## Y-12 Apprentice Program

Over the years Y-12 has produced numerous training programs. Many of them have been developed at Y-12 to meet special needs. The training programs have ranged from those required for specialized technical skills unique to Y-12 missions to the more routine safety and security training that goes with working at Y-12. Y-12 workers are also required to safely handle special materials and work in special environments, all requiring specialized training.

Some training programs developed at Y-12 have received special recognition because of their effectiveness. The Training and Technology Program jointly developed and administered by Y-12 Union Carbide Nuclear Division and Oak Ridge Associated Universities from 1960 – 1980 was one such program. This program provided training for inner-city individuals that helped them gain skills and get jobs that otherwise would have been beyond their reach. This program had an enviable placement rate of 100 percent.

Until recently, another training program series, the Y-12 Apprentice Program, had not been provided at Y-12 for several years. Until the current program began, the last program was held at the end of the Cold War when the workforce was restructured in the early 1990s.

John Whalen, Atomic Trades and Labor Council Joint Apprentice Training Committee Chairman, provided the following information on the history of the current apprentice program at Y-12:

After a 17-year hiatus, Y-12 revived its own apprenticeship program in 2008, because of a concern over the declining number of qualified craft personnel in East Tennessee and the nation as a whole, and the anticipated increase in demand for personnel. Craft positions require training and skills obtained in the classroom, as well as on the job. Craft levels include apprentice, journeyman, and master classifications.

Craft positions can be filled by hiring personnel who already have the required training and skills or by using an apprenticeship program to develop the appropriate skills. Currently the bargaining unit has about 1,400 employees, 35% are eligible to retire with full benefits, and the average age is 50. In general, most craft personnel at Y-12 obtained their craft training, in part, through an apprenticeship program.

The apprenticeship program ensures a new generation of skilled craft personnel will be available for future Y-12 missions. There were 2,610 applications for the 50 available positions in the first apprenticeship class. The 50 selected individuals ranged in age from 18 to 42 and served as apprentices across 10 craft positions.

To date, Y-12's apprenticeship program has 66 apprentices—11 entering their second year, 20 entering their third year, and 33 entering their fourth year. The fall 2011 class has eight apprentices in the following categories: four electricians, three stationary engineers, and one steam plant operator. Across all years there are 72 apprentices.

The apprentices are matched with a journeyman for on-the-job training and spend 8–10 hours per week in the classroom. The number of positions filled by hiring existing journeymen or masters versus those filled by apprentices is determined by analyzing each craft position with respect to the number of existing journeymen (the optimal ratio of journeymen to apprentices varies by craft position), the anticipated future need, and the projected attrition rate.

The apprentice program at Y-12 has approved standards and appendix A's which govern the classroom training provided by each of the local unions. The B&W Y-12 and ATLC partnership is based on B&W Y-12 providing the on-the-job learning, and the ATLC unions involved providing the classroom training outside the normal work hours. At this time, there are six minorities, 10 females, and seven veterans in the program.

In the fall of 2011, Stationary Engineer classification apprentices were added to the program. In the spring of 2012, Machinists were added.

The future of trained craftsmen is imbedded in apprentice programs, and Y-12's apprentice program provides a path for non-college-bound high school graduates. The 35% of the 1,400 ATLC employees of retirement age will be training their replacements as they train the apprentices in the program now and those to come. The apprentices trained at Y-12 are introduced to systems specific to the Y-12 plant and mission. This feeder pool of journey workers proactively is creating trained employees in a selection pool for planners, supervisors, and managers.

Local community colleges are partnering with B&W Y-12 to provide college credits equivalent to classroom training taken by apprentices as credit toward associate degrees and potentially higher degrees.

Thanks to John Whalen and others who work diligently in the Y-12 Apprentice Program to provide skilled and qualified workers in these craft areas. The whole of East Tennessee and the nation benefits from such apprentice programs.

Y-12's program graduated seven on December 18, 2012, two Boilermakers, two Carpenters and three Ironworker/Riggers. The others apprentices continue to pursue their goals with help and support from fellow workers at Y-12 and the benefit of the Y-12 Apprentice Program.