

Girls Who Grew Up to Change the



Valentina
Tereshkova



Valerie
Thomas

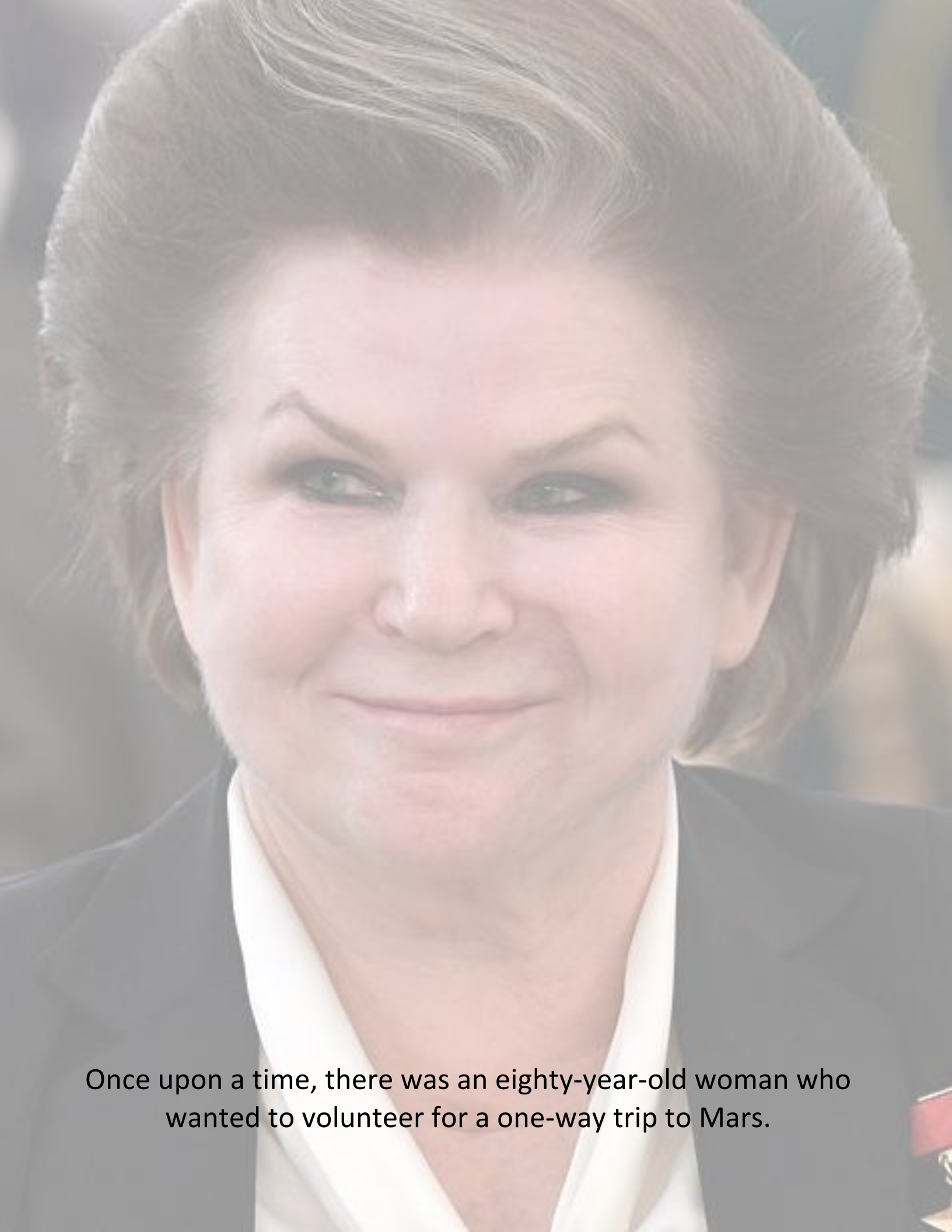
Valentina Tereshkova

Cosmonaut





***“Hey, Sky, take
off your hat. I’m
on my way!”***



Once upon a time, there was an eighty-year-old woman who wanted to volunteer for a one-way trip to Mars.

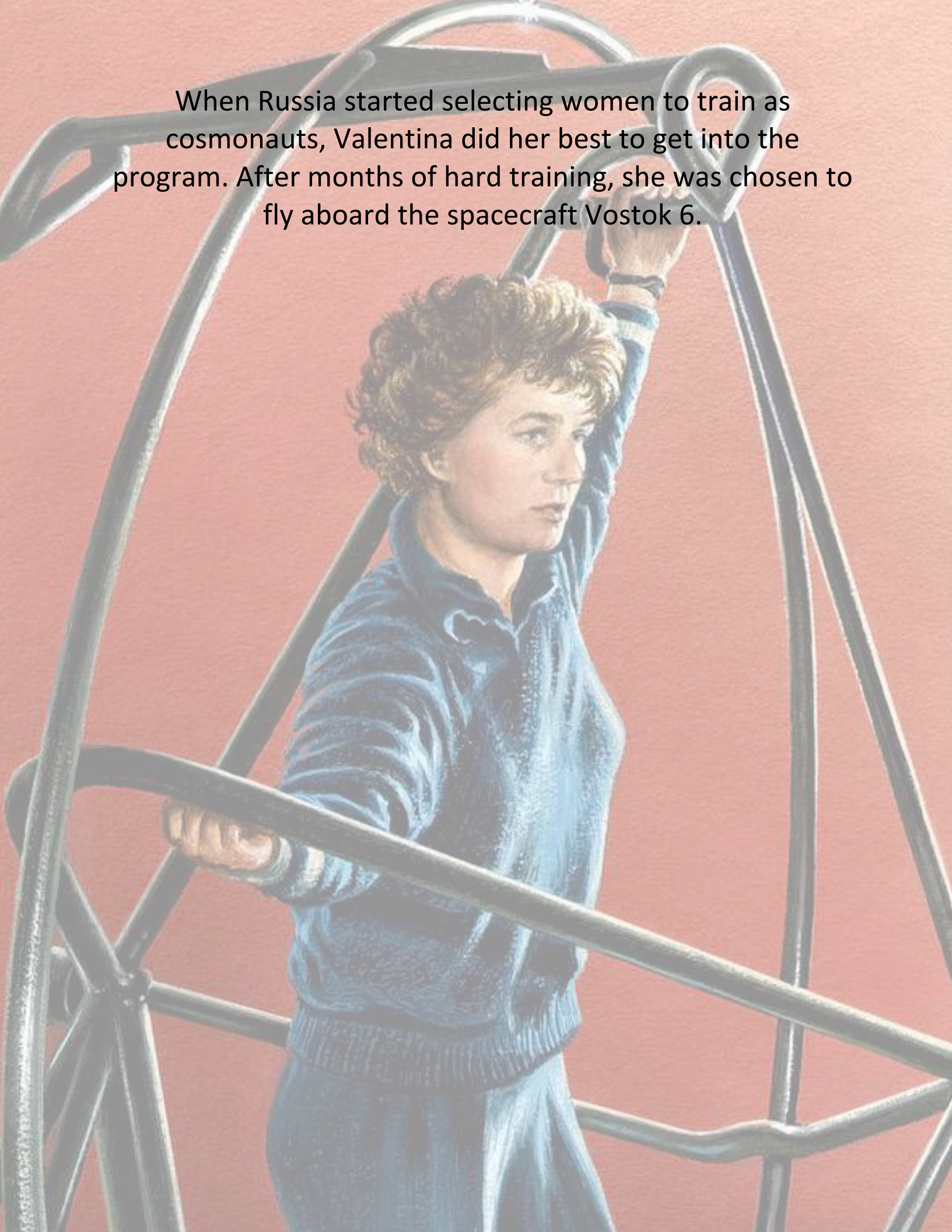


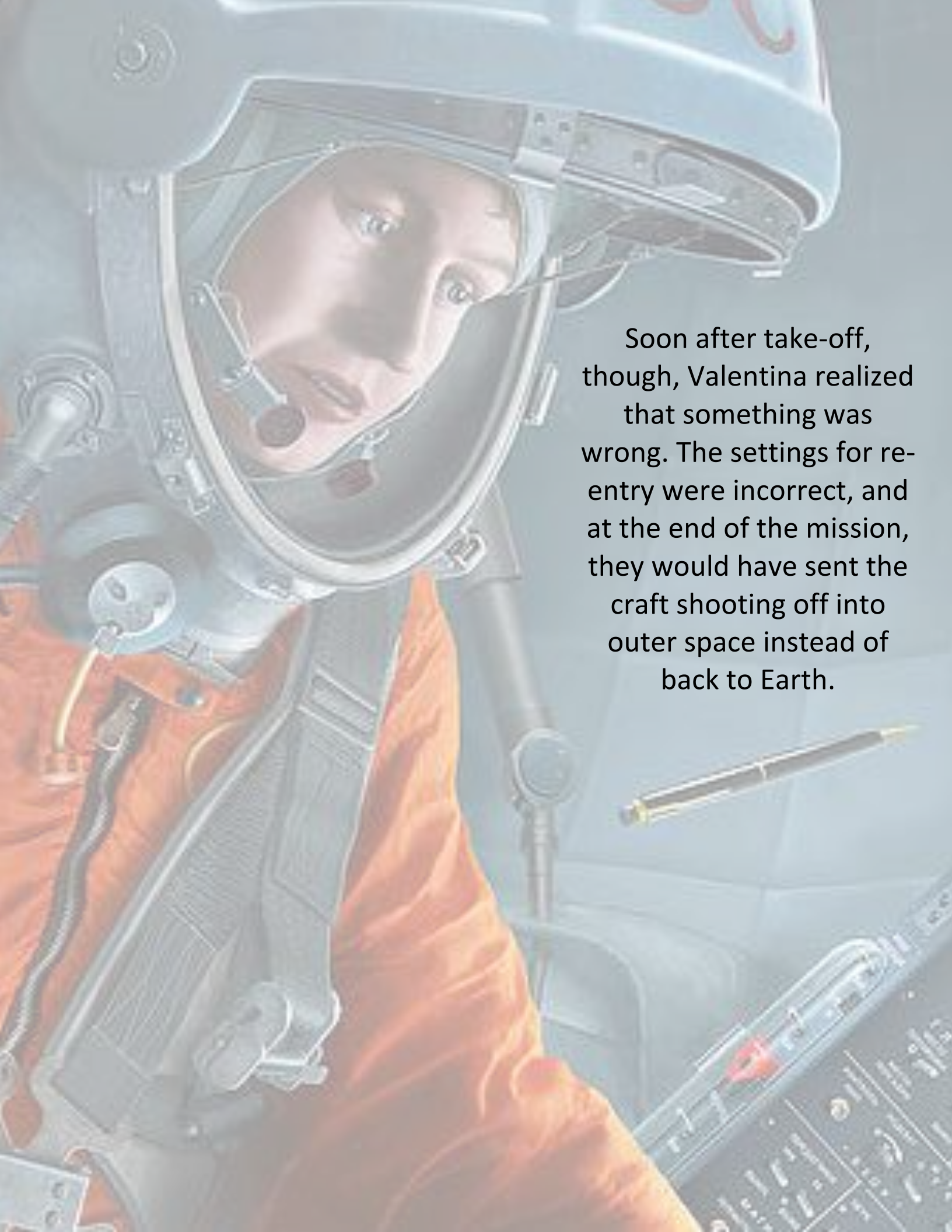
Her name was Valentina, and back when she was twenty-four, she was the first woman to travel to outer space.

Valentina loved to fly. She would parachute every weekend, during the day or at night, onto land and into water.



When Russia started selecting women to train as cosmonauts, Valentina did her best to get into the program. After months of hard training, she was chosen to fly aboard the spacecraft Vostok 6.



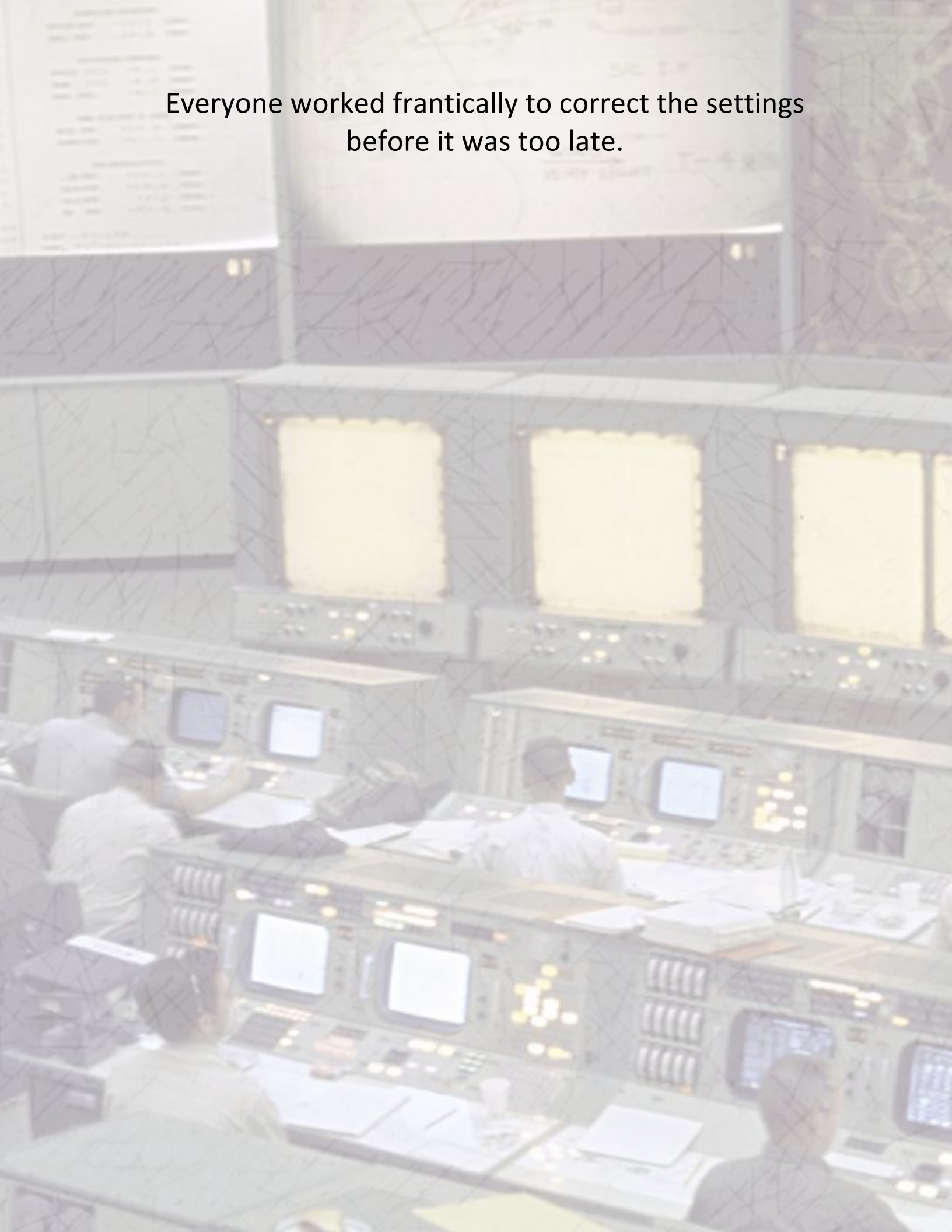


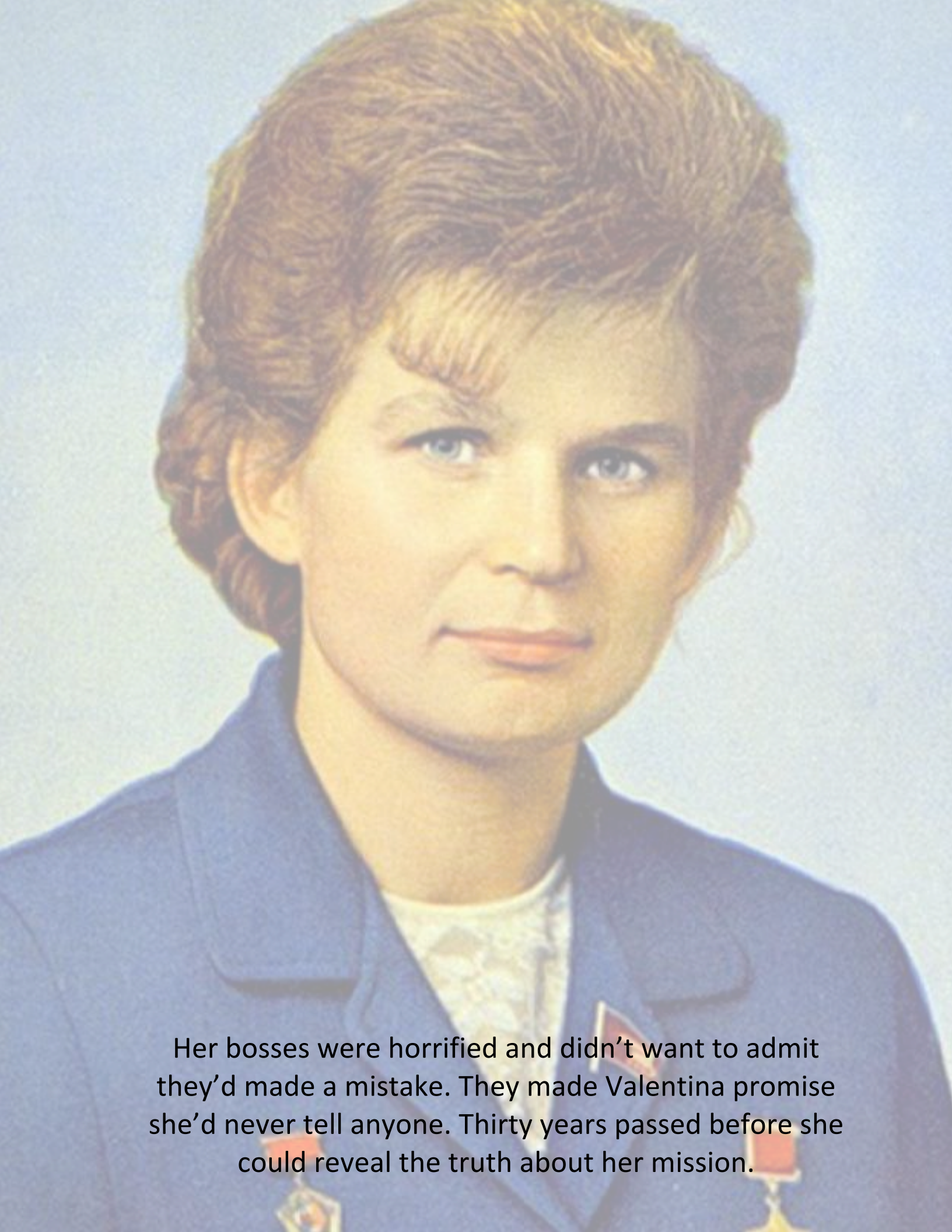
Soon after take-off, though, Valentina realized that something was wrong. The settings for re-entry were incorrect, and at the end of the mission, they would have sent the craft shooting off into outer space instead of back to Earth.



As much as she loved flying, Valentina wasn't ready to leave Earth for good just yet! So, she got in touch with the engineers back at mission control.

Everyone worked frantically to correct the settings
before it was too late.

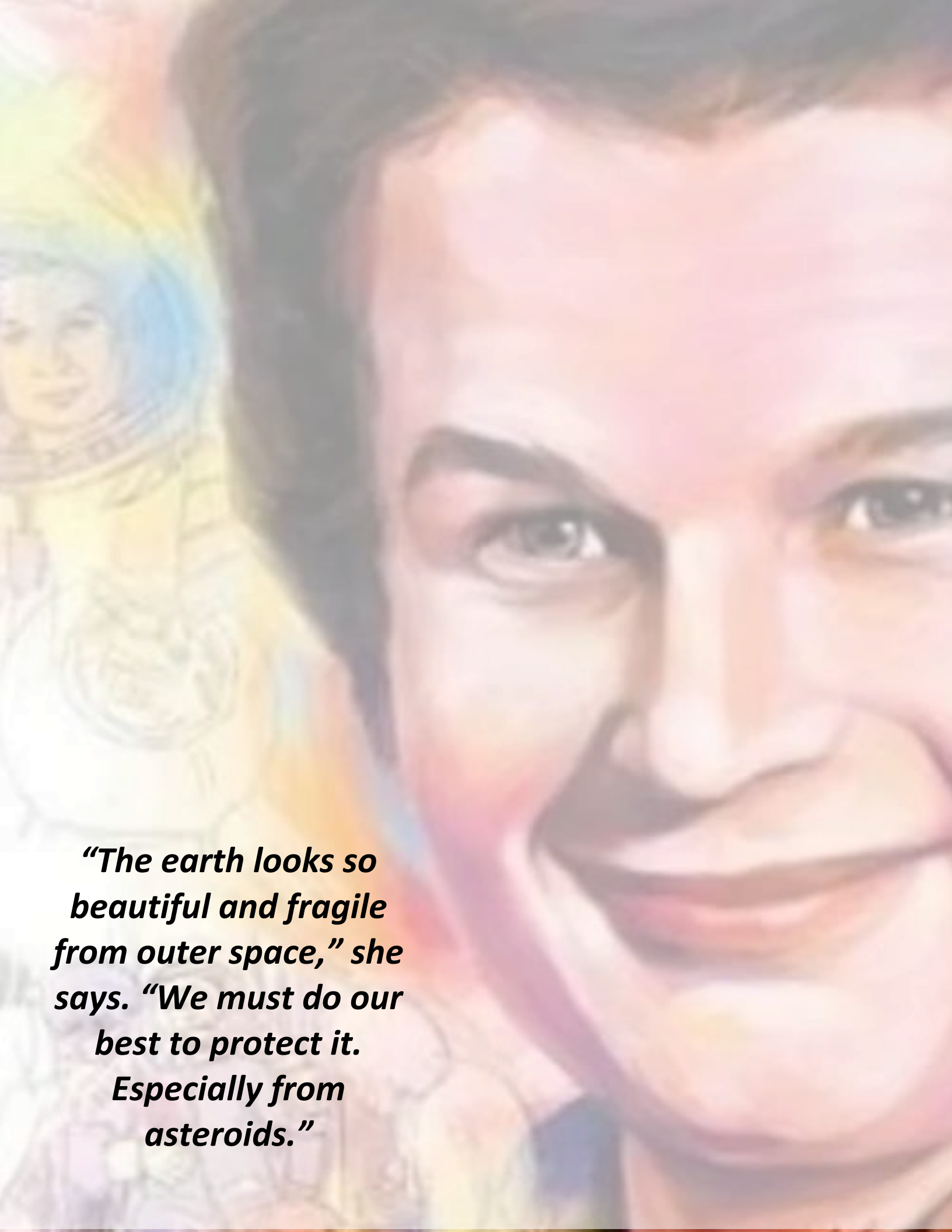




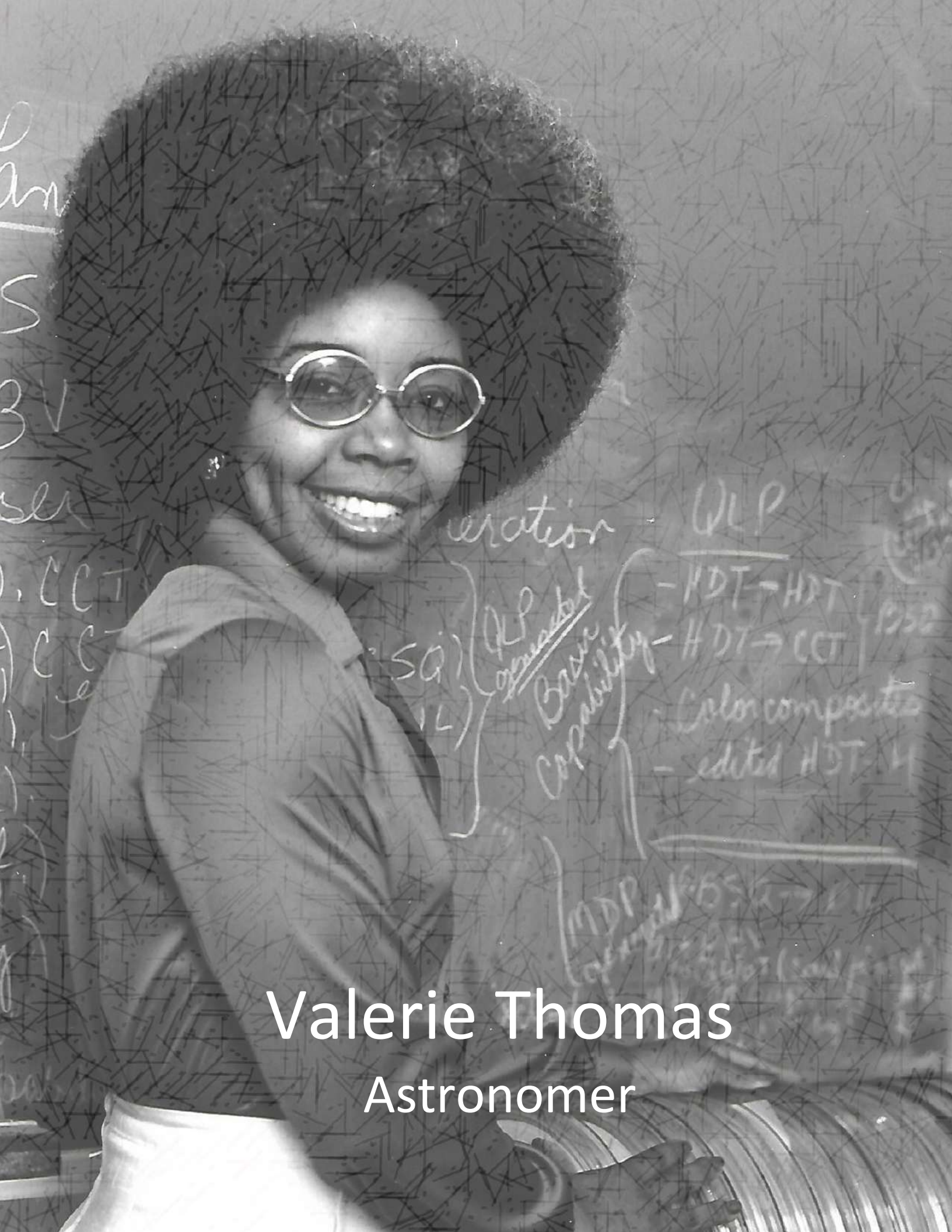
Her bosses were horrified and didn't want to admit they'd made a mistake. They made Valentina promise she'd never tell anyone. Thirty years passed before she could reveal the truth about her mission.

Now that she's an old woman,
Valentina would love to blast off
into space on one final voyage.

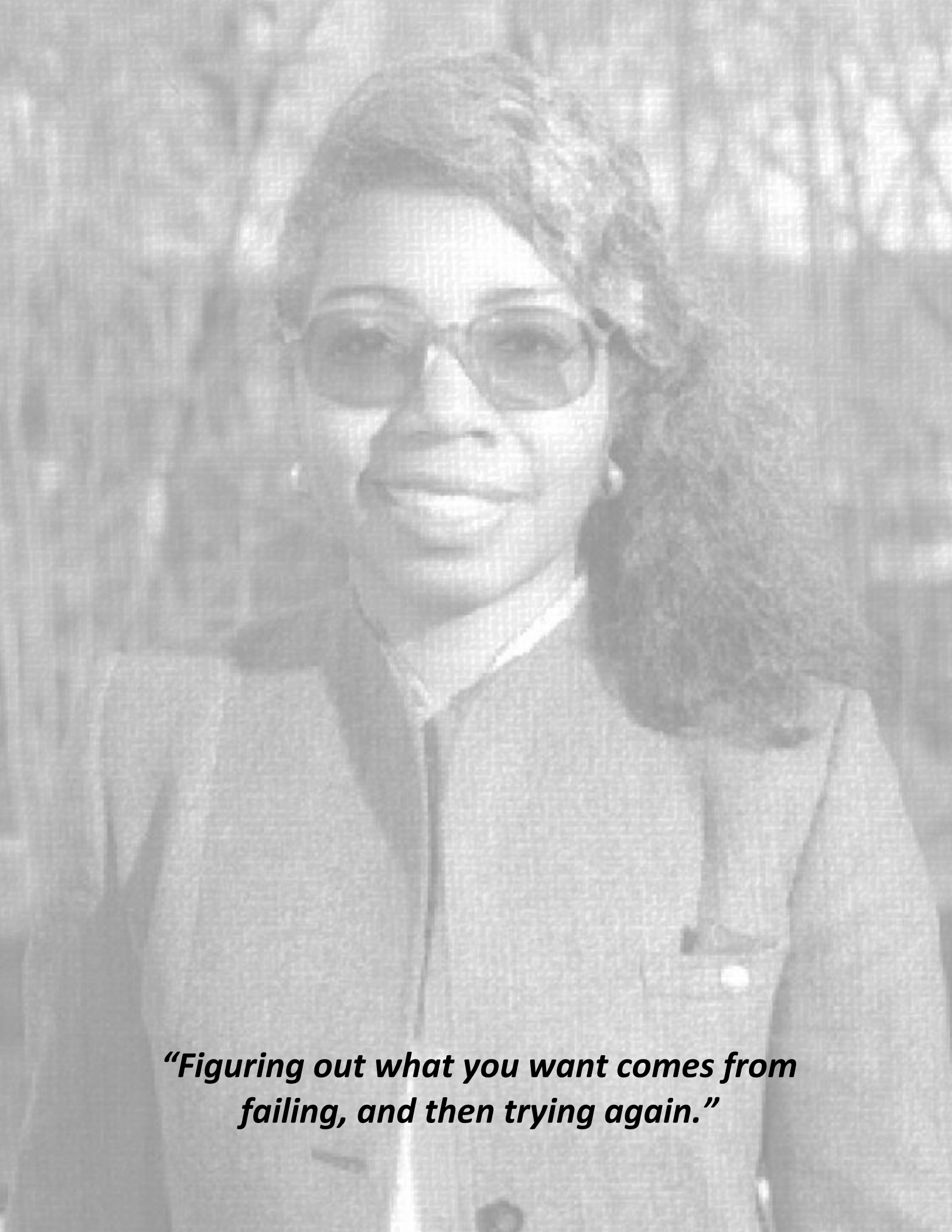




“The earth looks so beautiful and fragile from outer space,” she says. “We must do our best to protect it. Especially from asteroids.”

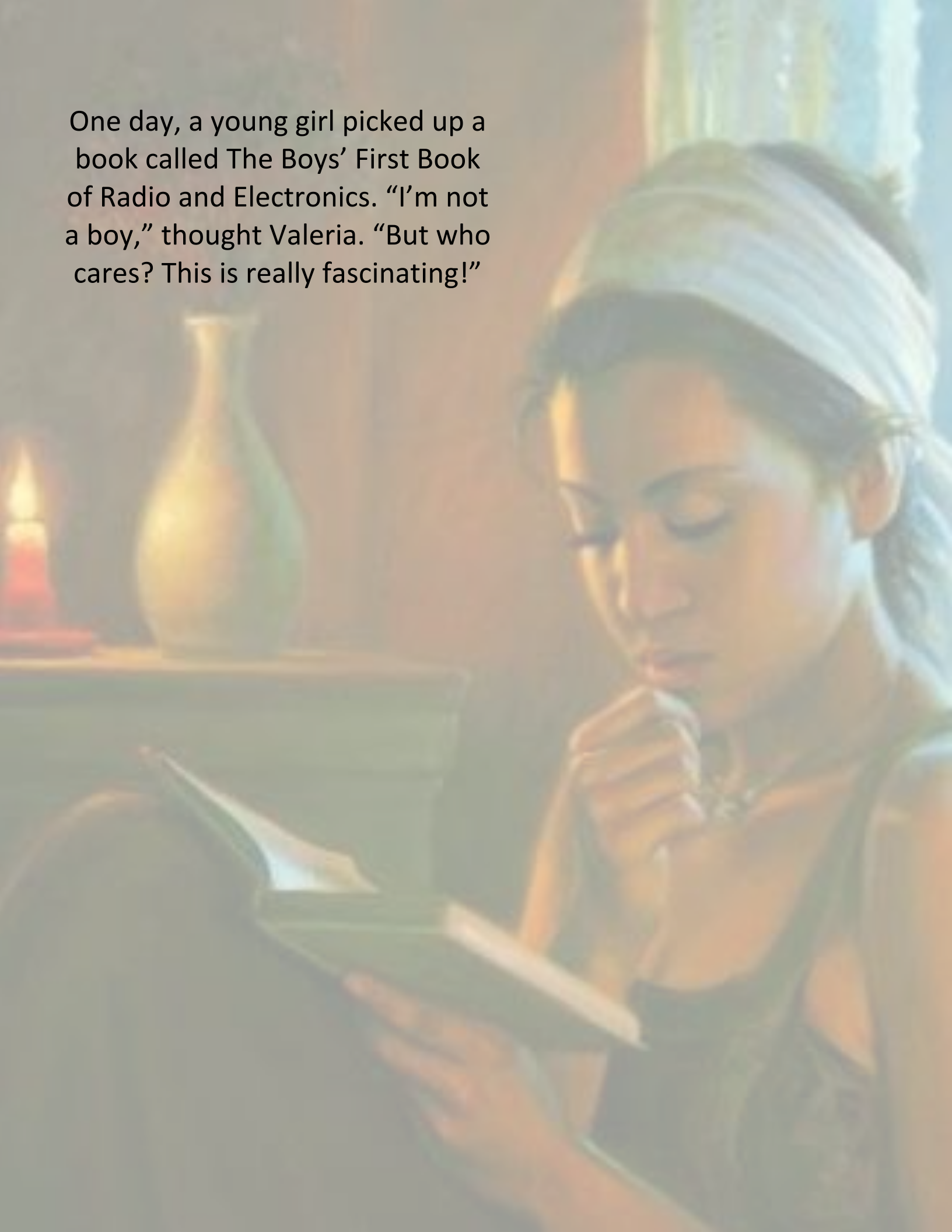


Valerie Thomas
Astronomer

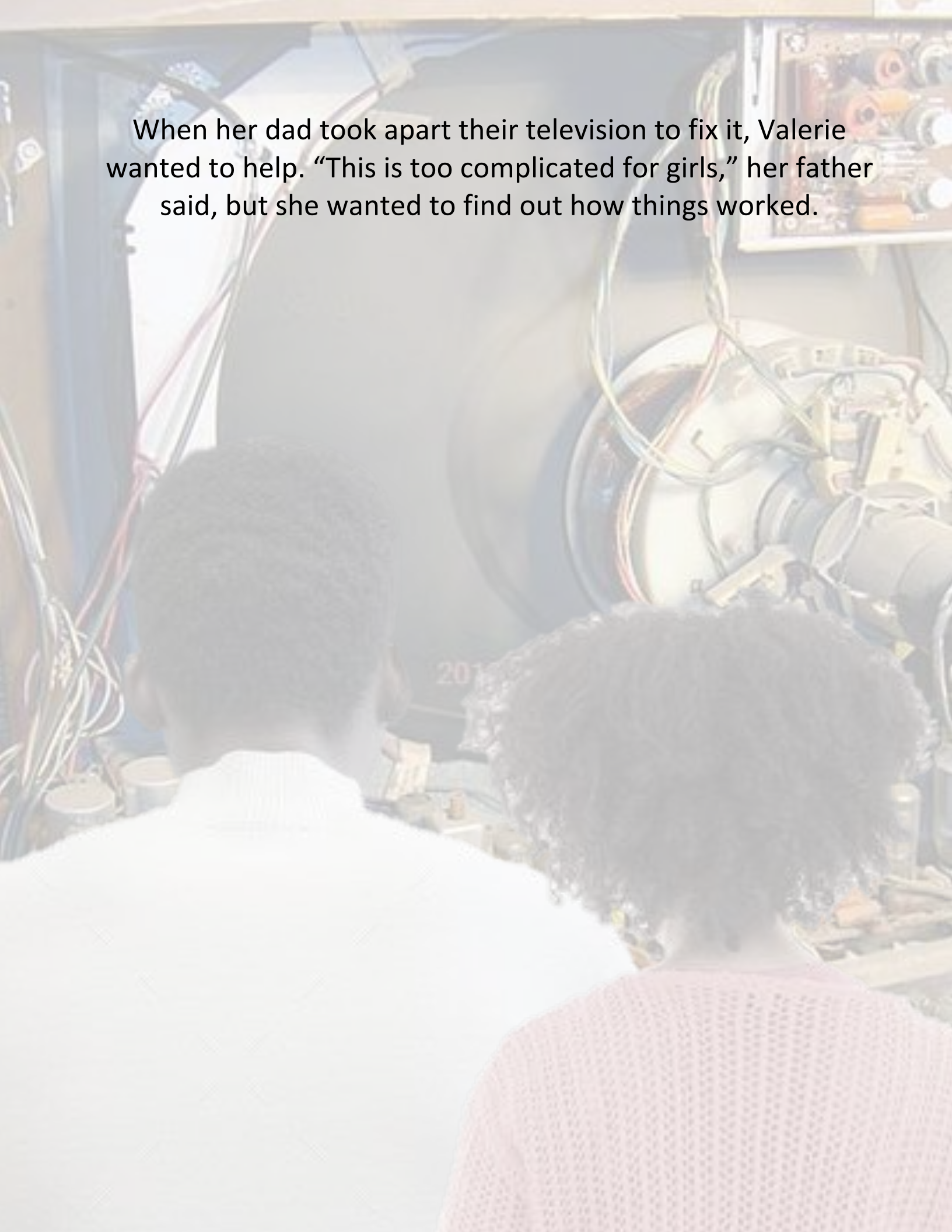



“Figuring out what you want comes from failing, and then trying again.”

One day, a young girl picked up a book called The Boys' First Book of Radio and Electronics. "I'm not a boy," thought Valeria. "But who cares? This is really fascinating!"



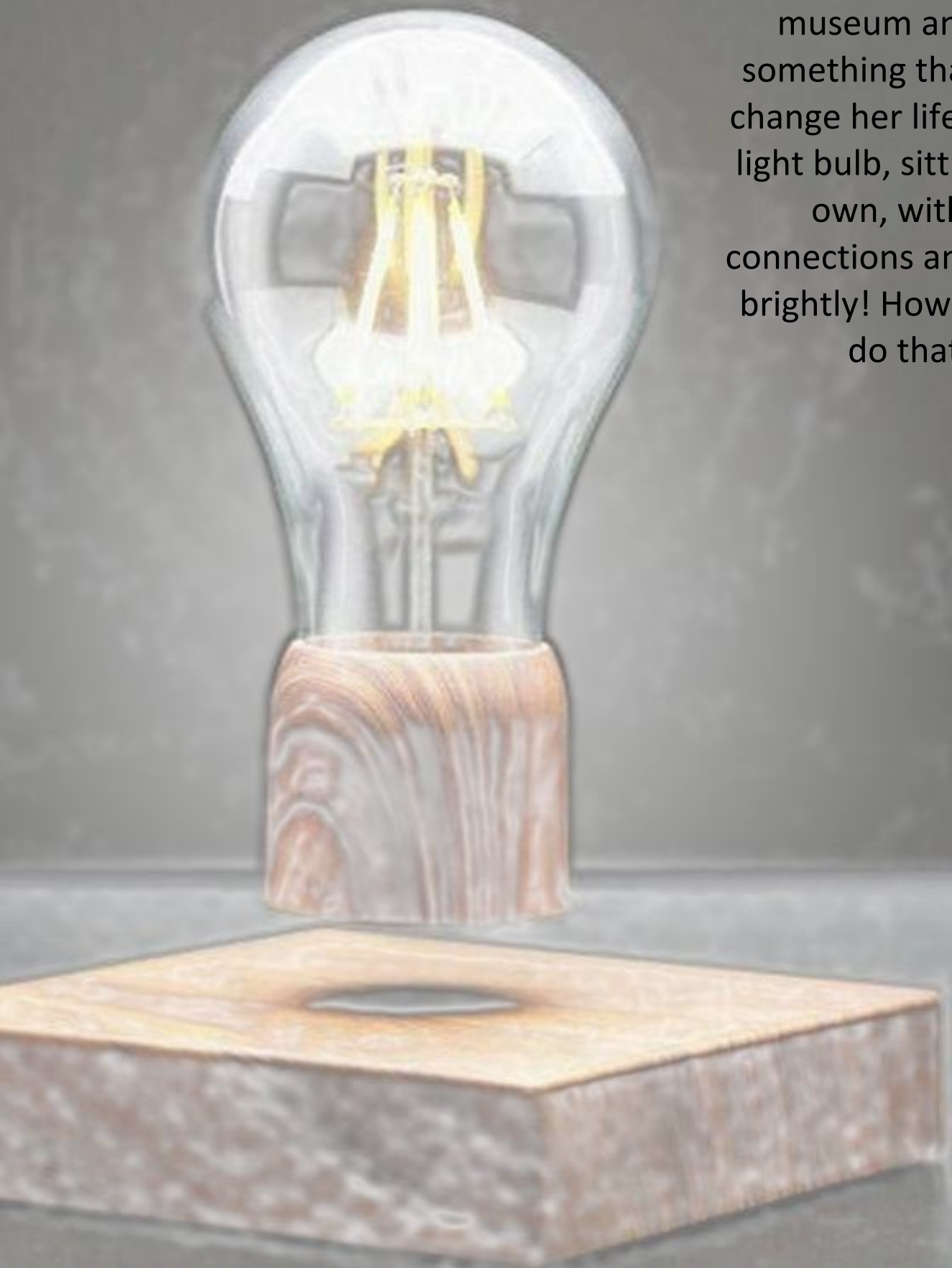
When her dad took apart their television to fix it, Valerie wanted to help. “This is too complicated for girls,” her father said, but she wanted to find out how things worked.



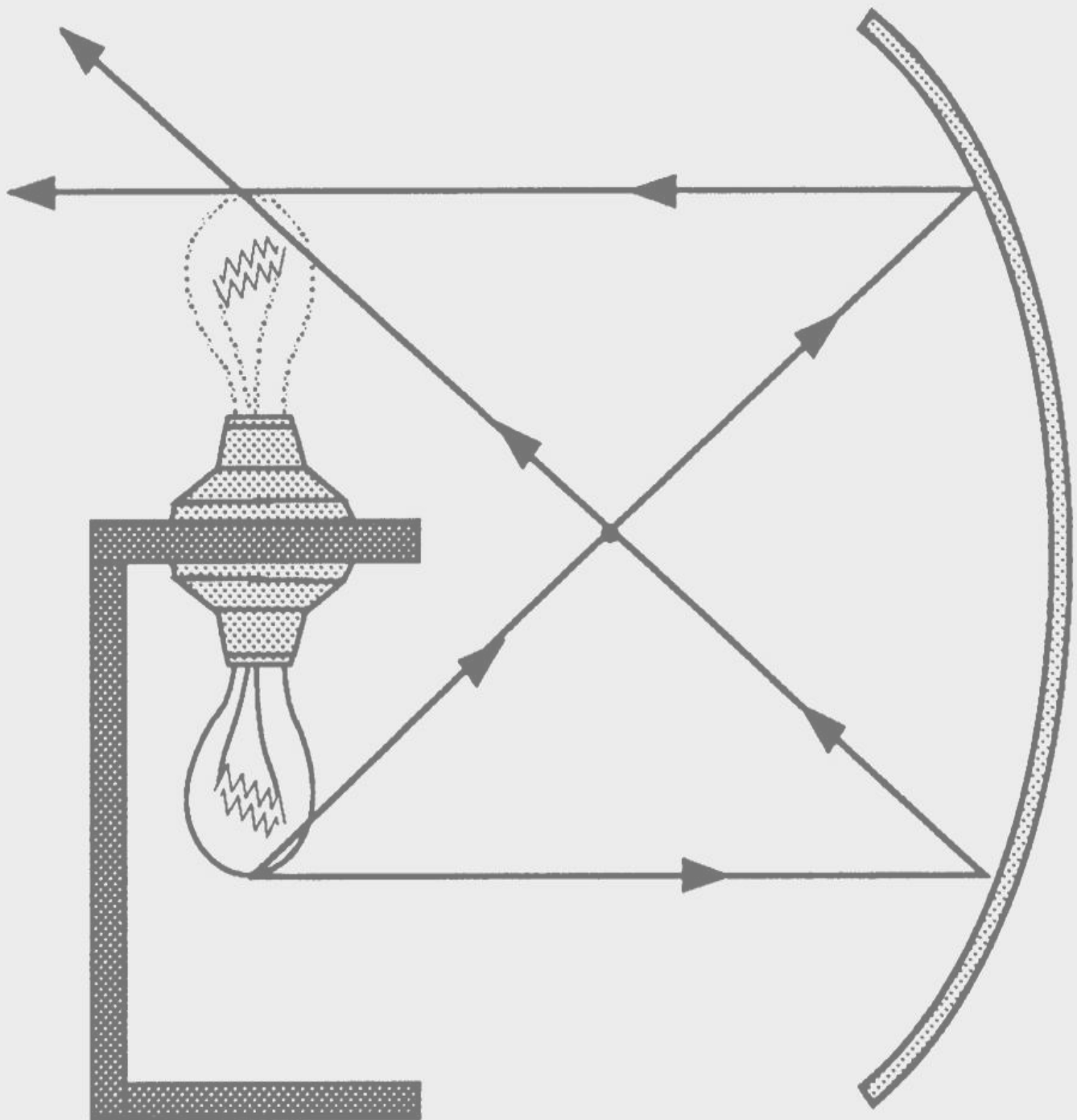


After university, she got a top job at NASA working on something way more complicated than a television: the world's first satellite. Landsat 1 was launched into space, and it sent back images of the earth that helped predict weather patterns and crop cycles.

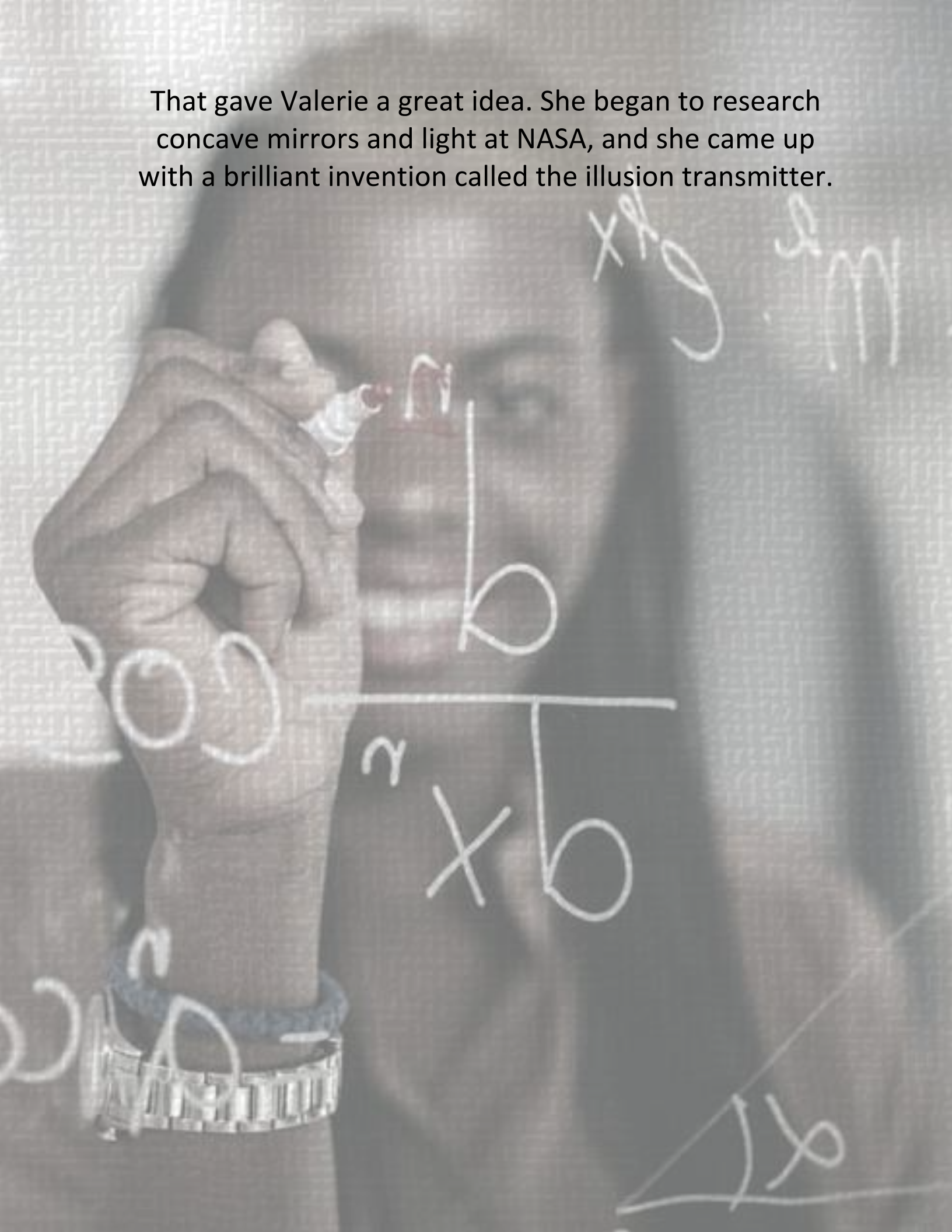
Then one day, Valerie visited a science museum and saw something that would change her life. It was a light bulb, sitting on its own, with no connections and shining brightly! How did they do that?



The answer was a clever optical illusion created by a hidden second light bulb and concave mirrors that made it look as if the first bulb was on.



That gave Valerie a great idea. She began to research concave mirrors and light at NASA, and she came up with a brilliant invention called the illusion transmitter.



This amazing piece of technology is still used in NASA's space exploration programs, and scientists like Valerie are developing ways to use it to look inside the human body. One day, it may also project 3D videos from your television right into your living room!



“Figure out what you want, fight power, live without limits,” Valerie says. “You won’t figure it out if you just play by the rules and listen obediently.”



