

Y-12 uranium storage facility—a “dream come true,” part 2

Last week we introduced Shirley Cox and began a two-part series on her career at Y-12 leading up to the recommendation that the Highly Enriched Uranium Materials Facility be built. This week we will conclude Shirley's career story and see her “dream come true.”

Shirley continued to gain respect and increased responsibility throughout her career at Y-12. Her abilities to understand the working level crafts and to interface with all levels of management enabled her to succeed and to bring success to the operations she managed. Shirley earned the respect of all organizations she worked with. I know she had my respect as I supported her operations during this time by providing the maintenance she needed to keep up the high paced production required of Y-12 at the time.

During the 1980's when the Cold War was raging at its peak, she and her crews continued to support the heavy manufacturing schedule for Y-12's production of nuclear weapon components. Schedules were met when seemingly impossible time tables were supplied from the weapons design laboratories. Increases in the abilities to communicate design criteria enabled reduced manufacturing cycles. Shirley's crews adapted the each new requirement and continued to meet schedule and quality demands.

Soon, the Cold War was obviously being won. Y-12 was buzzing with activity. Over 8,000 people worked around the clock in the 1980's to produce so many nuclear weapons secondaries at Y-12 that the Soviet Union in attempting to keep pace, literally broke its economic back and the war was won. Not in a small part because of the tremendous effort of Y-12 workers such as Shirley and her crews.

When the Cold War ended, the nuclear weapons production work came to a screeching halt. This left hard-working employees with no mission and much uncertainty. It was a time of radical change at Y-12.

With the reduction of nuclear weapons brought about by the Strategic Arms Reduction Treaty (START), Y-12 began to dismantle the components that had been manufactured at Y-12 as they were returned.

The increased number of these secondaries produced at Y-12 provided some additional work for Y-12. However, this work had historically been performed only by the disassembly craft. Looking for productive and interesting work for her group, Shirley convinced management that her employees could perform some of the dismantlement work in their area and do so much more efficiently. She felt this was true because of the advantages of working in the special facility designed for the manufacture of the original components.

Shirley presented the challenge to the two crafts – the Chemical Operators and the Disassembly craft – to find a solution that would allow both groups to perform work in Shirley's facility. She told them that they would have to dismantle five times what had previously been done. The craft did not think it possible, but because Shirley had challenged them with it, they succeeded. She also told them they could relax in the break room if the quota was met.

Ironically, the success of these craftsmen allowed the United States to meet dismantlement schedules that were jeopardized by another site's interruption of dismantlement work, because of safety concerns. The workers completed the dismantlement of this particular program far ahead of schedule, under budget, and greatly reduced the hazardous waste generated from the process.

About this time there were also huge quantities of highly enriched uranium being returned to Y-12 at an accelerated rate. To manage this new storage mission, the Defense Programs Director requested Shirley to transfer to a new organization and build a program called the Nuclear Materials Management and Storage Program.

She had to find safe, secure storage space for the ever increasing amount of nuclear materials returning to Y-12. Shirley's program quickly realized a new storage facility had to be built. In 1996, Shirley began negotiating, pleading and arguing for a new storage facility to store the nation's inventory of highly enriched uranium.

With support from the Department of Energy/National Nuclear Security Administration, and numerous Y-12 managers, Y-12 eventually received authorization to build a new facility and made the dream become reality. This was to be the first new capital project for Y-12 in many, many years. The facility has completed construction and will be operational in the near future. This is the Highly Enriched Uranium Materials Facility that shines bright white on the north edge of Y-12 today.

Shirley Cox was able to participate in the public event that dedicated the HEUMF storage facility that she saw years ago would be required. She was filled with pride at seeing Y-12 stepping out into the next phase of operations with the single most secure location in the world to store the "HEU," as she calls it.

We can all be proud of the "Shirley's" who have worked at Y-12 and who continue even today to carry the load at the national resource that is Y-12! Our nation's repository for its highly enriched uranium – the "Fort Knox" of uranium, but we have now turned that famous quote around to where it can now be said that "Fort Knox is the Y-12 of gold." Helen Hardin of Congressman Zach Wamp's staff coined that phrase at the public dedication of the HEUMF.