturday, June 19, 2010. You and your family will have an exceptional opportunity to look at the real equipment that made history during the Manhattan Project and Cold War as well as led the way in scientific discoveries used today in medicine and other applications.

You may catch a shuttle bus from the American Museum of Science and Energy to the Y-12 New Hope Center or you may drive to the Y-12 New Hope Center to begin your tour. Tours of Y-12 will last approximately one hour and will also include the much acclaimed view from the overlook on Chestnut Ridge at the water tanks.

Requirements are that you be a U.S. citizen, have a photo ID (US driver's license) or, if younger than 18, be accompanied by an adult who is a U.S. citizen. Handicap visitors will be accommodated as well.

Cameras and cell phones will be allowed in the Y-12 New Hope Center but will not be allowed inside Y-12. You can leave them at the New Hope Center while you take the bus tour and get them when you return for the shuttle back to the American Museum of Science and Energy. If you drive to the New Hope Center, and you choose to do so, you may leave the cameras and cell phones in your vehicle during the bus tour of Y-12 featuring Building 9731.