

Y-12 – 70th Anniversary, part 2

Continuing the 70th Anniversary story of Y-12 from the early years of Y-12's history through the major mission changes immediately after the end of World War II, we now come fully to the Cold War and Y-12's role in the winning of that most unusual and lingering fear of mutual destruction. Looking back, that era still seems to have been a most unique time in the world's history.

In the 1970s, Y-12 faced a number of environmental concerns ranging from asbestos, to Polychlorinated biphenyls or PCBs, to lead paint. Weapons work continued to grow and Y-12 became the storage facility for highly enriched uranium as well as a nuclear component manufacturing center.

The 1980s brought an increased workload as Y-12 manufactured as many nuclear weapon components as possible, literally helping to break the economic back of the Soviet Union as they tried to match Y-12's output one for one and could not do it. The end of the 1980s also saw the beginning of the end of the Cold War.

It was during the heat of the Cold War in the mid-1980s that the U.S. Navy came to Y-12 with a request to machine the propulsor for the Seawolf submarine. This work required capabilities that did not exist in private industry, so Y-12 undertook it. A special, huge machine was purchased, computerized and installed at Y-12, and then a building was built around it. This machine had a 20 foot turning bed to handle the large metal stock from which the propulsor was machined.

The 1990s saw even more radical change as nuclear weapon components began to be returned to Y-12 for disassembly and storage—yet another new mission for Y-12. But by far the most significant event of the 1990s was the shutdown of Y-12 operations on September 23, 1994. This signaled an abrupt change to a new operating culture.

It was tough on everyone, but it was a necessary change in operations from an expert or experience based operating methodology to a procedural based method. The term “Conduct of Operations” was introduced and internalized by Y-12 workers. In some cases, it took more than 10 years for Y-12 nuclear operations to become again fully operational. A major shift in overall management methodology and operations techniques had occurred.

The decade following 2000 saw changes that ranged from bringing in a new contractor, B&W Y-12, to the first ever wholesale demolition of facilities and also the first major construction of new buildings in 30 years. Over 300 buildings were demolished from 2001 through 2010.

In 2005 the public was allowed to see the Beta 3 Calutrons for the first time as a part of the Secret City Festival held annually each June in Oak Ridge. This facility along with Building 9731, which continues to be available for public tours during the Secret City Festivals, are both intended to be preserved and to become a part of the Manhattan Project National Historical Park.

The Jack Case and New Hope centers were built using private financing and were occupied in July 2007. Many community leaders were on hand for the ribbon cutting. The Highly Enriched Uranium Materials Facility was completed in 2008 and became operational in 2010. Over 1,000 people from the community were allowed in the protected area of Y-12 for the dedication of that major operational facility.

Beyond 2010 Y-12 continues to serve our nation's nuclear weapon component needs, stores the nation's highly enriched uranium not in nuclear weapons, along with the Oak Ridge National Laboratory, goes anywhere in the world where nuclear materials are in danger of falling into terrorist hands and removes the threat, and also continues to supply the U. S. Navy's nuclear fuel needs. Y-12 serves the nation as the Uranium Center of Excellence and a National Prototype Center and has become a well-known training center for nuclear security applications.

A security breach on June 28, 2012, resulted in questions about Y-12's security reputation and caused significant disruption to standard operating practices that had failed to prepare for the type threat that was initiated by three nuclear weapons protestors. Changes resulting from that embarrassing breach have strengthened security not only at Y-12 but across the Department of Energy nuclear weapons complex and other secure facilities across the nation.

So for 70 years Y-12 has stood in Bear Creek Valley as a "huge factory" as described in the legend of John Hendrix. Not only have Y-12 workers performed our missions in support of the nation's freedom and safety, we have become a mainstay of Oak Ridge and East Tennessee economic development and stand proudly ready to continue our march forward to help Keep America Safe!

The Uranium Processing Facility is the next step in Y-12's journey to assure the nation's capability to process highly enriched uranium remains in place. The UPF will improve our capability by replacing buildings that have exceeded their useful lifespan with new and modern facilities designed for uranium operations.

With future changes at Y-12, I believe we will continue to see the "Can Do" attitude exhibited in all mission areas and when the nation needs us, we will respond. Our freedom and safety is much too important to allow anything other than that "Can Do" attitude to exist at Y-12...an Oak Ridge treasure and a national resource.