"I think about being a helicopter mechanic," Schweiker said. "I think about doing something in animal behavior or zoology too."

Why? Because she can. Or, rather, she could — and because her love for physics leads to so many possibilities.

"I really liked high school physics and astronomy and I found out that I really like to figure out how things work," Schweiker said.

At the observatory, Schweiker, who received her physics degree in 1996 from the University of North Carolina, ensures the telescope is working and meets performance standards. Schweiker also troubleshoots any problems that come up.

The telescope is often used by undergraduate and graduate students who are getting experience at observing and collecting data.

Like other professionals with a physics background, Schweiker looks at problem-solving as fun and challenging. She thinks that once armed with the tools physics provides, the particular subject or area doesn’t matter much. But Schweiker does have two bits of advice for someone thinking about majoring in physics.

"Don’t be so freaked out over the math. It’s not all math. Some of it is observational," Schweiker said. "And get involved in building something and get involved in investigating something that’s interesting to you in terms of how it works."

Follow that advice and someday you too might aspire to be a helicopter mechanic, zookeeper, veterinarian, animal behavior researcher, dog trainer...

As the operations manager of the WIYN 3.5 meter telescope at the National Optical Astronomy Observatory in Tucson, Az., Heidi Schweiker occasionally lets her thoughts run wild about doing something that would really force her to push her boundaries.

Heidi Schweiker did.

While it appears it is a quart low and she’s changing the oil, Heidi Schweiker insists she’s cleaning and lubricating a spectrograph at the National Optical Astronomy Observatory.

If you connect with Heidi Schweiker’s story and are considering studying physics, email her at heidis@noao.edu.

If you’re interested in the physics behind how a helicopter can fly, check this out:

http://www.hk-phy.org/iq/helicopter/helicopter_e.html

If you want to see some cool pictures taken by the WIYN 3, go here:

http://www.noao.edu/image_gallery/WIYN/images.html

Do Physics. Be Anything.