



Barbara L. Brown

(B.S. '85)

Director of Exploration Research and Technology Programs, NASA's John F. Kennedy Space Center

By Laura Barrera

Barbara, telephone! It's NASA!" The phone call came from a landline phone in FSU's Smith Hall dormitory, and it was a call that then-resident Barbara L. Brown would never forget.

A child of the Star Trek generation, working for NASA had long been Brown's dream, especially after watching the launch of Apollo 11 in 1969. "I can remember having goosebumps and thinking that it was the greatest thing I had ever seen and just wishing I could be a part of it," said Brown. "That feeling never left me."

It wasn't long before she made that wish a reality. After starting as a student intern with NASA, Brown has worked her way up to the Director of Exploration Research and Technology Programs at NASA's John F. Kennedy Space Center.

Brown's current position consists of two roles. One is managing a team that helps prepare payloads for the International Space Station, such as food, breathing air tanks and experiments like crop production. She also oversees teams that perform research and technology development. A few of their projects include looking at how to mitigate and remove dust that stirs up when landing on a surface and how to use gasses that can be extracted from heating up trash.

Brown and her teams are preparing for the upcoming Artemis lunar missions, and she's developing concepts for uncrewed surface missions. Autonomy has long been the focus of her career, a passion sparked by Star Trek.

"If you've ever watched the show, typically, the ship itself would alert when it was malfunctioning or was about to malfunction," said Brown. "I said, 'That's what I want to do.' I was always looking at how to use the computer to help make humans' jobs easier."

Brown had her first Star Trek moment when she developed a software system called KATE: Knowledge-based Autonomous Test Engineer. She designed it to diagnose problems when loading liquid oxygen onto shuttles. While she was testing KATE in the Launch Control Center during a shuttle launch, her system not only recognized a failure but caught it 20 minutes before the official system did.

It's just one of the many highlights of Brown's career, which she describes as "one stellar moment after another." Other fond memories she has include becoming the first Black woman to manage a vehicle test flight program, which earned her an invitation to the White House.

Another was when she discovered why a system wasn't working, thanks to the knowledge she gained from a Florida State University class about relational databases.

"I can remember being called into a meeting with maybe 80 people to discuss why one of the systems wasn't working," said Brown. "They had hired a consultant to come in, and he had me sit down next to him, and he said, 'It's what she said. She was right.'"

She credits much of her experience at FSU with getting her where she is today. "The coursework really did fully prepare me to be successful in this career with NASA, and it would have prepared me for any other career," said Brown.

Today, Brown does a lot of outreach with students of all ages and often finds they're concerned that pursuing a career in NASA will be hard. But she doesn't think that should keep them from pursuing their dreams.

"My parents always encouraged me to never say 'can't.' We actually weren't allowed to say the word," said Brown. "My parents would tell us to believe you can do anything you want to do. But that comes with a caveat. You have to be willing to put in the work necessary to prepare yourself to be successful."

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