Solar

by Ron Teachworth

Remy Garcia sipped coffee as she sifted through the overnight email. She worked full-time on the reception desk at the maintenance base station for the world's largest solar power company, Sunlight Energy. At night, she took classes at Cal-Tech, where she was working her way slowly through graduate school to major in biomedical engineering. Her black hair was pulled back revealing several piercings and an array of tattoos.

Located about 75 miles east of Barstow, California, the base station housed a receptionist, a technician, and a supervisor, with back-up personnel if needed. Sunlight Energy had over a hundred utility-scale energy farms throughout the western basin that stretched as far as Wyoming. Their model was paying off. The 100 plus billion dollar company was paying dividends that millions of people enjoyed. The glittering oasis in the desert was saving the country in more ways than one.

It was another clear, sunny, hot, and mostly quiet day. After Remy gave the technician his work assignment, she could study for her calculus exam while monitoring the complex flow of electricity.

The solar farm generated a constant 900 Megawatts of electricity that moved directly into the power grid serving Sacramento, Stockton, and Fresno. The Mojave Desert site stretched as far as one could see and contained more than fifteen million dark blue elevated PV panels. The massive 3,800-acre site seemed like a remote possibility just a decade ago. Originally, it was federally subsidized by the Bureau of Land Management and the National Renewable Energy Office. Now it was controlled mostly by the oil industry, and the rich got richer.

The solar development in the U.S lagged behind Europe and China until the breakthrough came in 5-6th generation solar technology that now covered the top of most houses and all new vehicles. Once the oil companies owned the solar industry, the shift

Available online at *«http://fictionaut.com/stories/ron-teachworth/solar»*
Copyright © 2015 Ron Teachworth. All rights reserved.

was easy. Fortunately, the solar panels on the roof of the modern maintenance building kept the high-tech office complex a cool 68 degrees Fahrenheit.

Remy lifted off her headphones when she saw Trollo approaching the desk.

“Hey Trol…there was a report of a meteorite shower overnight. It was picked up on surveillance radar around 3 a.m. and it may have touched the southeast edge of the solar field. You need to check it out. We're losing wattage from that sector and we need to get it back up ASAP. Hey, are you awake?”

Trollo Martinez was wearing a pair of Ray-Ban sunglasses and an old LA Community College T-Shirt. He needed to find some water so he could down the 5milligram tab of Ritalin in the palm of his hand. He had gotten on full-time for Sunlight Energy after a stint of part-time work with Horizon Solar. He always wanted to work for Sunlight Energy. Every professor he talked with said Sunlight Energy was the company that had the most promise. He took all of the math and science courses available in college before graduating with a degree in electrical engineering, and after completing his internship at Sunlight, the tech job was offered. He heard Remy's remarks rolling around in his head and finally said something.

“Yeah, I'm awake…barely. I had a gig last night. I need some water. Is the repair pod ready to go?”

Remy was on the phone and handed him a report and the remote sensor that opened the pod. He took the report and looked it over for the essentials. He knew the routine. Trollo popped the GPS coordinates into his I-phone 10. Remy wrapped up her phone conversation and said to Trollo, “Should be number two. Take a container in case you find something.”

“There's not much out there except sand and cactus,” mumbled Trollo as he walked towards the drinking fountain.”

“If it's meteorite damage, scrape up the debris and seal it up. Orson likes to look at that stuff. Just follow procedure.”

Remy tried not to pay too much attention to Trollo at the office, but she couldn't help noticing his tight jeans as he bent over the

water fountain. They had gone out once since he started as lead tech four months ago. He took her to an outdoor drive-in to see the original *Andromeda Strain* on the big outdoor screen because Remy told him how much she loved Michael Crichton. They only kissed once at the door when he took her home, in the dark while she was still close to him; she whispered, “Good night Trollo…to be continued.”

The base station was located on the edge of the Mojave Desert, due east from the Barstow Race Track, and in this part of the world, the sun shines about three hundred days a year, casting its light on approximately ten million Photo-Voltaic, PV for short, panels. The only enemies were clouds and very few made their way into these high-pressure areas. The energy collected and converted into electricity flowed west towards Sacramento, helping to cool buildings, charge mobile devices and all late model cars; Something that could not be imagined twenty years ago.

He picked up the plastic container and headed out to where the service pods connected to a hard piece of PVC pipe full fiber cables that extended like branches out and into each sector of the solar farm. Up four feet from the ground, the monopod moved along the cable at no more than twenty miles per hour. Trollo pulled down on the clear plastic bubble and turned on the air. He set his coordinates based on the GPS settings in his phone and engaged the accelerator.

The friction free movement pushed the pod off its station pad heading due east, and he was able to lay back, look around and enjoy the view.

The area was defined by its mountain ranges, a geologic area where a crustal thinning had created a large basin over millions of years. Trollo had hiked the Cady Mountain region from a young age and had gazed through binoculars at the distant maintenance station with intrigue. Now he was working there. He radioed the base. “Hey Remy, pod two is underway. Should be back before lunch.”

Remy responded.

“Roger that. You should arrive at your destination in about 15 to 20 minutes. Repair time estimated at 1 to 2 hours, depending on the scope of damage. See you back here around lunchtime. We're having a little birthday celebration for Orson. Over.”

“How old is that guy?”

“He's not sayin' My guess: mid-forties. Over.”

“Roger that.”

Trollo took a breath, and was just getting relaxed when out of nowhere a Gila Woodpecker hit the pod and splatters itself over the front part of the bubble's surface. His head jerked back mostly from the sound as he viewed some skin, blood and feathers that remained when the bird's body, what was left of it, dropped to the ground. He had hit insects on a regular basis, but this was his first bird. *Shit, it's an omen*, he thought.

Dr. Orson Durand was the supervisor at the base station and monitored all activity. The government provided Sunlight Energy with half his salary. He had an MBA in finance from Stanford University, which paid the bills, but his true love was astrophysics in which he had a Ph.D. He was part manager and part researcher, who crunched the numbers when needed but loved to study the universe. He wrote his dissertation on meteorite bacteria and researched particle physics, better known around the office as space junk. Orson spent months writing the governmental grant that provided the lab with the most powerful atomic microscope produced, which he used mostly to examine asteroid and meteorite debris. Remy and Trollo loved to tease him about his office “uniform”: white shirt, white lab jacket, tan slacks, brown belt, and a western-style bolo tie held together with a piece of polished meteorite stone.

Orson wasn't happy about the idea of celebrating his birthday, much less a birthday cake.

“Why are we celebrating my birthday?” he asked Remy. “And how did you even know it was my birthday? Have you been looking at my personnel file?”

“No. Your wife called me. She and your son are stopping by for a little birthday party. So I bought a cake. She's bringing lunch and ice cream. Is that okay?”

“Not much I can do about it,” Orson said, shaking his head. “When will Trollo be back?”

Remy looked at her phone. “Couple of hours.”

Remy never knew exactly how to respond to or what to expect from Orson because he was so unpredictable. It was like he had a mood disorder, sometimes talking a mile a minute, asking a stream of questions and then very quiet, hardly speaking. She knew one thing: He liked spending time in the lab, alone, looking at specimens.

The instrument panel readings indicated the pod was approaching the damaged solar panel, so Trollo slowed the pod to a crawl, and then stopped. He saw the damaged panel with a softball-sized hole through it. He gathered his collection gear and got out to examine the unit more closely. There was a green bacteria growth around the edge of the opening, tinged pink in places.

Orson will love this stuff, Trollo thought. But the meteorite itself was buried deep in the sand and would take too long to dig out. That would be for another trip.

Trollo retrieved the hard, plastic hazmat container from the pod, then put on Alt 23 gloves and grabbed a small plastic spatula. He scraped the entire surface around the hole and flicked the gooey substance into the container, then activated the pressure-seal lid. The second part of the job was removing the damaged PV panel and replacing it with a new unit.

The whole process took him an hour. By the time he was finished, the sun was working its way upward, but the air was still a cool 83 degrees. By noon, it would be 110 degrees and rise to 115 by three. Trollo placed the damaged panel in a storage envelope and headed back to the pod, navigating the soft fine-grained sand peppered with Foxglove cactus. The mountains on the horizon glowed warm yellow from bending light. It reminded him of his youth when he camped

out under the stars with his first high school girlfriend. She was the lead singer in a punk rock band and left him shortly after they attended the prom together. He always wondered if she liked his lead Strat guitar or just needed a date. Didn't matter much. They only had sex once, the first time for both, and it didn't go so well. Like the blind leading the blind. The only thing he could remember as they fumbled around in the dark was the song that played on his I-Pod: *Touch of Grey* by the Grateful Dead.

The damage caused by the meteorite was routine and replacing the 4 X 8 foot panel was something he had done many times, both in training and in the field. Usually the damage was caused by a smaller piece of space debris or a meteorite fragment, but never had he seen bacteria residue around the impact. His training prepared him to be aware that objects traveling in space needed to be handled carefully and to follow NASA-based protocols. He held the container up and looked closely at the green bacteria that reminded him of green whipped cream with small shiny red particles throughout. *Weird*, he thought. *Happy Birthday, Orson. You're going to love this!*

It was a routine repair process, and Trollo felt good. He climbed back into the pod with the container and envelope and pulled down the bubble hatch. The maintenance pods were designed to be a tight fit, solar powered, and just enough room for one person. He removed his light jacket, placed the container on the floor near his boots, and the envelope next to his arm on the side of the cockpit. He gazed at the remains of the woodpecker on the clear plastic panel before he clamped his ear buds on and selected his favorite Jimi Hendrix album, and noticed the outside temperature had already risen to 93 degrees. He reversed the pod and headed back to the base station. He thought back a college history class segment on American westward expansion in the late part of the 19th century. It was Horace Greely who said, “Go west young man. Go west.

Trollo got on the radio, “Mission accomplished. Should be back in 20. Got a specimen for Orson. A birthday present. Over.”

“Copy that.” Remy said. Thoughtful of you. We're having lunch with a birthday cake and ice cream. See you in a few. Base out.”

The bacteria in the container were secure and safe, but the residue on the damaged panel in the envelope was not. It only took a small drop the size of a pinhead to liquidize, seep through the paper and land on Trollo's arm. It felt like a mosquito bite but immediately released an anesthesia that numbed the entry point. The bacteria entered his blood stream without sensation or notice. The life force would find its way to the sweat glands in his hands and transmit itself via perspiration.

When the pod pulled up and docked at the charging station, Trollo was anxious to open the bubble and breathe fresh air. He grabbed his jacket, the sealed container, and the envelope. He glanced at the envelope and noticed the bottom corner was soiled, but assumed it was that way when he got it. He saw Orson walking in his direction. Remy must have given him a heads up about the collection of a specimen, which immediately got him excited. When he heard the pod had arrived, he was anxious to find Trollo.

Trollo had only met and talked to Orson several times after being hired, but he had heard about his Ph.D. in Physics and was surprised to see him at the landing dock. He wanted to make a good impression. The first thing they did was shake hands.

“Hey Trollo. Good to see you. Let me help you with that.”

Trollo handed the container to Orson with the kind of smile that said he was proud of the find. “I scraped as much as I could from the surface. Some of it was stuck to the inside edge of the hole. I executed the container seal, so it should be captured properly.”

Orson said, “ It might be just animal excrement. I once found some bacteria on my car tire and traced it back to some bird droppings. All it takes is some moisture in the air and some fresh animal excrement to form bacteria. But this doesn't look familiar. I assume the meteorite buried itself in the sand a few feet?”

Trollo responded, “Looked that way. I can dig it out, if you want.”

But Orson was peering intently at the specimen. “I don't recognize this bacteria at a glance. Can't wait to see it up close under the microscope.”

Orson was already walking away, still looking into the container, and had all but forgotten Trollo. Trollo lagged behind, feeling a little rejected when movement beyond the building caught his eye. It was blonde woman, dressed in a lab jacket and sneakers getting out of her car. With her was a young child in a white, short-sleeved shirt, short blue pants, and sneakers. She was carrying a bag in one hand and holding the boy's hand in the other as they walked toward the base station entrance.

By the time Trollo got to Remy's desk, the attractive woman was already there talking to Remy. Orson was holding the little blonde boy. On the table in the center of the large meeting room was a birthday cake, some sandwiches, cups and a tube of ice cream. Orson spoke up.

“Hey, there he is. Trollo, this is my wife Kate, and my son Cosmo.”

Trollo extended his hand to Orson's wife. “Hi. Nice to meet you both.” And held out his hand where Cosmo gave him a high five and smiled. He caught Remy's eye and held up the envelope containing the damaged solar panel. “Should I just trash it?”

“No. I'll file it in the storage room with everything else in case anyone wants to look at the configuration of the damage. Then let's all sit down and have cake and ice cream.”

There were five people in the building that afternoon, Remy, Trollo, Orson and his wife Kate, and their son Cosmo. By the time they finished their lunches and indulged in the birthday festivity, Orson was anxious to see the bacteria under the electron microscope so he was ready to send his wife and child back home for the rest of the day.

But as soon as Remy logged on to her workstation, a message came up on her computer screen.

Gather in the conference room and have everyone pay attention to the chairs at the table.

Remy called Trollo over and pointed at the screen.

Trollo shook his head and read the screen again. He motioned to Orson. Kate and Cosmo trailed behind him.

“We've been hacked,” Orson said after reading the message. “This is a cyber-attack. I'll call security at headquarters.”

He looked at his cell phone. No service. He grabbed a landline. No dial-tone. Suddenly the station went dark. Only Remy's computer, the large LED screen, and the audio system were functioning. Then another message came up.

Authorize voice recognition software to the system. Turn your attention to the chairs.

Remy routed her computer screen to the large 60” display and activated the sound system. Everyone looked over at the conference table, as all six chairs levitated about 10” from the floor. It was a demonstration of control. Everyone turned their attention to the large screen. At that moment, a computer-simulated voice came over the system accompanied by an array of high-resolution images.

We control your base station and are in the process of logging into your corporate mainframe. At this moment, we are patching into the super computer at the California Institute of Technology and establishing a connection with the Hubble Telescope and all of the earth's satellites. Our purpose is to extract three rare heavy metals: Lutetium, Yttrium, and Scandium. This work is transparent to the rest of the world. Stay calm and do not try to disrupt our work or contact authorities. The imagery on the screen will reflect our progress. We should be finished and on our way within the hour.

Kate began to shake and the boy started to cry when he picked up on his mother's fear. Trollo sat next to Remy and looked at the expression of shock on everyone's face. He turned to Orson who was trying to calm his wife and son, then back to Remy. “Remy, can you send a text?”

Remy slowly picked up her phone and asked, “To who?”

“Anyone…your mother…just see if it works.”

Remy swiped her phone screen, but it remained dark. She tried again, and then shook her head, “No power.”

Orson spoke to the screen. “Who are you?”

We are a life force from the planet Ceres. We came here via an Asteroid belt that was bound for the Milky Way a thousand years ago. By the time we reached the Earth's atmosphere, the asteroid had broken up into hundreds of small bits landing in the Pacific Ocean. Some small meteorites hit the west coast near the Mojave Desert. Only one small meteorite hit the PV panel, as most were buried deep in the sand. Without moisture or light, they were distinguished, but once the organism entered the human bloodstream, we thrived on the entire menu of red cells, white cells, and platelets. The oxygen in your hemoglobin played a vital role as our foreign molecules set up their own sophisticated life force network throughout your human form. Void of any sensation or knowledge, all of our molecular work was in place before he reached this base.

Everyone walked over to the chairs and sat at their seats in a controlled and managed way. They felt dazed and suspended with a feeling of helplessness watching the screen. Trollo scratched the inside of his arm and started to feel a little queasy. The high definition imagery on the screen showed three geographic locations: Japan, Jamaica, and China. The computerized graphics displayed a transport mechanism and was targeting the supply of metals that had already been mined and packaged. Each location had an undisclosed warehouse where the metals were securely stored and ready for shipment. The force had set up an energy pattern that dematerialized exact amounts of each heavy metal and began a transport process that would take the material back to Ceres. Orson made a decision to communicate again with the force.

“Have you visited Earth in the past?”

We have…

“Why?”

We recently expended our supply of these metals. Earth is abundant with rare metals, but we are taking only what we need. Our visits in the past have been to seed humans.

“What?” asked Orson?

We seed the genetic code of humans with advanced intelligence. We began with Pythagoras, Copernicus, Archimedes and Aristotle. Then Galileo Galilei and Isaac Newton. Our most important seed was Mahatma Gandhi in 1869.

Remy turned to Orson and said quietly, “I need to use the restroom, but I can't move.”

Orson tried to get up from his chair, but was also unable to move. Kate started to cry. What is happening, Orson?” Trollo tried to leave his seat but he could not move. Suddenly the voice interrupted.

Is that better Remy?

Remy realized the sensation of having to urinate was gone. “Yes.”

We have completed our collection process now… You will be released from our control.

“Wait!” Trollo said, “Have you seeded anyone else… any other humans?”

Albert Einstein, Marie Curie, Allan Turing, to name a few. Still, our most successful seed is Mahatma Gandhi.

Trollo couldn't help asking, “Why?”

Your kind must understand that there cannot be wealth without honest work, nor pleasure without clear conscience. Knowledge must be accompanied by character and business conducted with ethics. Your science must have humanity, your religions must have sacrifice, and what you call politics must have principles. This was Gandhi's message. It is still the most important thing your kind must understand.

Orson quickly asked a last question. “Do we have to worry about internal threats?”

We seeded Stephen Hawking in 1942 and he suggests human aggression and artificial Intelligence can get out of control, and unfortunately…hostile alien intelligence. Peace be with you.

The force holding them in place was gone. The images on the screen were gone. Kate was hugging Orson as they held their child between them. Remy reached out, closed her eyes and hugged Trollo. All the light indicators at the base station were functioning as normal and their cell phones had service. Orson looked at the

container. The bacteria were gone. The phones began to ring. The entire encounter had taken less than forty minutes.

Remy was upset. She looked toward Orson and asked, “Do we file a security report with Sunlight, notify NASA or call 911? Should we be concerned about our health?”

Orson had managed to calm Kate and got both her and their son soda from the now functioning dispenser. He glanced at his cell phone that displayed a list of calls that had come in while the phones were off-line.

Trollo put on his sunglasses, got himself a soda, and poured half of it into a cup for Remy. Kate did some calculations on her phone and held on to Cosmo. The solar powered air conditioner was back on. Trollo plugged his I-Phone 10 into the audio system and selected *Forest Flower* by Charles Lloyd.

Orson sat down next to Remy and sipped his soda. “I am little freaked out. Let's all just take a moment.”

http://www.publishersmarketplace.com/members/ronaldst/