

## Notes from the President

### *Final Flight: Launch Day (Part II)*

07/08/2011

It's now 8:00 Friday morning and I am headed into a special briefing by the center director. They just announced that the astronauts have left to get suited up, the sun is peaking through and the weather is starting to look more promising. Optimism is growing.

They just gave us the safety briefing—told us that the dangers included potential lightning strikes, which are not uncommon. The second biggest problem is the fallout from the exhaust plume, which can “cause you to itch, burn your skin a little or discolor your clothes.” No problem!

Apparently this has not caused any environmental problems in the past. Kennedy Space Center is 140,000 acres, half of which is water, a quarter swamp and the other quarter is actually land. Only 10 percent is used for launch facilities, so there is a huge amount of wildlife: eagles, gators, manatees and dolphins.

From 2:00 to 5:00 this morning, they filled Atlantis' external fuel tank with 535,000 gallons of super cold liquid hydrogen and liquid oxygen. This shuttle mission will be taking up 12,000 pounds of supplies and return with approximately 10,000 pounds of old equipment and trash. Included in their cargo is a year's worth of food, 2,000 pounds of science equipment, clothing and thousands of pounds of spare parts. Their primary job is to take tons of logistics to the station while NASA still has the huge cargo-carrying capacity of the shuttle available. They're bringing the pump module back with them. It failed last year, and they want to learn what happened and make design improvements for the future. Two of the astronauts will participate in a spacewalk to capture the failed pump module, and because it is huge, they'll be working with a robot arm to move it around. As the 135th flight, it will leave behind a fully functionally space station, a truly remarkable accomplishment.

I cannot help but reflect on my time at NASA in 1981 immediately after the first flight and for the second. I recall participating in discussions about how hard it would be to have 100+ missions, then talking about how difficult it would be to build a space station and launch more than 100 missions. We went from talking about it to building it, and now it is done.

It is now 10:10 a.m. and we are entering a “hold,” and things look good! Truly amazing!!

Stay tuned!

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