

SHELTON HIGH STUDENTS HAVING A BLAST



From left, James Szabo, Omar Sobh, Jason Shnipes, Leann Misencik, Jessica Oliveira, Headmaster Beth Smith and Kayla Russo watch the launch of the Space Shuttle Endeavour on Monday. The five Shelton seniors have a science experiment in

Shuttle carries cell experiment

By Meg Barone Correspondent

SHELTON - So many delays had plagued the last voyage of the space shuttle Endeavour that Shelton High School senior Jason Shnipes — who has a vested interest in the flight - was not convinced it would lift off at 8:56 a.m. Monday, even as the countdown dwindled to within a minute of its scheduled launch.

Shnipes' sentiment quickly changed from skepticism to excitement as the Endeavour lifted from the launch pad at the Kennedy Space Center in Cape Canaveral, Fla., and roared into space, carrying with it a science experiment devised by Shnipes and four fellow Shelton High seniors.

Endeavour's payload carries 16 student generated experiments from throughout the country as part of the National Center for Earth and Space Science Education's first Student Spaceflight Experiments Program. Shelton's is the only experiment from a school in New England.

"I suppose I actually have to be-

"Many of us would give an arm and a leg to have our experiments and work go into space. Many scientists wait a lifetime for such an opportunity."

Tarek M. Sobh, dean of the University of Bridgeport's School of Engineering and father of Shelton High School senior Omar Sobh

lieve now," Shnipes said minutes into the historic final flight of Endeavour, which marks the next-tolast flight of the 30-year-old space shuttle program.

It is significant for another reason — astronaut Mark Kelly, the husband of U.S. Rep. Gabrielle Giffords, who was shot earlier this year, is Endeavour's commander. Giffords was present in Florida for the launch.

In the final moments of the countdown, the team that proposed the Shelton experiment - Shnipes, Kayla Russo, and James Szabo, all age 18, and Omar

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The space shuttle Endeavour lifts off from Kennedy Space Center in Cape Canaveral, Fla., on Monday for a 14-day mission to the international space station.

Shuttle carries cell experiment

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Sobh and Leann Misencik, both 17 — joined hands with Headmaster Beth Smith. They counted aloud for the last five seconds of the countdown and cast their hands skyward as the NASA announcer said "Liftoff."

"It's a rellef," said Sobh, who had traveled to Florida with his teammates last month hoping to witness the launch, which had been scheduled for April 29. That launch was scrubbed about four hours before lift-off when a technical glitch was discovered.

"Until it lifted up in the air, I had my doubts about it, but now I'm excited," said Russo. "I was worried it wouldn't launch until July and we'd all be off at college."

After Endeavour returns to Earth, the students will get back their experiment for further research

Their project, Development of Prokaryotic Cell Walls in Microgravity, will grow a particular strain of bacteria during the 16-day shuttle mission. When it returns, students will compare the bacteria grown in space with bacteria grown on Earth for the same number of days, said Sobh, who believes

their experiment could have real medical application

If the microgravity environment of space weakens the cell walls of the bacteria, then that bacteria may be less resistant to antibiotics. Thus the Shelton students' space experiment could potentially lead to treatments for drug-resistant bacterial infections, which, in turn, could save lives.

The students are already hypothesizing that the cell walls of the bacteria will be weaker because human cells seem to be compromised in space. "We will compare the two (space-grown and Earth-grown bacteria) and confirm or reject our hypothesis," Sobh

Perkin Elmer paid a portion of the \$15,000 payload fee and allowed students to use its laboratories to prepare their experiment.

Their proposed experiment had to show a purpose and students had to meet the same criteria faced by a real NASA scientist or researcher who wished to conduct an experiment in space. The students' experiment was first adjudicated on the local level last November before being analyzed by the NASA Review Board.



B.K. ANGELETTI/STAFF PHOTOGRAPHER

Sobh, who will study neurobiology at the University of Pennsylvania and plans to go to medical school, said he and his teammates know how lucky they are to have this once-in-a-lifetime experience.

"Many of us would give an arm and a leg to have our experiments and work go into space. Many scientists wait a lifetime for such an opportunity," said Tarek M. Sobh, Omar's father and dean of the University of Bridgeport's School of Engineering.



Above, Shelton High School seniors, from left. Omar 50bh. Jason Shnipes. Leann Misencik, Jessica Oliveira watch the launch of the space shuttle Endeavour on Monday. The Shelton seniors and James Szabo. not in picture. have a science experiment in the payload of the shuttle. At left, a lucite box similar to the one that holds the students' experiment.