Interview with Dr. William J. Convery
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At Rocky Mountain PBS Studio
Interviewed by Julie Speer

This interview was filmed for Colorado Experience: Colorado's Cold War

**Julie:** Tell me what years the Cold War occurred and then talk about the Cold War in Colorado. The major facilities and the impact on the state.

**Bill:** So, the Cold War was a period immediately after the end of the Second World War when the United States and the Soviet Union were left standing as the two remaining super powers. Although they had been allies against Germany in the Second World War, their ideologies of communism or capitalism clashed with each other in ways that many experts were worried would turn into a global conflict. The rivalry between the United States and Soviet Union lasted all the way up through the late 1980’s with the collapse of the Berlin Wall.

**Julie:** Tell me about some of the military institutions in the state and how one might see the Cold War in Colorado in terms of the places that folks would work.

**Bill:** Even before the Second World War, Colorado boosters had been aggressively pushing for a creation of military installations in Colorado. In 1937 with the creation of Fitzsimons Army Hospital, with the creation of the Lowry Air Force Base during the Second World War, and certainly during the Cold War, boosters realized that Government spending on military projects was good for Colorado’s economy, as it helped serve the countries interests.

**Julie:** Could you talk about the trilogy? NORAD, the Arsenal, Rocky Flats and how they were three major institutions serving both the Cold War and the citizens working there.

**Bill:** In addition to a number of military bases, the United States government subsidized the creation of three major institutions to serve our needs during the Cold War: The Rocky Mountain Arsenal, which was really open in 1942 to create chemical weapons as a deterrent against Nazi Germany, but which found a new life during the Cold War; NORAD, which became America’s surveillance headquarters for a potential nuclear war with the Soviet Union; and then Rocky Flats, which was a plant that was managed by the Atomic Energy Commission but actually operated by Dow Chemical Company that made plutonium triggers for atomic weapons.

**Julie:** Tell me what you know about Rocky Flats.

**Bill:** When the United States government began building Rocky Flats in 1951, America was in the middle of the coldest years of the Cold War. In the late 1940’s the Soviet Union had detonated their own atomic weapons. Both countries were racing for the detonation of a hydrogen bomb. The United States was involved in a shooting war with North Korea which pitted them against both the Soviet Union and Communist China. This was the age of McCarthyism. It was the age of duck and cover where children were learning drills to hide under their desks in case of an atomic war. A lot of people including Albert Einstein feared that annihilation beckoned.
**Julie:** Can you talk a little bit about Rocky Flats and what they were doing there? What the people maybe knew or didn’t know about what was happening there?

**Bill:** Rocky Flats, of course, was designed to build plutonium triggers for atomic weapons. A site near Denver was selected because it had a large population center which supported the ability to hire people. It had a university nearby, and it wasn’t that far away from western slope uranium deposits which were used as the base for the plutonium triggers. All of these things together made the Front Range and Denver a relatively good place to build this atomic weapons factory. But because of the Cold War, nobody outside of the government had a very clear idea of what was being built at Rocky Flats. The Federal Government didn’t work with county or state officials to let them in on the nature of the activities at Rocky Flats and the press was kept completely in the dark. Nobody knew (beyond the fact that it had something to do with our national defense) what exactly was going on inside Rocky Flats. But because of the war, most Coloradans accepted that as simply one of the facts of the new secrecy required to fight the Soviet Union.

**Julie:** Do you have any sense of when we started to know what was actually happening there, and can you talk very generally about some of the ramifications?

**Bill:** Word got out about what was going on inside of Rocky Flats solely from high officials in the Atomic Energy Commission. They made statements that let people know that weapons and parts of weapons were being produced there. In time, people became aware of the true nature of what was being built; triggers made out of plutonium an extremely volatile material. A grain of plutonium inserted in the human body is guaranteed to cause cancer. Now people didn’t understand clearly the link between cancer and plutonium, but studies in the 1960’s the 1970’s and certainly by the 1980’s made a stronger and stronger connection. At the same time there were studies of the populations of neighboring communities to Rocky Flats; Arvada, Westminster, and in particular, Broomfield, where it seemed that cancer rates were climbing. As a result of that, citizens began to realize that maybe this plant, which was supposedly important to protecting our freedom, was really a threat.

**Julie:** Let’s go back to the nuclear age. There were a lot of different interests, right? You have the military interest, you have folks with jobs and then you have the whole anti-nuke. Do you know anything about the protests that happened there?

**Bill:** Sure. You know Vietnam made Americans more aware of the disconnection between what the government was telling them and perhaps what was really happening. Going into the 1970’s, Colorado Senator Tim Wirth launched an investigation of Rocky Flats that began to start making strong connections between the activity there, the creation of plutonium triggers and the health risks in the surrounding community. Also, by the 1980’s Americans were becoming more convinced that an atomic exchange with the Soviet Union really served nobody’s interests at all. Because of the increased evidence of health risk, the antiwar movement and the anti-atomic weapon movement, Coloradans began protesting in more visible ways against Rocky Flats and springtime really became a rite of passage. The protesters would come to the site after the snows had melted and they would picket, protest the plant, create human chains to encircle the plant and big names like Allen Ginsberg arrived to help with the protest. Ginsberg wrote his own poem to plutonium, where he made the connection between the word plutonium and the Greek god Pluto, the god of death.

**Julie:** Do you know of anyone specifically lobbying for what became the Rocky Flats Plant?
Bill: The creation of this plant was kind of a funny thing. Local officials were really kept in the dark by the government about what was going on here, but what Colorado officials did know is that the Atomic Energy Commission planned to spend 45 million dollars constructing the plant, that it would employ thousands of workers, that it would bring tens of millions of dollars to the Colorado economy—and so the early news reports about this essentially said, *look, we don’t know what’s going on here, but it’s probably good news for Colorado.*

Julie: Can you tell me a little bit about the Rocky Mountain Arsenal?

Bill: The United States government opened the Rocky Mountain Arsenal during the Second World War in 1942. It condemned the land of several farmers in Adams County and it began building a factory to create chemical weapons, particularly mustard gas. The idea was that we needed a stockpile of mustard gas but that we would never use it. It was a deterrent to keep the Nazis from using chemical weapons in their warfare in Europe. It was felt that if they understood that we had a stockpile, that they would never use it out of fear of retaliation.

Julie: Did the arsenal stay functional through the Cold War?

Bill: The arsenal closed down after the end of the Second World War and then it was opened on a limited basis to make pesticides by the Shell Oil Company. When the Cold War began to heat up, the arsenal returned to its old project of creating nerve gases and biological weapons.

Julie: It seems to me that both Rocky Flats and the Arsenal now have this legacy of contamination, of pollutants. It’s like a terrible residual effect of war— I’d love for you to talk about it more.

Bill: Here’s the ironic thing about both Rocky Flats and the Rocky Mountain Arsenal: these two patches of extremely contaminated land are now wildlife refuges. Because they were secret, because the military created a buffer zone around each of them to keep prying eyes from seeing what was going on, they attracted Colorado wildlife. These plots of extraordinarily contaminated land sit side by side with some of the greatest wildlife viewing on the Front Range. It’s one of the ironies of the Cold War that we’re left with this toxic legacy that also helps us appreciate nature.

Julie: Now I thought it was because that it was too toxic for humans to live there, which is the only reason the animals could?

Bill: Well the parts that are toxic are toxic for everybody, right? Both Rocky Flats and the arsenal were built in a way that really kept people from understanding what was going on in the interest of national security, or maybe in the interest of making sure that people didn’t protest. Both spaces had gigantic buffer zones around them where nothing was developed and that made them remote. It made sure that if there was a leak that there would be a little time to react to it, but it also made sure that prying eyes were kept away, and it’s in that buffer zone where the wildlife returned in both places.

Julie: Talk about the legacy of the Cold War.

Bill: A famous historian once said that the Cold War diminished all of us in America. That the secrecy and the lies and the environmental pollution that we generated in the Cold War has eroded our ideals, and we’ll always be wrestling with the legacy of atomic radiation and chemical weapons. Living side by side with these toxic production facilities is a challenge that we’ll face for the rest of our time in Colorado.
Julie: Because it’s long half-life, right?

Bill: It’s like a 24,000 year half-life.

Michael: Can you discuss the high-level of mutually assured destruction?

Bill: The reason we were building hundreds of plutonium triggers for a vast stockpile of atomic weapons was because of the concept of mutually assured destruction. We never planned to use the atomic weapons created at Rocky Flats but they served as a deterrent and if the Soviet Union knew that we had hundreds and hundreds of atomic missiles pointed at them the theory went they would be less likely to send their missiles to us.

[Unknown:] When was the peak of mutually assured destruction?

Bill: The concept of mutually assured destruction, an idea that we’ll just build unlimited amounts of atomic weapons as a deterrent really peaked in the 1970’s and it was in fact Richard Nixon who went to the Soviet Union and said we need to slow down and stop, and he signed the first of the strategic arms limitation treaties which ultimately led to the strategic arms reduction treaties and a standing down which led to strategic arms reductions treaties that limited both the Soviet and American nuclear stockpiles and began to crack the ice of the Cold War.

Julie: Do you know when Rocky Flats closed?

Bill: The Federal Bureau of Investigation and the EPA raided Rocky Flats in 1989 and discontinued its atomic production capabilities. It was then transferred over into an environmental mitigation project which finally ended in 1992.

Julie: Do you know anything about the fires at Rocky Flats?

Bill: On Mother’s Day in 1969, May 11th, a piece of scrap plutonium spontaneously combusted at the Rocky Flats facility. It burst into flames. Think of it as a charcoal briquette of plutonium that is smoldering and melting and igniting all of the material around it. The fire triggered fire alarms and the Rocky Flats Fire Department arrived to put out the flames. I can’t imagine what they were thinking as they went into that building full of plutonium-generated smoke. All they knew is that they had to contain the fire because if it got out and got into the atmosphere potentially thousands of Denver citizens were going to die. They went in and they found that their fire suppression equipment was inadequate. The carbon dioxide they used didn’t put out the fire. They’d had also been instructed specifically not to pour water on a plutonium fire because it could trigger a chain reaction in an atomic detonation, but desperate to put out the fire at any cost they used water anyway and they got it out.

The city of Broomfield was founded in the mid 1950’s right after the opening of Rocky Flats. In fact, a lot of the early people that lived in Broomfield worked at Rocky Flats, and between Broomfield and Rocky Flats lay the great western reservoir, Broomfield’s drinking water supply. So it was kind of a nasty shock in the late 1960s and early 1970s when the cancer rates began to climb in Broomfield, and when the city asked the Department of Energy to test the water they found that trace amounts of tritium and indeed plutonium had leaked from faulty containment facilities at the plant into Broomfield’s drinking water supply. The Department of Energy took over the great western reservoir and they paid at their own expense for an entirely new drinking water system from a new uncontaminated source.
Julie: Tell me what an infinity room is?

Bill: An infinity room is a room that is so contaminated with plutonium that the radioactivity is off the charts. It is absolutely fatal for human beings to go into these spaces.

One other thing about the fire: The cleanup from the 1969 fire at Rocky Flats cost 45 million dollars, as much as the cost of building the plant initially. It was the most costly industrial fire in American history up to that time.

Janine: What is going on with the infinity rooms now?

Bill: They mitigated the site. I think they’ve removed all of the buildings and they’ve cleaned those sites out, took all the waste, took it down to the WIPP in Arizona, the Waste Isolation Pilot Plant, and they just moved it all out and away.

Julie: What can you say about our military industrial complex that the WWII and the Cold War created?

Bill: The detonation of the first atomic bomb during World War II really let the genie out of the bottle and we’re never going to be able to get it back. This immense power is so vital to our national security that it also creates incredible infrastructure, jobs and employment opportunities, and taken together atomic energy is… I don’t even know what to say. It’s…I don’t even know what to conclude.

Julie: What if we could tap that for good? It’s like almost an infinite energy source, but we have to re-channel into positive uses of nuclear power.

Bill: Atomic energy is an amazingly abundant energy source, but to date it has come with such an environmental price that we really haven’t found the right fit for it in our society.

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