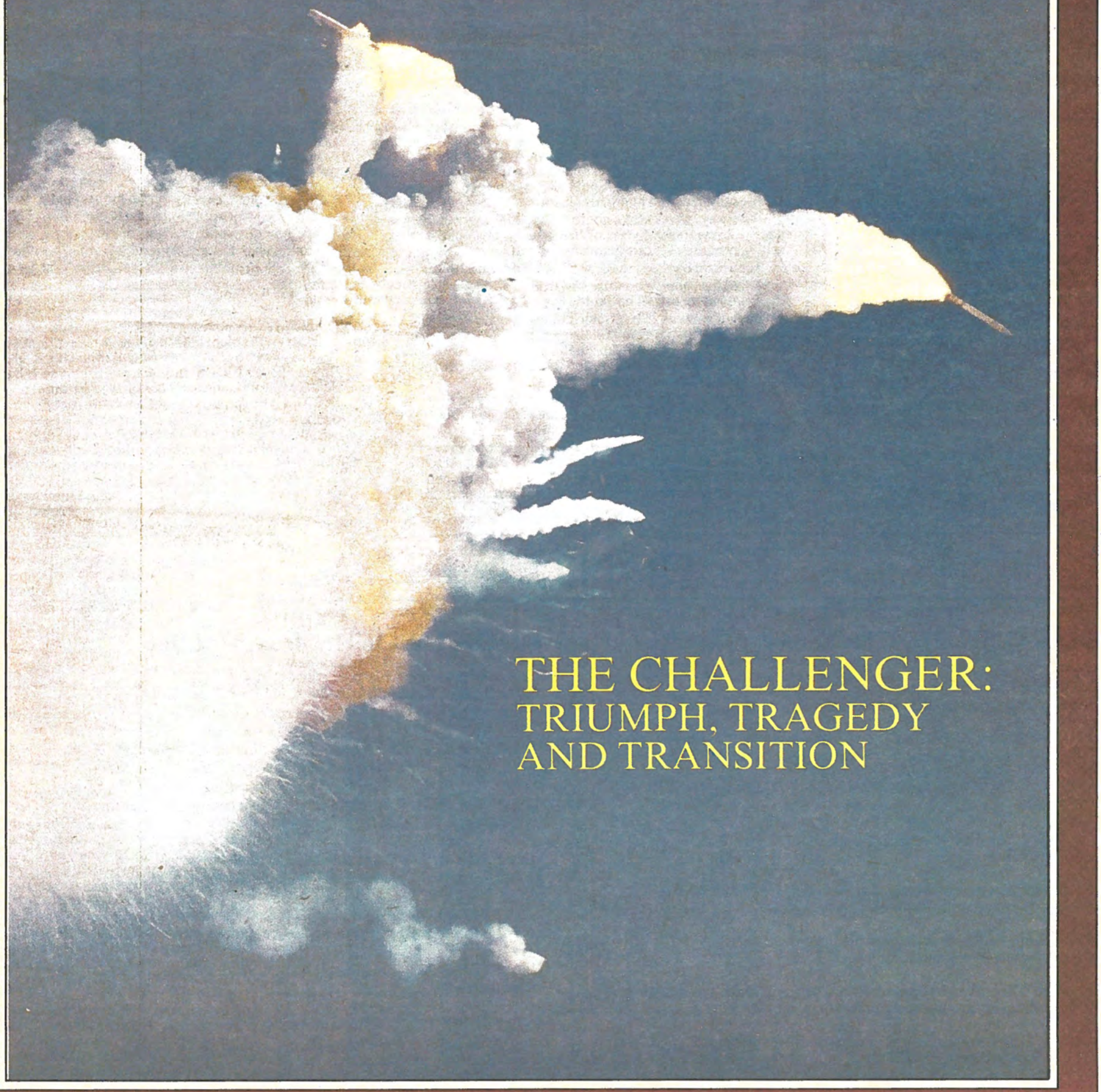
BOOK ONE

THE SHUTTLE SAGA



THE CHALLENGER: TRIUMPH, TRAGEDY AND TRANSITION

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CHAPTER 3

Challenger 7

'I never had any role models'

Judy Resnik always set her own pace. From child musician to doctor of electrical engineering to one of the first six American women astronauts, she 'did whatever seemed to be the right thing to do at the time.'

By Joan Heller

When other first-graders were learning their ABCs, Judy Resnik was learning the octave scales on the family Steinway.

Her legs dangling from the piano bench, the quiet child with the raven hair played with the single-minded dedication of someone a lot of people were going to remember.

Elementary schoolteachers noticed the tiny musician who worked so hard. She could play, but could she write? they wondered.

Challenged, little Judy played, composed and joined the select few talented child musicians of Akron, Ohio.

For the rest of her 36 years, Sarah Belfer's daughter Judy would remain among the select few.

The years passed, her legs grew long enough to touch the floor and still she played. Always dedicated to that piano and the one she would someday buy for her Houston home, Judy was finding another love — math and science.

It may have started in the kitchen.

While her father, Marvin, was away at the office practicing optometry, mom and the kids played.

Judy and brother Chuck, four years her junior, did their first experiments in the kitchen — with food.

"I'd let them go as far as a mother could," Sarah remembers.

And there were questions, questions about everything. "What's that?" they wanted to know. "Why?"

Just as she challenged her mother for answers, Judy faced the same challenges from the teachers at Firestone High School who recognized her gift for math and science.

Months after her June 1966 graduation from Firestone High, Judy packed her bags for Pittsburgh, said farewell to the girlfriends with whom she'd shared so many hours on the telephone and headed to Carnegie-Mellon University.

When she next packed her bags in 1970, Judy would be carrying a bachelor's degree in electrical engineering to the RCA plant in Moorestown, N.J. There for a year, she moved on to RCA's Springfield, Va., plant.

All the while, she pursued a master's degree. Her work as a design engineer included circuit design and development of custom-integrated circuitry.

She designed circuits for radar control systems. She evaluated control systems for NASA sounding rockets and telemetry systems. She wrote a paper on design procedures for special-purpose integrated circuitry.

And she kept studying.

In 1977, Judy moved from Springfield, Va., to Bethesda, Md. On a fellowship from the Laboratory of Neurophysiology at the National Institute of Health, she spent the next three years in biological research experiments on the physiology of visual systems.

In 1977, Judy became Dr. Judy Resnik with a doctorate in electrical engineering from the University of Maryland.

That done, she packed her bags again, this time for a job as senior systems engineer at the Xerox Corp.'s El Segundo, Calif., plant.

The Associated Press

SPACE HAIR: In zero gravity, Judy Resnik's long tresses stand out. The 'Brillo pad' look became her trademark. The mission specialist is in middeck of Shuttle Discovery.

NASA

WAITING HER TURN: Resnik prepares to simulate a parachute jump during survival training at Vance Air Force Base in Oklahoma. The training teaches astronaut candidates procedures to take in the event of ejection from an aircraft.

Months later, NASA called, and Judy answered.

"I remember getting the call from Judy," Sarah says. "She told me she was selected as one of the first six women astronauts. She was so excited, so thrilled."

Trained for a year and formally accepted into the elite ranks of the astronaut corps in 1979, Judy spent the next five years working on computer programs for Space Shuttle experiments, the Orbiter's giant robot arm and training techniques.

Destined to be the second American woman in space, Judy was pursued by an inquisitive press corps. Did she think she was opening doors for other women?

"I guess I don't perceive that I'm making it possible for other women to do things," she told reporters. "I think anybody can do anything they want, as of now."

Did she see herself as a role model?

"From my perspective, I don't. I never had any role models. I did whatever seemed to be the right thing to do at the time. And if there are people who need role models to get motivated, then I hope I do a good job."

Did she think about the dangers?

"No. I think it's mostly confidence in the vehicle, confidence in the crew and confidence in the procedures we have developed to carry out missions and the amount of practicing we do ahead of time in the simulators to deal with any malfunctions that might occur."

Finally, on Aug. 30, 1984, it was Judy's turn to fly.

Suiting up with Shuttle Cmdr. Hank Hartsfield, pilot Mike Coats, payload specialist Charlie Walker and fellow mission specialists Steve Hawley and Mike Mullane, she blasted off on the maiden flight of the Orbiter Discovery.

During their week in space, the crew members put three satellites into orbit, produced a new space medicine and performed outer-space photography experiments with an IMAX motion picture camera.

The crew members came to be known as The Icebusters as they used the massive robot arm to gently remove dangerous ice particles from the outer skin of their spaceship.

Judy won the title of Solar Sailor as she carefully flipped the switches and turned the dials that unfurl the 10-story-tall solar sail designed to provide power to future space vessels.

All business in public, Judy earned a reputation for her humor when the world wasn't watching. Away from the glare of the cameras, her crewmates took a lot of good-natured ribbing about male chauvinism.

Once asked what she would do after her first flight, Judy answered without hesitation: "Fly again."

On Jan. 28, 1986, she got her second and last chance.

The memories keep taking Sarah back to another day, another astronaut.

"I remember the day Neil Armstrong landed on the moon. Judy and Chuck and I were watching it on television. They were so interested.

"I remember saying, 'I never thought I would see this in my lifetime. I suppose this will be an ordinary thing in your lifetime and your children's lifetimes. Instead of getting on a plane, you'll get on some kind of Shuttle for a little trip into orbit.' "