

Christa McAuliffe, Teacher Astronaut

AS ONE OF her training exercises in becoming the first teacher astronaut, Christa McAuliffe had to curl up inside a 36-inch-diameter nylon ball. When she was zipped up, she found herself in total darkness. She didn't know when she'd be let out. Christa wore electrodes and transmitters to see how she would react to being closed in, since on the space shuttle she'd have to share a living space that measured only 10 by 13 feet (the size of her kitchen) with six people, and she and the other astronauts would eat, sleep, go to the bathroom, work, and relax there; it was no place for someone with claustrophobia.

Christa thought she would start yelling and try to claw her way out, but she lay back, folded her arms across her stomach, and imagined herself floating in space. As



Christa McAuliffe

a result, the 15 minutes she spent inside the nylon ball were very peaceful. At the end of the exercise, she asked if she could take the ball home. "When things start to get crazy, I can just set the timer and tell the kids, 'O.K., Mom's going into the sphere now.'"

Christa, a high-school social studies teacher from New Hampshire, first heard about the teacher astronaut program on the radio while driving with her husband, Steve. The smile that lit Christa's face told Steve she was interested. "Go for it," he said. When she put off filling out the



Women astronauts stand with the Personal Rescue Enclosure (the rescue ball). FROM LEFT TO RIGHT: Margaret R. Seddon, Kathryn D. Sullivan, Judith A. Resnick, Sally K. Ride, Anna Fisher, Shannon Lucid

by Catherine Jones

CLAUSTROPHOBIA IS AN EXTREME FEAR OF SMALL OR ENCLOSED PLACES.



25-page application, he gently encouraged her to finish it on time.

More than 11,000 teachers across the nation applied for the position. Selection committees in each state, as well as from the Bureau of Indian Affairs and overseas schools, were to choose two candidates who had the qualities of a “teachernaut”: they must have taught at least five years, be gifted communicators, strong role models, and able to handle the media invasion. Christa was unanimously voted one of New Hampshire’s candidates.

In June 1985, the 113 semifinalists arrived in Washington, D.C., and spent seven days attending workshops and press conferences. They also talked with judges from a panel that included astronauts,

professors, an inventor, a rocket scientist, even an actress and a basketball star (because of their experience in handling publicity). These judges had to pick ten finalists. They chose Christa because of her enthusiasm, her speaking ability, and her realistic project for the shuttle: writing a journal to communicate the space experience to students and historians.

One week later, the ten finalists reported to Johnson Space Center in Houston for physical and psychological testing; NASA (the National Aeronautics and Space Administration) wanted to make sure they were “fit” for space travel. They were also given a taste of the astronauts’ training program, which included a ride in the “vomit comet” (a jet that used a



Christa experiences non-gravity in the “vomit comet.”

special flight pattern to simulate the G-forces of liftoff and landing, as well as provide 20–30 seconds of weightlessness).

Christa felt like a lab rat after answering almost 700 medical questions, submitting to blood tests, x-rays, a treadmill test, a complete physical exam, and having every inch of her body measured. “They even know the height of my bellybutton,” she said. And though she experienced motion sickness on the “vomit comet,” she wasn’t the only one who did.

During her 45-minute interview with top NASA officials, Christa proved her worth. She was the only candidate who understood what they were looking for: a person who could communicate to students and other teachers her excitement about the space program. The judges’ vote was unanimous—Christa would be the first teacher in space.

In the months before liftoff, Christa trained at NASA, far away from her husband and children. She and Steve had been sweethearts since their sophomore year in high school. They married after graduating from college and had two young children: Scott, age nine, and six-year-old Caroline.

Because of limited space on the shuttle, each crew member could bring only 20 personal items—the total had to weigh less than 1 1/2 pounds and fit into a small storage tray. Among other things, Christa took Steve’s college ring and Caroline’s cross and chain given to her at birth. Scott wanted Christa to take his favorite stuffed frog, Fleegle, into space. NASA said O.K., as long as its insides were removed and

the frog was vacuum-packed. NASA also allowed Christa to take two T-shirts to wear besides her official shuttle wardrobe; one said, I Touch the Future—I Teach.

The morning of 28 January 1986 dawned clear and cold at the Kennedy Space Center in Florida. Mission Commander Dick Scobee, an experienced Air Force pilot, said, “My kind of weather. What a great day for flying!” Despite the frigid air, a lot of people came to watch the *Challenger’s*



The Challenger before liftoff

liftoff, including Steve, Scott, Caroline, Christa's parents, and many schoolchildren.

Though a shuttle had never been launched in such cold temperatures before, NASA decided to go ahead. The flight had already been delayed four times, and nobody wanted to put off the event any longer. Before Christa boarded, one of the ground crew tried to give her an apple. She said, "Save it for me, and I'll eat it when I get back."

Because a teacher was part of the mission, schoolchildren across the country watched the countdown on TV. At 11:38 A.M., Eastern Standard Time, millions of voices chanted: "Ten . . . nine . . . eight . . . seven . . . six . . ." At six seconds, the three main engines at the back of the orbiter ignited. "Five . . . four . . . three . . . two . . . one . . . liftoff!" The two solid rocket boosters roared to life and launched the *Challenger* heavenward.

None of the crew knew the dangers of launching on such a cold day. The metal joints of the two rockets used to boost the orbiter into space were sealed with rubber O-rings that contracted in the cold, icy weather. If the temperature had been warmer, the O-rings would have expanded to their normal shape, sealing the joints so no fuel could leak.

Not until later did anyone realize the significance of the thick, black smoke coming from a joint in the right solid rocket



The tragic *Challenger* explosion

booster. The O-ring was leaking liquid hydrogen and oxygen. This dangerous mixture caught fire, damaging the fuel tank and causing it to explode.

The only hint that the crew might have recognized the danger came from *Challenger's* pilot, Michael Smith. A millisecond before the explosion, Smith's voice was recorded as saying, "Uh-oh." The shuttle was just 73 seconds into its flight and nearly nine miles high when a white-orange fireball lit the sky.

The cheers of the spectators turned to silence. At first, no one realized what had happened. They had just witnessed the worst disaster in NASA's history.

CONTRACTED MEANS
GOT SMALLER, SHRANK,
CONDENSED.



Fragments of the shuttle rained into the Atlantic Ocean for more than an hour. Not until 38 days later were the shuttle cabin and the crew's remains raised from the ocean floor.

Across the nation, flags were lowered to half-mast in honor of the five men and two women whose lives and dreams had been so suddenly ended. The loss of the astronauts, especially the smiling, eager "teachernaut," filled the country with sadness.

Christa McAuliffe understood the risks of space travel and still chose to be a part of *Challenger's* mission. She once told

a reporter that people often said, "I really admire what you're doing, but I wouldn't want to do it." Christa couldn't understand that attitude. "If you had a chance," she said, "wouldn't you want to do it?"

Christa's legacy lives on to this day in the many schools, scholarships, and monuments that bear her name. But Christa McAuliffe's greatest legacy is the fulfillment of her ultimate goal as a teacher: to touch the future by inspiring generations of students to set high goals for themselves, to work hard at achieving those goals, and to believe that they can reach the stars. 🐛

The *Challenger's* crew members (FROM LEFT TO RIGHT STARTING WITH THE TOP ROW): Ellison S. Onizuka, Christa McAuliffe, Gregory B. Janis, Judith A. Resnik, Michael J. Smith, Francis R. Scobee, Ronald E. McNair

