

Notes from the President

Reflecting on the Space Shuttle's Final Flight (Part II)

07/07/2011

We just returned from an all-day tour of the [Kennedy Space Center \(KSC\)](#); had a great time. We took a driving tour of the Center, including Launch Pad 39A, where Atlantis is currently being prepared for launch, and 39B; the [Vehicle Assembly Building \(VAB\)](#); and the Banana Creek viewing area, where we will be when we watch the launch tomorrow.

As we walked around one of the viewing areas, located approximately 700 yards from the launch site, we could see the [main tank](#) — it is massive — and the [solid rocket boosters](#), but could not see the shuttle as it was shielded by the [Rotating Service Structure \(RSS\)](#). My memory flashed back to when I first went to work at NASA in 1981. They gave me a book about the size of a Reader's Digest magazine that listed all the acronyms.

The RSS was originally scheduled to rollback at 2:00 p.m. today, but it has been raining off and on all day, and a continuing band of thunderstorms has prevented teams from conducting the detailed pad inspection that must be performed before the RSS can be rolled back from the shuttle. After the rollback, the teams will continue work that must be performed before fueling the shuttle's external tank early tomorrow morning.

It has been raining all day and the weather has been pretty bad. Earlier today we heard that the Space Shuttle launch team is evaluating a possible lightning strike that apparently occurred about a third of a mile from [Launch Pad 39A](#). The NASA folks are evaluating the data and checking out the systems to make sure that the lightning did not adversely affect the space shuttle Atlantis or any of the pad's ground support equipment.

At the NASA briefing this morning, Shuttle Weather Officer Kathy Winters reported that the launch weather forecast remains unchanged, with a 30 percent chance of favorable weather for the [11:26 a.m. liftoff](#). The forecast is a more favorable 80 percent when the filling of the huge external fuel tank is set to begin.

We also went to the visitor's center and several of us took a ride in the Shuttle Experience, which is the launch simulator. The "experience" took about 12-15 minutes and was very realistic — or so say some of the astronauts. You could feel the g-forces from liftoff, the vibration and noise were incredible, and you actually felt somewhat weightless after the main engine shut off. We also had time to tour the visitor's center; it was great to see Georgia Tech well represented. Tech has a long history in aerospace and contributions to NASA research and programs. In 1917, the U.S. Army created a school of military aeronautics at Georgia Tech, one of only eight in the nation. In 1930, the Guggenheim Foundation contributed a grant to establish it as one of the nation's first schools of aeronautics in the U.S.

Today, Georgia Tech is home to some of the nation's most accomplished faculty and laboratories for the study and advancement of rocket propulsion.

[In my earlier post](#) I mentioned NASA's Chief Technologist Robert D. Braun. A Georgia Tech professor in space technology, Braun was named chief technologist for a two-year term on Feb. 3, 2010. He serves as principal advisor and advocate on matters concerning agency-wide technology policy and programs.

In addition to commanding the first Shuttle mission in 1981, Tech alumnus John Young is one the 12 men who have walked on the moon. He is the only astronaut who was engaged in the Gemini,

Apollo and shuttle programs. [Dick Truly, AE '59](#), was the pilot of Columbia in 1981, the first manned spacecraft to be re-flown into space. He was commander of Challenger in 1983, the first night launch and landing in the shuttle program. Dick Truly later became the NASA Administrator under the Reagan administration.

We at Georgia Tech are very proud of Dr. Sandy Magnus, a mission specialist for the final mission of the space shuttle. She earned her PhD at Georgia Tech. It takes a unique skill set to be part of a crew of just four people. (FYI, the other 3 crew members are Commander Chris Ferguson, pilot Doug Hurley, and mission specialist Rex Walheim.)

Tomorrow morning we are scheduled to meet at 5:15 a.m. to travel to the viewing site for the launch which is scheduled for 11:40 a.m. – let's hope the weather gets better. With hundreds of thousands expected here, the traffic is going to be pretty bad.

I am off now to meet with [Mr. Pete Combs from WSB Radio](#) to do an interview on Georgia Tech's role in the space program. Stay tuned!

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