Poem gives glimpse into Christmas past for one Y-12 worker

When Cathy Waitinas was cleaning out a bookcase at home a few months ago, she came across a stack of her mother's papers. Waitinas had looked through the certificates and mementos before, but this time a folded piece of paper caught her eye. She carefully unfolded the fragile page to find a poem written by her mother, Bernice Russell, in December 1946.

The poem read:

TWAS THE DAY AFTER CHRISTMAS

Twas the day after Christmas When all through Y-12 Many rumors were stirring No one himself.

Everyone was concerned with a memo from "Dock" which notified all of being lost sheep in his flock.

We have visions of a bonus and vacations with pay and in my estimation now...that's all hay.

Already I've heard nearly everyone say "I have no place to go and no place to stay."

We worked in Y-12 and help win the war We sold our furniture and then sold our car.

Our deferments prevented us from being soldiers or a job and now my dear children we haven't a job.

> Wrote Dec. 28, 1946 Beta -9204-2 – U-12

What struck Waitinas the most, aside from the uncertainty and dismay clearly conveyed in the poem, was the building number penciled at the bottom of the paper: 9204-2 — the same building where Waitinas now works as a procedures coordinator.

"Wow! I was blown away," Waitinas said. She now had another piece of the puzzle to help her reconstruct her mother's job at Y-12 during World War II. Russell, like most Y-12 workers at the time, knew she was helping the war effort, but she didn't know how. She was given enough training to perform her job but didn't know how her assignment fit into the bigger picture of Y-12. She, like others, was warned never to talk about what she did.

Long after the war, Russell told her daughter she "sat in front of a panel all day looking at gages and adjusting dials," but it wasn't until 1992 when Waitinas was reading an issue of the Y-12 employee newsletter that she recognized her mother in a now-famous photo of the "calutron girls," as they became known. "At that moment, I understood what she'd told me about her job in Oak Ridge, and I knew the role she played in helping to win the war," Waitinas said.

Russell's job, it turns out, was to monitor and adjust the controls of one of the calutrons used to separate uranium. Uranium-235 was used to fuel "Little Boy," the world's first atomic bomb to be used as a weapon. The bomb was dropped on Hiroshima, Japan, August 6, 1945.

After the war ended, it was "mission accomplished" for Y-12. There was no longer a need for most of the workers. Russell wrote "Twas the Day after Christmas" in December 1946, when layoffs at Y-12 were imminent. The only mission work going on at Y-12 was in Building 9731, where isotopes of materials other than uranium were beginning to be separated, and only a handful of workers were needed there. The remainder of the workforce was dismantling the calutrons and preparing to close down the huge Y-12 calutron buildings. Operators were not needed for that.

The mood of despair was felt by the Y-12 workers who saw the writing on the wall. Their jobs, and good jobs at that, were soon to be gone. The poem was written at a time when Y-12's future was the darkest.

By 1947 most of Y-12's work shifted to the K-25 Gaseous Diffusion Plant, which had become operational in March of 1945 and by the end of 1946 was capable of separating uranium at 1/10th the cost of Y-12's calutron operations. The leaders of Y-12 were trying desperately to hold on to the mission of separating uranium. They were struggling to keep ahead of the rapidly growing capability of K-25 and losing.

Of the 22,482 Y-12 workers on August 21, 1945, only 2,440 remained by June 1947. Russell was among those without a job. The city of Oak Ridge shrank from a high of 75,000 in August of 1945 to approximately 30,000, as workers and their families either went back home or to work elsewhere. The war was over, and there were questions regarding whether Oak Ridge would survive.

During that despondent Christmas of 1946 when Russell wrote the poem, could she ever have imagined that Y-12 would have an enduring national mission almost 70 years later? Would she ever have dreamed that her own daughter would work at Y-12 for 32 years and counting?

Y-12's relevancy in the 21st century is a testament to the resilience and ingenuity of the site's thousands of men and women over the decades who have adapted to meet the nation's evolving defense and security needs. These workers turned Y-12's single purpose to separate uranium for an atomic bomb into a multifaceted mission that includes converting uranium from former weapons for peaceful purposes and disassembling the nation's nuclear weapons secondaries as the weapons are deactivated.