OVERTON COUNTY – **Lyda Speck** never said the word "bomb" during her days in the lab in Los Alamos 70 years ago.



slide after slide through her microscope, carefully measuring between what looked like constellations amidst a starry sky.

Not that anyone ever confirmed her suspicion.

Not that she ever asked.

"That was how tight the security was," Speck, now 99 and living in Livingston, said of her role during World War II. "It was always referred to as a 'gadget' by all the scientists and everybody else. I never heard anyone mention that it was a bomb."

But the thought that she was contributing to the creation of such a device was never far from the young sergeant's mind as she pushed

But nothing was left to doubt on July 16, 1945, as Speck gazed into the New Mexico desert sky from her vantage point on what was referred to as "the hill," being among the first to witness a level of explosive fury the world had yet to experience.

But soon would.

A blast so powerful it could destroy an entire city, with shock waves felt more than 100 miles away, erupting into a monstrous mushroom cloud and leaving a crater of jagged radioactive glass where once was sand.

The first detonation – a test shot- had confirmed for Speck that the two and a half years she had contributed top the top-secret research and development endeavor known as the Manhattan Project had not been in vain. That the U. S. now had the atomic weapon it needed to slam the history book shut on World War II.

Speck, who was in her late 20s at the time, had come a long way to become a part of that history.

She'll be 100 in March and is still as independent as every – just like the young woman she was in the 1940s, defying the norms of her day.

Never marrying.

Never having children.

Instead, she went to war – drawn by a spirit of adventure and a desire to see the world.

Here early years, however, were common enough.

Speck – who held a college degree in chemistry – had been an elementary school teacher in Livingston during the Great Depression, a time when most jobs were reserved for the men.

"The attitude was that one family should not have more than one person working when everybody was really having a tough time," she said.

But when school attendance dropped, Speck was dropped from the school system and went on to become a rural mail carrier in May of 1941.

"That was wonderful because it was 12 months out of the year and you were working for the government so you weren't afraid of losing your job," she said.

And then came Dec. 7, 1941.

"I remember it distinctly," Speck said of the day that more than 2,000 young sailors were lost to a surprise attack from the Japanese Navy at the U. S. naval base at Pearl Harbor.



"It was on a Sunday...Momma had just told us lunch was ready, and they broke into the news on the radio before we got to the dinner table. It was just unbelievable."

And suddenly – jobs.

"The war brought the Depression to an end," Speck said. "That's an awful thing to say – that you benefited from (the war) in some ways – but that's what happened."

As young men volunteered or were drafted for service overseas, women stepped up to handle the jobs on the homefront.

Meanwhile, Speck felt the patriotism itch and took a leave of absence from her mail route in 1943 to join what was then called the Women's army Auxiliary Corps but became the Women's army Corps just before she reported for duty.

"They changed it to put women in the regular Army," Speck said. "A lot of (the women) left then and went back home."

But not Speck.

"That's what I was going in for," she said. "I volunteered for anywhere in the world that we were needed."

She figured that her service would have something to do with the mail – since that was her experience – and envisioned handling deliveries all over the globe.

"You'd go wherever your troops were, and your troops are sent everywhere," she said. "And the main thing they want is a letter from home."

But, as it turned out, Speck's high score on an Army intelligence test caught the eye of those involved in a top-secret project to produce the first atomic bomb.

It was while she was stationed at a training camp in Florida that the peculiar interviews began. Among the questions was whether she was willing to go overseas without any chance of going home until the war was over. And she was.

After basic training, Speck's entire company of women was sent to what was called a casual unit to await their orders.

"Of course, they started shipping them out immediately," Speck said. "Every day, more and more of them would leave, and I was still there."

Eventually, she was the only one left.

"And I thought, 'Gee wiz, am I the only woman that they can't find anything for her to do?"

Finally, she was told she'd be going to secretarial school. But that plan was immediately changed when her superiors were informed that Speck would not be going anywhere yet.

She would remain where she was to await "special orders."

"I couldn't imagine what that would be," Speck said.

She later ended up on a train with a couple of other women to an Army base at Fort Sill, OK, which was the point form which troops were sent overseas.

"They outfitted us with gas masks and everything," Speck said. "We really thought we were going to the ends of the earth!"

But it was all a sham – a way to keep hidden the secret job that awaited her in Los Alamos, NM.

"They told us where wee were and what we could and could not say," Speck said of her debriefing.

"Mostly we could say anything but the truth!"

But it took her a while to figure out what the "truth" was – to realize she was actually helping to build a bomb.

Speck's part in the process involved day after day in a physics lab – a job she felt unprepared for at first.

She told her boss in their initial meeting she believed he had been "misinformed" about her.

"I just had one physics course," she told him. "My major was chemistry."

But then he told her: "We're not interested in what you have learned. We're interested in what you can learn. We'll teach you what we want you to know."

Speck said she'd "give it a try."

Over the next couple of years she got to know her microscope extremely well, measuring tracks that would help scientists perfect the explosion.

"It had to do with determining what size the bomb would have to be to go off," Speck said.

The job was tedious and nerve wracking – comparable to measuring a shooting star within a host of other stars.

"It took a lot of patience to sit there hour after hour, day after day," she said.

"I would measure 1,500 tracks on each (glass plate) that was exposed. That was a lot of measurements, and it sure began to play havoc with my eyes. That was the main reason I could do the job – I had such perfect eyesight."

And though no one ever said the word "bomb" it became clear enough to Speck that a devastating weapon was coming together.

And she knew the U. S. was in a hurry to possess it.

"They were pretty sure Germany was working on a similar bomb," she said. "And no one knew for use what they were doing in Japan."

The war in Europe would end before the bomb could be completed – but Japan was still a threat.

"(The war) went on in Japan until they dropped the bombs," Speck said of the two atomic blasts that wiped out Hiroshima and Nagasaki on Aug. 6 and Aug. 9 of 1945, prompting the Japanese to negotiate peace with the U. S.

It was a relief that the bombs had worked, Speck recalled.

But the cost was high.

"Those cities were completely destroyed," she said.

"It was a horrible thing. And a lot of people will criticize those who worked on (the bomb) for how horrible it was because we knew the Japanese civilians were going to suffer."

But the people at home were suffering too.

"(The Japanese) were killing our people on every island in the Pacific," Speck said.

"It had to be stopped or they would have been in this country before too long.

But finally, the war was over, and Speck would return home in February of 1946.



World War II
veteran Lyda
Speck of Livingston holds a
bit of jagged
glass from the
world's first
atomic bomb,
which was detonated as a test
in the New Mexico desert in
1945.

Amy Davis | Herald-Citizen But there would be no hero's welcome.

Not even a mention of her arrival in the local newspaper.

And life would resume as usual with Speck reclaiming her mail route, a job she would hold for more than 30 years.

But in her home is a reminder – a small bit of jagged glass enclosed in a globe, which takes her back to that momentous day in the desert nearly 70 years ago.

"That first test shot had everybody so nervous," she recalled.

"They didn't know if it was going to work at all. People stayed up all night, and I was one of them."

And when it happened, the view from the hill was amazing.

"We saw the sky light up," she said.

A bright sport that seemed to promise better days.

Or, the end of a war at least.

*Read more about the history and people of Putnam Co., TN & surrounding areas at: $\underline{\text{http://www.ajlambert.com}}$