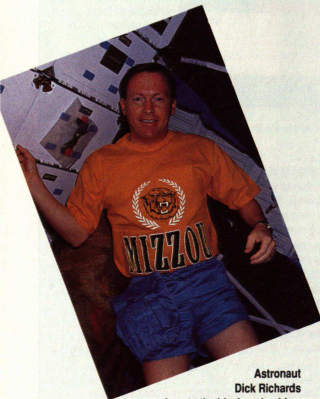


Mizzooming through space

By TERRY JORDAN



Astronaut Dick Richards boasts the black and gold as he floats around the cabin of the space shuttle.



When Dick Richards, BS ChE '69, piloted NASA's space shuttle Columbia into orbit in August, a little bit of MU went with him. Stashed in his flight kit were a University Sesquicentennial banner and a toy tiger. And on the third day of the mission, he floated around Columbia's cabin in a black-and-gold Mizzou T-shirt.

"If it hadn't been for MU, I never would have gotten my foot in the door as an astronaut," says Richards, who made a triumphant return to the University Oct. 28 as grand marshal of the Homecoming parade. "Mizzou helped prepare me academically for my career and opened my eyes to the options out there. I wanted to take something from the University along on the shuttle to show that I appreciated it."

Although he guided Columbia 80 times around the earth from Aug. 8 through 13 — a total of 2 million miles — Richards is a career military man whose formal title is U.S. Navy captain. It was the military connection that drew him to NASA

in the first place.

"I had just graduated from MU when the Apollo astronauts landed on the moon," says Richards, who grew up in St. Louis and came to Mizzou on a Navy ROTC scholarship. "I couldn't believe it when I heard that all three of them were military pilots. I never had made the connection before. It was then that I thought, 'Hey, I might have a shot at that, too.'"

Richards had taken a number of nuclear engineering courses while at Mizzou. He also had piloted his first small plane from Columbia's Regional Airport in 1968. "I wasn't sure what I wanted to do with my engineering degree, although I knew I would have a four-year commitment to the Navy after I graduated," he says. "I wanted to work flying in there, too."

"Suddenly it clicked. I'd get my Navy wings and apply my engineering education, and work toward becoming an astronaut."

Richards went to test pilot school in Patuxent River, Md., then was assigned to the Navy Air Station in



The space shuttle Columbia takes off from the Kennedy Space Center in Florida, far left. Crew members, from left, Dick Richards, James Adamson, David Leestma, Mark Brown and Brewster N. Shaw Jr. prepare for the launch. NASA photos

Pensacola, Fla. Over the next several years he flew F-4s, earning his wings in 1970 and logging more than 4,000 miles. He earned a master's degree in aeronautical systems from the University of West Florida in Pensacola.

He applied to become a NASA astronaut in 1978 and was turned down. But he kept trying and was accepted two years later. "NASA was expanding and was looking for shuttle pilots. I was in the right place at the right time."

Richards and his wife, Lois — they met when he was at MU and she was a student at Stephens College — moved to Houston, and he began NASA training "on an extended set of orders" from the Navy. He originally was scheduled to pilot Columbia in March 1986, but the flight was postponed after the Challenger exploded in January of that year. "Everything was put off indefinitely," Richards says. "We finally got the go-ahead for Columbia this year."

Columbia was a U.S. Department of Defense flight, and security precautions prevent Richards from giv-

ing details of the mission itself. But he delights in talking about traveling through space.

"Zero gravity is unbelievable," he says, laughing. "There's absolutely nothing to compare it with. You take so many things for granted on earth that when you get in space and realize the normal rules don't apply, it throws you for a loop.

"Take writing a note, for instance. On Earth if you need to take a break, you just put your pencil down. But in zero gravity you let it go. And when you come back a minute or two later, it's still there, floating. You have to be careful, though, because if you're gone too long it won't be there when you get back ... and you'll have no idea where it is!"

Richards and Columbia's four other crew members ate rehydrated beef, potatoes and vegetables during the mission, along with "real treats" such as fruit cocktail and homemade jam. "It was great to eat upside down, hanging from the ceiling," he says. "And it's really great when you finally get your 'space

legs' and can do things like fly across the room without hitting anything. It's a lot of fun up there."

The Sesquicentennial flag that Richards took along was sent by Chancellor Haskell Monroe. The T-shirt was a present from Dr. Dabir Viswanath, professor of chemical engineering at MU. And Richards received another present a few weeks after his return: He learned he will command an October 1990 Atlantis mission to study the sun. Also making a NASA flight next year is an MU alumna; Linda Godwin, MS '76, PhD '80, will be a crew member of space shuttle Discovery, to be launched in April.

Richards has memories from the Columbia mission that he says can never be matched. After the shuttle broke through the atmosphere into space, he looked out the window and saw the Earth below.

"I had an incredible view of Europe, and it was an amazing sight," he says. "I was grateful to all the people along the way who helped me get there."