



Elizabeth Gauldin inside a replica of the Lunar Excursion Model and Greg Meeks outside NASA in Florida.

The risks of space

NASA alumni Elizabeth Gauldin ('50) and Greg Meeks ('85) reflect on the loss of the Columbia and media speculation

Mission Integration Engineer Greg Meeks ('85) tuned into the cable NASA channel in his home to check in on Columbia's landing around 9 a.m., Feb. 1.

"I was watching the tracking and energy displays in Mission Control and they weren't changing. I knew we lost telemetry with Columbia and suspected something very bad because obviously the backup systems weren't working."

Meeks, who works at the Kennedy Space Center as an engineer and technical liaison to The Canadian Space Agency, lives in Titusville, Fla.

"When it was time to hear the sonic booms over the house, they weren't there. That's when I knew."

Meeks, like the nation has mourned the tragedy, but all the more from his vantage point at NASA.

"We all feel a great sense of loss. We lost seven of our finest personnel as well as our nation's first space shuttle," he says. "It's a reminder that we accept great risk and, even though we do everything possible to minimize it, we cannot eliminate it totally. The shuttles are incredibly complex machines that take off like rockets, operate like space stations on-orbit, re-enter the atmosphere like meteors and then fly to earth like airplanes. The missions are much more complex than people imagine."

Elizabeth Gauldin ('50) retired from NASA in 1999 and still lives in Houston. She has received cards and letters from friends who knew she worked at NASA for 30 years, even though she did not personally know any of the people aboard Columbia.

She says Texans have felt especially close to the loss, with the shuttle disintegrating over the state. There have been numerous memorials in her area and the local media reports daily on wreckage findings.

"I find it heartening that people seem so concerned, that there's been so much weeping," she says. The outpouring reveals, she says, how much Americans still care about the space program and support it.

The recent tragedy brings back memories of the Challenger explosion for Gauldin. She says she remembers going to work after the tragedy in 1986, and fearing the shuttle program might be cancelled.

"We were just traumatized," she says. "Nothing like it had ever happened. We were going to work even though we didn't have to."

James Barnes, ISAT professor who works with a NASA program called RISE, also was taken back in time.

"My initial thoughts when I heard about the Columbia catastrophe was immediately reflecting

back to the Challenger accident," Barnes says. "Having lived through that experience, I know what the families of those lost and NASA are going through. My thoughts and prayers are with them."

Barnes has closely watched the news and said the coverage has been a mixed bag.

"It always bothers me when the media try to speculate as to what caused the catastrophe, to what in my opinion, is in hopes that they are the group that breaks the actual cause of the catastrophe," he says. "Let the experienced do their job and let the media report the events."

Gauldin, who remembers the silence surrounding the Challenger incident, says NASA has been more forthcoming with information this time. The one negative with their openness has been the rush to judgment on the cause of the accident.

"The media prod science to do a better job, so I'm in favor of the press, but they don't know anymore than we do," she says. "Columbia was the oldest shuttle in our fleet. There are so many, many things that can go wrong."

NASA constantly runs scenarios for potential problem situations, and for years, Meeks worked with emergency landing operations. He served as a site manager, which required him to travel to locations around the globe and ready each site and a team of about 35 people for each launch. The emergency landing sites were created in case a launch failed and the craft had to land at another location.

"In that work we prepared for what was the most-likely recoverable emergency: a problem during the ascent with the main engines... We played every launch like it was going to happen. I wanted to give them every opportunity to land if they could make it to the runway in Spain or Africa," he says. "What happened to Columbia was one of the multitude of things that are possible when you do what we do."

In recent years, Meeks has worked with the International Space Station program.

"I am part of the team that was preparing the components of the space station that would be launched on the next flight of Columbia, which would have been in November," he says. "Right now we are preparing the components of the space station just as we were. The launch schedule is on hold until we determine the cause of the accident. We now only have three shuttles, which is obviously going to impact the way we do business in the future. We'll continue though."

Meeks, a Staunton native who was 9 when the first man walked on the moon, says he'd always wanted to work at NASA.

"Space flight, both human and robotic, is something very rare in the world - we're just beginning," he says. "We live in one of only two nations on earth that can put people into space. ... It's not just about science, but exploration and inspiration. It shouldn't be taken for granted."

By Donna Dunn ('94)