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W. David Case contacted me at the suggestion of Bill Wilburn. Not an unusual circumstance as I often get connections through others to people who have parents who worked at Y-12 and want to talk to the Y-12 Historian. Sometimes I can help them understand what Y-12 workers did in jobs their parents had and other times I am unable to do anything more than give them generic information about the Y-12 work environment during the period their parent(s) worked here.

Something was different about this contact. At first I could not tell what it was. David seemed to be anxious to talk about Y-12 and seemed to know a great deal more about the early work environment than many others who question me about it.

The more we talked the more I thought this connection would produce something useful. In the course of the conversation, I learned that David had created a blog: http://y-12-beta-chemistry-building-9206.blogspot.com/

He also mentioned he had a number of photographs from when his parents lived in Oak Ridge and worked at Y-12. So, I asked him if he would allow me to share the story of his mother, "Claudy," one of the young girls right out of high school who came to work at Oak Ridge during the Manhattan Project. He agreed.

David said, "Claudy Felicia Osborn was born on January 4, 1926, in Colbert County, Alabama. She was the eleventh and last child born to Columbus Allen Osborn and wife, Nancy Isobel Romans. Both parents were descendants of Scots-Irish immigrants who came to North Carolina prior to the American Revolution, and whose later generations migrated through Tennessee before finally settling in north Alabama during the period of the Indian Removal."

"Neither parent had more than six years of schooling. Columbus Allen, whose nickname was "middle buster", labored his entire life as a farmer, yet always on lands owned by someone else. His net earnings from farming after feeding and clothing his family, paying his rent, etc., were never enough to allow him to buy a farm of his own.

David went on to say he knew little of his mother's childhood. His desire to learn more came about when he decided to write a family history for his grandchildren. In his research into her childhood turned up an interesting change of name for her.

It seems the 1943 yearbook for her school has her name listed as "Claudia" rather than "Claudy," her given name which she thought sounded too "country." She also did not like her middle name of "Felicia" and according to David, rarely even disclosed it. See her struggle? What came next is something amazing that happened in 1944 and 1945 to several young girls, right out of high school. She was offered a job at the Clinton Engineer Works in Oak Ridge, TN.

David says it this way, "Her chance to escape came in the summer of 1944 when she learned that a company called "Clinton Engineer Works" was hiring young high school graduates like her for defense related jobs somewhere in East Tennessee. Packing everything she owned into a single small suitcase she made her way north to Knoxville and was hired by CEW as a trainee on August 3, 1944."

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David described her arrival as follows, "The first stage of her entry into the strange world of the 'city behind the fence' was the compulsory indoctrination for new employees. Once as a child when we drove by the 'Castle on the Hill' area I asked my mother about the many buildings there and she told me she had spent a few days in one of them when she had just arrived in Oak Ridge. She said that she had to attend some classes about secrecy and 'keeping your mouth shut,' and that one of the men who taught the classes spent a lot of time telling dirty jokes, which most of the girls did not appreciate. During the training period she was paid seventy cents an hour."

Can't you picture the situation now? Claudy travels to Oak Ridge on her own! She is eighteen. She gets settled in and is sent to a training class where the main course is dirty jokes! Yet, she is on an adventure! David continued, "On September 17, 1944, she was hired on full time as a Refining Oxide Operator at the Y-12 plant. It was the first real job she ever had. Her pay was raised to eighty cents an hour. Four days later she was assigned Room 123 in Residence Hall WV-60.

David said, "She now had a real job and her own place to stay, complete with water that she didn't have to pump out of a well and indoor bathrooms. She was eighteen years old and on her own. It must have been as scary for her as it was exhilarating.

"I'm sure it did not take her long to get accustomed to her new daily work routine. After waking up (to an alarm clock and not a rooster) she would quickly get dressed and pin on her badge. Breakfast would be in the Adams Cafeteria across the turnpike, and it would be not at all like what she was accustomed to back home.

"There were eggs to be sure, and plenty of them, but just not as good as the ones she had retrieved from the hen house. The bread was store-bought white bread. It was so-so and not nearly as tasty as the biscuits and cornbread she and her sisters could make. Same for the milk and butter. It was good, but never the same as "fresh squeezed".

"But it wasn't all bad. There were items on the menu that were scarce or costly back home, like citrus fruits and juices.

"After breakfast it was a short walk to the busy Jefferson Bus Terminal where she would catch a bus to Y-12. Once there she would join the line of employees passing through the security gate, punch in at 'clock alley,' then walk a short distance to her building, Building 9203.

"She could enter no buildings other than the one to which she had been assigned, except for the main cafeteria. She could also use the change buildings where she would change into her work clothes. After work she could shower before changing back into her own clothes and returning home to the dorm.

"She was expected to work an eight-hour shift, six days a week. She was paid time and a half for overtime work. If she was required to work a seventh day she was paid twice her standard hourly wage for that day.

Building 9203 is where the uranium feed materials for the Beta Calutrons was prepared. So, Claudy was a Chemical Operator doing hands on work with the uranium oxide to convert it to the required mixture.

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As a part of David's research into his mother's history to be included in the family history he was preparing for his grandchildren, he requested his mother's work records. From these records he was able to add to what little she had shared with him.

David said, "My mother was treated by Medical Services for work related injuries twice while working in Building 9203. The first event occurred on October 10, 1944, when she suffered an acid burn to the left side of her face. I remember the very shallow dime-sized scar that the burn left on her cheek. Another event occurred on 25 Nov 1944 when she was once again brought to the Medical Building by ambulance, this time for respiratory difficulties caused by 'breathing gas fumes.'"

David continued, "In November, 1944, the Beta Chemistry Building (Building 9206) was placed in operation and processes formerly carried out in Building 9203 were moved to the new building, along with the personnel who carried out those processes, my mother being among them. There in addition to converting UO4 wet cake to UO3 by calcination, she took on two new assignments as well. One of them was the removal of yellow uranium oxide (UO4) from centrifuge bowls transferred to Building 9206 from the Beta Calutron Process Buildings. Approximately 50% of her work week time was now devoted to this task.

"That operation consisted of placing the stainless steel cylindrical shaped bowl on to a cleaning table where a scraper attached to a stainless rod was inserted into the bowl and the wet UO4 was transferred into a ten inch diameter stainless vessel for conversion to UO3. After removal of most of the UO4 cake by scraping the centrifuge bowl, it was placed in a wash unit where nitric acid was sprayed into the inverted bowl and the remaining uranium was dissolved. This solution was collected and processed by H2O2 precipitation and added to the UO4 process stream for conversion to UO3.

"The bowl cleaning was a close contact/hands on effort. Rubber gloves were worn for protection against nitric acid uranium solutions and UO4 skin contamination. Nonetheless accidents could happen. It was during this period that Claudia was brought to the Medical Building by ambulance for treatment of an acid burn to her right eye that occurred as she was pouring acid from a container into a cup.

"Approximately 10% of Claudia's work time was devoted to a third work assignment: that of recovering Beta Calutron product receiver parts for reuse. The process required the removal of deposits of uranium deposited by the ionized uranium beam.

"One particular graphite part of the product receiver that was recovered was a graphite part called the defining carbon. This removal was carried out in an open faced vacuum hood where the graphite part was wire brushed with a power driven rotating brush.

What has just been described is the cleaning operation where Chemical Operators removed the uranium residue separated by the Calutrons. You see, these young ladies were doing the actual hands on work of cleaning the collectors. Unlike the "Calutron Girls" whose job was to maintain meter readings, these women were immersed in the actual chemical recovery process.

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David also noted that his mother took advantage of the Clinton Engineer Works / Tennessee Eastman Corporation Suggestion System and hit the jackpot with her suggestions at least three times: Her first award, dated 01 Oct 1945, bearing number 22428, was for \$20.00; The second award, dated 25 Mar 1946, bearing number 37436, was for \$25.00; The third award, dated 22 Nov 1946, bearing number 40337, was for \$5.00.

David said, "Only many years after her death, when going through her notes and diaries, did I learn how deeply concerned she was with moral issues and question of guilt. I believe that much of those concerns derived from her work at Y-12. She was a naive girl of eighteen when she came to Oak Ridge. She knew only that her work would help the war effort and help bring her brothers safely home from the Pacific.

"I think she was shocked to learn that the product of all the work had been the creation of a weapon of terrifying power, and that its use had killed so many civilians including children. Two of her brothers had served in the Pacific Campaign with the 27th Infantry Division. Ellis, a deeply religious man, was a combat medic. Randolph was a survivor of the infamous Banzai charge in Saipan. Both had seen and endured things that should never have been part of any human's experience. She was so thankful that they had survived it all. Yet still, I that in her heart and mind she remained confused and troubled about it all.

David's mother fought cancer twice in her life. First, with uterine cancer in 1967, and later with a very aggressive cancer that quickly spread throughout several organs. She died on October 17, 1979.

David said, "I understand more about my mother and her life now than I ever did while she was alive. My deepest regret is that I cannot now go with her to some quiet place and tell her how proud I am of her and of her family. My mother is buried alongside my father at Anderson Memorial Gardens."

These young girls right out of high school who were a large part of the 22,000 people working at Y-12 in August of 1945, did the hard work of hands on chemical processing to help stop the most deadly war in the history of the world. Their dedication and devotion to their country is unsurpassed.

I am pleased to see the Honor Air Program now including these Manhattan Project veterans, what few we have left, on their flights to Washington DC, to see the monuments.



Claudy's Residence card

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Claudy Osborn at Residence Hall WV-60 dormitory in Oak Ridge



A cash award for making a suggestion that improved productivity