Avatar Update

Personal Opinion of Sofia Smallstorm April/May 2016

email: smallstorm@earthlink.net PO Box 698, Cardiff CA 92007

A subscription newsletter
to bring you bits and pieces
that clarify understanding
as I come to learn more
in my own Rabbit Hole
discoveries

Luminous Dials

One day when I was about 13, I was recuperating from a bout of something on the family-room couch. In my hand was my brother's watch, which I had found on the coffee table, its glass face having come loose and the hands free for me to move around and play with. They were a whitish green and would light up in the dark. I pushed them with my finger, looking closely at the watch face and the space it contained for the hands to move around in. After a while, I put the watch down and, a little sleepy and bored, I rubbed my face, my fingers dragging across my lips and mouth. Within a few seconds, a wave of dismay hit me. I recalled my mother telling us that women who painted the dials of watches had gotten cancer by putting the brushes in their mouths to make them pointed at the tip. And I had just done that – touched the hands of a luminous watch and put my finger immediately in my mouth!

They went down in history as the Radium Girls. They worked at the U.S. Radium Corporation in Orange, New Jersey, painting watches called "Undark" for the U.S. military. It was 1917; mixing glue, water and radium powder, the women each painted 250 dials a day. In all, some 4000 workers in North America were hired to do this, and many fell ill. Throughout the "Undark" watch production, U.S. Radium supervisors encouraged shaping the brush points by mouth, though the dangers of radium exposure were known to upper-level management.

Anemia, bone fractures, and "radium jaw" were the symptoms that developed, the latter manifesting as bone tumors and jawbone porosity. Five of the women from New Jersey managed to find an attorney and joined to file suit against U.S. Radium, all of them too weak to raise their arms in oath at their first court session in 1928. Yet they prevailed, receiving settlements of $10,000 each, as well as medical and legal expenses. It was a groundbreaking case for American industry workers, setting a legal precedent for labor safety standards.

I did not know what I had done to myself with that foolish swipe of my hand at my mouth, and for years I remembered it, wondering if I too would get cancer. But that was in the 1970s, and tritium had largely replaced radium to illuminate watch and clock faces (a little better: low beta radiation, half-life of 12 years compared to radium paint's 1600 years!). As I grew older and wiser I decided to stop worrying myself silly. The next time watches, clocks and luminous dials caught my attention was in 1998, when I read a most interesting article titled "The Radioactive Boy Scout."

Atomic Chemistry

He was nearing the age of 15 when he began to use his mother's potting shed to build an assembly inspired by his interest in science, which had sprung like a beanstalk from a gift he received at age 10, *The Golden Book of Chemistry Experiments.* Chapter 10 of the book blares: *You–Scientist!*, presumably encouraging the reader to dream big. The book was full of enticing carrots like this:

> The force hidden in the atom will be turned into light and heat and power for everyday uses. Chemists of the future, working with their [brothers], the physicists, will find new ways of harnessing ... the atoms of numerous elements – some of them unknown to the scientists of today. Do you want to share in the making of that astonishing and promising future?

David Hahn evidently did. "The Radioactive Boy Scout" appeared in the 1998 issue of Harper's magazine, and I still have a copy of it. I will treat you to some excerpts:

> Not even his scout troup was spared David's scientific enthusiasm. He once appeared at a

> scout meeting with a bright orange face caused by an overdose of canthaxanthin, which he was taking to test methods of artificial tanning. One summer at scout camp, David's fellow campers blew a hole in the communal tent when they accidentally ignited the stockpile of powdered magnesium he had brought to make fireworks. Another year, David was expelled from camp when ... he stole a number of smoke detectors to disassemble for parts he required for his experiments.
> ...
> One night as [his parents] were sitting in the living room watching TV, the house was rocked by an explosion in the basement. There they found David lying semiconscious on the floor, his eyebrows smoking. Unaware that red phosphorus is pyrophoric, David had been pounding it with a screwdriver and ignited it. He was rushed to the hospital to have his eyes flushed, but even months later David had to make regular trips to an ophthalmologist to have pieces of the plastic phosphorus container plucked carefully from his eyes.

Few people are this brave or foolhardy. David, as a Boy Scout, elected to earn an Eagle Scout merit badge in Atomic Energy, one of the available options:

> [His] Atomic Energy merit-badge pamphlet was brazenly pro-nuclear, which is no surprise since it was prepared with the help of Westinghouse Electric, the American Nuclear Society, and the Edison Electric Institute, a trade group of utility companies, some of which run nuclear power plants. The pamphlet judiciously states that America is a democracy and "the people decide what the country will do." The pamphlet goes on to suggest ... that critics of atomic energy were descended from a long line of naysayers and malcontents, warning that "if America decides for or against nuclear power plants based on fear and misunderstanding, that is wrong. We must first know the truth about atomic energy before we can decide to use it or stop it."
>
> David was awarded his Atomic Energy merit badge on May 10, 1991, five months shy of his 15th birthday. To earn it he made a drawing showing how nuclear fission occurs, visited a hospital radiology unit to learn about the medical uses of radioisotopes, and built a model reactor with a juice can, coat hangers, soda straws, kitchen matches and rubber bands. By now, though, David had far greater ambitions.
> ...
> His inspiration came from the nuclear pioneers of the late 19th and early 20th centuries: Antoine Henri Becquerel, the French physicist who, along with Pierre and Marie Curie, received the Nobel Prize in chemistry in 1903 for discovering radioactivity; Frederic and Irene Joliot-Curie, who received the prize in 1935 for producing the first artificial radioisotope; Sir James Chadwick, who won the [1935] Nobel Prize in physics for discovering the neutron; and Enrico Fermi, who created the world's first sustainable nuclear chain reaction, a crucial step leading to the production of atomic energy and atomic bombs.
>
> Unlike his predecessors, however, David did not have vast financial support from the state, no laboratory save for a musty potting shed, no proper instruments or safety devices, and by far his chief impediment, no legal means of obtaining radioactive materials.

Yes sirree, that there is a hard one. Young David Hahn decided first to build a neutron gun, something that could bombard isotopes with neutrons so as to dislodge particles from the isotopes to create new isotopes and further "creative" decay. David had a Department of Energy publication that defined the term *breeder reactor* this way:

> Imagine you have a car and begin a long drive. When you start, you have half a tank of gas. When you return home, instead of being nearly empty, your gas tank is full. A breeder reactor is like this magic car. A breeder reactor not only generates electricity, it also produces new fuel.

Industrial Friends

This was the "promising future" of atomic energy. To get a smidge closer to it,

> David wrote to a number of groups listed in his merit-badge pamphlet–the DOE, the Nuclear Regulatory Commission (NRC), the American Nuclear Society, the Edison Electric Institute, and the Atomic Industrial Forum [to see] how he might obtain ... the radioactive raw materials he

> needed to build his neutron gun. By writing up to 20 letters a day and claiming to be a [high-school] physics instructor ... [he] managed to engage the [NRC's] director of isotope production and distribution, Donald Erb, in a scientific discussion by mail. Erb offered David tips on isolating certain radioactive elements, provided a list of isotopes that can sustain a chain reaction, [as well as] pricing data and commercial sources for some of the radioactive wares he wanted to purchase. [...]
>
> Armed with information from his friends in government and industry, David typed up a list of sources for 14 radioactive isotopes: Americium-241, he learned from the Boy Scout atomic-energy booklet, could be found in smoke detectors; radium-226, in antique luminous dial clocks; uranium-238 and minute quantities of uranium-235, in a black ore called pitchblende; and thorium-232 in Coleman-style gas lanterns.

There is just nothing like being industrious. Perhaps it has to do with making lists (!), as writing seems to connect human desire, visions and certain pragmatics together. At any rate, our David went on to contact smoke-detector companies for broken detectors for "a school project," and got 100 of them for a dollar apiece. Customer service at BRK Electronics of Aurora, Illinois explained to him where the americium was in the smoke detectors, and for thorium-232 he bought thousands of lantern mantles from surplus stores. Very little of these isotopes is to be found in these common items, so David had to obtain many of them to extract the "gold." His source of radium was old clocks and dashboard panels: junkyards and antique stores were the places to go for these:

> Once he found such an item, he'd chip the paint [off] and collect it in pill vials. It was slow going until one day, driving through Clinton Township to visit his girlfriend Heather, he noticed his Geiger counter [mounted on the dash of his Pontiac] went wild as be passed Gloria's Resale Boutique/Antique.

There David bought a particular table clock for a mere $10, *with a vial of radium paint left inside it.* This was a find indeed. He had to concentrate the radium, which he did with some barium sulfate from the X-ray ward of a local hospital, beryllium from the chemistry department at Macomb Community College (a friend swiped it for him), and managed to turn his first americium gun into a radium gun. (I'm skipping a lot of the trials-and-tribulations phases he went through.) The kid was a whiz. At 17, he set to work on his model breeder-reactor, "to get his various radioisotopes to interact with one another. ... *No matter what happened, there would be something changing into something–some kind of action going on there.* His blueprint was a schematic of a checkerboard breeder reactor [in] one of his father's college textbooks."

His efforts met with success. "It was radioactive as heck," he told *Harper's* writer Ken Silverstein. "The level of radiation after a few weeks was far greater than it was at the time of assembly." When his Geiger counter went off five doors down from his parents' house, it was time to take the reactor apart.

> WASTE DISPOSAL. If you can dump your waste directly into the kitchen drain (NOT into the sink), you are all right. If not, collect it in a plastic pail to be thrown out when you're finished. *–The Golden Book of Chemistry Experiments*

David's story came to a strange end. He was caught stealing tires from a car (reason unknown), and the police searched his Pontiac to find a sealed toolbox that contained many cubes of gray powder (thorium) wrapped in foil, mercury switches, ores, fireworks, vacuum tubes, chemicals and acids. David warned them the toolbox was radioactive and admitted he had a backyard lab, which was promptly sealed and visited by the EPA for deconstruction and removal. The potting-shed remains were put in sealed barrels on a semi-trailer headed for a dump in the Great Salt Lake Desert. At the time the article about him was written, David had enlisted in the military at the behest of his parents, completed boot camp, and was on the U.S.S. Enterprise as a low-ranking seaman.

I am surprised that a person of such determination was not recruited by higher powers for his service to America. It was determined by authorities that David might have put some 40,000 people at bodily risk by his mad dabbling, although he himself felt he might have taken a mere five years off his life. And then I came across another nuclear-reactor story, a big one.

The Tunnel Makers

If you cross the United States on Interstate 81, you will see signs for the Cumberland Gap, a narrow Appalachian pass

near the junction of Kentucky, Virginia and Tennessee. Native Americans walked the pass when the country was theirs; as tourism drew modern folk to the national historical park that would one day commemorate the Gap, US Route 25E was built, only to earn the name "Massacre Mountain" for the travelers killed by its twists and turns on the stretch that went through the Gap. By 1980, the government decided it was time to build a tunnel underground.

Parsons Brinkerhoff was the multinational engineering firm put on the Cumberland Tunnel job; S.A. Healy was the construction company. The lead engineer was the famous Thomas Kuesel, the brains behind the "grapefruit and four tin cans" design of NORAD's hidden bunker in Cheyenne Mountain, Colorado. All were super defense contractors with a specialty in secret military bases. Why were they chosen for a tourist-road bypass?

From "Tunneling to the Future," page 15, published by Parsons Brinckerhoff in 2010:

> During the Cold War, PB pioneered methods for the creation of large underground spaces for military fortresses. The firm's work in this area began in the late 1940s with the design of a hardened underground defense facility at Fort Ritchie, in the Catoctin Mountains near Waynesboro, Pennsylvania, and culminated in the early 1960s with NORAD (North American Air Defense Command Center), an underground cavern deep within Cheyenne Mountain outside Colorado Springs ... comprising six huge chambers and several tunnels designed to sustain a nuclear attack. Recently, mined caverns have been designed by PB for construction of transit stations or underground storage.

From "Parsons Brinckerhoff Through the Years":

> We started design in 1948, at which time the project was under very tight security clearance ... We did not even tell our families what we were doing. Once construction started and tunnel muck had to be deposited outside, it was obvious that something very important was under way. And the fiction that it was a mining operation could not be very long maintained.

This was a description of PB's leading role in building Raven Rock Mountain Complex for the military, a nuclear bunker known as "The Underground Pentagon" near Blue Ridge Summit, Pennsylvania.

The construction of the Cumberland Tunnel involved more than a dozen projects; Congress reported the cost to be $280 million. However, we have yet to learn how and where all the money was spent. The tunnel was officially opened to the public in 1996, but available construction reports show the work to have been finished by 1993. What was going on for nearly three years before the general public could get through Massacre Mountain?

U.S. Route 81 also goes past Surgoinsville, Tennessee, where a big nuclear power plant was begun for the Tennessee Valley Authority, and abruptly abandoned because of "falling energy prices." It was 1981; the oil scare of the '70s had receded, and though the people of Hawkins County were eagerly awaiting the jobs and industrial development the new Phipps Bend power plant (with two reactors) would have brought them, it was a no-go. Half-finished, project layoffs began and the workers went home. "An idea that met an expensive death," the Kingsport *Times-News* called it.

But the reactor pressure vessels had already been delivered. They weighed 1150 tons and needed special preparations–a kind of road-and-bridge midwifery–for their arrival. From a private researcher who has been looking into this affair:

> In 1980, the heaviest load in state history crawled through East Tennessee towards the Phipps Bend nuclear plant, a TVA venture located near Surgoinsville. A nuclear-reactor pressure vessel so large that strengtheners had to be added to the roads and bridges to prevent crumbling and collapse. ... If you were old enough to remember the reactor coming to Hawkins County, chances are you still haven't forgotten it. Power lines had to be raised up and roads were shut down for the reactor and its entourage. Person after person I have talked to vividly remembers the reactor arriving ... but *no one knows when it left.*

Largest, Biggest, Heaviest

You can watch the reactor rolling in on YouTube. (Type in "Largest/Biggest/Heaviest Go to: ..." and it should pull it up on the Blackstone Edge channel.) The Thing, at over 1000 tons, required a convoy of 30 vehicles to attend it.

The vessel itself was nasty and majestic-looking – maroon in color with spikes sticking out of it. Preparation for the arrival of The Thing (roads and bridges and barges) took three years. Supposedly the pressure vessel is only the *container* for the reactor core, core shroud, and the coolant, but the weight of the assembly, in this particular case, seems unusually high. Let's just leave it at that ...

Once the Phipps Bend nuclear plant was decommissioned, no one spoke of the reactors anymore (the second one was barely reported on and got there a lot faster, with much less fanfare). Our private researcher sent a FOIA request to the Tennessee Valley Authority to find out what happened to these monstrosities, and received a copy of a letter from TVA to Dewberry & Davis, a defense contractor, dated December 13, 1989. The letter refers to the sale of the reactor vessel, building and land– originally from TVA to Phipps Bend Joint Venture– and the resale, apparently, of some or part of this to Dewberry and Davis. The letter mentions a "potential salvage contractor" whose obligations would be to restore the property to its original pre-project state. But amazingly, when our researcher contacted the D&D manager, Chris Umberger, to find out what happened to the RPV(s), he could not remember!

Now, these are nuclear-reactor materials: containers, at the very least, and given the massive weight, containers that might also have contained the reactor core(s). Granted, this is 2016 and many years after 1989; 1989 itself is quite a few years after the decommissioning of Phipps Bend in 1981 (what's up with that?) ... but really and truly, Mr. Umberger claims he does not remember where the nuclear-reactor materials went. Our researcher believes D&D supposedly bought the reactor(s) to turn them into scrap, but there was another development quite soon after:

> Without any other documentation existing, it is hard to know precisely when Dewberry took possession of the reactor. But we do know that by April of 1990, Claud Cain, a member of the Industrial Board and a contractor himself, had begun work on a "spec building" at Phipps Bend that comprised 50,000 square feet.
>
> "Spec" means building something and speculating that someone looking for real estate will find it desirable and purchase it ... [Yet] there was no buyer, there was no interest, [but the 50,000 square-foot building] was built anyway [with the presumption that] it would attract businesses to the area.

[Thus] Dewberry, a well-known military engineering company, ends up with possession of the nuclear reactor at Phipps Bend. [And] almost immediately, construction of a massive building with seemingly no purpose begins. Then a few months later, Rogersville City Council approves Dewberry & Davis's bid to build another massive spec building a few miles away [at Rogersville Industrial Park], again, without a buyer.

A few days before the city council [approved] a second mysterious building [in Hawkins County, near Phipps Bend], Senator Al Gore came to town to hail the "development of Phipps Bend." Coincidence? Gore was on the Homeland Security, Governmental Affairs and Armed Services committees; [the latter] oversaw nuclear energy and its role in national security. Did Senator Gore come to Hawkins County to [check] the progress of the nuclear reactor's relocation? [Or] to meet with the city council to [get the second building approved?]

I have called the Phipps Bend Industrial Park. I have called the Hawkins County Sheriff. I have posted messages on the internet asking [people from] Hawkins County to come forward with any information about the missing reactor. I have called the courthouse. I have called environmental health. Each time I have received the same response: No one knows what happened to the 2.3-million pound reactor-pressure vessel.

...

I submit the U.S. government used the engineering firm of Dewberry & Davis to place the reactor underground, using the spec buildings at Phipps Bend and Rogersville Industrial Park as cover. Once underground, engineers were able to use the massive caverns, underground river (it stretches almost the entire length of Cumberland Mountain), and possibly even old mines to move the reactor precisely where they wished. I believe, in the end, that the reactor ended up 40 miles away, near Cumberland Gap National Park (but not within the park itself). I don't know how they did it. Perhaps one building was used to modify the reactor to make is more easily transported to the second site. I'm unsure. I just know [that both

> of] the reactor pressure [vessels have] vanished into thin air, leaving behind the biggest elephant in the room for the United States government in 99 years.

Money and Metal: Missing in Action

Wassim Dergham (a Lebanese) was another high-level PB manager at the Cumberland Gap project. A civil engineer skilled in magnetic-levitation transit systems, his design hand has been seen worldwide, from conveyors in Lebanon to bridges in Malaysia and Kuwait, and in rails and tunnels all over the United States. Our researcher dug deeper to find that there had been $4 million of aluminum bridge railing and bridge expansion joints purchased in relation to Cumberland Gap National Park, but no clue as to where all this material was used. See pdf titled "Eastern Federal Lands Highway English Bid History Data" (guides.roadsafellc.com/Documents/SBC07c/OtherDocs/upa_bridgerail.pdf) and look for NPS-CUGA 25E17 ... the money and bids are there.

Now, remember the $280 million funding for the Cumberland Gap projects? Our tireless private researcher has repeatedly asked for documentation as to contractors and payments related to the project(s), and has had a very difficult time obtaining this. Parsons Brinckerhoff and Archer Western were not even listed on the initial reports she procured, although a call from her to a former AW manager confirmed its participation and payment. But the amount of reluctance on the part of "the government" in providing "paperwork" about Cumberland Gap – evidently a super-project with many sub-projects, suggests to our researcher that, very possibly,

> *PB and Archer Western helped build a secret installation under Cumberland Mountain.* They, at least, used the tunnel as a cover; at most, it was used to move large equipment underground for the construction of the [secret] installation and to use [at the secret] facility itself.

The Nun and the White-Nose Bat

Interstate 81 crosses Tennessee through Knoxville, and just past Knoxville is the town of Oak Ridge, chosen by the government in 1942 as a perfect Manhattan Project uranium-development site. Oak Ridge is 50 miles, as the crow flies, from Cumberland Gap. In May 2013 when three activists, including 80-year-old Megan Rice, a nun, broke into Oak Ridge with mere bolt cutters and poked around, security there was clearly not very tight. We are told Oak Ridge still has weapons-grade uranium, the most radioactive stuff on earth. Our researcher writes:

> There is very little security because I believe there is no weapons-grade uranium there. Why spend resources protecting empty buildings? The breach occurred on a Friday; the facility was finally locked down almost five days later. What took so long?
> ...
> I am not the sharpest tool in the toolshed. But if I can figure out there's a real chance our nuclear weapons program has been relocated ...

And that would be ... underground. Bye bye to Oak Ridge and hello to Cudjo's Cave. This special place, now known as Gap Cave, is in Cumberland Gap National Park and is home to the white-nose bat, now suffering from a *syndrome,* caused by a *fungus,* which is said to be worse because *humans* visiting caves have transferred the fungus on their *shoes* and spread the syndrome to more bats, and thus bats must be protected from our visits to *caves.* Our researcher again:

> Visits to the cave today are strictly regulated and only offered a few times a year. *They tell us it's because of white-nose bat syndrome.*
> ...
> Did the federal government remove the Cumberland Gap surface road and then begin to use the excuse of white-nose bat syndrome to keep the public out of Cudjo's Cave? A woman who has spent her life in the [area] tells a story about exploring the cave as a child. As a small girl, approximately 50 years ago, she and a friend would sneak into the cave to go swimming in the pools of water ... They would squeeze back behind the stalactites and stalagmites, which their small size [allowed them to do]. She tells of finding military storage in one of the cavernous rooms – boxes, crates and equipment that was off-limits to the public.
> ...
> Oak Ridge lies some 50 miles southwest in the same mountain chain. The area [has] hundreds of miles of deep underground coal mines and natural caves. Is it too far a stretch to consider the possibility that Cudjo's Cave, Cumberland Gap Tunnel and Oak Ridge could be connected?

Word also has it that Cudjo's Cave has long been a place of dark activities practiced by satanists and freemasons in the area. Surprise, surprise! Is it any wonder, with nefariousness getting thicker than the thieves who indulge in it, that White Nose Bats are the new cave guardians and idiots like us are kept out of it?

Bays, Passages, Doors and Cameras

Now to the cargo bays. These are in the Cumberland Tunnel,

> ... lining the entire length of the tunnel, separating the north- and southbound lanes. According to former workers, they are rooms, and in these rooms are more doors, leading from one room to the next. ... The ceiling of the southbound tunnel is significantly higher than the northbound side. Is it to accommodate larger military vehicles? Could the tunnel be some kind of flight deck or loading zone for arms, even nuclear arms, on military vehicles ...?
>
> Mysterious doors in the tunnel lead deep into Cumberland Mountain. Little is known about these doors as current tunnel employees are forbidden to enter. Workers who helped build the tunnel say the door on the right side of the northbound lane leads you to the water pouring down inside the mountain – this makes the lake the tunnel is supposedly built over.
>
> [A door off] the southbound lane leads you to the underground lake itself. This lake has no measurable depth. The workers weren't sure of its surface area either, for a miner's headlamp shone across the water [did] not reveal an opposite shore. In other words, it's big.
>
> Still another door opens to another passage leading into the mountain above the southbound lane in the *second story* of the tunnel. No one has any information about this passageway. ... No one knows how much farther these passageways lead into the mountain, or their ultimate destination.

Ipix is an Oak Ridge company that makes surveillance cameras capable of projecting a 360-degree panorama. Ipix, started by nuclear scientists from Oak Ridge, has become Ipix Corporation and Ipix Security, and is "the leading supplier of Full-360 -degree video surveillance technology for critical government and security applications." Um, why are Ipix 360-degree cameras mounted in Cumberland Tunnel? It's just another tunnel, created for tourists' safety, after all.

Oh, yes, there are also the haz-mat escort trucks. Whenever trucks with "hazardous" loads like gasoline come up to the tunnel, they are made to pull over for a "security check" by tunnel personnel. CGTA Haz-mat Procedure is as follows:

> Trucks that display a hazardous material placard are required to stop at the Cumberland Gap Tunnel inspection lanes. After stopping in the lane, a CGTA operator requests information from the driver such as trucking company name and address, DOT#, truck license #, truck order# or bill of lading, origin and destination of goods, and driver's name and signature. The operator then performs a walk-around inspection of the truck and looks for possible hazardous material leaks. Trucks transporting Class 1 explosives are prohibited and are turned around at the tunnel.

The Airplane Room

Now, boys and girls, on to another absolutely wondrous space to be found deep inside the Cumberland World. Our researcher tells us: *The following entry was written by a guest author who wishes to be known only as The Mysterious Man from Rose Hill* (I have edited for clarity):

> This is a story told to me in the late 1950s by my father when I was 8 or 10 years old. It was an exciting story for a young boy and I still have vivid memories of him telling it. Please understand that everything I relate is hearsay, as I have no way to corroborate the account. My father was a very truthful person. He would often admonish me as a child never to exaggerate or embellish a story. "If you stretch the truth," he said, "no one will believe you when you do tell the truth." This is the story as told by my father:
>
> The setting is Cumberland Gap, Tennessee; the time is the early 1940s – the war years – and my dad was in his early teens. One night Dad and two of his friends decided to explore Gap Cave, known at the time as Cudjo's Cave. They arrived

late at night when no one else was there to see how far they could get inside the cave. They made their way over rough terrain, through narrow passages, small openings, through mud and water for nearly half the night and were surprised to enter a huge room much larger than anything they could have imagined.

"We were so excited to have made this amazing discovery," Dad said. "And to think we were the first people to see it!" I said, "Dad, how did you know you were the first people to discover it? How did you know no one else had been there?"

"Well, when we first went in that big room, there was water dripping everywhere. The water had puddled on the floor, and on top of the water, minerals had hardened like a thin sheet of ice on a pond. Where we walked, we broke through the crystal – just like breaking through ice – and it left our footprints visible. When we first went in, there were no other footprints, so we knew we were the first."

"How big was the room? How many feet across?" "I don't know exactly," he said. "We didn't have anything to measure with, but I know how big a football field is, and you could put several in it." "How many?" I asked. "Well, several." "Dad, could you see all the way across from one side to the other? Was the ceiling high enough to see the walls all the way around?" "Oh yeah," he said, "it had a high ceiling." "How high?" "Well, it was high enough that you could fly an airplane around in it." "Could you fly a passenger plane in it?" "I don't know about that, but there was plenty of room to fly a small two-seater plane around inside."

Dad went on to describe how big boulders littered the floor of the Airplane Room, and they left a Coke bottle under a dripping stalactite as a souvenir. *Dad, if I had a chance to explore that cave, is there any way I could know that you were there? Did you carve your names and a date?* Only the proverbial Coke bottle, a sign of the times and tastes. *Do you think that room might ever be open to the public?* I doubt it. It's too far back in the mountain and too hard to access ...

And that was back in the 1940s. The unexplored cave. Big enough to someday house a reactor...? Did the government nix the surface road at Cumberland Gap to replace it with a below-ground tunnel not to save people's lives but for its own military transport needs? Was the tunnel part of a massive underground passage/storage/operations network?

Mineral Lessons

What is saltpeter? From Britannica.com:

> *Ordinary saltpetre.* Potassium nitrate occurs as crusts on the surface of the Earth, on walls and rocks, and in caves; and it forms in certain soils in Spain, Italy, Egypt, Iran, and India. The deposits in the great limestone caves of Kentucky, Virginia, and Indiana have probably been derived from the overlying soil and accumulated by percolating water. In former times, the demand for saltpetre as an ingredient of gunpowder led to the formation of saltpetre plantations – or nitriaries – which were common in France, Germany, and other countries; the natural conditions were simulated by exposing heaps of decaying organic matter mixed with alkalis (lime, etc.) to atmospheric action.

What is limestone? It's a sedimentary rock made mostly of calcium carbonate. Lime saltpeter is *calcium nitrate,* derived from saltpeter and limestone. The bat guano in caves is the "decaying organic matter" mentioned above that can be mixed with lime and thus made into lime saltpeter, also known as Norwegian saltpeter.

The Confederate Army availed itself of the geology of the South to make its supply of gunpowder–all those mountain caves and the bats that produced copious organic matter. Similarly, Norway developed a hydroelectric plant in World War II that produced calcium-nitrate/saltpeter, from which process something known as "heavy water" was a byproduct. Now it gets more interesting ...

What is heavy water? H_2O is the molecule we know as water, and under ordinary circumstances the hydrogen atoms in water only have protons in the nucleus – no neutrons. *Heavy water* is actually deuterium oxide, written as ^2H_2O, because of a neutron alongside the proton in the nucleus. It is not radioactive, but the hydrogen isotope it contains, known as *deuterium* or "heavy hydrogen," is critical to the manufacture of weapons-grade plutonium, or plutonium-239.

Lime and organic material are key ingredients of fertilizer;

thus fertilizer plants producing saltpeter were sought after in wartime. The U.S. government's Nitrate Supply Committee, in an August 1917 report, recommended that sites in Virginia or West Virginia be considered for construction of a nitrate plant; President Wilson ultimately chose Sheffield, Alabama as the location, much to everyone's surprise. A U.S. Congressional report titled "War Expenditures–Ordnance" for the 66th Congress, Second Session (1920), tells us:

> ... [T]he facts seem to indicate that the entire nitrates program, after the declaration of war on April 6, 1917, was fathered by Bernard M. Baruch. Mr. Baruch was appointed by the President as a member of the advisory commission of the Council of National Defense in the early winter of 1916 ... He was a promoter and stock-exchange operator in New York City, and had never followed any other business ... He had no knowledge of chemistry or nitrates. At the time the program of the War Department was adopted, viz, in the fall of 1917, Mr. Baruch was a member of the War Industries Board of the Council of National Defense, and was in charge of the raw materials section thereof.

The construction of American nitrate plants was delayed and dragged on for years thanks to arguments between top military brass, government committees, scientists and the New York financiers. America had been importing Chilean saltpeter, and far too little of it for the likes of Mr. Baruch, who advocated strenuously for the construction of our own nitriaries, which, when finally approved, produced nothing at all until after the armistice. In the meantime, America had no trouble importing boatloads of nitrates from Chile (nearly 2 million tons in 1918 alone), with 600,000 tons unused by the war's end. Building nitrate plants had not been necessary in the least. From the report in the United States Congressional Serial Set, Issue 7654, titled "War Expenditures–Ordnance" (for easy access use http://tinyurl.com/sheffield-nitrate):

> Practically all the scientific advice sought by the Ordnance Department was to the effect that it was not desirable to embark on an extensive construction of nitrate plants in the United States. ... Major T.T. Crabb also communicated with Gen. Crozier on October 31, 1917, arguing against the necessity for the building of nitrate plants, and calling attention to the strain which would be put upon steel mills, foundries, and transportation companies for the necessary materials and transportation required by such an extensive program. (pages 22-23)

Nevertheless, the war hawks won, with plans approved for two Alabama plants, two in Tennessee, and two in Ohio. America would now be its own nitrate producer, big-time. The "War Expenditures–Ordnance" report continues:

> There is no good reason, so far as the hearings indicate, for the nitrates program of the War Department. A candid and fair inspection of the record can not fail to disclose that the program was founded upon exaggerated fears and with an entire absence of regard for the condition of the public purse. The administration of the nitrates division was in the hands of weak and largely incompetent officers, who were entirely influenced in their decision on vital matters by Mr. Baruch and [his assistant] Mr. Summers, of the War Industries Board. ... The entire program promised nothing in the way of winning the war, and accomplished nothing. (page 26)

Not nothing! We go on to learn that the contractors assigned to the projects had contracts "unfavorable to the government," with new corporations being created whose stocks were owned by the New York financiers. Royalty payments for "rights, licenses and privileges" to the contractors were imposed, in some cases retroactively. Each contract "was more unfavorable to the government than the preceding contracts," says the report, also using words such as "unconscionable," "flagrant" and "meretricious" to describe the "conduct of these officers." And so the Ordnance officers (actually Wall Street bankers) not only ripped off the government, but began to build the chemical/industrial behemoth that would go on to become the United States Manhattan Project, as ways to wage and profit from war were clearly in the visions of the same.

In the Air Tonight

Our relentless researcher is from Middlesboro, Kentucky. She lives just one mile from Cumberland Gap. She has driven through the Cumberland Tunnel many times. On her blog (which I will not keep from you), she writes:

> This evening I took the dogs outside for a walk, and a strong smell of fertilizer was permeating the air. A friend described the smell as ammonia

> or household cleaner. But I lived near the Scotts Miracle-Gro headquarters when I was younger, and I know what fertilizer smells like, and this is, without a doubt, what it is.
>
> My friend said, "Why do you think it smells like that?" I replied, "They're making heavy water for the reactor." What else could it be? The time was around 10:30 p.m.

She tells me there's a similar smell in the tunnel – an acrid, heavy-duty cleaner smell. "They must have build-up in there on the walls and they have to scrub them down real good." And what would the build-up be from? On her blog, she writes:

> All three elements needed to produce deuterium are located right here in southwest Virginia: the naturally thriving saltpeter, a catalyst (limestone) that would replenish and produce even more, and the power of hydroelectricity.
>
> I asked Dr. Jeremy Whitlock, a Canadian reactor physicist with decades of experience, how the heavy water needed for pressurized nuclear reactors (also called PHWRs, or pressurized heavy-water reactors) is produced; this was his [email] reply: *If industrial-scale production is needed again ...we will likely use a catalyzed exchange process attached to an existing process based on electrolysis or hydrogen reformation–e.g., fertilizer production.*

The pressurized water reactors of the type that were delivered to the Phipps Bend plant in Tennessee were light-water reactors, using normal water for cooling, not heavy water or deuterium. However, deuterium is a by-product of fertilizer production, which is why saltpeter-making facilities were so sought after by the military. And one thing that ties all this together is lithium.

Duffield, Virginia

Duffield, Virginia is in Scott County's western tip, a tiny town of less than a square mile, with 25 households and barely 100 people. In 1915 it had a general store and a railroad depot. By 1953, it was graced by the arrival of Big Industry, in the shape of Foote Mineral Company, which built the largest lithium plant in the world right there. For the next six years, the plant's main customer was the Atomic Energy Commission. (Surprise, surprise!)

Virginia has 4,400 documented caves, layered richly with sediments and packed with minerals and rocks. Foote Mineral dug a limestone mine alongside its factory, from which it procured the material that facilities lithium extraction from spodumene ore. Lithium is the lightest of the alkali metals, and very reactive and flammable. Because of its high reactivity, it never occurs by itself in nature, instead bonding with other elements to form a more stable compound. Spodumene is an abundantly found mineral-rock lithium source, as is ocean water and alluvial earth (clay). If you go to this USGS document, http://minerals.usgs.gov/minerals/pubs/commodity/lithium/450400.pdf, you'll be amazed at how many industries use lithium (called "downstream lithium products"). A 1956 Oak Ridge government report tells us that spodumene ($LiAlSi_2O_6$) "is the chief source of lithium in North America," and one of two common ways to recover it is by a process that mixes it with limestone. From MineralsZone.com:

> Lithium minerals, lithium and its compounds have assumed great military and civilian significance after the Second World War. ... Lithium has two stable isotopes with mass numbers of 6 and 7 ... The former isotope is used for the production of tritium, extra heavy hydrogen, an intermediate explosive in the manufacture of hydrogen bombs. It serves as well in the preparation of lithium deuteride, which is also used in the manufacture of the hydrogen bomb.

Lithium deuteride (^6LiD) is the fusion fuel in thermonuclear weapons. Lithium fluoride (LiF) comes from the Li-7 isotope and is itself the coolant in MSRs, or molten salt nuclear reactors. Lithium-7 hydroxide alkalizes the coolant in PWRs (pressurized water reactors). Lithium is electrolytically isolated from its salt (or chloride) forms for "downstream" manufacturing purposes, but, as you might guess, it is also a big deal to the military, given the above applications. Domestic lithium chemical production began in 1905 and ended in 1998, when Chile soared ahead as the world's largest producer; Chilean lithium is derived from brine, American lithium mainly from spodumene rock. From the USGS pdf:

> Extracting lithium from spodumene entails an energy-intensive chemical recovery process, which is more costly than that used for brines. Because of the high cost of [spodumene recovery], most lithium carbonate production

has shifted to brine deposits.

As we know, the mid-1900s discoveries of fission and fusion birthed the United States Manhattan Project, which destroyed the health of thousands of industry workers, as well as fatally harming people, animals and vegetation around its uranium-enrichment plants. New Jersey was known as the Garden State (still proclaimed on NJ license plates), but after the DuPont Manhattan Project facility had a couple of explosions and belched tons of fluoride-laden waste from its smokestacks, horses, cows and apple orchards fell to the ground, never to rise again. No more garden conditions for New Jersey after that! If you read Christopher Bryson's wonderful book *The Fluoride Deception* (2004), you get an amazing education on all the different ways fluoride compounds have harmed people, including tales of whitish powder landing everywhere and the very harmful joinder of two certain materials into one. Manhattan Project scientist Robert Turner, Bryson writes,

> ... described the pathways by which tiny fume-sized particles of beryllium oxyfluoride penetrated deep into lungs "with missile-like force." When the molecules arrived inside the alveoli, the atoms of fluorine and beryllium separated "like a charge bursting." Both beryllium and fluoride were poisonous, the scientist said, but it was the liberation of fluoride deep inside the lung that produced the most catastrophic health problems, destroying tissue, choking breath, and leaving permanent lung scarring.

Our researcher sent me a letter that says:

> I started studying [Duffield, Virginia] when I became aware that the world's largest lithium plant was built here back in the 1950s. ... The treatment this town has suffered since Foote Mineral came to town has been unreal. For many years, the community was literally subjected to a snowstorm of white powder every night when the plant smokestacks discharged white precipitate. Trees and vegetation died for miles. In many areas, the mountain laurel never came back. The residents were breathing this precipitate constantly: now the [community] is riddled with breathing disorders, nodules on major organs, and cancer. ... The stories these people have to tell are unreal.

The lithium plant remained in Duffield until the 1990s. Fluoride compounds were used to refine uranium back in the 1940s, and they are also used by chemical plants for lithium extraction. We learn from Wiki that:

> Lithium fluoride (highly enriched in the common isotope lithium-7) forms the basic constituent of the preferred fluoride salt mixture used in liquid-fluoride nuclear reactors [molten-salt reactors]. Typically lithium fluoride is mixed with beryllium fluoride to form a base solvent (FliBe), into which fluorides of uranium and thorium are introduced.

Are the people of Duffield possibly suffering from the same conditions brought upon Americans exposed to beryllium fluoride in the Manhattan Project days? And, Wiki also tells us,

> In the 1980s, TVA [the Tennessee Valley Authority] set out to build 17 nuclear reactors but finished only five. Canceled nuclear facilities include Phipps Bend, Bellefonte, Hartsville, Yellow Creek, and the Clinch River Breeder Reactor.

All I can wonder is, if twelve more *facilities* were begun, how many of these *reactors* were built and then went unaccounted for? There are heavy-water reactors, light-water reactors, breeder reactors, boiling-water reactors, and supercritical water reactors. There's room for all of them in the underground world of America's caves and mountains, or am I just being silly?

Secure and Prepared for Tomorrow

The Duffield mine has been acquired by Secure Mountain, LLC of Roanoke, Virginia to be turned into an underground government data center, of all things! Says the company's president, George Foresman:

> "The focus here is not to build a large above-ground structure, but rather to minimize our above-ground footprint and from an architectural standpoint to have it very much flow into the natural topography of the land, because for various reasons we are not looking for this to be a very high-profile site."

Secure Mountain is "positioned for today, prepared for tomorrow," according to its website, boasting:

> ... 166 acres above ground, with 900,000 square feet (and 21 million cubic feet) of partitioned subsurface engineered space cut more than 1200 feet back and protected by more than 200 feet of solid rock cover. Formerly a limestone mine and a Civil Defense relocation site, the facility is both dry and maintains a stable temperature of 55 degrees, thus offering cost-effective geothermal cooling capabilities. In addition, a remote section of the facility contains more than 10 million gallons of naturally chilled and constantly refreshed water, another potential source of temperature control. This subterranean space delivers numerous advantages over above-ground data center facilities, including a lower cost of operation, superior data security, and environmental sustainability.
>
> Secure Mountain is optimally located in the mountains of western Virginia...in close proximity to major commercial, government, and financial centers on the East Coast and the Central US, yet it is remote enough not to be compromised by a catastrophic event.
> ...
> Secure Mountain offers a "hardened" facility that is impervious to both physical and electronic penetration and disruption. One point of ingress and egress ensures access to the center can be tightly controlled and monitored. The facility's solid rock cover offers the highest level of protection from the growing threat of external electronic intrusion or theft and disruption or destruction due to an electromagnetic pulse (EMP).

(Boy, do they know what's coming down the pike, is all I can say!) So even though this super-duper data-storage strongbox hints at being available for regular civilians, it most likely isn't. President George Foresman wrangled a $460,000 Economic Revitalization Grant from the Scott County Development Authority for Secure Mountain and its promised jobs. But–only two people work there. Foresman is a big Virginia muckety-muck and graduate of the Virginia Military Institute, as well as having been America's first Under Secretary of Preparedness at the Department of Homeland Security (2005). He was also their No. 3 Official, leading "comprehensive national efforts related to information sharing, infrastructure protection and cyber security" (from his bio on the SecureMountain.com website).

The beat goes on. Only the chosen, who have proven themselves by years of morality shedding and "special service" get the sanctified work, and the sanctified work is all about secrecy and destruction. Will everyone who *counts* (as opposed to those who don't) retreat to palatial settings underground someday, supplied with nuclear power and fresh flowing water, natural rivers with elevated light-rail transport, sheltered by rock, with natural temperature control and impenetrable security? I bet they will. The "infrastructure" is being created as we above ground wrestle with building our lives and families as the seas roll and we teeter for balance every moment of the day. One friend commented as I was telling him about this newsletter that the high-speed rail system Europe has is not here in America, at least not *above-ground* ... it's all underground! Boy, are we toast! I say this because if people clap and cheer as giant nuclear reactors roll into their community, then sniffle and sob as the plants are shut and the jobs all go away, *why do they not notice that the reactors never left?* Was there no little boy in the town who shouted to the adults, "Where are the reactors? The Emperor has no clothes!"

Could it be that while the super-elites are guaranteed their spot/shelter/palace in the underground haven (which may stretch beneath all the continents for all we know), those beneath them who are utterly obedient–following orders and never questioning *anything*–will be given a place in Hades where they can remain safe and have eternal life as well? Perhaps the deep interest in man-melding-with-machine and man-marrying-with-A.I. is all about becoming immortal in this *next world?* Perhaps the underground techno-terra *is* the final destination for *Homo sapien,* now transformed into *Homo evolutis*? It could be. It could also be an explanation for why our "leaders" do such terrible things to us: they are dangling in desperation, competing for spots in the world-beneath-the-world when self-perpetuating destruction has fully taken over the land and water we are familiar with now. And compete they must, for not everyone will get into The Sanctuary.

The intrepid researcher's website from which I have drawn material to write the above is EverybodyHatesCharlie dot com. There is no reason for this name, but it's a good one because it isn't easily forgotten, as those Phipps Bend reactors were. Please visit it to poke into the story of how the United States Manhattan Project never stopped after all, in this researcher's humble opinion (that means me). It may be continuing right beneath our feet, speeding along with super-technologies and super-security, in the depths of the rock caverns known only to bats, who are blind.