## **America's Arsenal of Democracy**

Matthew Jaster, Senior Editor

While we recently celebrated women in manufacturing and engineering on International Women's Day on March 8, 2021 there is rarely a day that goes by that I don't think back to the stories my own grandmother, Laurel McKinley (Hartner), shared about her experience working at the Willow Run manufacturing complex during World War II.

Growing up in Michigan, my family was very familiar with the Rosie the Riveter stories about the women that worked on the B-24 bombers at Willow Run. Of course, we had no idea my grandmother was part of the program until she nonchalantly mentioned working on the bombers many years later.

I still remember the expression on my mother's face when we realized my grandmother was talking about the famous plant between Ypsilanti Township and Belleville, Michigan.

"You and Aunt Janet worked at Willow Run during WWII?"

"It wasn't a big deal at that time," she told my mother. "We were expected to do our part here at home during the war."

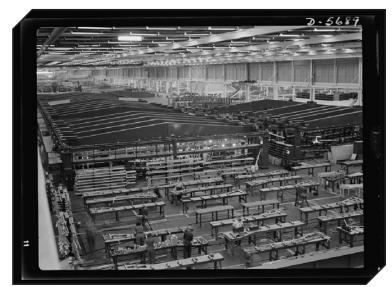
According to the Detroit Historical Society, the Ford Motor Company initially struggled to transfer automotive assembly practices into aircraft production during the war. The use of steel cast dyes hindered design changes to the bomber. And it was difficult to attract workers away from Detroit auto factories due to the distance and lack of local housing. Many women were hired to replace men drafted into the war, leading to the creation of the "Rosie the Riveter" character.

Despite these issues, Willow Run was able to achieve remark-

able production rates. At its peak in 1944, it produced a B-24 bomber every hour. By 1945, it was able to produce 70 percent of its B-24s in two nine-hour shifts, with pilots and crew members sleeping on 1,300 cots as they waited for the B-24s to roll off the assembly line. The Ford Motor Company eventually produced half of their 18,000 total B-24s at Willow Run—just an hour away from my grandmother's hometown of Holly, Michigan.

Rosie the Riveter culturally represented a shift in American economics that saw the number of working women in the United States increase from 12 million to 20 million by 1944. Many of these women — including my grandmother — broke social norms at the time by working in manufacturing.

As the story goes, Laurel McKinley (Hartner) and her sister Janet Wolverton (Hartner) spent time during the war at



The Willow Run Bomber Plant built half of the 18,000 B-24 Liberators used during WWII.

Willow Run. Aunt Janet worked in the offices while my grand-mother worked directly on the aircrafts in the production line. She told my mother that her relatively small stature was perfect for moving around inside the aircraft where taller individuals had a difficult time. My mother wanted all the details, but my grandmother gave her very little to go on. She said it was hard work, challenging work, but rewarding at the same time. It was also problematic because some of the men that remained at the plant during the war didn't exactly make the women feel very comfortable. They persevered, however, doing what they could do in Michigan while so many Americans were fighting in Europe and the Pacific — including her future husband, a

U.S. Marine fighting in Guadalcanal in the Solomon Islands.

She never mentioned a word of her time at Willow Run until much later in life, throwing the family a curveball as grandmothers tend to do! I cannot help but get a little smile on my face when I think about that girl in her early twenties, climbing through airplanes, getting her hands dirty and playing a small yet pivotal role in our country's rich, vibrant manufacturing history.

It wasn't a big deal to her at the time, it's certainly a big deal to me. Share your family manufacturing stories and we'll include some in a follow-up article in a future issue. Contact Matthew Jaster at jaster@agma.org.

For more information on the Willow Run Bomber Plant, visit: www.thehenryford.org/collections-and-research/digital-collections/expert-sets/101765



Janet Wolverton (Hartner) (left) and Laurel McKinley (Hartner) grew up in Holly, Michigan and worked at the Willow Run Bomber Plant during WWII.