The Deep Beep-Beep

THE SPACE AGE HAD BEGUN, and Russians had initiated it with a small satellite they called Sputnik. The whole world looked up, mostly in awe. Like the sudden beginning of the Atomic Age — America had initiated that — nothing would ever be quite the same again — in geopolitics, in science and technology, or in how humans saw themselves in the universe.

Sputnik started circling us on October 4, 1957. I was close to turning nine years old and this was one more thing to be anxious over. First, it had been that lunatic atomic bomb that everyone said could *end everything,* then fallout from testing that bomb was coming toward us over the mountains (government assurances that it wasn't dangerous turned out to be false). Now something Russian was in orbit above us.

"Never before had so small and so harmless an object created such consternation."

—Daniel J. Boorstin, *The Americans: The Democratic Experience*

The Fellow Traveler

Some of us remember, but most of us don't, so let's review a few things.

Sputnik literally means "fellow traveller." It went into orbit during the International Geophysical Year, when sixty-seven countries agreed to initiate projects intended to end a Cold War scientific standoff.

By today's standards for satellites, Sputnik was not large. It was tiny, in fact, the size of a beach ball. It had an aluminum exterior polished to reflect sunlight, making it visible around the world. It had a radio transmitter emitting chirps that ham radio operators could pick up, making it heard around the world. Two howdy-dos from the Russians.

Other than that, Sputnik did nothing except disturb a lot of people, including my father, and create the "Sputnik crisis" in America. It enraged those who saw a communist boot on the throat of democracy. For others, it was

SIX FACTS ABOUT SPUTNIK:

- **A kerosene-powered rocket launched it.**
- **It was 23 inches in diameter and weighed 184 pounds.**
- **It traveled around Earth in elliptical orbits at about 18,000 miles per hour.**
- **The radio signal it transmitted, the "deep beep-beep," was in the key of A-flat.**
- **In three months it completing 1440 orbits and traveled about 43 million miles.**
- **Most Americans living today were born after the launch of Sputnik.**

Pearl Harbor all over again. Of course, some people saw it as a step every bit as significant for humankind as the first steps taken by a hominid. It excited their imaginations to see themselves as spacefarers one day.

I was in two camps: anxious over what I heard about Russians (everybody knew they had atomic bombs), yet excited about being a spacefarer someday. So space was clearly someplace to compete with the Russians.

The TV Room

Sputnik entered orbit around Earth, and then entered our home through the TV room.

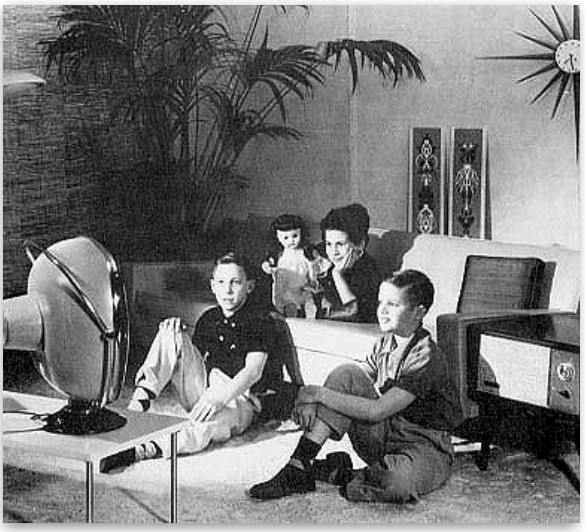
In the 1950s, a TV room became a new domestic space in American households. Representations of cheerful families gathered around a television were war time images of a GI on the battlefront and Rosie the Riveter on the homefront transformed into a suburban dad and mom with a new house.

My parents created a TV room when television signals reached our town in Utah's desert country sometime in the middle years of the 1950s. My father said it was a "big jump" to get signals from Salt Lake City over the Wasatch Mountains. He drove twenty miles to a Sears and Roebuck store, and returned with a Zenith Console TV. It had a laminate cabinet and fabric over the speaker.

The best part for me was that it could be operated remotely with a *Flash-Matic* tuner decorated with the RKO radio waves and a reassurance that it was harmless to humans.

Our spare bedroom was compromised for television. Matching twin beds were replaced with a sleeper sofa on casters. A dressing table with a round mirror and the nightstands were moved out. A bachelor chest of drawers was left in place since we might still have guests using the sleeper sofa. Collapsible tray tables leaned against walls. The room still passed for cozy.

Now that we had a TV room the three of us — father, mother, and son —began to find a new family balance there. It somewhat



Predicta TV advertisement (1957)

unbalanced the life of the kitchen (the other newly important domestic space in postwar America). The tray tables were big enough for a Swanson & Sons TV Brand Frozen Dinner and something to drink, and always ready for a family meal.

The television screen placed us at the center of a world made from new faces, places, and entertainments. We had our favorite shows. High on my list were *Science Fiction Theater* and any other show promising triumph — after close calls —over alien invaders or forces trying to take over our minds. I preferred science fiction to westerns, and they were predictably alike —outlaws from space, lawmen with science, atomic showdowns on Main Street, a town saved in the end.

The evening news also became part of our new balance. Douglas Edwards was my father's choice but my mother favored the newcomers, Huntley and Brinkley. I sided with her, and tried to make sense of an enlarged world.

"Two generations after the event, words do not easily convey the American reaction to the Soviet satellite."

—Roger D. Launius, NASA historian (1997)

The Men on TV

On October 4, 1957, there was only one story when the newsmen came on TV. They wore their usual coats and ties and serious faces, but their voices seemed unusually grave. I took their gravity to heart, as though they had come to talk to me separately from my father or mother. They admitted "the Russians have won the race into space."

They showed a crude animation of a sphere with protruding tubes, revolving with a hypnotic beeping sound. One newsman said it was the sound Sputnik made, "a deep beep-beep that had forever separated the new from the old." That seemed important to know, even though I was too new in the world to know much about what was old.

The scientists came next, also in coats and ties, and with serious faces and grave voices. They sat next to a newsman, or stood next to graphics on a wall and pointed. They explained things. Sputnik was a metal ball

"The present generation will witness how the freed and conscious labor of the people of the new Socialist society turns even the most daring of man's dreams into a reality.

—Telegraph Agency of the Soviet Union (TASS), 1957

going around Earth in an hour and half, which was 18,000 miles per hour (faster than I could imagine anything moving). They said the orbit varied but it averaged about 400 miles above us (now I could calculate that space was about as far away as Las Vegas).

After the scientists, there were spokesmen from big departments of government, again wearing coats and ties and serious faces. They told me not to worry. This was a small vessel (which seemed true since the television model was no bigger than Douglas Edwards) and it posed no danger (that was less convincing). They said it was okay to be surprised but don't be alarmed.

My father contradicted the government men on that last point. By his reckoning, it was a hostile surprise by an enemy, and he blamed those men for not being on their toes. He was deeply suspicious of big government and its official scientists, both were embryos of socialism in his eyes. Russia had a masterplan for world domination and this defeat in space is what we got for our scientific liberalism.

Over my father's objections, the government men on TV kept talking. There were plans for an American satellite into space soon. They were proceeding cautiously, unlike Russia which moved recklessly, with no regard for their people or economy. America proceeded with carefully planned engineering steps. I took them at their word.

I wanted to us to catch up to the Russians, and my father agreed that was terribly important. For him, the world was a dialectic between good and evil, freedom and tyranny. In that dialectic we had the good fortune of being on a sacred continent, its constitution divinely conceived to protect conscience and free agency. This Sputnik was a Red moon above our sacred land, reflecting the dark soul of communism, not sunlight. Someone should have foreseen this and acted first.

In meantime, while we were catching up, I wanted to go outside and look for Sputnik in the night sky. The newsmen said I might see it with my own eyes. I wanted to shout "I see it! I see it over there!" I realized I would have to do this alone, as a future spacefarer, and in the very cold and dead part of night, when it might appear above the horizon.

No Longer Over There

I slipped from my bed before sunrise and went outside to look for Sputnik, and I got lucky. It was cold, like October nights are in the high desert. I had my father's binoculars (the scientists on TV told me to bring them, just in case).

I was not sure what to expect. The sky was big, so maybe it would blend Sputnik into the stars, like when television could make a horse and rider in the far distance seem to be moving slowly across the plain. Maybe Sputnik would not seem so fast. I did not want it to be fast because it was Russians.

At the far corner of our property I was away from the nearest light, the sky was as dark as it would get. I stood next to an old Dodge recently abandoned in favor of a new car, and a conked out gasoline pump with a broken globe on top. That pump was a landmark for our property. I turned my head up, scanned the horizon, and waited. Finally, I saw a point of light appear. It was moving fast after all. I could not hear the deep beep-beep, but I imagined it going straight through me without passing through my ears.

I felt none of the calm urged by the men in the TV room, none of their admiration for this advancement of man's desire to go into space. Against these satellites there was surely no defense, no safe shoreline. Nothing was "over there" anymore. I had not expected to feel that way, to feel in awe and alarmed in the same moment. I suppose most of America, on that night or another night, felt awe and alarm, and consternation over Russia.

NASA preferred “astronaut”, which became commonly used in America. The Soviet Union chose a term which anglicizes to "cosmonaut".

Over the next few days, alarm gave way to curiosity. There was much I wanted to know about satellites and possible spaceships. I looked forward to the explanations of Mr. Swinburne, the one science teacher at our one small town school. He appeared to relish the opportunity to speak authoritatively about space and great achievements in science.

He told us theory had become reality through the ambition of scientists. Nations had once sent scientists and explorers to the South Pole, and now America — perhaps one of his students — would send men to the moon one day. Education was the answer.

Within a month, an even bigger Russian satellite appeared: Sputnik 2. The newsmen told me there had been another technical achievement: a dog, Laika, was inside and in space. The world had its first *astronaut,* or more precisely, its first *cosmonaut*. I tried to imagine my own beloved dog locked inside a satellite, high up in the cold space between Earth and the stars, moving so fast.

Leo Szilard, Hungarian physicist and early theoretician of nuclear chain reactions, dreamed of nuclear-powered space ships that would one day carry us away from Earth.

I asked my father how the Russians would get Laika back down. He answered me by asking questions about my own dog. There was no plan to get Laika back down, and my father knew that. The world had its first dead thing in space.

America preferred monkeys as our first astronauts. None survived their journeys until 1959 when Miss Baker, a Peruvian-born squirrel monkey, splashed down alive in the Atlantic. A publicity blitz followed that included her appearance of the cover of *Life* magazine. She lived a long life with two different mates, saw each of them off, and was interned at the United States Space and Rocket Center in Alabama.

Another Age, Another Race

We had a lot of “ages” back in those days — Atomic Age, Space Age, Television Age. They began with some kind of technological advance and led to a race of soldiering and science— arms race, space race. I understood these races were contests for universal power, and I was prepared to be a defender of America. I understood America needed to be vigilant, keep an eye on the Soviet Union, and counter their every move.

In fact, at the time of the “Sputnik crisis," the White House, Central Intelligence Agency, and Air Force were creating a spy satellite called CORONA. With Sputnik — no eyes at all — racing around us, President Dwight Eisenhower quietly reckoned that the principle of "freedom of space” had been established. He could get his own satellite up there and looking down on the Soviet Union as soon as a rocket could launch it.

Sure enough, in December, just as the government men had promised, the United States Navy aimed the first American satellite skyward on the tip of a Vanguard rocket. If Sputnik was small, this device was minuscule — about the size of grapefruit (you have to start somewhere). Three feet from the launch pad, the rocket exploded in flames and smoke and fell over. The world dubbed it *Flopnik*.

The newsmen came to our TV room again and said our rocket had been “throughly checked out by scientists.” Nevertheless, it was “a setback for America.” The Department of Defense quickly covered tail and said their scientist, Wernher von Braun, and his Army

Vanguard TV3 launch failure (1957)

“There is no doubt that American scientists will, in the end, succeed in launching earth satellites.”

— Radio Moscow (1957)

team would get to work. Wernher was already famous (I had seen him in magazines). He came on TV with a model of the better rocket he would launch.

Despite any danger I felt on that night outside among the broken things, and despite the obvious worries of my father and many other grown ups in town, I was in the TV room every week for *Science Fiction Theatre,* where we faced invaders from space (I mostly understood they were stand-ins for real world communists), and waited for the havoc, mayhem, and the taking over of bodies

"Every great and deep difficulty bears in itself its own solution. It forces us to change our thinking in order to find it."

—Niels Bohr

Robert Oppenheimer, Niels Bohr, Wernher von Braun, Edward Teller

and minds to begin with their arrival. I knew scientists would come up with a solution and all of humanity would be saved.

In fact as well as fiction, the scientist was a new American hero, necessary to the national defense. Science taught in schools was a fundamental of democracy. That seemed clear to me. My father had reservations, and kept a wait-and-see eye on science. He objected to a government that relied too much on scientists.

Perhaps it was akin to believing Prospero would not — despite the movement of the play on stage — abjure his powers and dark arts before we are all in a terrible, world-wide tempest. My father seemed to believe that a likely storyline was the scientist who easily falls into cahoots with bad company. After that he will never reveal the whole truth, holding back what will bring more power. He will toss us, not his book, into the sea.

Nevertheless, the scientists of the real world intrigued me, especially the *atomic* and *space scientists*. I started to read what I could find, and ask more questions of Mr. Swinburne.

I went through our family library of books and magazines looking for photos of them. I started to collect them, more or less like my collection of major league baseball cards. Scientists, of course, had no statistics, like earned runs or run batted in, as metrics of doing well. Yet it seemed to me they were the ones running the big races that were the future —the arms race, the space race —and so much depended on how well they did. I wanted to feel confident about that.

Beyond permission to cut out photos, my father showed no interest in my collection. My mother paid a little attention. She thought Robert Oppenheimer was handsome; Wernher von Braun looked reassuring; and Niels Bohr, who was Danish, reminded her of her father. I did not disagree.

The Men on the Moon

July 20, 1969, and this time the National Aeronautics and Space Administration (NASA) had won the race. A dozen years after Sputnik, men put boots on the moon. We had "caught up to the Russians."

Nearly everyone roughly of my age remembers where they were that day. I was in South America; one more college kid taking an academic leave of absence. I was checked into an inexpensive hotel in Lima, Peru. There was a little television in the lobby, on a table top next to paintings on black velvet.

A day earlier, I had been in a high valley in the central Andes, where two rivers converge in a waterfall on their way to the Amazon, and people hold festivals every year. I walked in a cloud forest and carried torches in a cave named for owls, where no owls actually lived.

That evening, I and a half a billion people watched a grainy video feed of Neil Armstrong coming down a ladder to the moon (in my case, the feed went from the moon to Australia to Houston and then to that little television set in Lima). Neil said something sure to be newsworthy, planted an American flag, jumped up and down a bit, and took a phone call from Richard Nixon (which deeply annoyed me). Then Buzz Aldrin came down the ladder to the moon. On screen, I saw two fuzzy gray blobs wade into an inkwell.

I wondered if my father was also seeing this in his TV room in Utah, and if he found comfort in seeing Americans on the moon. He had been staunchly anti-communist before

Buzz Aldrin on a ladder to the moon.

Sputnik started circling us. After that, he seemed to lose faith in our government to defend its positions on Earth and in space. He was right that decisions about space were mostly political decisions, not scientific.

He kept his faith in God and the apocalypse of the Second Coming, even rationalizing the Bomb as a possible means of destroying the wicked and exalting the righteous. The Cold War was a holy war with divinely chosen leaders and archetypal enemies.

He also kept his faith in a key American strategy for not losing that war: bury the Soviet Union under and avalanche of houses, cars, appliances, and all around better consumer products. In that year of Sputnik, he brought home a new Dodge with push-button drive, put in a dishwasher, and converted our household heat from a coal-fired furnace to a natural gas furnace with "steady state" efficiency at the flip of a switch.

Over those dozen years between Sputnik and men on the moon, my father and I came to talk less and argue more, and even the arguing was mostly out of the corners of mouths. It was as if we only saw each other in profile. On one side of him, I saw a simple man of faith and good works who wished to set his family apart — at least a little —from the pitfalls of the greater world. He sought assurances that divine intentions were interwoven in our lives, that there were bright lines to follow in God's plan.

On the other side, I saw him turn increasingly distrustful of government and frustrated by the heedlessness of that greater world. He looked for alternative truths and the conspiracies that concealed them. When these truths were not apparent to his wife, whose temperament took a turn toward profound inner darkness, or to me, who turned toward rebellion and flight, his frustration was compounded.

Perhaps the edges of the post-war world had been blurred for him, once bright lines dimmed. But he kept God close, my troubled mother under care, me in college, and communists at a distance. He did his best.

It would have been nice if he had stood next to me that night in October. He might have leaned down toward me and explained things. Maybe we could have agreed to not be afraid. But maybe that wouldn't have been possible.

Launch of Apollo 11, aiming three men at the moon (1969).

"The 'Eagle' has landed. Bingo. Just like that. Man became an alien."

— Janet Turpin Myers, novelist