

PROFILE OF RESISTANCE

DOROTHY VAUGHAN

NASA Mathematician

"I changed what I could, and what I couldn't, I endured."

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Background Information

Born: September 20, 1910; Died: November 10, 2008.

Vaughan was born in Missouri, and she grew up in West Virginia. She was known for being a smart student, and she graduated with the best grades in her high school class. In 1929, Vaughan received a math degree from Wilberforce University, a historically Black college. She received all "A's" and "B's" in her classes. She began her career as a high school math teacher, and later worked for NASA as a "human computer."ⁱ

Vaughan's Resistance

Vaughan was first hired to work at NACA, which would later become NASA, during World War II. During the war, President Roosevelt made a law that banned racial discrimination in hiring people to do defense research. Before that, Black people were not allowed to work at places like NACA.ⁱⁱ Even though they were allowed to work there, Vaughan and the other Black mathematicians had to work and eat in segregated areas. Still, she worked hard and proved her worth to those who did not believe in her at first. She became the first Black manager at NASA, and was well known for her math skills. People began to respect her for her abilities and would ask for her help on challenging problems. She fought for increased pay and promotions for herself and other female workers at NASA (both black and white).ⁱⁱⁱ

Achievements

From 1949-1958, Vaughan was Head of the National Advisory Committee of Aeronautics' West Computing Unit. While working at NASA, she helped to calculate the flight path of the Project Mercury and Apollo 11 missions. In 2019, she was awarded the Congressional Gold Medal. She was also featured in the popular movie, *Hidden Figures*.

ii McFadden, C. (2018). Dorothy Vaughan: NASA's "Human Computer" and American Hero. Retrieved November 10, 2019, from <https://interestingengineering.com/dorothy-vaughan-nasas-human-computer-and-american-hero>

iii Shetterly, Margot Lee (2016). "The Hidden Black Women Who Helped Win the Space Race". New York.