Chapter 1

Soft gray light filled the room when Jim opened his eyes and patted around with his hand on the nightstand to locate his glasses. The red numbers of the clock on the dresser were an unreadable red blob until he got his glasses over his eyes to see that it was 4:30am. *Just like always*. As he lay on his back staring blankly at the ceiling he heard the dog stirring at the foot of the bed. He listened for sounds from outside but only heard the always-present ringing in his ears. *At least the rain has stopped... I should leave today*.

Jim pulled off the covers and sat on the edge of the bed for a minute while his senses synchronized. Awakened now, the dog also got up, did his up-dog and down-dog stretches at the foot of the bed, and wagged his tail convincingly. Jim stood up with a sigh, got his feet in his slippers, and walked out the bedroom door, the dog just a step behind.

Jim turned on the lights in the kitchen and set about making coffee. The kitchen lights, like most the others in his home, still housed old-fashioned incandescent bulbs. Jim had never gotten used to standard LED lights, even though they were so much more efficient than incandescent. A few years ago he had been fortunate enough to obtain two cases of antique incandescent bulbs at an auction, after bidding a considerable sum of money. Incandescent bulbs were no longer manufactured, and they were technically illegal. But the warm light the bulbs produced was worth the auction outlay. This morning, one of the overhead bulbs burned out with a flash just as it illuminated. Jim noted the flash but decided without much thought there was no reason to replace the bulb today even though he had a few left in the garage.

When Jim designed and built the small home, back in 2042, he put the kitchen at the back corner of the structure. The normal kitchen necessities—sink, stove, refrigerator, and a small pantry—were situated along the inner two walls of the room. The outer two walls consisted of a large sliding-glass door and floor-to-ceiling windows. Jim usually had his morning coffee at a counter along the windowed wall

where he could look out to the yard and woods. In the summer, the space beyond the kitchen windows was closed in and the view was limited; but in autumn, as it was now, when the leaves were off the trees, the fine-edged horizon dividing the light blue of the sky from the dark blue of Lake Superior was visible between the brown tree trunks.

As Jim looked past the trees to the lake this morning, his thoughts drifted to his youth, when at this time of year in rural Upper Michigan his dad would chop wood and clear the access road to get set for the snowy freeze of winter. But it hadn't snowed at the house and Lake Superior hadn't frozen over for more than a decade, so there wasn't much that needed to be done now to prepare. In some ways, the softened winters were better than the winters of Jim's youth. They certainly were less trying, which many people appreciated. As the climate changed, Michigan had become something of a climate haven and people had moved from all over the United States to the Great Lakes basin states, where there was plenty of fresh water and at least part of the year wasn't uncomfortably hot.

Finishing the coffee that remained in his mug, Jim looked down to find his dog, a medium-sized mutt with short white fur, black paws, and a grey-black spot on top of his head. Because of the spot, Jim called the dog Smudge. Smudge had been with Jim for three years, and although the dog was free to roam, he normally stayed right at Jim's side. "Smudge, do you want to go for a car ride?" Jim asked. The dog looked up, wagged his tail convincingly, and even tapped back and forth a little on his front paws. *He's good to have around*, Jim thought, *better to have him than to be alone all the time*. "Let's get going."

After breakfast, a shower, and a second cup of coffee, Jim walked across the gravel driveway to the garage, with Smudge at his heels. It was a cool morning, but not cold, and everything was soggy after several days of rain. The wind turbine was spinning slowly in a light westerly breeze, not generating much electricity. Still, every little bit helped. Jim made a mental note to set the brake on the turbine before leaving.

Stepping in the side door of the garage, Jim switched on the lights—LED lights here, bright and white—and walked over to the black Jeep Wrangler which would be home base for Jim and Smudge for the next while.

The Jeep was seventy-seven years old; his dad had bought it new in 2000, when Jim was just eight. Of course not much of the vehicle was original. After his dad passed away in the late `30s, the car sat in a garage for more than a decade before Jim set about restoring and updating it. And he had updated the vehicle a second time only ten years ago, with the last batch of legacy components he could find. At the last update, Jim installed a "modern" engine—modern in the sense that it wasn't seventy years old, but not modern by any contemporary standard.

The Jeep ran on liquid fuel, either gasoline or ethanol, neither of which were in plentiful supply. The manufacture of fossil-fuel-powered vehicles was fully banned in the United States in 2052, and as the Nation's interstate system was modernized, most major highways were rebuilt to accommodate only electric, self-driving vehicles. The agriculture collapse in 2065 put an end to the era of plentiful and relatively inexpensive transportation-grade ethanol, which was fermented and distilled from corn. Gasoline, which Jim preferred, remained available in small quantities at general aviation airports sparsely peppered across the States. With careful planning, Jim was still able to obtain fuel for the Jeep and he could still legally drive it on backroads and byways, which were falling into a state of disrepair.

The Jeep was a hearty vehicle. All that remained of its original interior was the driver's-side seat. Jim had removed the passenger and rear seats and had reconfigured the interior so that it could accommodate a few days' supplies, a repair and tool kit, a variety of back-country camping gear, and Smudge. The driver's seat reclined enough to make it comfortable for naps, or even to sleep in if necessary. Smudge rode shotgun, on a small platform where the passenger seat used to be. He could sit up and see out the Jeep's windows if he wanted, or, as he most often did, Smudge could lay down and sleep.

Jim and Smudge used the Jeep a few times a year to get out camping, most often along the Lake Superior shoreline in Michigan's upper peninsula, where few people lived any longer. The scope of the upcoming trip, however, was more grand than their usual getaways: some time ago, Jim had made up his mind to drive one last time to Point Pleasant, West Virginia. He used to go there frequently, then, for a long time, he didn't think he would ever go back. But in recent years a sense had slowly enveloped him, like moss that grows on the north side of a tree trunk in the woods, that he needed to make this last road trip. And it was when he woke up a few hours ago that he realized he would leave today.

Jim walked over to the workbench at the back of the garage and looked at the checklist he'd been adding things to and checking things off for the past few weeks. On the list, everything under the 'Jeep' heading was checked off. He had gone over the vehicle mechanically as best he could. It was filled with gasoline—nineteen gallons in the tank and five gallons in a canister attached to the tailgate—and the repair/tool kit was stocked. He had also checked and stowed the camping gear, stocked the small pantry with non-perishable and freeze-dried food, and filled two canisters with water and affixed them to the roof rack.

"Okay Smudge, we've got twenty-four gallons of gas which should get us about eight hundred miles. It's about that, maybe a little more to Point Pleasant, so we will probably need to stop for fuel once, just to be on the safe side." Smudge looked up at Jim, but didn't raise his head from the floor where he lay at Jim's feet. "I guess I should go pack some clothes, grab what I can from the fridge, and shutdown the house. How about you go take one last look around before we head out. Okay? Go on, you're free." At that, Smudge got up and walked out the garage door, this time with Jim a few steps behind. Before going back inside, Jim walked over to stow the wind turbine. The house would not need electricity while he was gone so there was no reason to keep the turbine spinning. Jim opened the access panel on the base of the turbine's pedestal and pulled down a lever to engage the lock. Thirty feet above, the turbine slowly stopped spinning, the blades feathered into the wind, and the mechanism locked into place.

When Jim originally built the house, he installed a ten-kilowatt solar array on the roof and a battery storage bank in the crawlspace. Back then, the house was connected to the grid but was net-zero for electricity usage, averaged over the year. About fifteen years ago Jim took the last step: he replaced the battery storage bank with a supercapacitor bank, which stored more electricity more efficiently than the battery did, and he installed the wind turbine to augment what the solar panels generated. He also added a geothermal heat pump for heating and cooling. With those upgrades, Jim had gone one hundred percent off the grid. No wires or plumbing of any kind connected the house to public utilities.

Back inside the house, Jim collected his travel clothes and a spare pair of shoes in a duffle bag and he filled a small cooler with the few items of fresh food that remained in the refrigerator. He set the bag and cooler outside the side door then opened the utility closet which housed the master switches for the home systems. Jim had never turned off the entire house before, but this morning he would. As he flipped the circuit breakers and switches, various status lights turned from green to red, then went out altogether. Jim stepped out of the closet and listened: the house was silent, and again, all he could hear was the ringing in his ears.

After listening for a short while and confirming that all the circuits were de-energized, Jim picked up a small firesafe from the floor of the utility room, carried it into the kitchen, and set it on the table. He opened the safe and checked its contents: a considerable amount of cash and a handgun with two spare clips of ammunition. He had reservations about the gun. While the world had not become what was depicted in the latetwentieth-century Mad Max movies, drivers on the back roads did sometimes encounter thieves, who were interested in money, of course, and whatever else they could take. Like the Jeep, the gun was an antique. It was an old-school handgun that fired a lead projectile. Jim preferred his gun to a modern energy weapon, if only because the gun never needed to be charged. Finding ammunition was a problem, but there was enough to last for as long as he would need. Jim only fired the handgun once or twice a year to keep it in serviceable condition, and he hoped he would never have to use it for the purpose he kept it. After looking it over, he put the gun back in the firesafe.

One last thing, Jim thought, as he reached around into his back pocket and retrieved his comdev. Even though no one ever called him, and he didn't get many messages from friends and family any more, he had a comdev because it was a necessary part of everyday life.

Jim activated the comdev by tapping his thumb on the screen. Then he tapped the photos app icon and began scrolling through the images he kept on the device, photos of friends and family, and of places he'd been. At the end of the photo roll he lingered on one image in particular, an old image, lacking both resolution and fidelity, of a young lady standing at the stays on a small sailboat. She was barefoot, wearing capri jeans and a long-sleeve tee-shirt, and a ball cap that Jim recognized as one of his from so long ago. She had long dark hair, and she was smiling, smiling at Jim when he took the picture. Jim looked back at the girl in the image until he felt the familiar pang in his chest, and said out loud "I miss you." Then, with a sigh, he closed the photo with a swipe of his thumb and held his finger on the power button until the comdev turned off.

Jim left his comdev on the table in the silent house, walked out the side door pulling it closed and locked behind him, and called out "Smudge, come on boy, let's go for a car ride."