Y-12 grows and expands in the 1950's

The Alloy Development Program that Harold Cofer and others supported from a maintenance standpoint was one of the key programs in Y-12. The COLEX (Column Exchange) process operated from 1955 to 1963 in Buildings 9201-4 and 9201-5. Building 9201-4 became the workhorse of that successful process mission for Y-12 and was able to meet the demand for separating Lithium 6 in support of the nation's efforts to build hydrogen bombs.

Harold Cofer's concluding comments on that phase of his work at Y-12 show his attitude toward working at Y-12, "One of the main factors contributing to the success of the Alloy program was the willingness of higher level management personnel to readily discuss with the workers how important the effort was and what the end result of the program would be. We were in a race with the Russians to see who could develop an arsenal of useable thermonuclear weapons. We won the race."

That knowledge of the importance of Y-12's mission is something heard repeatedly from former workers who are interviewed for oral histories. They knew the importance of the job they had to do. They felt very much a part of something much greater than just a job. They knew that Y-12 did special work that assured freedom for our nation and helped assure freedom for much of the rest of the world.

Today, that attitude is still prevalent among Y-12 employees. The work done here is vital to our nation's security. Even the employees who are being hired right out of college almost immediately gain a respect for the heritage of Y-12's missions over the years. I have the honor of telling most of them about Y-12's history and it is rewarding to see their eyes light up as they learn about our past and begin to see all that has been done here over the years.

It was not just in the Alloy program where important things were being accomplished at Y-12 during the 1950's and early 1960's. Other parts of the plant were growing and adapting to the added workload of nuclear weapons testing. Machining requirements were often set at seemingly impossible tolerances, but Y-12's "Can-Do" attitude was sufficient to enable all requests from the weapons design laboratories to be met.

Building 9212 had become the hub of the weapons work immediately upon the return of Jack Case along with Wimpy Hilton and John Strohecker who had gone to Los Alamos and returned with the technology needed to machine uranium at Y-12. Within a few years, the building had expanded by adding additional wings between the existing wings.

Building 9212 was completed in August, 1945 according to one record and November, 1945 according to another. By 1951, a little over five years later it had more than doubled in size and offices had been added to the west of the wings and headhouse. Although many changes have been made over the years, the 9212 complex continues to serve Y-12's weapons mission today.

Machine tools were purchased in large quantities and redundancy was incorporated from the beginning to assure schedules could be met. One of the techniques Y-12 has been known for over the years is having several machines that can do the various particular machine cuts required to produce weapons parts.

It was not uncommon for machines to be taken down for maintenance and the production schedule still be maintained because of the large number of machines that could perform the needed operations. It is my belief that this style of production planning started very early in Y-12's history and was a significant contributing factor leading to the successful production efforts of the 1980's.

The Cold War was won partially by Y-12's ability to produce more nuclear weapons components than could the Soviet Union, thus breaking their economic back as they tried to match us one for one in the number of nuclear weapons produced. This resulting in the eventual breakup of the Soviet Union and the fall of the Berlin Wall, often seen as the symbol of the end of the Cold War.

While the lithium separation was going on in Buildings 9201-4 and 9201-5, Building 9212 was also a beehive of production activity. Other buildings in what was to become known as “Area 5” were also being expanded or new buildings completed.

One important building added to Area 5 was Building 9995, the Plant Laboratory, completed in March, 1951. This new advanced analytical laboratory was the best such facility in existence at the time to do analytical chemistry on the weapons materials being used by Y-12. Before the building was completed, the analytical laboratories were located in what is commonly referred to as the “Headhouse” of Building 9212.

All of the original wings branch off the section known as the headhouse, A, B, C and D. It was between these wings that expansion developed as the rapid growth of Y-12’s weapons component machining mission in the late 1940’s and early 1950’s. An additional wing was added, E-Wing and all the other wings were filled in with A-1, B-1, C-1, and D-1 wings.

The Y-12 Plant Laboratory has remained in the forefront in the analytical chemistry field over the years and continues to support Y-12’s missions and other important analytical work. While the laboratory has expanded over the years into other buildings and sites, many of the functions located in Building 9995 have continued to faithfully serve Y-12’s production missions.