

Clinton Lab occupies many Y-12 buildings and becomes Oak Ridge National Laboratory

During 1946–1947 the Clinton Laboratories continued expanding operations. Some of the expansion had begun as early as late 1944. But they were fast outgrowing the available buildings at that site. However, large buildings were becoming available at Y-12 because they were closing down the very large Alpha calutron buildings and putting them in standby.

These buildings began to be occupied by the laboratory personnel for research work. This was a great opportunity for the laboratory functions as they were not allowed to build any new buildings at the X-10 site. So, the changes at Y-12 now included added research and development work.

The buildings at Y-12, such as those in what is known as the “Biology Complex,” were all turned over to the laboratory for research. Other large buildings at Y-12 were made available as the calutrons - with their silver - were removed and the buildings vacated. Buildings 9201-2, 9201-3, 9204-1 and 9401-1 eventually came to be laboratory research buildings. Several other smaller buildings were transferred as well.

This research work would continue on the Y-12 site for several decades. Only in fairly recent years has the vast majority of that work relocated to the main Oak Ridge National Laboratory site. As of now all that is left of that research activity at Y-12 are a few remaining inactive research facilities and associated equipment. The Biology Complex is vacant now that the new facilities are complete at the main site.

It was in mid 1946 that Eugene Wigner came to Clinton Laboratories from Princeton University to serve as research and development director. In 1939, Wigner had helped Leo Szilard persuade Albert Einstein to write a letter to President Roosevelt essentially initiating actions that ultimately resulted in the Manhattan Project and the atomic era.

Wigner had also been in Chicago on December 2, 1942, working with Enrico Fermi and Alvin Weinberg when the world's first atomic reactor was created. Wigner and Weinberg formed a lifelong friendship and worked together to expand the scope of the Clinton Laboratories. Weinberg preceded Wigner in coming to Oak Ridge. He arrived in May 1945.

Wigner was working on an idea of creating an expanded postwar laboratory for nuclear research with perhaps 3,500 personnel and an associated school of reactor technology. He hoped he and his theoretical group in Chicago would be transferred as a unit to Oak Ridge.

That was not to be. Yet, he and Weinberg did come to Oak Ridge and that made all the difference in the future of Clinton Laboratories as it was first renamed Clinton National Laboratory in 1947 and in 1948 Oak Ridge National Laboratory.

As early as April 19, 1946, the University of Chicago had a letter to operate an “Argonne National Laboratory” that did not yet exist. On July 1, 1946, the name of the Manhattan District's Metallurgical Laboratory was changed officially to Argonne National Laboratory. There was a tremendous struggle going on vying for these “national” laboratory designations.

In just a matter of a few years, what had begun as a pilot reactor intended to prove the principle that plutonium could be produced on a large scale, was transitioning to a full blown basic research facility. Many new ideas were being tried and success was apparent in all areas of endeavor.

One such success was the Clinton Training School, established in August 1946. Navy Captain Hyman Rickover was one of the first to attend that nuclear reactor training school. From this brief encounter came to be developed the nuclear navy that exists to this day as the world's greatest nuclear powered and nuclear armed naval force.

Rickover's understanding of nuclear reactor technology learned at Oak Ridge would guide his decisions throughout his long and influential career. The nuclear submarines that resulted still use fuel from Y-12.

Many other innovations in nuclear reactor design came from these initial efforts. Alvin Weinberg helped the young laboratory to take great strides by demonstrating reactor design that influenced all nuclear power reactor design since.

The changes begun after the war ended in August 1945 continue taking place at Oak Ridge and Los Alamos as 1946 draws to a close.

- The shifting of production work for additional nuclear weapons from Los Alamos continued.
- Y-12 was taking on more responsibility for production work with uranium metal.
- The Clinton Laboratories was gaining a reputation as a basic science research facility and early in 1947 was named the Clinton National Laboratory.
- In 1948 the name was changed again to Oak Ridge National Laboratory.

Meanwhile, Y-12 was picking up work but was also transferring research and development organizations to the laboratory. The laboratory was moving more and more of its functions into the large buildings at Y-12 as they become available.

In January 1947, the Atomic Energy Commission took over all this effort from General Groves and the Army. Next we will look more closely at this transition.