

# VALERIE THOMAS

(USA, 1943)



## Early life

Science and mathematics were on Valerie's mind as a young child. She became interested in them after watching her father repair the television that was full of mechanical parts.

She started reading books on electronics at a young age, which helped to develop her interest in a career in science.



## Fun facts

- NASA continues to use her illusion transmitter technology to this day.
- Valerie was awarded the NASA Goddard Space Flight Center Award of Merit and the NASA Equal Opportunity Medal.
- At 21 she was a data analyst for NASA.

## Education

She was one of only two women majoring in physics when she graduated with a Bachelor's degree in Physics. After graduating, she started to work at NASA as a data analyst.

## Contributions

During her years at NASA she helped develop computers to support satellite operations, and oversaw the creation of the Landsat program. All of this aided the works of other NASA scientists. But her most important contribution came after attending a science exhibition, where the illusion of a light bulb and concave mirrors made it appear to be lit, even though it was removed from its socket. This inspired her to invent the illusion transmitter, which enabled satellites to transmit 3D images from space, which was a game-changer.



## Struggle

As an African-American woman growing up in the 1940s and 1950s, Valerie Thomas faced numerous challenges. Her greatest challenge was in obtaining her education as a woman. She wanted to be a physicist as she loved science and mathematics, but they were considered to be a man's field, and women were discouraged from pursuing education in these areas.

