

FAMOUS FREETHINKERS/COOL CRITICAL THINKERS

Stats:

Mary Golda Ross - Aerospace Engineer



Image credit: https://transportationhistory.org/

Lived: 1908-2008

Birth Place: Park Hills, OK

Why are they famous:

She was the first known Native American female engineer. She worked on aerospace design – including the Agena Rocket program – as well as numerous design concepts for interplanetary space travel, manned and unmanned earth-orbiting flights, the earliest studies of orbiting satellites for both defense and civilian purposes.

Freethought and Critical Thinking:

Ross was a member of the Cherokee Nation, and attributed her successes to the Cherokee people's tribal emphasis on education. "I was brought up in the Cherokee tradition of equal education for boys and girls," she said.

After earning her masters degree, Ross joined Lockheed Aircraft Corporation in 1942, helping design the P-38 fighter airplane, a fighter plane that came close to breaking the sound barrier. As one of 40 engineers in Lockheed's Advanced Development Programs, later known as the Skunk Works, the company's top-secret think tank, she was the only woman on the team aside from the secretary. She was also the only American Indian.

Ross's gender alone made her a hidden figure in the world of early spaceflight. Ross worked for NASA and helped do work on projects that would later become a vital part of the Apollo program. Over the years, Ross helped write NASA's Planetary Flight Handbook, the agency's comprehensive guide to space travel.

After retiring in 1973 at age 65, she focused on mentoring and recruiting women and Native Americans to the engineering field with the advice: "To function efficiently in today's world, you need math. The world is so technical, if you plan to work in it, a math background will let you go farther and faster."

Fun Facts:

Graduating from college with a BA in 1928, she became one of less than 2 percent of women during this era to earn her degree. She then went on to earn a masters degree in mathematics!

Much of Ross's work will never be known because it was—and still is—classified. She once told an interviewer that her work with NASA "was a lot more fun since you could talk about it."

More Information on Mary Golda Ross:

https://www.nasa.gov/image-feature/mary-ross-a-hidden-figure

https://www.americanindianmagazine.org/story/mary-golda-ross-she-reached-stars