

CHALLENGER

America's Space Tragedy



人类征服太空的历程

(英汉读本)

美国太空悲剧

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广西科学技术出版社

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The seven crewmates of the Space Shuttle Challenger (from left to right, front row) Mike Smith, Dick Scobee, Ron McNair; (back row) Ellison Onizuka, Christa McAuliffe, Gregory Jarvis, and Judith Resnik.



1

A Major Malfunction

Today was to be a glorious day for Christa McAuliffe. She and her six crewmates walked across a narrow metal bridge toward the hatch of the Space Shuttle *Challenger*. She was about to live the dream of going into space.

One of the technicians at the hatch had a gift for McAuliffe. His name was Johnny Corlew. When he was a boy he often picked apples to give to his teachers at school. He would not miss the chance to give an apple to *this* teacher.

Christa McAuliffe had been chosen by the National Aeronautics and Space Administration (NASA) as the first teacher in space. The Teacher in Space program was invented by President Ronald Reagan to help boost public interest in the space program. It was working.

Schoolchildren around the country were watching the countdown on television. McAuliffe was ready to become the first private citizen ever to fly into space.

Wearing her blue NASA flight suit, McAuliffe stepped toward the hatch. Corlew gave her the apple.

Teacher in Space



NASA

This was the logo for the Teacher in Space program, an idea invented by President Ronald Reagan.

The teacher from Concord, New Hampshire, gave him a beaming smile.

"Save it for me," McAuliffe said, "and I'll eat it when I get back."

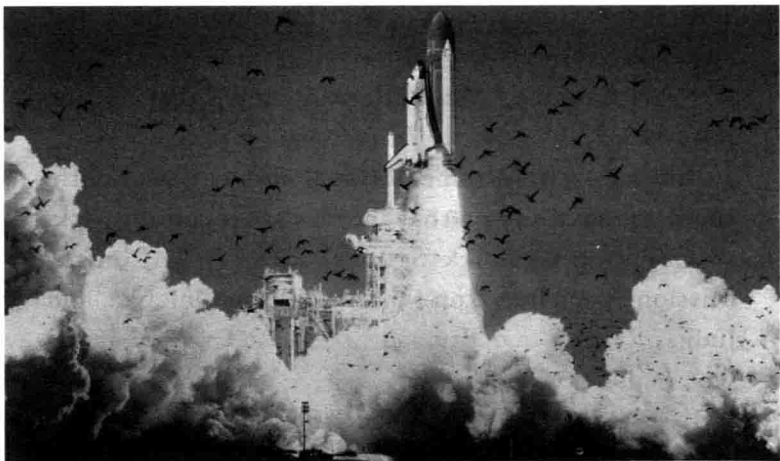
In that exciting and emotional moment, McAuliffe could not have known that she was never coming back.

Commander Dick Scobee, Pilot Mike Smith, Mission Specialists Ron McNair, Ellison S. Onizuka, and Judith A. Resnik, and Payload Specialist Gregory B. Jarvis would also not return.

The mission was doomed from the beginning. A dangerous design flaw in the solid rocket boosters had shown signs of trouble before. Now, on the morning of January 28, 1986, the temperature at Cape Canaveral was around 32°F. Icicles a foot long hung from parts of the launchpad. It was the coldest launch day ever. Too cold for a safe launch. NASA decided to launch anyway. The upper management at NASA was not aware that the cold temperatures would cause the design flaw in the solid rocket boosters to trigger a fatal explosion.

By the time *Challenger* lifted off the pad at 11:38 A.M. It was a ticking time bomb.

To the spectators around Cape Canaveral, the launch was as beautiful and perfect as any other launch. Members of the astronauts' families were there, including McAuliffe's parents. They heard the voices of *Challenger* and Mission Control on the loudspeaker.



Challenger lifted off from Cape Canaveral at 11:38 A.M.

"Challenger now heading downrange," Mission Control said. "Engines beginning to throttle down to 94 percent . . . Will throttle down to 65 percent shortly. Velocity 2,257 feet per second. Altitude 4.3 nautical miles. Three engines running normally . . . Engines throttling up. Three engines now at 104 percent."

"Go, you mother!" Pilot Mike Smith exclaimed. "There's 10,000 feet and Mach point five." They were now traveling at half the speed of sound.

"Point nine," Commander Scobee said.

"There's Mach One," said Smith. *Challenger* was now supersonic. It continued to climb toward space and the orbital speed of 17,500 miles per hour. Only one minute into the launch, the shuttle was more than

30,000 feet high and was going one and a half times the speed of sound.

"Thirty-five thousand. Going through 1.5," Smith said.

"*Challenger*, Go at throttle up," said Mission Control.

"Roger," Scobee replied, "Go at throttle up," said Mission Control.

Three seconds later, the unthinkable happened.

"Uh oh," Smith said.

The *Challenger* suddenly exploded in a blaze of flame, smoke, and debris. The two solid rocket boosters soared away uncontrollably to either side of the cloud. The spectators watching the launch were not sure what they had seen. The orbiter did not emerge from the

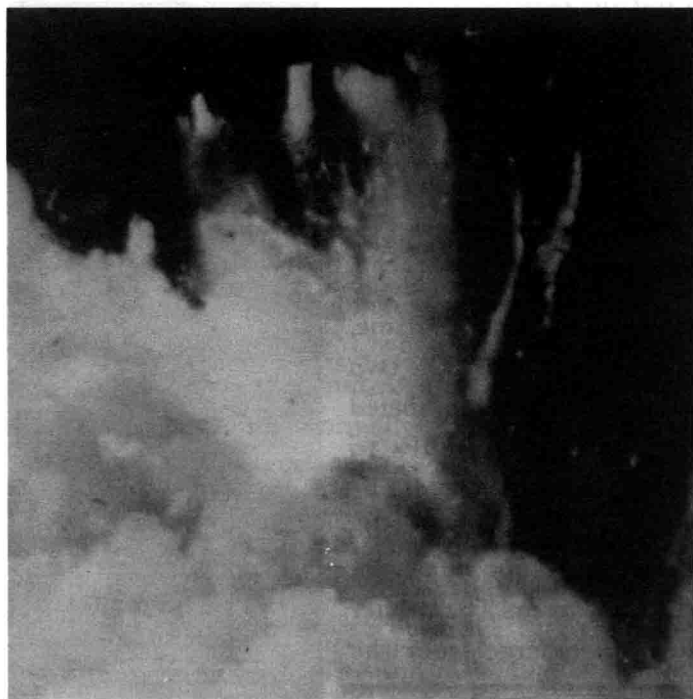


The Space Shuttle Challenger as it begins its ill-fated climb toward space on January 28, 1986.

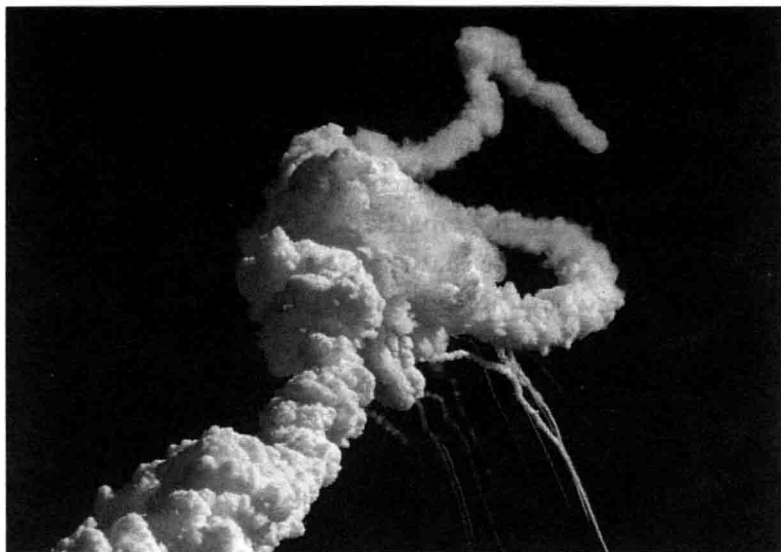
cloud. The column of smoke was no longer going higher. For thirty seconds the loudspeakers were silent.

Finally the public address system announcer continued. His calm voice only added to the unreal feeling of what seemed to have happened.

"Flight controllers are looking very carefully at the situation. Obviously a major malfunction. We have no downlink." This meant there was no communication



The Space Shuttle Challenger exploded suddenly in a blaze of smoke and debris.



Seconds after the Challenger explosion, an expanding ball of gas was visible from the shuttle's external tank. The worst disaster in the American space program had taken place.

between Mission Control and the shuttle. "We have a report from the flight dynamics officer that the vehicle has exploded. The flight director confirms that. We are waiting for word of any recovery forces in the down-range field."

It seemed unreal. But it was true. The *Challenger* had exploded. The worst disaster in the American space program had just taken place. And because Christa McAuliffe was aboard, it had happened before the eyes of schoolchildren around the country.

Television networks interrupted programming to

announce the tragedy. The networks followed the story with live television the rest of the day. They replayed videotape of the explosion many times, and waited for the latest news from NASA. At 4:30 P.M. NASA held a press conference. They announced that their searches of the impact area in the Atlantic Ocean showed no evidence that the crew had survived.

The crew of *Challenger* was gone. The loss of the shuttle and its crew was truly a national tragedy. President Ronald Reagan was scheduled to give his State of the Union Message to Congress that evening. He postponed the speech because of the tragedy. Instead he addressed the nation about *Challenger* later that afternoon. Some of his comments were directed at the schoolchildren who had been watching the launch.

"I know it's hard to understand that sometimes painful things like this happen," Reagan said, "It's all part of the process of exploration and discovery. It's all part of taking a chance and expanding man's horizons. The future does not belong to the fainthearted. It belongs to the brave. The *Challenger* crew was pulling us into the future and we'll continue to follow them."

The story of *Challenger's* explosion dominated the news for days after the tragedy. Reporters were told many times by many people that spaceflight is a dangerous undertaking. They were told that this sort of thing could always happen. They were told that

Americans must not give up on the space program because of this one tragedy.

As time passed, however, the story changed. The cause of the explosion was discovered in the weeks and months that followed. It became clear that the tragedy could have been avoided. The explosion of *Challenger* should never have happened.



Christa McAuliffe always took pride in the American space program. She is seen here at Kennedy Space Center.

The shuttle program was headed for disaster long before the morning of January 28, 1986. Some administrators at NASA were under political pressure to speed up the shuttle's launch schedule. "As the flight rate increased, the . . . safety, reliability, and quality assurance work force was decreasing, which adversely affected mission safety." The shuttles were complex, and very difficult to repair and launch quickly.

Christa McAuliffe became an unfortunate victim of all that was wrong with NASA.

McAuliffe always took pride in the space program. And throughout her training, she had taken great pride in the brief role she was going to play in it. The courage and dedication of McAuliffe and the *Challenger* crew would not be forgotten. Neither would their sacrifice. That sacrifice would begin the long journey toward a better space program and a brighter future for America in space.

Christa McAuliffe's part in that long journey began on her front doorstep.

2

Teacher in Space

One morning in August 1984, Christa McAuliffe stepped out on her front porch to get the newspaper. On the front page was the headline—REAGAN WANTS TEACHER IN SPACE.

She had heard something about the Teacher-in-Space program the day before on the radio. Now, here it was again on the front page of her hometown newspaper. Next to the story was a picture of astronaut Judith Resnik. In two days, Resnik was to become the second American woman in space. Sally Ride had become the first in 1983.

McAuliffe had no idea that in sixteen months she herself would be aboard the shuttle with Resnik. Being a teacher in space seemed like only a dream to her then. But McAuliffe would not miss a chance like this.