

Some of the buildings constructed at Y-12

In researching the history of Y-12, I have found the following information on buildings constructed as a part of the Manhattan Project. There were nine major buildings that housed calutrons.

First the five large Alpha Buildings:

The Alpha buildings were completed as follows:

9201-1 (Alpha 1) - August 1943;
9201-2 (Alpha 2) - October 1943;
9201-3 (Alpha 3) November 1943;
9201-4 (Alpha 4) October 1944;
and **9201-5** (Alpha 5) - May 1944.

Next the four large Beta Building:

The Beta buildings were completed as follows:

9204-1 (Beta 1) - November 1944 (Ken Bernander says 9204-1 started up in March 1944);
9204-2 (Beta 2) - November 1943;
9204-3 (Beta 3) - July 1945 (Ken Bernander says 9204-3 started up in November, 1944);
and **9204-4** (Beta 4) - March 1945.

(Readers, if you, from your experience recall different dates, please let me know. I am searching to find accurate references as some of these dates confuse me. Ken Bernander has been MOST helpful!)

Now let's look at some of the other primary buildings:

Building 9706-1, where the Paymaster's office was located, was completed in July 1943.

Building 9706-2, the Medical facility was completed in July 1944. This building has continuously served to house the Y-12 Medical facility until July 2007 when it was moved to the new Jack Case Center, a period of 64 years! The building has also been the home of the Plant Shift Superintendent's office since its inception and still serves that function even today.

Building 9709, a wooden building with a high bay that was used as a mechanical shop with machining capabilities was completed in July 1943. This building has a storied past as it has been used for a variety of missions over the years – as have many other Y-12 buildings. However, 9709 served as home to the Training and Technology program from the mid 1960's until early 1980's. This unique training program was a highly successful program in which Y-12 provided the facility, machines and instructors while the Oak Ridge Associated Universities administered the program. It may well be the single most successful such training program ever, having successfully placed 100 percent of the students who graduated in well paying jobs. There will obviously be more said on this subject in a later article.

Building 9711-1, the first cafeteria was completed in July 1943. This building eventually housed the Y-12 Technical Library operated by the Oak Ridge National Laboratory until just a few years ago.

Building 9711-5, the building that housed the cafeteria until it was moved to the Jack Case Center in July 2008, was constructed in July 1944. Obviously this building was built as the plant grew to the point that the original cafeteria was too small to support the demand.

Building 9712, the garage, was completed in March 1944. Built with a smaller high bay than 9709 and also of wooden construction this structure was similar to **Building 9766** (still standing, but not occupied) and **Building 9728** – The Laundry (demolished in 2001). All three of these buildings were

found to have roof trusses that failed and required substantial repair to retain the use of the garage until a new one could be constructed just this past year.

The failures in Building 9766 roof trusses required half of the building to be closed off for safety and Building 9728 actually had the roof collapse under a snow load several years ago. This failure prompted the review of similar buildings and heralded the beginning of major concerns for wooden structures at Y-12. Ultimately this resulted in a major effort to demolish over 275 buildings at Y-12 over the past six years.

Building 9720-1, the first of the warehouses, was completed in August 1944. These type buildings, wooden one-story structures built on huge concrete pads were ideal for storage and served Y-12 well for many years.

Building 9720-2, another warehouse was completed one month later, in September 1944.

Building 9723-4, a change house was completed in August 1943. If you are noticing the numbering sequences, you will note that this was likely not the first change house completed at Y-12. Buildings 9723-1, -2, and -3 would have been completed before this one. I am still looking for records of these earliest change houses.

Building 9723-1, this change house was built to support Building 9201-1, the first Alpha Calutron building and thus would likely have been completed at about the same time as the start up of Alpha-1. That would have put it near August 1943.

Building 9728, the laundry (mentioned above as having roof truss failure) was completed in June 1943.

Building 9733-1, the building where the final processing of the Uranium 235 took place was completed in July 1944. This building, along with other buildings located close by and numbered 9733-2, -3, and -4, served to house Engineering offices for many years. Again, these buildings were vacated in July 2007 in the move to the Jack Case Center.

Building 9737, where electrical shops were located was completed in July 1943. Over the years, this building continued to serve as the electrical maintenance headquarters. It had a role in the Moon Box construction and also housed the Instrument Calibration Laboratory and now is home to a metrology center. It also was the primary location of the Centers for Manufacturing Technology. 9737 is a building with a host of stories because of its varying missions over the years. There will be more published on this building later as well.

Building 9738, an early foundry, was completed in July 1944.

Building 9766, a machine shop, was completed in July 1944.

Early requirements for steam for heat in the buildings required three steam plants to be constructed at Y-12.

Building 9769 over near the Biology Complex is said to have housed the first steam plant at Y-12.

Building 9401-1, the second steam plant, was completed in June 1943.

Building 9401-2, the third steam plant, was completed on the west end of Y-12 in December 1943. This building was later converted to a plating shop and now stands empty.

Building 9401-3 is the present Steam Plant for Y-12 and it was constructed in June 1954.

Other buildings, such as pump houses, various utility buildings and other structures were built during the first 18 months. The main process support buildings were also being constructed during this time. Much

of the laboratory space and the chemical processing facilities to support the calutron operations were also built in these first few months.

The construction of Y-12 by Stone and Webster was a huge undertaking and one that proceeded under intense pressure but also with substantial support from the Army and other government resources. While it was done in secret, it was afforded a support system second to none. General Groves and his staff had the connections within the government ranks to assure needed resources were provided. Y-12 literally sprang up in Bear Creek Valley at a pace never before seen in the history of the world.