

Notes from the President

Reflecting on the Space Shuttle's Final Flight

07/07/2011

At 5:00 p.m. on July 6 I boarded a flight out of Atlanta bound for Orlando, Fla., for the launch of the last space shuttle mission, [STS-135](#). I was invited by the director of the Johnson Space Center, Mike Coats, as part of the Johnson Space Center Director's Guest Program. I invited my son Keith, 28, to accompany me. He works for ERC, a NASA contractor headquartered in Huntsville, Ala., but stationed at NASA Ames in Mountain View, CA, not far from where I was born.

During my first two-plus years as president of Georgia Tech, I have received hundreds of invitations, but this one is special and is particularly meaningful to me, as it represents an interesting turn of events. In 1981, just prior to the launch of the first space shuttle mission, [STS-1](#) (and not long before Keith was born), I was appointed as a research scientist at NASA's Johnson Space Center in Houston, Texas (NASA-JSC).

While I have always been a bit of a space program geek, working at NASA, even very briefly, was one of the bright spots in my career, but the juxtaposition of events here is a little eerie. The director of the Johnson Space Center while I was there in 1981-82 was a man named Aaron Cohen. He was a remarkable man, quiet, but with a presence that was astounding – you knew when he walked into a room. At around the age of 35, he led the development of the [Lunar Excursion Module \(LEM\)](#) used on the Apollo missions that first landed on the moon. Twenty-five years later, I had the privilege of offering him a position as a faculty member in the [Department of Mechanical Engineering at Texas A&M](#), which he ultimately accepted (one of the best hires I have ever made!). In his role there, he went on to have a huge impact on the lives and careers of a countless number of students, many of whom are now employed by NASA and will watch this last flight with Professor Cohen in their memories.

This final launch of the space shuttle is momentous for all Americans, and it is especially meaningful for us at Tech. There are 14 Georgia Tech graduates who have flown on the shuttle and a huge number of engineers and scientists who have helped to make the U.S. space program successful. Hundreds, and perhaps thousands, of Georgia Tech alumni have worked for NASA over the years as researchers, engineers and administrators, including about 150 full-time engineers and co-ops currently employed today at facilities such as the Johnson, Kennedy and Marshall Space Flight Centers. Nearly one-third of the research conducted by faculty in our [School of Aerospace Engineering](#) is supported by NASA.

All of us here at Georgia Tech are enormously proud of the role and impact that our faculty, staff, students and alumni have had on the space shuttle program, from the first launch of Challenger in 1981 that was commanded by Georgia Tech alumnus [John Young](#), AE 1952, to this last mission of Atlantis with [Dr. Sandra Magnus](#), MSE 1996, as one of a four-person crew. I had the privilege of meeting Dr. Magnus this spring. You might want to check out the STS-135 mission overview video on NASA's site, www.nasa.gov. It highlights several of our alumni, including an interview with Dr. Magnus.

From STS-1 through STS-135, Georgia Tech has been there. And we'll be there for the many frontiers ahead. Keith, who arrived at the Cape before I did, aptly noted that the STS-135 emblem has an Omega, the last letter of the Greek alphabet, to symbolize its role as the last launch of the space shuttle. It is his hope (and mine) that this also symbolizes a transition; not "the end of the shuttle program," but "the beginning of the many frontiers ahead."

As part of our ongoing commitment to the U.S. space program, this last month Georgia Tech hosted a three-day Space Shuttle Symposium entitled "*The Space Shuttle: An Engineering Milestone.*" The symposium was dedicated to honoring the contributions of the men and women from the U.S. and around the world who have dedicated their careers to the success of the U.S. space program and particularly to the shuttle era. The participants and speakers at this symposium included industry leaders from the aerospace industry, space shuttle commanders and astronauts, scientists, and NASA Administrator, General Charles Bolden. While we celebrated the past, we also focused on the future.

At the conference, General Bolden made it clear that NASA will develop a heavy lift rocket and crew capsule to take crews beyond low Earth orbit. They'll foster a commercial industry to take care of the low Earth orbit activities and focus NASA's efforts on new frontiers, possibly Mars or an asteroid landing.

Keith and I are among an estimated 1 million people who will travel to the Cape to watch Atlantis make her, and the Shuttle program's, final voyage. I am joined by numerous colleagues from Georgia Tech, including [Dr. Robert \(Bobby\) Braun](#), the David and Andrew Lewis Professor of Space Technology here at Tech who currently serves as the chief technologist for NASA, and Mike MacMillan, a fifth-year aerospace engineering major who works part-time in our office on campus and also drives the Ramblin' Wreck. He drove down with a group of his fellow Tech students (not in the Wreck!) and will be camping out with them and watching the launch. He is interested in a career in space vehicle design for satellites or passengers, and didn't want to miss the chance to see the last shuttle launch. If the weather cooperates, Dr. Braun, Mike and his friends, Keith and I, and many others will get the memory of a lifetime.

The task before all of us here at Georgia Tech is to continue to educate and inspire the next generation of leaders, engineers and scientists to ensure that our nation's space program continues to lead the way in space exploration.

G. P. "Bud" Peterson
President, Georgia Tech