



# Mary Golda Ross

## HIDDEN HERO OF HISTORY

**Listen to the story:** <https://jonincharacter.com/mary-golda-ross/>

Mary Golda Ross was born in 1908 to a Cherokee community in Oklahoma. She loved math and science from an early age, and took classes in school - a very rare thing for a young woman to do during her time. But she always said that she could, 'hold her own'.

Ms. Ross was so ambitious and passionate, she completed high school at the young age of 16. She went on to get a college degree in mathematics, a very significant accomplishment since women in 1928 were rarely even allowed to go to college.

She continued her education for a second degree in mathematics. During her studies, she took astronomy classes and read A LOT about space.

After she graduated, she taught for nine years before she was hired to be an **engineer** at Lockheed Martin, the aerospace company that specializes in making advanced airplanes.

Ms. Ross was hired during the height of World War II, and her first projects were focused on the P-38 Lightning, the first fighter plane to come close to breaking the sound barrier.

She rose through the ranks at Lockheed, and accomplished incredible feats along the way, including big contributions to space travel that would eventually help put humans into space! She was one of the only female engineers of 40 employees selected to be part of a new top-secret division of Lockheed called Skunk Works.

Skunk Works is where she began her work on space exploration. She also participated in projects that are still top secret to this day.

She used her talents to develop and design satellites that ultimately led to humans in space. She even worked on early designs for flyby missions to Venus and Mars. As she said herself, she was 'taking the theoretical and making it real'!

Mary Golda Ross was a true pioneer in engineering.

Mary Ross was not only one of the first women to rise in the ranks of engineering, she was also one of the first Native Americans in the field. After retiring, she was a **mentor** to young women and Native Americans, encouraging them to follow in her footsteps. She wanted more people to get excited about math, science, and engineering.



## Glossary

**Engineer** - A person who designs and builds complex products, machines, systems, or structures. Engineers want to know how and why things work. They have scientific training that they use to make practical things.

**Mentor** - A trusted person or friend who teaches or gives help and advice on life issues or career to a less experienced and often younger person.

## Give it Some Thought

What do you think Mary Golda Ross means when she says she could ‘hold her own’ when she was in classes with students who were much older than her?

What is Skunk Works and why do you think it was so top-secret?

How do you think Mary Golda Ross felt about being the only female engineer hired to be a part of Skunk Works?

Why is Mary Golda Ross considered a true pioneer in engineering?

When she retired why was it so important for Mary Golda Ross to become a mentor to other women and Native Americans?

## Use Your Imagination

Imagine that you are an engineer at Skunk Works. Use your journal, a separate piece of paper, or “My Secret Project” worksheet to write down or draw your responses to the following:

- What’s the title of your top secret project?
- What are three reasons why it is so important for our world, your country or your community?
- Use words or draw a picture to describe your top secret project.