

# DARE MIGHTY THINGS

## AN AFA EMERGING LEADER ALUMNUS JOINS FORCES WITH AFA'S TEACHER OF THE YEAR TO INSPIRE STUDENTS.

By TSgt. Timothy J. Tichawa

On the wall in my office at Peterson AFB, Colo., is a poster with the words, "Dare Mighty Things." President Theodore Roosevelt uttered these now-famous words. To me, they capture the essence of what it means to be bold, an attitude that's crucial to have—especially in the engineering world.

"Dare Mighty Things" is also a phrase that Kaci A. Heins, the Air Force Association's 2014 National Aerospace Teacher of the Year, uses with students in her sixth-grade science class at Northland Preparatory Academy in Flagstaff, Ariz.

In October, I visited these students, 101 in all, while moving to Colorado from California. I talked to them about what the Air Force does in space. I also did my part to inspire them to pursue careers in science, technology, engineering, and mathematics fields. It was a rewarding experience for me, and based on the feedback I received, it was worthwhile for the students, too.

The inspiration for my visit came after I heard Heins speak at the AFA's Air & Space Conference at National Harbor, Md., in September 2014. Both she and I are members of AFA's Aerospace Education Council.

At the conference, Heins discussed the emphasis she places on STEM projects in her classroom. For example, each year she has her students build a payload for a high-altitude balloon that's launched into the

stratosphere. One year, her class designed a payload featuring a camera pointed at a Lego toy astronaut; the students successfully snapped a photo of the astronaut against the cold background of space.

Heins also uses field trips, live Web chats, and guest speakers to expose students to STEM-related careers. That's where I came in.

**“IT WAS GREAT FOR THE STUDENTS TO BE EXPOSED NOT ONLY TO POSSIBLE STEM CAREERS, BUT ALSO HOW THEY COULD DO THESE JOBS WHILE SERVING OUR COUNTRY.”** — Kaci A. Heins, AFA's 2014 National Aerospace Teacher of the Year, on Tichawa's visit.

TSgt. Timothy Tichawa stands with AFA's 2014 Teacher of the Year Kaci Heins during his visit to her sixth-grade classroom in Flagstaff, Ariz., Oct 1, 2014.



The students eagerly interacted with me and seemed to love the presentation. They even asked for my autograph afterward!

I expect to reconnect with them early this year for an update on the launch plans for their high-altitude-balloon payload. The class is designing sensors to measure radiation through the atmosphere. They hope to send them aloft in late March from Flagstaff. ✪

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Photo courtesy of Kaci Heins