

Y-12's Training and Technology – An exemplary success

In the early 1960's, specialized skills training and work for others concepts were taking on growing and ever more important roles as emerging missions at Y-12. The manufacturing processes had expanded into broad areas of chemical processing and metal working. Y-12 had a wide range of specialized processes and was surely among the most technical, highly precise and complicated machine shops in existence anywhere in the world.

In 1966, Y-12's contractor, Union Carbide Corporation's Nuclear Division, began participating in a demonstration industrial training program in cooperation with Oak Ridge Associated Universities. This experiment in learning came about as a result of a 1965 survey conducted by ORAU which concluded, "...millions of Southerners are unable to make reasonable use of their potential for work mainly because of inadequate education and training."

This experiment had the support of the Department of Energy's predecessor agencies, the Atomic Energy Commission until 1974, then the Energy Research and Development Administration that was formed when the Nuclear Regulatory Commission came into being, and finally in 1977 when the Department of Energy was created. The dedicated and continuing effort to train unemployed and underemployed persons was seen as an important mission by all three successive government agencies charged with the oversight of Y-12.

This innovative program, a forerunner of other similar programs across the nation in later years, was best known just as "TAT" or the "TAT School" and was officially named *Training and Technology*. This unusual-for-its-time program was created and first funded by the Department of Labor's Research and Demonstration Program. The Manpower Development and Training Act of 1961 took over the funding after the initial demonstration proved highly successful.

In 1974, when the Manpower and Development and Training Act ended, the Comprehensive Employment and Training Act took over the funding. The CETA legislation, lasting from 1973 to 1982, provided support but was erratic and saw continuing struggles between local governments and others for control of the funds and training programs. TAT was on the cutting edge of skills training for all the years of its existence, but continual change in legislation governing such programs eventually caused TAT to close down in early 1984.

TAT classrooms and shops were located in Building 9709 on the east end of the Y-12 site near the headquarters for the Electrical and Electronics Department of the Maintenance Division, located in Building 9737. The highly successful effort lasted from 1966 to 1984.

One has to wonder why such a highly successful program, graduating over well over 6,000 trainees with a job placement rate exceeding 90 percent and an average salary that far exceeded other such efforts to provide jobs to the unemployed, did not survive longer. Those individuals to whom I have spoken about TAT wonder as well. While they understand the decision made that put a stop to TAT, they still miss the program and hate that it did not continue.

TAT's success is a great story and may well be one that just because of its success was able to help change the way training was done across the nation and thus put itself out of business. You see, others became able to do the training because of the model training program developed right here in East Tennessee by Oak Ridge Associated Universities and Union Carbide Nuclear Division with the support of the Department of Energy. Such prototype work was common to Y-12 even then. As you may know, today Y-12 is recognized as a highly successful National Prototype Center.

I found that the University of Tennessee and Roane State Community College also used the TAT training facilities located at Y-12. These higher education schools offered credit courses in the evenings using the facilities. Students were able to walk into Y-12 and take the courses. In the middle 1970's over 100 students were enrolled there in continuing education for credit.

The TAT enrollment at that time was approximately 200 trainees per year. The instructors for the TAT courses were primarily highly skilled craftsmen and craft supervisors from Y-12. The technical skills training courses relied on Union Carbide's Y-12 employees.

However, some instructors were ORAU employees and taught there part time. Additionally, ORAU provided administrative services, took responsibility for long-range planning, provided some class room instruction, trainee services, and job placement.

Five training areas were offered: welding, machining, physical testing, mechanical operations, and drafting. TAT remained very flexible and was geared to meet the needs of industry, so other courses were added or dropped as required. Courses such as glassblowing, industrial electricity and chemical-technician training were a part of the program but were dropped when demand slackened for those areas of employment.

The job-related education provided in each of the occupational areas included shop theory, blueprint reading, shop mathematics, and science. As we will learn in the next installment, English was also taught. These instructors even taught the trainees about money management, how to use banks and about checking accounts.

The instructors and trainees grew close to one another. These young people, some of whom might not have had the best home life, came to know a different way of life...forever! It was that kind of radical change. To them TAT was much more than a training program.

It was a life-changing event for some 90 percent of the trainees. Many of them came from inner cities to East Tennessee — even to a nuclear weapons manufacturing plant. All for a unique training program to learn new skills. Some of them even stayed here, too.

Maybe we can share a story or two from folks who experienced TAT. Contact me with yours.