National Aeronautics and Space Administration



## MARIA CABALLERO

## CONSULTING ENGINEER



Lexile Ranges Level 1: Less than 810 Level 2: 810-1000L Level 3: 1010-1200L Level 4: 1210-1400L





Educational Product Educators & Students Lexile Level: 810-1000L If Maria Caballero could have one superpower, it would be to fly.

When she was young, Maria would lay in her yard, stare up at the sky and dream about making airplanes. She did not know how to make that dream come true. She only knew she loved airplanes.

Maria and her family lived in California. When the first space shuttle was going to land on a runway in California, Maria went to be near the runway and saw the big spaceship appear in the sky and make a perfect landing. She knew right then that she wanted to work for NASA when she grew up.

"Since I cannot fly for real, the next best thing is working for NASA because they are involved with things that fly and blast through our atmosphere, such as airplanes and rockets," Maria said.

Today, Maria is an adult and works for NASA in California at the very place where she watched the space shuttle land when she was a child.

Maria's job is to help make sure no one in the public could get hurt if there were a problem with a drone during a test flight. A drone is the nickname for an airplane that doesn't have any pilots inside the aircraft. Most drones are flown by pilots who are on the ground. The pilots use cameras and information on their computer screens to fly the drone and tell them where the drone is at all times. Part of Maria's job to is to help make sure the drone will not hurt anyone, or anything, if it should start flying on its own.

It's a job she has worked hard to get. The path Maria took to get to her job today began in California, made a stop in Virginia on the U.S. east coast, and returned her to the California desert.

Maria grew up in a migrant family in the San Joaquin Valley in California. Migrant families move around to work where they can find jobs, but sometimes they can stay in one spot for many years.

When Maria was 12, she began working in the fields, spending her summer days picking grapes and garlic. During the school year she spent most of her time on her studies and did homework every night. Her parents could not help her very much because they did not speak English.

But that was OK. Maria's parents loved her and told her she was doing a good job. Maria remembers how her father wanted her to experience life working in the fields so she could see how hard life could be if she didn't do well in school.

Her hard work was rewarded. After high school, Maria attended college in California to learn engineering. She was allowed to take some harder classes. This would help her when she worked for NASA.

Maria was the first in her family to go to college, so she didn't know what to expect. She signed up for a class that was too hard for her and had to quit the class. She found some help, tried again, and got an 'A.'



Today, Maria knows there were some things she could have done to help in college. One idea was to get a summer job at a big airplane company so she could practice what she was learning. Another idea was to find a caring person who could give her advice about doing well in school.

Maria said another thing she learned in college was how important it is to work hard at everything you do so you can do a good job. She said that might mean working long hours and giving up doing something else that might be more fun.

After graduating from college, Maria accepted a job working on tanks for the Army in California. Then she worked in Virginia helping to launch rockets to the edge of space. These rockets carried science experiments.

One of Maria's favorite jobs was the first one she had after starting to work for NASA. The job was to help work on Helios, a very big, but very light airplane that was powered by the sun. Helios set a world record for flying higher than any other airplane that wasn't powered by rockets. It flew more than 18 miles high. Maria got to travel to Hawaii to help with a test of Helios.

Maria also works with others at NASA to teach students about aviation and space. She volunteers to speak at local schools about her life as a rocket scientist and aerospace engineer. She also talks about her childhood working in the fields and what she learned from that hard work.

Her hope is that her work at NASA will inspire kids with the excitement and wonder of aviation and space, just as she was.

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