

Astronaut aims to keep young eyes looking up

By Deborah Medenbach
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New Paltz — "Would a single missing thermal tile affect a space shuttle on re-entry?" a high school girl asked into the audience microphone.

Dr. Roger Crouch leaned back in his Reeboks and cocked his head toward the teen.

"Depends on where it hit," the astronaut said.

Crouch had been on two space missions within three months in 1997. Meteors punched seven holes in his ship's thermal shield with no ill effect.

"But you lose a wing, you lose a wing. It's just like an airplane. It wouldn't be able to fly," he explained.

Crouch spoke to 400 middle school and high school students yesterday afternoon as part of SUNY New Paltz's New Faces in Engineering Conference.

Keeping with NASA's mission to "inspire the next generation of explorers," Crouch detailed the daily life of an astronaut from blastoff to touchdown.

In the weeks after shuttle Columbia's fiery end, Crouch, 62, is even more committed to showing young science-minded teens the wonders of the space program. Crouch knew firsthand about aborted space missions.

The April 1997 mission he'd been on returned after only four days.

"One of the fuel cells failed after takeoff. Without it, we couldn't control the hydraulics. It took four days before we were over Florida again and could land," Crouch said.

An astronaut accepts the risks that are part of the job, he said.

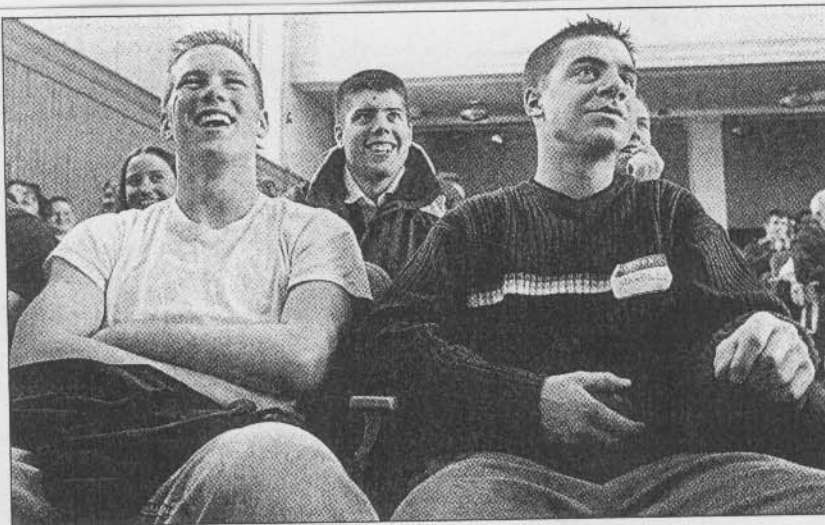
Crouch first thought about a career in space as a third-grader.

So far, he's up to 471 hours in space. He's on loan from the Massachusetts Institute of Technology to serve as a payload specialist for NASA.

He's been NASA's senior scientist for the International Space Station for the past three years.

The engineering conference was part of National Engineer's Week, Feb. 16-22. The balcony of Studley Auditorium was filled with teachers and engineers from some of the sponsors, including IBM.

To find out when the International Space Station will cross overhead next, go to www.hq.nasa.gov/osf/station/viewing/issvis.html



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Onteora High School students attend a lecture yesterday by Dr. Roger Crouch, a NASA payload specialist, at SUNY New Paltz. From left are Jon Hereth, 16, Chris Thomas, 17, and Mihalios Kariolis, 16. They were among high school students from Orange, Ulster, Sullivan and Dutchess counties who attended the daylong event designed to introduce students to careers in engineering.



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Dr. Roger Crouch, who has logged more than 470 hours in space, explains how the shuttle separates from its launch rocket engines to 400 students yesterday at SUNY New Paltz.

How to pee in space

When high school students were reluctant to ask questions during the New Faces of Engineering Conference yesterday at SUNY New Paltz, astronaut Dr. Roger Crouch broke the ice by explaining in detail the mechanics of relieving oneself in

a zero-gravity environment. The "aiming cameras" in space toilets brought a whole new meaning to the phrase, "big brother is watching." Astronauts rely on snug-fitting toilet seats, aiming cameras and fans that do the work of gravity to get the job done.

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