# NOT UP TO CODE

by Paul A. Cummins

other stories by the author:
My Soul Magnifies the Lord: Mary after the Crucifixion
Quantum Entanglement
Liz Matchett: Science Sleuth
The Doodler
The Christmas Cardinal

The Story of You: Everything You Need to Know About Science before High School

There was no place to go. Maybe they were just really lost but it took three left turns just to get parallel to the main road and then you were at my house. George Washington's mansion was a mile down that thoroughfare so any non-residents would have stayed on that. My head was always processing details after an inspection. I was lucky to find my home myself so maybe I was just overly sensitive to the attention the black SUV seemed to give me as it slowed and passed by as I pulled in my driveway. Then again, why would it even register with me while I was trying to remember which of the upstairs bathrooms, which I neglected to photograph, had the fan that didn't work? What was the house even doing with four bathrooms upstairs?

Yes, I am a home inspector, meaning I get paid to find problems in houses before they are sold, yet I don't have to lift a finger to fix them, unlike the reality at home for most husbands. I've had several previous careers, all of which were interesting; however, this has got to be my favorite. You're always marketing yourself and never really sure when the work will come, but you're the boss: no staff meetings, no wasted time. In fact your whole perception of time changes. There's no 9 to 5, just your own life. You get to meet some interesting people, help them during an exciting time in their lives, with every house a puzzle consisting of thousands of pieces that make a whole. I like a challenge but prefer the inanimate kind. Don't like the idea of being followed. Who cares what I do anyway?

After throwing the ball to my dog, Molly, an energetic pit bull-shepherd mix, I got right to finishing my reports. Of course I use the latest software. Every time I log on it says my subscription is out of date and that I need to close the current report to start a new one, neither of which is ever true. Every month or so my logo or another piece of me gets lost by the program, yet it has many nice automatic features, like linking my radon kits directly to the report.

Our new tech toys are fun and generally helpful, but my SUV paranoia got me to thinking about how little privacy we have, particularly as business people. Our names, addresses, phone numbers, testimonials, websites, Facebook pages, multiple email addresses, professional association sites, state license information, online training scores, GPS routing, calendars, posts to professional chat rooms revealing our ignorance, local ads and finally every detail of our work, in the form of digital reports, is online somewhere. My health insurance company was recently hacked—so far biggest haul ever. I just heard on NPR that pacemakers can be hacked and someone proved with a "Bluetooth blast" they could command glucose monitors for diabetics to dispense lethal doses of insulin! Seems we should all be paranoid. Anyhow, I've lived long enough to realize my good-natured naiveté has cost me big time. It's

necessary to not always assume the best in people. Still, why would anyone want to mess with a mild-mannered home inspector with no hair? It's not like anybody died.

#### XXXX

I was wrong. For dinner I made a couple cheese-steaks on soft Italian rolls with provolone, a little mayo, sliced pepperoncini and grilled onions. Then I sat down to watch the local news. Some poor slob had been asleep on his porch when he was crushed to death by his neighbor's chimney. My chimney. One I inspected a couple days ago. It had no discernable footing, the mortar had weakened, there was no cricket diverter to protect it from run-off, we had had an earthquake in Virginia a couple years ago and it was now leaning away from the house. I remember wondering if a good roundhouse kick from my position on the roof might send it falling. All they said on the news was that the victim had apparently been asleep in his patio chair after dark when his neighbor's brick chimney fell on him. They mentioned the offending home was for sale and showed a brief shot of a stricken widow and teenage son.

It was after 11 PM but I scrolled through my contacts and called Rachel, the agent I worked with on that house. Rachel Weaver was a prep-school girl who had followed her diplomatic corps parents around the world. We had worked together for many years and even had a fling a while back. I guess my appeal for an up-town girl was simplicity. No games, easy to read, can fix a broken heart and your leaky toilet. We still were friends and flirted some but that was all. She hadn't heard about the accident before I called.

"Oh my God! We told them that chimney should be looked at soon!" she responded.

"Well, strange that it had to be that soon!!" I answered, and then, "And what are the chances someone was downrange from it?"

"Yeah, that's crazy. During the last big storm we had some poor woman was killed by a falling tree while she was standing in her yard. You have to wonder whether their time was up."

"So what do we do?" I asked.

"Hell if I know. No one's been killed by one of my houses before. I assume the police will ask for all we have on it. Don't know what the seller's liability is. Seems like they're the ones that should worry."

"Well I did warn them. Let me know when you hear what needs to be done."

"You too. You alright?"

"Just in shock. I know we point out safety issues all the time but this is for real."

"For sure. Talk to you tomorrow."

"OK, try to get some sleep. Bye"

XXXX

I, Bill Johnson, 45 years old, divorced home inspector, with dog, did not sleep. Not much anyway. There was a weird dream about Ben Affleck doing a detective thing and all sorts of weird objects falling on me. I would have sworn I had hair on my head when I woke up but it was only Molly.

It was great to get right back on my horse and do another home inspection the next morning. New agent, smelled really good, hair you really wanted to touch, nice voice. I really like the ones who talk to the client about what your job is, ease concerns about the overly worded agreement, and tell them to pay you, as she did. Needless to say I spent a lot of time looking at the chimney, especially paying attention to the proximity of the neighbors.

Afterwards I had lunch with Rachel before we went to visit the disaster scene and talk to the police. Some people age better than others. Must have to do with how you live. It's in the face... light from the eyes, wrinkles up or down depending on whether you spent most of your time smiling or frowning, complexion depending on your vitality. Rachel had a face you wanted to look at. Even in her current anxious state, the furrows in her brow were cute. Highlighted hair clipped in a tussled bun, pearl earrings, just a touch of lipstick, shining hazel eyes framed by slim, tortoise-shell glasses...hard not to enjoy the experience, so when she looked up from her coffee and I was smiling she asked,

"What are you smirking about?"

"Sorry, just like watching your face... and your butt!"

"You have always said the oddest things."

"Only around you."

"Well, you better worry more about both our asses," Rachel said with feigned anger.

Chided, I shut up for a few moments, then asked, "So, what's our strategy?"

"Just tell the truth. You covered everything in your report and suggested immediate evaluation by an expert. No one could have known when that thing would fall, let alone onto someone!"

"I figured on telling the truth but do we need lawyers or something?"

"My firm has one we've consulted. They're pretty sure we're safe."

"I figure that as the buyer's agent you should have like zero liability. Me, however..."

"You did all you could. Seems the owner is in most jeopardy. Anyhow, it was just an accident."

"Ok, you must be right."

I was fine until I swore I saw that black SUV in the parking lot before we left. Even thugs need to eat lunch, I guess.

#### XXXX

Agent Bell was a handsome, professional, African American. Was he in a military uniform? When I first saw him, I thought, in my middle age way, jeez, he's just a kid but he must be in his late 20's. Bell had a tape measure out from the base of the chimney to the victim's concrete patio still littered with bricks, mortar and soot. I couldn't help it but my mind went to a technology place...

They don't make things like they used to. I had just seen a NOVA episode on Hagia Sophia in Istanbul—built in the 500's, was the largest enclosed space for 1000 years, has withstood dozens of serious earthquakes, just masonry arches and domes. They discovered that its survivability depended on very light clay bricks embedded in thick mortar which was more flexible because it had crushed brick in it. I had also read most of a too-long-book on the history of cement that said the Romans had this mixture that would cure underwater! And they still haven't figured out how they did it... no surviving You-Tube videos, I guess. How many good ideas are lost in our fast-paced life? What is the balance between expediency and quality?

I was shaken out of my reverie when Rachel introduced me to Agent Bell. I did not recognize the initials on his jacket "OSI". Then he showed me his badge, Air Force Office of Special Investigations. As he shook my hand he asked,

"So, have you seen anything like this before?"

"No. In our training they give us statistics on deck failures, radon exposure dangers, show us pictures of houses destroyed by exploding water heaters... but real disasters are very rare."

"Do you have any idea why this fell?"

"Yes, of course, I outlined several in my report. Have you seen it?"

"Never had a house inspected before. I assume the report is private, but it would now be evidence related to a fatality. Can you walk me through it?"

"Simple really. Chimneys made of bricks are heavy. They are exposed to all the elements. Gasses from burning can weaken them from the inside. Mortar holds the bricks together. A strong footing is needed to support all the weight. The footing needs to be on compacted soil and not loose-fill left over from construction. The chimney's footing and mortar were suspect and it was already leaning precariously."

Detective Bell looked up from his notebook and asked, "What are the chances it could have fallen?"

Rachel came over, smiled reassuringly and put her hand on my shoulder.

I answered, "There is no way to say. There are too many factors involved. All we can do is identify possible problems."

"Is it possible this wasn't an accident?"

"Not an accident? Is that why you're here and not an insurance company rep?"

"I'm not at liberty to say except when a person dies we have to look at all the angles. Most of us have someone in our lives we wouldn't mind doing without."

"Seriously! I don't really know what to say... Hypothetically, I guess a strong push from the top might help?"

"Like how?"

"I don't know. A pry bar between the house and chimney, I suppose."

"How about a pull? We've found a hand winch."

"Holy shit. A rope, cable and winch from the top of the chimney to the ground could pull almost anything down."

"Seems like a rope around the chimney connected to a cable wouldn't leave any evidence on the bricks after they fell."

"But surely the poor man, in the Air Force, I assume, would have seen all this and gotten out of the way," interjected Rachel.

"Apparently he drinks a lot and it is quite common for him to pass out in his deck chair in the same spot most nights," answered Bell.

Then I said, "Still, if someone did try to pull the chimney down on him, there was no guarantee it would work."

"Yes but maybe there wasn't much risk of discovery late at night in total darkness, the house with the murder weapon unoccupied."

Rachel queried, "You're not suggesting Bill had a motive are you?"

"No. Relax. Just jaw-boning. Mr. Johnson's technical knowledge is invaluable, and, as I said, it's only fair to the victim to consider all possibilities at the outset, however improbable. Most crimes are fairly brutish and obvious. This one just gets to me somehow. Pretty dramatic..."

### XXXX

After meeting Johnson and Weaver and interviewing the victim's family, Agent Bell let loose on the drive back to the office. With Drake's "Hotline Bling" playing full blast Bell vented:

Agent Bell, agent of what? Of change, of good vs. evil, of the law? How about confusion? Everybody dies, what does it really matter when? One more day, one more year? Alive for a few decades, dead forever... This dude had a chimney fall on him! Even if someone helped it along, what were the chances? He had to be in its way, unconscious or distracted, and the tons of masonry, solid for 50 years, had to give out. Yeah the victim dealt with secret information, he knew more about extremists than you read in the paper, but who cared about what he knew? He was a drunk bastard at home, didn't he deserve annihilation? Could there be any better justice? Even if his kid helped it along, did Agent Bell of the Office of Special Investigations want to prove that? Bell's father had sucked too. Wasn't no father better than a bad father? What the fuck was someone with no options supposed to do? Most criminals were ordinary people backed into a corner. The truly evil ones are either successful in business or mentally ill.

#### XXXX

Rachel met her fellow realtor and long-time friend, Illiana, for drinks that evening. Illiana was the classic blond, eastern European, perfect posture, a bit stiff, with a body that would not look out of place in a figure skating competition. Illiana did many high-end sales in the most powerful city in the world, where it is common to encounter a half-dozen languages on the Metro. Illiana was quite the

socialite as well, being single, as attractive to women as the men, and helping sheiks and ambassadors find the best accommodations. She and Rachel had attended the same prestigious girls' college. They complimented each other on their hair and outfits then got down to business.

"So, how are you? What's up with you and Derek?" Illiana asked.

"That's over...Derek was my man of intrigue, I guess."

"How so?"

"He travels a lot. Makes specialized electronic devices."

"That do what?"

"He'd tell me but I could never really understand... sounded like for security."

"So, he's a spy?"

"Don't know, probably just quirky...you know genius engineer, who just happens to be really hot!"

"Sorry it didn't work out."

"It's alright. Too many that haven't worked out."

"What about this chimney accident you told me about?"

"Damn, it was really weird to have the detective suggest it might not have been an accident," Rachel said as she sipped her Amaretto.

"Who would have wanted the poor man squashed?" Illiana asked.

"You know I thought it was ridiculous at first but then I remembered the feeling I got talking to his poor widow and son."

"What do you mean?"

"The woman wasn't exactly grieving, more furtive and scared I would say. The boy was clearly an awkward teen yet seemed intense and protective of his mother. The detective did say the father drank too much, maybe he hurt his family too."

"Awful. You sure are good at reading people. No one really knows what happens in another's life, I guess."

"EVER? Like you and me? You have a secret life you're hiding from me?" Rachel asked playfully. Illiana just smiled.

#### XXXX

After Rachel left, Illiana went to the powder room and redid her mascara. *Didn't everyone lead* a double life? There's what you say and what you do, a work persona; what you do to get people to do what you want; what you say to some friends about other friends. Then there was the whole family

quagmire: child to your mother, mother to your child, mother to your mother, always daddy's little girl, brothers and sisters vacillating between love and competition, or just running away.

Illiana had been so many things at once for so long, she wouldn't know how to do it any other way. Her outer beauty had given her an unfair advantage from the very beginning. She knew that. It meant she was always noticed by men and women, sometimes for different reasons. Always on stage. Always pressured to live up to someone else's expectations, making it more difficult to figure out who she was. Being able to get what you want didn't assure you wanted what you ended up with. Here someone else had died who had been tied up in another of her intrigues. Was it on her shoulders? The deaths she was used to were much more subtle: a car accident, a heart attack, a disappearance. There was nothing subtle about a chimney squashing you like an insect.

### XXXX

Business went on as usual during the busy spring real estate season. People moved in and out frequently in the DC region—politicians, military personnel, government contractors, were always cycling through. Home inspections are not required yet most buyers see them as a sensible down payment on a safe, well-functioning house. Where I don't pay for myself immediately in terms of finding fixes the seller will pay for, I provide peace of mind that everything's OK. Who does that? Mothers and priests, I guess.

I enjoy helping people at an important time in their lives. I welcome the new challenges each house presents, enjoy meeting new people and getting out every day. Each realtor might sell 18 houses every year, half of which might be purchases, so, if I want 250 inspections a year I need 25 or so recommending me exclusively or many more who do so intermittently. In any case, I work with a lot of realtors; however, it doesn't mean I don't see some quite often.

I was still brooding over chimneys, the vagaries of life and agent Bell's suspicions. Also, I wondered if he drove a black SUV: didn't notice when we first spoke. One didn't have to live too long to realize how unfair life can be, and how quickly it can all change. America was founded on the idea that an individual could determine his or her own fate. Logic and rationality providing a framework to build a life. Yet the reality is that life is a mess and we depend on each other's toil more than we can easily understand, especially in America where we take so much for granted: like that clean water will come out of our faucets and that our neighbors will not suddenly try to cut us up with machetes. These institutionalized common goods, infrastructure, the rule of law, stop signs, etc., provide us the opportunity to think for ourselves, but often we just think of ourselves. Human insecurities are boundless, those with the most vision and compassion usually the least understood; it being much easier to destroy or hate, rather than to create and find common ground. Therefore, the orderly investigation of a home's structure and mechanics give me a sense of wholeness and control. That is MY work. I still can't control how others react to it.

Today it was a young man (remember, most people are now younger than I) who was overwhelmed with the list of things needing attention in a 75 year old house that had been well-loved but pretty much left to itself recently. Over coffee that I always bring to morning inspections, I was trying to reassure him that it was a fine house, but,

"It can be daunting to have many things to fix, yet they don't all have to be done at once and often it's worth it to take your time and make sure each change fits with your needs and style."

"Ok, but this is all going to be expensive."

"Cost is always a concern but investments in a home are valuable for two reasons; 1) YOU get to enjoy them, and; 2) It raises the value of the property."

At this point I couldn't tell if the agent thought I was helping or just talking too much so I said, "It's a nice house," and quit.

## XXXX

He was spending more time outside now. The house felt freer too. For once, he enjoyed just sitting in the kitchen with mom. It was just the two of them now and they did stupid, fun things together like going to the drug store. Mom would get a People magazine and he would buy a candy bar and maybe a new flash drive or some keyboard cleaner. Everyone called him a computer geek but he loved being on or near the river, he enjoyed reading and had a girlfriend on the tennis team. Mathew was lean, tall and had bent shoulders from his time spent over a keyboard. Fifteen wasn't easy by any stretch yet when your father got drunk and hit your mother, it meant you had to figure out how to be a man on your own. As soon as he was a head shorter than his father he had tried to protect his mom. He started with words and then eventually literally stood between them... Being in his precarious state Mathew had thought about death more than kids are supposed to: his mother's, his own and his father's over and over again.

Mathew started out just being interested in the real estate process. Once the For Sale sign went up next door he started fooling around online. The owners had been friendly enough but they were an older couple with no kids Mathew's age. They moved to Florida to a huge planned community, where everything was made to look like something it wasn't, like an antiqued lighthouse on a fake lake with miniature boats moored in it. So maybe the new family would have a hot daughter or a guy his age. Much of selling houses was done online now. Virtual house tours, mortgages applied for through scanned documents, most communications done via email, appraisals and inspection reports done digitally.

Mathew got Johnson's inspection company's name off his truck, went to his website and found his sample report. Then he began to wonder if he could mess with something in his house to get rid of his dad. He tried to log on as Johnson using simple combinations for user name but it shut down his IP address after three tries. A call to customer service didn't help because their user and password reset options went to Johnson's email. In trying to get more information about Johnson he looked up his professional associations and saw they both hosted forums for inspectors to post questions and get advice from others in the field.

It took days of work but he just Googled different parts of a house, based on Johnson's sample report, and sometimes got hits on these forums. Mathew definitely learned a lot of things that could go wrong in a house. All the while he kept an eye out for Johnson's name to pop up. There were so many sub categories of house parts it seemed hopeless. He thought it was funny how rude some of these old guys could be to each other,

"I hope you die a horrible death!"

And others with curse words with letters left out and non-sequiturs like,

"It's amazing how dangerous new inspectors can be!" when the question was about a potentially dangerous electric panel box... so the new inspector wanting to be safe makes him unsafe?

Tough when even grown-ups didn't act like grown-ups, yet Mathew knew all too well about that.

He had pretty much given up on finding anything useful. How do you destroy one person in a house without wrecking the whole house, after all? Yet eventually he found not only Johnson, but the chimney next door. There was no address attached to the comment but the picture was clear and so was the precarious nature of it. Johnson wanted more opinions on how precarious. Opinions ranged from,

"It's been up for 50 years, don't worry about it," to another guy attaching a picture of a collapsed chimney with a cartoon character squashed flat under it... not funny.

### XXXX

My afternoon inspection was with Rachel again. I always try to do the outside before anyone else arrives. Rachel got there before the owners returned from work so we had a chance to catch up.

"How you been? You don't look so good... I mean you always look good but..."

"Yeah, sure. Death by chimney would get anybody down but on top of that Derek is acting like a jerk."

"What do you mean, is he threatening you?"

"No, more like you..."

Derek was Rachel's most recent boyfriend, if that term can apply to anyone over 16. How about "the man I'm dating?" – a little awkward but much more satisfying to my mind. Needless to say they had been in the breaking up stage for some time. Relationships are not points in time. For example, marriage is a process, you have to commit emotionally long before the day itself and, if the worst should happen, you can't just stop loving someone else. Also, what lovers say when they're upset can't be taken at face value...give it 48 hours. So I figured I had some time too.

Rachel continued, "He knows we work together occasionally and even though I tell him we're just friends he won't buy it."

"That IS understandable... I am hard to resist."

"Yes, you are, in the, I know I can always count on you sort of way. I wouldn't want to lose that."

"What happened between us? Why can't we be more than friends?"

"One, you're just horny and, two, we have almost nothing in common."

"Besides being in multiple bedrooms together on a regular basis?"

"Ha! Like you pay any attention to anybody else while you're walking around with your voltage tester and tablet!"

We were talking on the deck. The house was on the Potomac River surrounded by woods on a slight downgrade. From the deck we could see over the trees to the mild current reflecting the sun in random eddies... hypnotizing. I had always felt like rivers were metaphors for life in that they were permanent, yet the water itself was always new, and, of course, the delicate surface held unknown dangers.

Rachel fixed on the river too and said, "It just keeps rollin' along."

"Wish I could."

"You don't do so bad."

"Same river, new water, still smooth and swift. Me, not so much... I hear a car, better pretend I'm working."

Rachel went out to meet the owners. This job was actually a pre-inspection. Some owners wanted a heads-up on any potential problems before listing the house so they could either fix them or be ready to adjust the price accordingly. I had done many a house up for sale that was on the market for over a year because of some obvious problem that was potentially very costly. In order to sell it they would have to fix it, so why not pay an inspector a few hundred bucks to avoid the loss of maybe \$25,000 in continued mortgage payments due to a delayed sale, if unoccupied and a year of stress keeping it ready to show constantly, if occupied. The pre-inspection report also gives the sellers a good point of reference when the buyers' inspection report comes in. Pre-inspections can also be very helpful for long-time residents to get a check-up. I've found sump pumps not working, leaky HVAC systems, walls wet and in jeopardy, moldy attics and roofs ready to cave in under those situations. We inspectors are obviously big fans of pre-inspections.

They all came to find me in the attic. A cultured Arab voice offered a muffled greeting.

"Hi, be down shortly," I shouted.

When I came down I found three people talking about one of the beautiful tapestries in the hallway. Great calligraphy I assumed was from the Quran. I took off my headlamp and mask. The man said, "Hello," shook my hand, said, "My name's Ahmed," and gave me a card with his three names on it. It also had green Arabic script and "Colonel, Saudi Air Force" on it.

I said, "Asalaam alaikum, Colonel Behery, my name's Bill."

He smiled, introduced his wife, Dabal, and asked, "How does it look up there?" as I dusted myself off and removed my mask and headlamp.

"Fine, although the rafters are beginning to separate from the ridge board. Collar ties may be helpful."

"And what exactly are 'collar ties'? I assume they are not made of silk?" the colonel said with a smile.

"Quite right! Collar ties are made from 1 by 6 lumber and are attached with 6 nails a third of the way down alternate rafters. They keep the roof from settling downwards from the ridge."

"That sounds serious."

"Well, it may be but it's an easy fix. Not expensive at all, yet you won't be able to walk around up there as easily."

"That will not be much of a sacrifice given how hard it is to get around up there already."

"True," I said appreciating his nod to how difficult it may have been for me to cavort around up there.

Then Rachel said, "Bill always looks like he wrestled a fiberglass snake in a swamp when he comes down from attics."

"That's colorful," I answered, "... what have you all been looking at?"

"Allow me to translate," Dabal said, "And good and evil are not alike. Repel evil with that which is best. And lo, he between whom and thyself was enmity will behave as though he were a warm friend. But none is granted it save those who possess a large share of good, Sura 41: 35-36."

I responded, "That's beautiful. Sounds very much like, 'Thou shalt love thy brother as thyself.' Truly hard teachings. We have so much in common. Why can't that be enough?"

The colonel answered, "Because it's simple to draw a circle around yourself and say everyone else is wrong, to claim the creator's approval of your own ends."

"That was all quite evident in my middle school teaching. The pain of growing up and actually taking responsibility for your own behavior is severe." I said.

Rachel continued, "It is so easy to join in with kids who pick on the weak and are jealous of many others."

"Middle school? That is your young teenagers?" Dabal asked.

"Yes, from age 12 through 14," I answered.

"Oh my, a difficult age indeed," she said.

"What did you teach?" asked the colonel.

"Science."

"Ah, that fits with your current profession."

"Yes, and by the way, a common perception in the West is that during our 'Dark Ages' science died, yet in the Muslim world you made great progress in math, engineering and medicine."

"True," Dabal answered, "And with many women contributing and people of all faiths living peacefully together. Hopefully it will happen again soon."

"It also could be argued that contact with your world during the Crusades actually fostered our Renaissance," I said. "We surely could use some rebirth now."

Then the colonel said, "Yes, most likely slowly through your esteemed profession of education...speaking of which, how else can you educate us about this house?

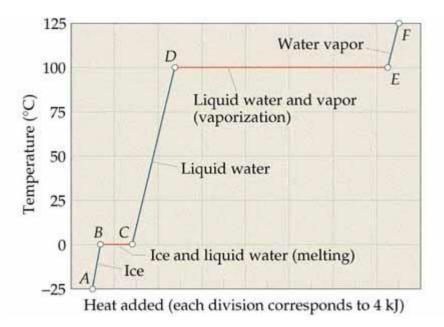
"OK, right, back to work!" I conceded.

## XXXX

Nothing else looked too bad until we got to the utility room in the basement. There we found an old gas water heater with a leaking TPR valve, which stands for temperature-pressure relief valve. This is a major safety device because it releases pressure on what's supposed to be a teapot, not a pressure cooker. When they leak you need a new valve or maybe a whole new unit.

Life on earth depends on water's special properties. One of which is its high specific heat—basically water doesn't change temperature easily, therefore the oceans moderate temperature along the coasts so we all don't live in deserts. Also, unlike most solids, water is less dense when it freezes so ice on the surface of lakes, rivers and oceans just stays there, instead of sinking, freezing everything solid and killing us all. Water is the densest as a liquid at 4 degrees C, so the answer to any trivia question referring to the temperature of any deep body of water at any time is always 4 degrees C.

Anyhow, to get water to change state takes lots of energy: from ice at zero degrees C (32 degrees F) to liquid water at zero degrees C (points B to C in diagram), then from liquid water at 100 degrees C (220 degrees F) to steam at 100 degrees C (Points D to E). Since it's more difficult to push the bonds far enough apart to make individual molecules, the latter takes much more energy. It's called the heat of vaporization. Conversely, condensation releases a lot of heat (the same as it takes to vaporize it) so water condensing on your skin after a hot shower, or on a humid day, makes it very difficult to cool down (points E to D). That energy from E to D is what is saved by condensing furnaces, adding about 16% to efficiency. By the way, condensation is a process and condensate in the result, so those droplets on your iced tea glass in August are condensate. Anyway, you can't raise water over its boiling point, 100 degrees C, without containing it, that is, allowing the pressure to build up. But that's what happens after point E, and you get superheated water/steam.



As long as the thermostat was still working no TPR valve was necessary and no superheated water would be made by the water heater. The tank would just turn off each time it got hot enough. But there was no way to know if the thermostat worked or when it would fail so I recommended a new TPR valve be installed soon.

Rachel and I were recapping the inspection out by my high mileage, totally packed, rolling office, supply truck and home away from home.

"What a nice couple, Saudis, huh?" I said.

"Yes, he works at the embassy. She teaches at an Islamic school in the neighborhood."

"Doesn't Illiana usually handle the diplomats?"

"Yes, she does, but she passed them onto me, wonder why?"

"Easy enough to find out, I guess."

"Yeah, maybe."

"Well, with a few 1 by 6's and a new water heater you should be good to list."

### XXXX

Spring in DC turned to summer. It was a very dry one. Not as bad as on the west coast, though—state-sized forests were burning there. There was no news from Mr. Bell from OSI and no more black Suburban sightings so I assumed they had determined that the chimney of death had been an accident and that mild-mannered Bill Johnson had no evil alter-ego (regular guy turns houses into killers!). My river of life flowed on. I should have realized how suspicious all my self-talk sounded.

I had just finished my bratwurst dinner. It consisted of Usinger's brats (made with veal); fresh spätzle (mix one cup flour, 2 eggs, and ¼ cup milk, season and push through large holes in a grater over boiling salted water, pull them out with a slotted spoon when they float); and Thai cucumber salad

(peel, cut cucumber into halves, add spiced rice vinegar, sugar and red pepper, leave in fridge until cold). And then that dang SUV showed up. Agent Bell came to my door looking all serious. Crap.

He said quietly, "Will you please come with me?"

"What's going on? It's dark out for Pete's sake! What happened?"

"I'll explain everything when we get to the office," was all he said.

"OOO K," I answered wiping mustard from my face.

It was a quiet ride to a gray government building, looking even uglier in the xenon street lights. Everyone remembers every detail about their first walk to the principal's office. The mixed aroma of old sweat socks and disinfectant, the faded classroom displays with those ubiquitous punch-out borders and turkeys found on all school bulletin boards. That pit in your abdomen that gets heavier with each step (your stomach is actually under your rib cage on the left side). Your trust in the suppressive benevolence of school hierarchy fading. Trying to buck yourself up. "I wasn't as bad as the other kids?" ...Too much time to think.

After we went through night security (they were scarier because you could tell they were affronted at having to let you in) we were met by Rachel and a no-nonsense young woman in a suit (company lawyer?).

"Hi," I said weakly, "You're an attorney I hope?"

"Yes, my name is Marilyn Dominguez. Don't worry, everything's going to be fine."

"Hey," Rachel said.

"Do you know what's going on?"

"Fire at one house, explosion at another. Both ours."

"You're kidding?"

"Nope, sorry."

"Anybody hurt?"

"Don't think so, still may need to dust off our résumés."

"Fucking A." The pit was deep.

Everyone's seen those cop procedurals where the offices look like something out of a sci-fi movie, the women wear clothes to work that look like they're going to a cocktail party and the DNA tests take five minutes, yet I've also really worked for the Federal Government. We had beige, fabric-covered partitions, torn-up orange carpet and dumpsters out the window. OSI offices were somewhere in between but I was still surprised by how little effort people took at personalizing their spaces. Only the odd picture of a child or a spouse, other adornments consisting mainly of Post-It notes on walls or computer monitors.

Agent Bell led us to an ordinary-looking conference room...no handcuffs, bare metal table and two-way mirror. "Thank you for coming on such short notice," he said.

"Like, I had a choice," I thought.

"I presume Ms. Dominguez will be serving as both your counsel?"

I looked at Rachel, she nodded.

"Very well, this meeting is mainly for informational purposes," Bell said.

"What's going on? Rachel said something about a fire and an explosion?" I asked.

"Right, I needed you all together before I started talking to you, Mr. Johnson, sorry."

"You mean so you could make sure we both gave you the same story?"

"Right", he said neutrally. "Yes, there were incidents at two more houses you inspected, an ash fire that burnt down a garage on Riverside and a water heater that went through a roof on Lucia Lane. Do these kinds of things happen often in your business?"

"No, the whole idea is to forestall potential accidents by calling us. Is somebody out to get ME?"

"That's what we're wondering, why you and Ms. Weaver, for that matter," Bell said looking at Rachel.

Ms. Dominguez, although half my age, patted the back of my hand like I was a kid and said, "You don't have to answer that?"

I didn't but asked my own question, "OSI, what's your interest in these?"

"Well, you know the chimney victim worked for the Air Force. The water heater house belongs to a Saudi Air Force colonel. The house with the ash fire has no known connection yet."

"Was the chimney guy trying to get at something the Saudi guy had?" I probed.

"Or vice versa?" Rachel said.

"Well, that's a question I can't answer."

"I think you just did. Anyone can screw up and put hot ashes from a grill into a trash can but what about the water heater? It just needed a new TPR valve, the chances that the thermostat was bad AND that it blew right after I looked it are astronomical. Do have any forensics on it?"

[Check this out! Myth Busters Water Heater Explosion]

"Our people say they found the fragment were the, er, valve you say was faulty but there was no valve there, just a plug."

"What about the wires from the thermostat?"

"They didn't say anything about that."

"Well, they would have been ripped apart by the explosion anyway."

Rachel interjected, "This is too weird. How on earth could anyone benefit from sabotaging a water heater?"

"They could have wanted to hurt the occupants, like maybe with the chimney," Bell said.

Rachel continued, "But there was no guarantee of that. Also they must have called a fake plumber which should be easy to check and they knew our fearless inspector here would ask about the faulty valve."

"It does seem whomever did this didn't care, or wanted the Saudis to know it was deliberate. They did say some things were missing from the house but wouldn't elaborate," Bell said.

I said, "The Saudis had a good security system, the 'accident' would allow someone to avoid that."

Bell sat silently.

Moving on I asked, "So what about the house with the fire and what do you think my connection is?"

Bell repeated, "We don't know about the fire, yet. Maybe someone is trying to divert attention to you."

"So you don't think I'm causing the problems on purpose?" Ms. Dominguez gave me a thumbs up.

"It certainly would be very bad for your business." Bell said. "Do you have any enemies?"

Pause, eye roll. "My expanding gut and receding hair?"

Rachel laughed, Ms. Dominguez grinned and Bell's eyes brightened.

I continued, "Finally, the chimney. You said you found a winch before..."

"We're still looking into that. These new incidents give us more to think about."

"So, you are not charging my clients with anything? asked Ms. Dominguez, following the legal rule of only positing questions you knew the answer to.

"No. We ask only that they be available should we have further questions."

# XXXX

I got home way past my bedtime, had trouble getting to sleep and had nightmares involving crawlspaces, rabid raccoons and Rachel outside trying to save me.

There's a problem when it's just you and a dog. The dog listens well but only responds when a ball is involved. Who can give you support when you're depressed? Straighten you out when you're fooling yourself? Who helps you find a way out?

My career begins and ends each day. Sometimes I have a job scheduled a week in advance, mostly it's a couple of days and often the same day. The phone doesn't ring, my pocket doesn't jangle.

One more house here or there makes the difference between feeling like you have a career and wondering why you're spending so much time with the dog.

It's all reputation and word of mouth, plus good online reviews. I've got my regulars but promotion is ongoing. Three houses gone bad, all in the local paper, two of them made the TV news. Don't think anyone mentioned my name but word does get round. Real estate is very competitive and very local. Everyone's livelihood depends on keeping an eye over your shoulder.

The only way to stay psyched is to remember all the things you didn't like about all your previous jobs and make the best use of your free time. Cursing the people that call you six times a day to put you number one on Google also helps. Actually I just say "I hate you" after I hang up. My favorite begins with "This is a vital call for a particular reason..." Is this a translation from Russian or something and makes more sense in its original language? All calls are for a particular reason, the vital ones especially!

But back to dogs. Can't argue with unconditional love. Remember, "I just met you and I love you?" said by Doug, the dog from UP? Jack Nicholson said he has more in common with a male dog than he does any woman. Men probably are generally less complicated than women. Food, sleep, games with balls and sex if available... dogs again. Truly, we like to be respected. I think women just really want to feel listened to more than anything else. So, I wanted to not be afraid and feel respected for what I do as an inspector and dog Molly just couldn't help with that. She did suggest, however, that we go roll in the grass in the sunshine. Not bad!

## XXXX

Bell was talking with his boss, an Air Force psychologist who spent many years in IT before taking the top job at OSI. Her name was Mendez.

"So, Bell, what have we got on this chimney incident? ... We've got to get a better name for it, sounds like we're after Santa Claus."

"I know what you mean, everything about it is weird. Too many civilians involved."

"Well, you're getting a good education in real estate, I guess!"

Bell smiled and continued, "You know there is an inspector and agent attached to every house, Johnson and Weaver. The chimney victim worked for us and he was tracking the Saudi colonel in the water heater house. We've got a good trail on the Saudi's movements and he doesn't seem to have any direct connection to the chimney falling. Our best bead is with his son. His web activity shows a lot of real estate and home inspection hits, despite his use of Tor to try to remain anonymous."

"What about the winch you found in his house?"

"First off, seems anyone who used it to kill somebody wouldn't allow it to be found. Second, it was rusty and showed no signs of recent use."

"How about your interviews?"

"The wife and son seem reluctant to answer questions but so would anyone else in a domestic violence situation where the perp was killed. The neighbors made it clear how noisy it was over there and that bruises were often evident on the wife."

"So you don't really suspect the boy at all?"

"Well we didn't until we found out he may have caused the fire that burnt down the garage."

"Why would he do that?"

"Not sure."

"Is he tied at all to the other house? The Saudi's?"

"Not likely. That required much more sophistication. Weaver was right about the fake plumber—how could she be so sure?"

"Fake plumber?"

"Sorry. There was a defect in the water heater so it needed to be repaired quickly. However, the 'repair' actually made it much more dangerous and caused it to explode."

"So someone pretended to be a plumber and sabotaged it?"

"Yes, well, the perp actually had to know something about plumbing to take off the valve that normally prevents water heaters from exploding, put in just a plug instead, disable the thermostat and turn up the heat...at least according to Mr. Johnson."

"How did they get in the house?"

"Seems they paid a real plumber, from a firm with dozens of trucks, to use his truck for an hour, no questions asked."

"Which means someone else knew who they called and when?"

"Not only that, but the house was burglarized after the accident."

"So we're talking about a big player here. Which country?"

"Not sure it's a country but someone attached to Weaver or a friend of hers, Illiana Petrovic."

"What do you have on her?"

"Well, Weaver probably recommended the plumbing company and her friend, Petrovic, has shown a lot of interest in Muslim extremist groups like the Wahhabi, active in her birth country, Bosnia."

"How do you know?"

"Well loose associations mostly—right place at the wrong time. She'd return home and something bad would happen soon after."

"To whom?"

"The good guys."

"So, she's helping the extremists?"

"Maybe."

"Why?"

"Not sure. Her dad sure killed a lot of them."

"Extremists?"

"Muslims yes, they weren't extremists yet."

"During the genocide?"

"Yes, seems he mainly WAS the genocide."

"Damn. Give me everything you have on her and I'll do some checking."

### XXXX

Derek had just returned from an 11 hour flight from Turkey. He thought the trip would clear his mind of Rachel. Not that easy to get over her. What did she say? Some version of "It's not you, it's me?" He thought they really had something, or did all women just try to be what they thought the man wanted so they could get what they thought they wanted? What was real? Who was real? His feelings certainly felt real. Who wanted to be alone? Who wanted the hassle of trying to make a life together? Someone brings you joy, you want to give joy back. Someone causes you pain, you want them to suffer too. Did it ever even out? She did talk about that inspector dude a lot, but they were just friends, right? And what was it with that Illiana chic? Were she and Rachel a thing? If so, how do you compete with that?

#### XXXX

It was a foreclosure: dingy, hopeless, uncooperative. What the heck could you do with the water and electricity turned off? That old wet spot in the upper hallway? Those long, parallel, six foot stains in the living room ceiling? The best I could do by way of explanation was the gaps in the linoleum between each tub. Still, the leaks would have had to travel a long way. The young man, a new father, HVAC tech and aspiring owner, kept trying to be enthusiastic, yet as we continued to find another hole in the drywall, another cigarette burn, another questionable plumbing fixture, he (and I) got weary. I had to take pictures and annotate everything.

Your environment shapes you. Good smells and pretty views cheer one. A house with a few problems is still easy to love. One that's been abused takes a lot of vision and optimism. The houses of the elderly are bad enough. They surely notice the decline and feel more helpless because of it. This house had been lived in by a young family with a little girl (princess bedroom décor), whose life was so chaotic they couldn't take the simplest care of their surroundings. I always find house work to be good for my sanity—or proof that I still have some! Good for your soul to sweep, mop and pick up. What we can't control outside our house not defeating us inside the house, yet it is still a fight most of the time. Laundry basket says, "I'm overflowing...again." Me: "I don't want to fold laundry." Basket: "It's just

going to be worse when you totally run out of underwear." Me: "You're right. You're always right." Basket: "Just do it!" Me: "OK."

Well, having circled down from the attic and covered two floors of decay, with more damage to the basement walls and plumbing, and then, finally, when we found the sump full and smelly because of a non-functioning pump, the poor man visibly deflated. Remember, all this was before we had checked the electrical system (no power) and before the water was turned on.

Chris, a young go-getter with rippling biceps and colorful tattoos, my realtor on this job, had been trying since we arrived to find out why the utilities were off. The water people had turned it on the day before and seen a rapid rise in the meter, suggesting a flood, and then turned it back off. I had thought that when I saw a missing faucet in one of the bathrooms, so I made sure the supply to that fixture was turned off. The electric people said someone was on the way.

I don't carry alcohol to the job but I do stock mixers, Gatorade mostly. The three of us went outside, I tossed them each the latest extraterrestrial flavor (Blue cherry? Really?) and we fortified ourselves for the next project. I gave my usual speech about bargain properties, "Minor problems long unattended look more dramatic, can redo the whole house just the way you want it, there doesn't seem to be any serious structural damage." After a little rest I stationed Chris and the poor buyer at different floors of the house and went out to turn the water on from the street. Wrench in hand, butt sticking up, belly against my knees (no pictures please!), I turned the valve, counted, one, two, heard simultaneous shouts, not surprised, but muttered, "Damn", anyway then shut the water off. Water had streamed down from the kitchen over the water heater in the basement. It was moldy under the kitchen sink so I looked there first—no change.

Chris said he heard something from behind the fridge so we pulled that out and found black mold on the wall facing the outside. I had wondered over efflorescence on the highest block level with the kitchen floor (and nowhere else along that wall). Clearly, where there's smoke, there's fire. Apparently a constantly spraying fitting right behind the fridge had led to the caddy corner wall being wetted by capillary action and culturing Stachybotrys and Penicillium genera. We had found mold in the basement from intrusion due to a downspout emptying right outside that corner, but this growth was much worse.

Your relationship with your house is like any other important one: if you don't attend to little, nagging problems they build up over time and can blow up in your face. Is there a marriage equivalent to cleaning your gutters? It's amazing how much damage can be caused by a few ignored leaves. Maybe just listening to each other instead of trying to defend your image of yourself would parallel just being observant and hardy enough to walk around outside during a rainstorm occasionally checking gutters and downspouts.

[Here's one just for fun: Waterfall Porch]

After we confabbed on the plumbing, the electric gal came. She looked like she could have bench pressed me. She just nodded, opened the meter box, twisted out the meter, fiddled with something then literally pounded the meter back in with her fist. I was sure the next thing I would witness was a giant woman flying backwards with flaming hair. My turn to give CPR...how many

breaths? How many compressions? They seemed to have downplayed the breath part since I had previously taken the course...oh, well, I would try my best.

By Golly, I then got to go around the house for the third time, now checking circuits. Found nothing but the usual handful of loose receptacles, dead, and painted-over outlets, thank God! But then there was the panel box.

Home inspection is a lot like medical diagnosis. There is a good deal of common sense involved, and the mere fact that the patient has survived without you up until your point of contact, suggests the need for humility. Every practitioner has reasonable suppositions about what's serious and what isn't. For symptoms with multiple possible causes all one can do is present reasoning based on evidence and tackle one aspect at a time, hopefully the most important ones first. Inspectors have forums where we can post queries much like doctors have databases they can search based on symptoms. The forums have limited value because each comment needs to be evaluated based on the source, and, regretfully, few commentators state their reasoning for a certain opinion. The great thing about modern science is that anyone can have his or her own hypothesis; however, it must be supported by data. Plus, there are trolls everywhere, I guess. We adults don't really get much past middle school, mostly. Anyhow, even with well-supported hypotheses there can be legitimate differences of opinion, none probably so vehement as the subject of electric panel boxes. This is understandable because electricity is the most common cause of fires in the home, not involving accidents caused by human activity (cooking, playing with matches, smoking and misuse of space heaters).

I guess some houses, like the people who live in them, are just down on their luck. Their panel box was a Federal Pacific Electric, Stab-lok model. My training said we aren't even supposed to touch them because about one out of three breakers in these babies doesn't trip when overloaded. Some forum members said if there's no scorching and all the breakers turn on and off, everything's peachy. Well, if there's a good chance some breakers won't do their job...what would you recommend? Replace the whole thing, right?

# XXXX

What is it about sloppy joes? Somewhere between hamburgers and barbeque. Soothing kid food. Something your mom rarely made. So easy to reheat. I make mine simply by browning ground beef, throwing in chopped onions and when they're grilled adding ketchup, vinegar, mustard, red pepper, salt and black pepper. Serve only on potato rolls! Cole slaw is just grated cabbage, grated carrots, mayo, vinegar, sugar, salt and pepper. Add a Blue Moon and you're good.

I was half way through my third joe when Chris called about the electrical fire in the house I'd just done the day before. Obviously, I'm cursed. Someone has been collecting my toenail clippings and loose hairs (most likely from my back) and doing Voodoo.

The problem with the panel is the breakers don't necessarily trip when the current is high. When the current exceeds the capacity of the wires, they burn. Think toasters with low resistance, meaning more current flows, versus incandescent light bulbs with high resistance (the old ones with filaments—you know, Thomas Edison and carbon-coated cotton). By the way resistance decreases with temperature. That's why incandescent bulbs always blow when you turn them on—cool filament implies less resistance, equals more current, so they blow.

All someone had to do was increase the current by loosening one of the lugs holding the main 'hot' wire then turn up the AC and electric water heater. Just like lighting a fuse and walking away.

#### XXXX

Illiana had been arrested. Rachel went to visit her at the OSI holding cell. She looked so little in that bare space, she still sat ram-rod straight but her hair was, for once, not perfect. There was a calmness about her that Rachel found confusing. Had she given up? Was she now free of something?

Rachel sat next to her friend on the bare bench and put her arm around Illiana.

"How are you? What happened?" Rachel asked quietly.

"I'm alright."

"Is that it? Why are you here?"

"They think I don't like the Saudis."

"You blew that water heater?" Rachel started to get agitated.

Illiana said nothing.

"Who are you? Whose side are you on?" pleaded Rachel.

"What sides are there?" Illiana responded.

"What does that mean?'

"Everyone just takes what they want."

"What do you want?"

"I don't really know. Something different."

"Like?"

"Than the strong always getting their way!"

Rachel took back her arm and was silent for a time. Eventually she asked, "What happened to you? Was it the war? You seemed happy in school, surely you'd gotten over whatever horrible things you experienced."

"It was refreshing having a new life here, but I saw things that I couldn't shake."

"You were just a child in Kosovo in what the late 90's?"

"I was 16. My father commanded a unit that killed thousands of Bosniaks, Muslim neighbors, one of whom was my best friend. The way he talked it sounded like real battles but after my friend disappeared I followed his unit and saw what they actually did with my own eyes. I vowed to make up for it somehow."

"By helping ISIS?"

"Your wacko is my hero?"

"Seriously, what's heroic about blowing up innocent people or stabbing fellow Muslims, like that cleric in Bosnia who spoke out against extremists?"

"Selvedin Beganovic. Yes. Nothing heroic. How else can the weak get the strong's attention? In any military action the motive is fear and innocent people die. The Wahhabi only showed up in Bosnia after the genocide. They were supported by the Saudis and others, just like Bin Laden in Afghanistan and then what happened?"

"My God, Christians killing Muslims in Bosnia led to 9/11, Iraq and all the rest?" Illiana just shrugged.

"Then why were you after this Saudi colonel if they were supporting your friends?"

"The House of Sa'ud is one ingrown mess. Insular, run on nepotism, the complete opposite of the American ideal of the self-made man. Their founder, King Abdulaziz, unified the tribes by killing all his enemies and taking a wife from each tribe. One family basically owns the whole country. Pride they have no lack of. Then this colonel spends a little time at USC, goes native and gets Americanized. A couple poly-sci courses and one in comparative religions were apparently enough to make him decide to push for more moderate positions. He was quoted as saying, 'The Sunnis and Shia dispute goes all the way back to arguing over who would succeed Mohammad after his death in 632. Surely 1400 years is long enough. Even the infidel Catholics and Protestants just recently stopped killing each other after only 500 years!' When it seemed he was making progress I was asked to dig up some dirt on him."

"Oh my God, some would hate him for suggesting the unification of the Muslim world and others for giving any credence to the rest of the world!"

"You're probably right," said Illiana and then she looked at the book in Rachel's hand, smiled weakly and said, "Is that for me? Is there a hacksaw in it?"

Rachel just showed her the cover.

"I AM MALALA," Illiana read. She began to weep. "She was my age during the terror in Bosnia, when she was shot in Pakistan."

### XXXX

Two weeks later Agent Bell was meeting again with his boss, Director Mendez.

Bell recapped, "One pure accident kills a man who works for us who is keeping tabs on a Bosnian spy and a guy who works for the Saudis but is really working against the Saudis. But this guy was also hurting his family so we thought his son might have killed him so the son starts a fire at another house to try to divert attention away from himself. That son is now doing community service work with Habitat for Humanity. The Bosnian spy causes a water heater to explode to try to dig up dirt on the good-guy Saudi. She also has a real estate-agent friend, with whom she also may have been a lover, whose upset boyfriend also works for us and he, most likely, causes a fire (an electrical one this time) to try to get back at his estranged girlfriend's ex-boyfriend who also happens to be attached to all the same problem houses.

Bell continued, "Therefore we have one dead guy who worked for us, who probably deserved to die, one Saudi on our side, the tech guy still with us because his work is invaluable, plus no one can really prove his involvement because all we have on him is a bug found in the inspector's toolkit. The Bosnian spy in jail, the real estate agent, Weaver, with a complicated personal life to sort out and one nerdy home inspector connecting them all."

Mendez smiled and said, "That sums it up quite well, but you're entitled to know that Petrovic has had a change of heart. Her friend, Weaver, seems to have played a role in turning her. She has agreed to work for us."

"To be a double agent?"

"Yes."

"So everybody's on our side now, not bad... well, that does leave Johnson, surely he doesn't work for us too?"