

**A WILLOW ROSENBERG - GIRL GENIUS ADVENTURE**

**WILLOW ROSENBERG**

**and The Clockwork Empire**

**BY VICTOR APPLETON II**

**and**

**BATZULGER**

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## Chapter One -- In The Middle of Nowhere

The twin engine Swift Bronco cargo plane was coming in on approach to Diori Hamani International Airport. As it banked for the final turn the occupants looked down at the Niger River and the bustling community surrounding it. To the south was green jungle, but as you headed north and east the brown of the Sahara was faintly visible.

The plane came in for a landing, and Niger customs and immigration control sent a jeep over to check in the new arrivals. The propellers had barely stopped turning before the cargo ramp at the rear of the aircraft began to lower. Sergeant Mariko was surprised to see three young women step out.

The first was a petite blonde with a smile on her face. She was followed by a taller redhead and another blonde, this one with darker colored hair. The short blonde was wearing a loose blue cotton chambray shirt and olive drab cargo pants with sunglasses and a gray baseball cap with the same blue 'SSI' logo as the plane' had on its tail. The pale skinned redhead was wearing jeans, a white shirt, sunglasses and a wide brimmed straw hat. The third woman had her hair tied back by a scarf and wore a long tan skirt and a loose green top.

"Ahh...Passeportes, sil vous plais?" the Sergeant asked pleasantly. There had been a lot of SSI aircraft coming through for the big project taking place out in the desert. None with a crew like this though.

"Bien!" the short blonde said as she presented hers with a flourish. The other two produced theirs as well. Sergeant Mariko sighed thankfully. Even though his English was quite good, they seemed to speak French which made his job a lot easier, and more importantly, they had their papers ready.

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"Merci, mademoiselles," he copied down their specifics on his clipboard, "Et maintenant...Votre manifeste?"

The redhead produced a folder with a number of printed pages. It was a line item accounting of everything aboard the aircraft including crate number. Sergeant Mariko nodded. All the SSI aircraft had had this level of detail, and had freely allowed any crate the inspector desired to be opened and examined. Nothing not listed had been found.

"Sergeant," the redhead said in excellent but accented French, "can we get clearance to get refueled? The job is expecting us sometime in the near future and the flight from the Canaries made us a little low on gas."

The shorter blonde stretched and muttered, "Fearing to Newfoundland...refuel. Newfoundland to the Azores...refuel. Azores to the Canaries...refuel. Canaries to here? I think you know the deal. I feel more like a gas station attendant than a pilot."

Surprised at hearing this, he looked down at the manifest and saw 'Pilot in Command, Buffy Summers. Co-Pilot, Tara Maclay'. Glancing at the shorter blonde's papers there was the 'Buffy Summers' name again. This little American woman was the main pilot?

Recovering quickly he nodded, "Of course. I can start the inspection while you are enroute to the fuel point?"

"Sure," Buffy replied cheerily, "Tara, I'll taxi us over while you and Will help him out. 'Kay?"

The other blonde nodded, and the three, followed by the Sergeant climbed back aboard the aircraft. Sergeant Mariko heard one of the motors kick over a minute later and soon the plane was taxiing over to the fuel bowsers. He picked

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three crates at random and began a quick inventory. The SSI planes all had overhead track cranes to aid in cargo handling so moving through the packed load was easy.

He looked over at the redhead, "Mademoiselle Rosenberg?" She was helping pry open a crate supposedly filled with electrical cable. Tara had headed out to assist with the fueling.

"Call me Willow, Sergeant," she said in a spritely tone.

"Ah! Willow...What do you do, if les autres are les pilotes?"

"Uh, I'm un étudiant en génie."

"Un ingénieur? As un mécanicien?"

"Yup! I mean Oui! I mainly work with computers and electronics though, but I do know other stuff."

The Sergeant ticked off that yes, there was cable in this crate, "So what will you be doing on ce projet?"

"This project? I don't know actually. The boss, Tom Swift, told me to head on over and that's why I'm here."

Mariko opened another crate, this one full of canvas tarps and ticked it off the list, "But you said you were a student?"

"Yeah well Tom can be pretty persuasive at the school I go to. I look at this as work-study, like un apprentissage."

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"It is wild desolate country where you are going. I would not expect such young women to be heading out there," he said in a concerned tone.

Willow laughed, "Don't let Buffy hear that," she said amusedly. "She takes pride in her ability to survive anything. She's also an engineering student too."

"Computers?"

"Nope. Aeronautical. She's learning how to design planes. Tara is the absolute computer expert though."

"So all three of you are students?"

"Uh...yeah," Willow said cautiously. Explaining Tara was not something she really wanted to do. Fortunately the Sergeant didn't seem to notice as he cleared the last crate in the spot check.

"Fini! Welcome to Niger."

"Merci Sergeant. You made this very pleasant."

When the fueling was complete they taxied back to where he had parked his jeep and Mariko headed back to the operations area, watching the ramp close in his rear view mirror.

Up in the cockpit Buffy and Tara were strapping in while Willow finished checking the crates. When she was done and came up front, Buffy got clearance from the tower as the redhead took her seat at the flight engineer's station.

"You set?" Buffy asked the other two.



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"Yes!"

"Uhuh!"

"Okay then. This is SSI Flight 81257 ready on 09 Romeo."

"81257. You are cleared for takeoff. Have a good flight!"

"Merci Diori Tower!" she said as she fed power to the turboprops and the Bronco leaped into the air like its namesake. Twenty minutes later, when they were at the cruising altitude of 26,000 feet, she set the throttles and the autopilot and stretched.

"How long?" Willow asked.

"About two and a half hours. Tara can you take the stick? I need a nap." That was an understatement as they had been flying almost twenty four hours straight. If it wasn't for Buffy's amazing endurance and Tara's entire lack of need to sleep, they would have been in a lot worse shape. All three women were pilots so Willow had filled in earlier when Buffy was catnapping.

"Of course Buffy."

Buffy unstrapped and Willow slipped into the Pilot's seat, the view with the clear desert sky was spectacular. After an hour or so they found themselves flying over the Air Massif, the Mountains of the Air. This wrinkle in the Earth's skin trapped moisture and allowed agriculture to flourish in a small zone in the Sahara. After passing over them they were now flying high above the Ténéré Desert. An hour and a half later, Buffy reappeared drinking a bottle of water and yawning.

"Welcome back sleepy head!" Willow said teasingly as she unstrapped.

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Buffy grinned and nodded as she got back into the Pilot's seat, "I have the airplane."

"This is SSI 81257 to SSI Base. Can I get a heck yeah? Oh, and a beacon?"

"81257, I think we can help. Welcome to Africa, Buffy!" the voice of Gene Tarrent, one of SSI's radio specialists, came across the headset. Soon a blip appeared on the radar and Buffy swung the aircraft to face it.

"Thanks Gene! ETA is about ten minutes."

"Gotcha Buff, be aware we are having sporadic gusts from the east at up to 40 knots. Runway is 5900' feet stabilized sand. Heading 35."

"Okay then," she turned to her co-pilot, "Tara, keep an eye on the doppler feed. If a gust is coming I want to know about it."

Soon the runway was in sight. The sand looked darker than normal because of the compound that had been mixed with it, to form it into a rigid surface. They were a mile out when Tara called, "Gust!"

Buffy was crabbing the Bronco into the wind so the aircraft would stay on line when suddenly she lost all control of the rudder!!!

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## Chapter Two -- A Bold Plan

"Uh oh..." Buffy muttered as she lost control of the vertical stabilizer. "Tara, give me full flaps!"

The taller blonde quickly yanked down the appropriate levers while Buffy adjusted the throttles for the two engines bringing one up to full and the other back and feathering its prop. The extended area provided by the flaps allowed the Bronco to glide better, while the unbalanced thrust from the engines caused it to begin to pivot around its axis. Buffy carefully controlled the yoke with one hand while adjusting the throttles with the other as she rode out the heavy gust of wind striking the plane from the side. Finally it stilled, and she balanced the two engine's thrust to realign the aircraft on course with the runway.

"Buffy, our a-airspeed!" Tara said quickly as she saw the needle climbing.

Lifting the nose, Buffy began slowing the careening plane. "Can't cut back the engines. They're the only yaw control we have. Hang on; this is going to be bumpy!"

The gear lowered and locked into place while Buffy goosed the port engine a touch to slew the Bronco back to the centerline. Willow tightened her harness and pressed herself back into the seat as she braced for impact while Tara and Buffy guided the broken aircraft down. There was a heavy thump and then a massive roar as Tara shifted the pitch on both props to reverse and pushed the throttles to full; the engines' force slowing them down. The rough surface of the improvised strip shuddered under the impact and the smell of overworked brakes filled the air. Finally though the plane stopped.

Willow immediately began shutting systems down and checking fire warning lights. Satisfied that they were not going to burst into flames she let out the breath she had been holding and began unstrapping.

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"Are we there yet?" she heard Buffy say. "I really hope we are because I do not want to try that again."

Willow laughed and triggered the cargo ramp, "We're there Buff. Come on; let's see how badly it's broken." The three women climbed out of the cockpit and headed back through the hold. They were met by a group of SSI personnel who all seemed concerned about the strange and rough landing.

"What happened?" Abraham Haskell, the head of mechanical fabrication and one of Willow's best friends at SSI, was the first to arrive.

"I'm not sure Abe. Buffy said that the rudder failed, and then things got really exciting," the red headed genius replied. She looked around, at the moment Buffy was staring up at the rudder of the Bronco.

"That was some amazing flying. We were watching the rudder flop around when you touched down," Lena Kibiwot, exclaimed. The slender dark skinned woman was one of SSI's best geologists and the project leader for this job.

"Hey can I get a ladder?" Buffy called out, "Or a forklift or something?"

Dex Grunberg fired up one of the rough terrain cargo movers and drove it over. Buffy hopped onto one of the skids, and Dex lifted her up so she could take a closer look. After a moment of scrambling around the tail section, she waved to be lowered down.

"Could somebody put a pallet on the forks?" she said. "Willow, Abe, Tara, you need to see this."

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All four were hoisted up and Willow could clearly see a long string of small holes punched cleanly through the aluminum. On the opposite side was a long ragged gash. Abe pulled out a penlight and peeked through the tear. It was obvious that control cables and pulleys had been shredded. "A machine gun?" he asked.

"These are really small holes and close together," Willow said carefully, "Could a bullet that small really do that kind of damage?"

"Sure if it was travelling fast enough," Abe replied, "But it would be so light that it would lose velocity and energy fairly quickly. It would have had to have been fired from a very close range, and we didn't see anything that could have fired it."

Willow thought for a second and waved at Dex to lower the platform. When she was down she headed into the plane and pulled out her laptop before plugging it into the flight data recorder. Scrolling the data she got the exact position of where the Bronco had been before the rudder had failed. Matching that with the angle of descent and the attitude of the aircraft she walked outside and called up, "Tara, what's the angle of those shots?"

The human-appearing robot looked at both sides and processed for a moment, "2.1 degrees judging by the entry a-and exit."

"Thanks!" Willow began modeling the location on an overlay map of the area. After a few minutes work she looked up at the SSI personnel gathered around her.

"So?" Lena asked.

"Well, either it came from inside a bluff six miles that-away," she pointed, "or it was from an aircraft."

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"I didn't see any other aircraft," Buffy said thoughtfully. "Either by eye or on radar."

Abe and his people quickly got to work, repairing the damaged components with the portable machine shop that had been set up at the base camp. Meanwhile, as Buffy got the offloading of supplies and equipment started, Willow and Tara walked over to Lena's tent.

"Knock knock?" Willow said as they stood just outside.

"Hey guys. How are the repairs coming?"

"Abe says they'll be done in an hour or so. The cable was sheared and several pulleys got smashed."

"Any idea what caused it?"

"They found a lot of this..." Willow placed a plastic container of black shards and fine glassy powder on the worktable. "It was all over the place inside the tail."

Lena looked at it, and then pulled out a magnifying glass, "It looks like quartz. It's been machined somehow though. See the curve?" she tapped one of the fragments.

"Quartz bullets?" Willow asked.

"I guess. I'll test it to see exactly what it is."

"Thanks. So, in the meantime you have any work for Tara and me?"

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"I don't know exactly. It looks like Tom sent you here with no real job in mind. Do you know what we're doing?"

Tara spoke up, "Searching for underground water resources?"

"That and more," Lena got up and walked over to a wall map of the region. "This is the Ténéré...200,000 square miles of wasteland. The annual rainfall is extremely low, one of the lowest on Earth, at about 10 to 15 mm, and it can easily have several years without any rain at all. All this means that it is incapable of producing food and as drought is fairly common even in the arable areas; Niger is continuously on the knife-edge of starvation."

She tapped the map. "200,000 square miles of an environment so harsh and dry even the hardiest of animals won't live in most of it. The government of Niger hired SSI to fix that little problem."

"How?" Willow asked.

"Satellite imagery gave me an idea that it was distinctly possible there was an aquifer deep underground, a really big one located under the Ténéré holding trillions of gallons of water. I told Tom, and he sent me out here to do a little investigating on site. I came out here as a 'tourist' so I wouldn't cause any waves, and did my preliminary search trying to find a good point for a bore, along with ways to keep secondary ecological damage to a minimum."

"You found a way?"

"I did," she pointed at another map. "Drill here and pipe the water south to the edge of the desert, I chose this point specifically to protect the desert ecology from leaks. Right now we're setting up for the bore. First some seismic charges to find the absolute best place, then a test hole."

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"So how can we help?"

"Well the seismic analysis program is going to be tricky. Could you two refine it to a best solution?"

"Sure," Willow said happily. "We got this!"



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## Chapter Three -- Missing!

The SSI work site consisted of seven tents, two prefab workshops, and the runway and control tower. Parked alongside the runway were three Broncos including the one the women had arrived in, and a pair of Skeeters; SSI's light utility helicopter. There was also a small motor pool with assorted ATV's and rough duty 4x4s. Most of the heavy stuff had had to be brought in by an Atlas, the Bronco's big brother, which was also rough terrain capable. At the moment most of the vehicles and all of the aircraft were all covered with tarps to keep the worst of the sand and dust out of them.

Two of the tents were quarters for the crew; one for men and one for women. There was also Lena's operations tent, the chow hall, the supply tent, the power tent, and the sanitation tent.

Current Willow and Tara were working in the chow hall, while Buffy was helping the mechanics repair one of the Skeeter engines. The tents were all sealed with flaps and air doors, and had an inflatable frame which kept them rigid. The sealed Dynalon construction kept the worst of the sand and dust outside, and the layer of Durafoam insulation allowed them to be air conditioned quite efficiently.

"So compensating for soil and rock density is going to be the trick..." Willow was saying as she took a drink from her bottle of water. She was in loose cargo pants and a long sleeved white shirt and had her red hair pulled back in a messy ponytail. Her straw hat and sunglasses sat on the table next to the laptop she was using.

Tara looked up at her. The gynoid was currently running calculations on optimal seismic emitter locations on her own laptop, "We know that it's sandstone karst over basalt."

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"Hi guys!" Buffy walked in. She was mopping sweat off her face, and went straight for the cooler to get some water before she headed over to her friends.

"Hi Buffy!" Willow replied. "How's the Skeeter?"

"Fine now. Did you know gas turbines do not like dust in their fuel injection systems?" the petite blonde said with a grin.

"I think I did know that," Willow replied.

"So what's the big-brain trust working on now?"

"Reflection seismology," Tara said.

"Gasping in despair while looking in a mirror?"

"Not sighs-mology, you goof...S-e-i-s-mology as in seismic. The study of earthquakes and other earth vibrations," Willow said in a mock stern voice. "The mirror part on the other hand, is pretty close."

"What?!" Buffy said in surprise.

"You know what we're doing here, right?"

"Looking for underground water. I'm still not sure how Lena expects to find any here. This place defines desert."

"Back in the 1980s, there was a radar imaging experiment in the Arba'in Desert of southern Egypt, west of the Nile Valley. They found there were buried systems of bedrock channels, about five to fifteen miles wide. The guys who found this thought that this invisible water system, which is under the absolutely driest

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part of the entire Sahara, carried overflow west into Lake Chad, and maybe all the way to the Atlantic Ocean. Their thought was, 'What could have made such a drainage system except for the drainage from the Red Sea Hills and also from tropical Africa,' Willow stopped and took another sip of water.

"There were rivers running from east to west under the Sahara? So what stopped them?"

"Well, the guys who were working on this proposed that it was tectonic uplift...Chunks of bedrock being pushed up along fault lines? That along with volcanoes made a barrier some about 15 million years ago which screwed up the drainage. Water doesn't flow uphill you know?" she grinned at Buffy who stuck out her tongue at her friend's teasing.

"I'm not that blonde..."

"Anyway, the Mediterranean Sea level dropped which made it easier for the water to flow north into it. This may be why the Nile does what it does, but he buried rivers still seemed to have remained working until about 4000 years ago."

"Okay, so there were these rivers, but not anymore..."

"Well, when fault lines shift vertically, usually one side goes up and the other goes down. Lena was looking at satellite data and figured out there was a subsidence, a sinking, of part of the Tenere."

"So, like a bowl." Buffy said, slowly getting it.

"Exactly. The water couldn't get past the Air Massif to the west, so it's trapped deep underground, probably in huge pockets. Our job is to find and tap those pockets."

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"And the Reflective sighing?"

"Seismology. Well you brought up mirrors, how does a mirror work?"

"Law of reflection," Buffy answered promptly, "That says that when a ray of light hits a surface, it bounces in a certain way, like a tennis ball thrown against a wall. Mirrors reflect almost all light."

"Somebody has been paying attention in physics class. Well let's say you have a mirror where the glass is thicker in certain places than others. What would you see when you looked at it?"

"The thicker places would change...refract the light differently. The reflection would look warped and blobby in those places."

"So you could tell where the problems were?"

"Sure."

"Well we can't look through dirt and rock for blobby places, but we can listen."

"How?"

"Echoes like sonar. We make a loud noise. It passes through the ground and bounces back. We listen for it and see how it's been changed."

"How blobby it is!"

Tara smiled, "Exactly, but the term is deformed, not blobby."

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Willow continued, "We then take all this information and combine it to make a map of the reflections. With this map we can find all sorts of things underground...like water."

"I think I got it. So how we make a noise? Get Abe to yell really loud?"

"Well there are two basic ways. Explosives, which means you have to drill holes and it takes a long time; and tampers, which are big machines that take a lot of people to run," Tara explained.

"Okay, what is the SSI way? I just know that Tom came up with something good."

"Got that right," Willow reached into her bag and pulled out something that looked like a large dinner plate, only painted SSI bright blue.

"It's called a Cricket," Tara explained. "It's a-a highly focused infrasound generator and receiver. Infrasound is sound so low that humans have a-a really hard time hearing it, but it penetrates earth really well."

"So," Willow continued, "You and the other Skeeter pilot are going to fly around and plant these and we're going to trigger them. That way, we'll have an accurate reflection map under this whole area."

"That's really cool. When do we start planting them?"

"Tara and I need to finish tweaking the software before we can start analysis, but you should be able to start laying them tomorrow?"

"How many?"

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"About nine hundred."

"Wow! You guys don't mess around. Well I guess I'd better talk to Grady," Buffy was referring to the other Skeeter pilot, "and let him know what we're in for," she finished her water and stood up. "Never a dull moment with you guys."

The next day the two helicopters took off with their load of Crickets. Each had a pilot, co-pilot, and loadmaster aboard. Tara and Willow were set up in Lena's tent working on the code as radio reports filtered back of locations and Cricket ID numbers.

At about six all the Crickets were set up with the Skeeters returning home and the code had been finished.

"Ready for a test?" Lena asked. The two girls had just uploaded their project to the project main computer. Lena pressed a few keys on the keyboard and the screen started lighting up with numbers. The Crickets seemed to have done their job.

Suddenly Gene Tarrent came rushing in, "Lena! We just lost contact with Skeeter 2!"

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## Chapter Four -- Puzzling Clues

When they heard that, Willow, Tara, and Lena followed Gene to the flight operations tower. "Their beacon's still going, but it's stayed put for the last twenty minutes and there's been no response to our calls on any of the radios, the datalink or anything," he said as they ran.

Debbie Moore, the other flight controller, was on the radio. When she saw Lena she switched it to speaker. Buffy's voice came in loud and clear, "...-kay. We're about ten miles from their last known position. Visibility is basically unlimited too. Should be seeing them any moment now. There it is! Sending video from the nose..."

The main screen in the tower flickered and an image, transmitted by the compact yet high power camera located in a steerable bubble under the Skeeter's nose, came into focus. The camera was still slewing as it was tracked into position by the monacle sight built into Buffy's flight headset.

"Getting this Deb?" Steven Stockdale universally called Steve-O, Buffy's Australian co-pilot asked. "We're not seeing anybody aboard the bus."

Skeeter 2 sat there with its cockpit hatch and its utility bay doors open. The rotor obviously de-clutched, as it spun lazily in the hot desert wind.

"Steve-O, Buffy. I'm in the tower," Lena said. Can you give me a 360 panorama?"

"Sure thing. Steve-O Records on!" Steve-O activated the system and the camera turned smoothly in a full circle. The focus and angle changed each rotation so it gradually spiraled out from the center. When it hit its 'infinity' focus; it stopped. "Get that, base?"

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"Sure did Skeeter 1. Land and check it out," Lena said.

Buffy brought the small craft down gently, "Steve-O, you stay in the seat and keep an eye on things. Rory," she looked back at the loadmaster, "You're with me."

"You sure Buff?" her co-pilot asked only to get an 'Are you kidding me?' look in response. He laughed, the martial arts sparring duels at SSI between the short blonde and Phyllis Radnor, the SSI Assistant Security Chief, were legendary. Buffy had a reputation for getting things done.

Rory and Buffy clambered out while Steve-O kept the rotors slowly spinning and one eye on the mast mounted camera display. This was in a small dome mounted right above the rotor hub and allowed him to sweep behind and above in the helicopter's blind spots.

The two arrived at Skeeter 2 and saw it was empty. Grady Branch, his co-pilot Tom Macpherson, and Angie Prescott his loadmaster were gone.

"Tower, it's empty," Buffy said into her headset mike. "All three are missing."

"You're 70 miles out. It will take a couple of hours to drive there with a search party."

"There's a decently flat space where you can set down a Bronco to the south. It looks like hardpan," Willow said as she scanned through the video from Skeeter 1's cameras. "Buffy, it's a quarter and 175 degree heading from your helicopter. Can you check it out?"

"Sure Will. Rory, keep poking around for anything extra weird. I'll take a quick jog over there with a marker smoke grenade. How long till you guys show up?" she called back to base



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"Ten minutes to ready and load the Bronco another ten or so to fly there."

"Okay, I'll meet you there."

Lena looked at Willow, "Get Abe and tell him what's going on. I'll grab some people. We can fit a jeep and two ATVs in the cargo bay along with ten people right?"

Willow nodded, "Come on Tara!"

As they left, she heard Lena contacting Shopton and requesting a Prober sweep from the Outpost.

The Bronco touched down on the beaten sand and the ramp was lowering before it had even stopped rolling. Abe was at the controls of course with Willow in the co-pilot's seat. There were an assortment of mechanics, geologists, and support people in the back. Willow looked out the cockpit window as the aircraft stooped and saw a sand frosted blonde sticking her thumb out for a ride, an orange smoke grenade burned out beside her. They had used the smoke to judge the ground wind.

The jeep and ATVs rolled off and soon they were on their way to the location of the two helicopters. Steve-O had shut down Skeeter 1 and was now sitting down in its shadow with Rory next to him.

Lena jogged over to them, "Any other signs?"

Rory nodded, "Weird ones. While Buffy was marking the runway I went for a walk about a quarter mile and made a big circle. Steve-O had me on the mast the whole time. I didn't see any animal or vehicle tracks. The only tracks we saw were the ones around 2. Here, I'll show you."

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He led the small search party over to the abandoned helicopter. Scattered on the ground were Cricket units all willy nilly; "Somebody dropped the tray right here." Rory was referring to the rack the Crickets were normally stored on for transit.

"Wait a second," Willow said, "It was Angie, Grady, and Tom right?"

"Yeah," Buffy replied. "Why?"

"Well here's Angie's footprints leading away from the Skeeter...to here where the tray was dropped. Her feet are almost as small as yours Buffy."

"Rub it in."

"Well, if this is her. And these coming from the cockpit are Grady's and Tom's...whose are those?" she pointed at some heavy boot prints protected by the wind by a small sand erg. There were multiple sets of them.

"Good question..." Buffy said. The small group followed them to the opposite side of the erg where they found a half-buried and broken pair of sunglasses and two long marks like somebody had laid down a set of railroad ties then removed them. There was a muddle of sand blasted boot prints next to the long mark.

"Those are Grady's sunglasses," Steve-O said. "I recognize the strap."

Tara bent over and pushed her finger into the sand along one of the long marks. "The soil compression gives a-an estimated weight of a-approximately 6,000 pounds to whatever made this mark."

Buffy looked over at Lena, "And the tower didn't have anything on radar?"

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"No. How about your systems?"

Buffy and Steve-O shook their heads and Buffy added, "These sand waves make it pretty difficult to pick up anything near the ground though. There're radar shadows everywhere."

"Buffy," Tara spoke up, "I may be a-able to clear up the imagery. Once we get back to base camp of course."

Lena nodded, "That sounds like a good start. We should also have the Prober sweep of the area completed by that time as well." She sighed, "They're not here or within sight of here. We'd better head back to camp. Leave a cache with water, food and a radio, in case they do make it back. Abe, how bad is Skeeter 2?"

"Not really sure, you want to fly it back?"

"If we can. If not, we'll use Skeeter one to sling load it. Could you do that Buffy?"

"Sure. Come on Abe, let's see how messed up it is," the petite pilot and the big machinist and mechanic walked back to check the helicopter's engine and flight controls.

Willow looked at the parked Skeeters. The SSI aircraft were currently resting on long aluminum skids with their runway wheels retracted. "Tara, how far apart are those marks spaced?"

"109.3 inches," she said after glancing at them. "a-and they a-are 118.7 inches long compensating for wind a-and sand collapse."

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"Helicopter landing skids," Willow said. "I bet that's what they are."

"The helicopter would have landed on the blind side of the erg..." Tara said thoughtfully, "But, the crew would have heard it."

Willow nodded, with rotor slap and the high powered engines a helicopter needed they were far from silent. It might be difficult to pick out the exact location of an incoming helicopter because of the reflection from the rotor disk to the ground and back, but you would hear them coming. Especially Angie when she got out to place the Crickets.

"A-also Buffy was right on top of it very quickly. A-and you know how good her vision is. She would have spotted it."

Willow nodded again, "Well, let's see what we can do with the data."

The redhead and the blonde gynoid headed back towards the jeep.

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## Chapter Five -- On the Hunt

When they returned to base camp they were still as puzzled as before. Buffy and Abe had flown Skeeter 2 back with Steve-O and Rory taking Skeeter 1. Tara and Willow had been at the controls of the Bronco.

When all three aircraft landed, Abe immediately had Skeeter 2 into the workshop and started giving it a thorough once over. Buffy and Steve-O tied down Skeeter 1 and then headed over to the chow hall where they met the others.

"Hey Lena!" the blonde powerhouse said, "Anything from the Outpost?"

Buffy was referring to SSI's remarkable space station, the third in a series. It was where Tom Swift's incredible Megascopie Space Prober was housed.

"They got two good orbits of the site, Buffy. Absolutely nothing, and that's in a sixty mile radius. I talked to Gene up in the tower and there were no radio transmissions either except for ours. He ran back the feed and listened to make sure," the slender geologist said.

"Well we've dealt with stealth subs and aircraft before," Willow said thoughtfully. "Why not helicopters?"

"But Willow," Tara spoke up almost shyly, "When the Cobra was using his quantum shield, we could detect it was being used, by its effects. This time the Prober didn't detect a-any anomalies."

"So big brains," Buffy asked, "How would you make a helicopter invisible and more importantly, silent?"

"Why more importantly silent?" Lena asked.

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"Well," Buffy began, "Like I said at the site, the area where we found Skeeter 2 is covered with these sand ergs. If you were really really good you fly in the radar shadow of them. SSI's radar is really good, but it still would be screwed up by ground clutter if you're super close and below the radar horizon from the tower's or Skeeter 1's emitters. Silent is tougher because helicopters are loud."

"If I wanted to make a helicopter silent," Willow began thoughtfully, "I'd have to mask two things, engine noise and blade slap. Blade slap is really called blade-vortex interaction actually. That's the two biggest cause of that whap, whap, whap sound."

"Blade-vortex interaction?" Lena asked.

"Sure," Buffy said, "Think of a helicopter blade as a bunch of spinning wings. A normal aircraft wing produces a rolling wave of disturbed air right behind it as the high pressure under the wing and the low pressure going over the top recombine. It makes something like waves on a beach."

"Exactly!" Willow said. "Now all these wings are running into the vortexes produced by the wing, uh, blade, ahead of them. These vortexes are forced down and rebound off the ground. All sound is, is fast moving air after all."

"So how would make a silent helicopter?" Lena asked.

"Electric motors maybe for the engine. For the blade slap I don't know...Interference using an out of phase signal from a speaker, like noise canceling headphones. It would be really tricky to keep in sync though. Maybe have odd spacing between the blades? That would spread the frequencies over a wider band so they wouldn't reinforce...I honestly don't know Lena."

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Lena looked over at Tara who was working away at her laptop, "What are you looking at?"

"The radar data. Now that we have a-a space prober scan I can measure the radar shadows and possibly filter the clutter out. It's only a-a chance a-actually."

"Well, I've got to get a hold of Tom," Lena said getting up.

"Is he back from the asteroid belt yet?" Willow asked. The elderly inventor was exploring new mining techniques as his latest project.

"I don't know, but I still have to keep the home office up to date. I do know we're getting a security team sent here ASAP. Sandy's bringing them in on the Sky Queen and they should be here in a couple of hours." The Sky Queen, also known as Tom's Flying Lab, was easily the largest aircraft ever built.

"The Queen?" Buffy gasped, "I'd better tell the flight line. Maybe we can get them to land downwind, otherwise sandstorm city from its jet lifters," referring to the massive VTOL system mounted on the gigantic aircraft. She gulped down her water and headed out followed by Lena.

Tara continued her work while Willow sat there looking thoughtful about what Buffy had just said. "Tara, when a helicopter flies really close to the ground it leaves a trail..."

"Yes, the blade wash would leave marks. There has been too much wind to spot that though a-all the marks would have been blown a-away."

"But they would have been there..." she got up, "I'm going to check something out. I'll be back later."

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Heading to her bunk, she opened her locker and pulled out a small backpack. Then she headed over to the flightline to find Buffy.

"Hey Wills! They're warned," the blonde did a double take, "That backpack?"

Willow nodded, "I have an idea on finding Grady and the others."

"Okay, what do you need from me?"

"A pilot and Skeeter 1."

"Uh huh. And that pack means we can't tell Lena what's really the what...Come on, let's talk to Abe."

They found the big machinist looking at the windscreen of Skeeter 2. He had a puzzled expression, "Hey Abe," Buffy said.

"Hey yourself Buff. Willow, what do make of those?" he pointed at the windscreen, while shining a portable work light on it from an angle.

The red head bent over and looked closely at the plastic, and saw the light was picking up odd looking circular whorls that seemed to be actually inside the half inch polymer.

"That's not a manufacturing flaw is it?"

"How could it form? These screens are injection molded and hot shaped," Abe replied. "Look how regular it is too."

Willow shrugged, "As if this was making any sense anyway."



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Abe clicked the light off and shook his head, "Yeah I know. So what's going on that you came over?"

"Abe, we need some help," Buffy said, "And we need it with no awkward questions."

"O-o-kay...What kind of help?"

"Willow needs to use Skeeter 1 without Lena asking about it. It has to do with finding the crew of Skeeter 2."

"And you can't tell Lena why?"

"Because it involves some weird stuff like what happened in Mirinsk," Willow said referring to the Kranjovian capital. The three of them plus Tara had escaped from a secret base there.

"Weird like Buffy's combat skills and physical abilities weird?"

"Sort of. Stuff that Lena isn't cleared for, but you kinda are," Willow replied.

"I see...would Tom or Sandy know?"

"Not exactly. Abe, you've known me for a while right?"

"Yeah. Best machinist apprentice I've ever had."

"Do you trust me?"

Abe nodded, "Definitely. Okay, so Buffy will be flying?"

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"I hope so."

"Try and stop me."

Abe laughed, "Okay okay...Just asking." he turned to one of the mechanics, "Hey Vin. 2's ready. Buffy, Willow and I are taking it up for a check ride."

"You're coming too?" Buffy asked.

"You'll need a co-pilot because I'm guessing what Willow will be doing, won't let her keep her mind on the aircraft."

Skeeter 2 flew low above the desert to the place where it had been found abandoned. As it arrived Buffy looked around. "Where should I set down?"

"Just hover about here," Willow said over the headset. Opening her bag she pulled out several packets of herbs and mixed them together while chanting softly. Then she scattered the powder out the open cargo door. A fine dust settled out of the air and caused large swirls to start glowing on the ground.

"It worked..." she breathed softly. It was a variation of a tracking method she had used before.

"What the heck!?" she heard Abe say.

"Don't ask," Buffy replied, "I'm guessing that-away Will?"

"You're guessing right. I'm not sure how well or how long this will keep working so...hurry?"

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"Hurrying," adjusting the collective and twisting the throttle, Buffy accelerated the small helicopter until the ground was a brown blur underneath. Willow continued to trickle the powder through her fingers and watched as it leapt towards the rotor wash pattern of their mysterious foe.

Ten minutes later they were approaching some of the basalt eruptions that bordered the western side of the Tenere before the Air Massifs. Buffy hovered Skeeter 2 in front of the 20 foot tall stone lump and about fifteen feet above the ground.

"Where to now?" she asked

"I don't know..." Willow began when she suddenly heard a high pitched keening sound just before everything went black!

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## Chapter Six -- Blackland

Willow woke up lying on a small concrete slab with a thin mattress on top. She was in what appeared to be a jail cell with a small sink, a plain metal toilet and the bed she had woken up on being the only furnishings. There was a strong looking sealed door with a vision slot and also a small hatch in it. She sat up and immediately felt dizzy and nauseous. It was like her inner ear wasn't doing what it was supposed to and keeping up, well 'up'.

She felt some small twinges on her waist and shoulders and checking; saw there were shock harness shaped bruises. Had they crashed?

She got up and made it to the sink. After splashing some water on her face she felt a lot better. Carefully sitting back down, she reached behind her ear and pressed the small bulge of Little Sister. There was no carrier wave. Wherever she was, was well out of range of the camp's repeater. The concrete walls weren't helping either.

Standing up again she walked to the door and knocked politely on the vision slit, "Ummm? Hello?"

The panel slid open and a pale and scraggly bearded face stared at her in some surprise. "Yer up already?" he said in a rough voice with a tinge of an English accent. "Right then, turnabout and stick yer mitts through the panel when it drops."

"What?" Willow was confused.

"Yer hands missy. Turnabout back to the door. There's this panel in the door. When it drops push yer hands through."

Still slightly dazed about the strange turn of events, Willow did as she was told and found a strip of Velcro covered cloth was used to bind her hands together.

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"Step ahead a pace and keep facin' the far wall missy. If you don't, you get droned again."

Willow stepped ahead and heard the door swing open behind her. A hood was slipped over her head and a strong hand gripped her by the shoulder, "Come along now."

She was guided down a hall and into a small room. Then a sudden sinking feeling told her that she was in an elevator.

When it stopped she was placed onto a small bench seat and a rush of air told her they were in motion. She had the impression of passing people and open spaces and she could hear snatches of voices speaking in a multitude of languages. Finally her journey ended and she was pulled up from her seat by rough hands and shoved forward. The hands walked her forward to a chair and she was firmly pressed into a sitting position. Then the hood and the strap around her wrists were removed.

"You can go. I don't think she's the usual sort we deal with..." an amused voice said. "Hood and binders? You weren't taking any chances with her. I'm half surprised you didn't drone and drag her." Willow's eyes were still trying to adjust to bright light so she really couldn't see who was speaking.

"Sorry Chief. You bein' so uh, forceful on followin' the rules, I thought it was safer to go by the book."

"And rightly so. Sergeant Geoff. I would not have been happy if she had not been secured on arrival."

"Another test Chief?"

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"Always, and remember, I test myself just as I test you," Willow's eyes had adjusted by this time. The man who had just spoken was not much taller than she was but broader across the shoulders and had a presence that made him seem much bigger. He was clean shaven including his hair and eyebrows, and had a face of an eerily smooth and pale tone. It was difficult to judge his age; he could have been 30 or 60.

"What do you think miss?" he said as he turned to face her. His voice was smooth and controlled with a mere hint of a French accent.

"Uh what's going on?"

"You tell me. You're the one who was tap tap tapping on my front door...Along with your two associates of course. What brought you here?"

"We were looking for some friends. You haven't seen them have you? They were in their helicopter and then they weren't."

"Much like the one you were travelling in?"

Willow nodded and looked around the room surreptitiously. It was luxuriously furnished with a tiger skin rug on the floor and the head of a bull elephant mounted on the wall along with other trophies. The man interrogating her was standing beside a large desk made of black marble with a bare stone wall behind it. He was dressed in a white linen suit with a black collared shirt and no tie. He was also, strangely enough, barefoot.

"Admiring my office I see...Get up, take a look around. I doubt you'll see anything of its like anywhere else on Earth."

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Willow stood and turned to see the portion of the room behind her. The walls, floor to ceiling, were split between bookshelves, display cases, and paintings. Walking over to one of the cases she saw a cutlass inset with rubies and emeralds. The blade looked razor sharp as it lay on a velvet pillow next to its gilded scabbard.

"My grandfather's. He took the head of an annoying British Captain with that during the annexation of Darfur in 1916. Couldn't blame him for it, he was under contract to the Kaiser at the time after all."

"Who are you? What is this place? Where are my friends?""

"Your friends are resting comfortably in the same sort of accommodation you found yourself. They will be brought up and I will ask them the same series of questions that I am about to ask you. If two of you agree and one does not. Than the dissenter...well, it would not be pleasant to be the dissenter."

"What questions?"

"Who you are? What you are doing in the desert? How you found where we captured you? Even the Tuareg do not know this location."

"My name is Willow Rosenberg; I'm out here working on a project for the company I work for. We used a new tracking algorithm that let me see the patterns in sand of rotor wash. I had just developed it."

"You're a scientist?"

"An engineer."

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"Interesting," he moved and sat down behind his desk. "An American engineer. Young and attractive as well. Sergeant, take her to the Factory. Perhaps Calcade can put her to work. After you've done that bring the blonde up."

"Yes Chief."

"Uh sir," Willow said timidly, "My other two questions? Who and where?"

The man laughed. It was a cold laugh. "My name is Eddie Killer, and I'm the Chief of Blackland."

There was a click as he manipulated something on his desk and the wall behind him slid aside revealing a huge underground city in a monstrous cavern.

"Welcome to your new home for the rest of your life. Take her away!" the hood was slipped over her head and the strap wrapped around her wrists once more as she was led from the room.



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## Chapter Seven -- A History of Crime

When the hood and strap were removed again after another long ride in one of the carts, Willow found herself on a factory floor. There room was mainly dark with high intensity lights, mounted on the ceiling way above, focused on the machines and not on the walkways. The light spillage showed Willow that it was immense though and the echoes of machinery and shouting reinforced that fact.

Walking over to an intercom panel, the Sergeant spoke into it, "Calcade, I have a new employee for you. The Chief's orders."

There was a whine and an incredibly fat man riding on an electric cart pulled up to them. It was driven by a much skinnier man who appeared to be tied to the cart with a long coil of aircraft cable that fastened to his ankle.

"Sergeant Geoff," the fat man said with an obviously fake broad smile, "Always so good to see you. Another dune dwelling stray I presume? They're only good to fetch and carry you know."

Geoff gave a ghastly grin which displayed many of his missing teeth, "Not this time, it's an engineer. An American engineer."

"Oh?" Calcade's expression turned from fake smile to predatory, "You have proof of that?"

"They was grabbed from a surface helicopter that had managed to track a helodyne across the Tenere. She was doing the scannin' I believe."

"A technician then at the very least. Definitely a step up...A señorita?" Calcade looked surprised when he saw Willow. "Interesting...Where is the surface helicopter?"

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"We crashed it right away with a bunch of undesirables. Just so their friends won't come lookin'. The flight crew's in the can until the Chief decides what to do with them."

"Pity about the helicopter, I would have liked to have seen what the primitives had come up with that could track a helodyne. Still faking a crash seems best in the long run. As Great Chief Harry always said, 'Them that is murdered is revenged. But, them that dies by happenstance is mourned and forgotten'. Well," he looked at Willow again, "I suppose I can find something to do to keep the senorita out of mischief...Tell the Chief Gracias for me Sergeant."

"Of course Calcade," the mangy looking sergeant headed back into the gloom.

"Well Señorita...what is your name? And who did you work for?"

"Willow, Mister Calcade. And I was working for SSI."

"Swift!?" Calcade gasped, "Does the Chief know that?"

"He didn't ask, but it was all over the helicopter. So probably."

"Or possibly not..." Calcade said in a curiously subdued tone. "Climb up here," he pointed at the seat next to him. When Willow complied, he spoke to the driver, "To my office."

The little electric cart hummed off into the shadows.

After a five minute ride through a vastness of machines and warehouse areas, they pulled up at a small building set up in this vast cavern. Calcade climbed off with some effort and beckoned Willow to follow him. She thought about running,

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but saw a curious pistol on his belt and decided that would probably not be the wisest of courses.

Inside the building was bright and clean in direct opposite of Calcade, who was dirty and smudged with greasy black hair and a nasty scar that curled around his chin and neck. He noticed her staring at it and grinned revealing many gold teeth, "You like my snake?" he tapped the scar. "I had an issue with a former compañero...about the ownership of some funds. He was faster and had a knife; I was tougher and had a gun. Also I had better aim."

He led her into a small elevator and they exited in a large room with computers and drafting tables with an assortment of individuals working away.

"Calcade," one of them said. "We're running low on spares for the rotors, permission to open a production line?"

"The blades again?" Calcade asked. On receiving a nod, he shook his head, "Almost a hundred years later and we still can't improve on that design. Yes of course. If we lose the helodyne the Chief will have all of our heads not just mine. Come along Willow."

He led her into a cluttered office with the only visible luxury a large padded chair behind a paper strewn desk. The only decoration on the wall was a framed Doctorate of Mechanical Engineering from the University of Barcelona for a Hugo Calcade.

"Is that you?" Willow asked shyly.

Calcade looked over, as he sat his immense frame down, and nodded, "I was top of my class as an undergraduate at MIT as well. I thought I knew everything but then...then I got this job and found I knew nothing."

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"What do you mean?"

"What do you know of Blackland?"

"Nothing."

He pulled open a small refrigerator and pulled out a bottle of beer. Opening it, he took a swallow and sighed, "In the late 19th century there was a very bad man. His name was William Ferney and he was a former Major in the British Army. He fought all over Northern Africa for the Queen, and then when he was discharged for conduct unbecoming an officer; as a mercenary, a brigand, and a pirate. He had changed his name to Harry Killer by that time, and he and a group of others decided that they needed a secure base, and made their way to the deserts of Mali. Sometime before that he had made the acquaintance of the first Director of the Factory. A Frenchman by the name of Marcel Camaret. He was a genius much as the Swift family is, and he developed some absolutely amazing inventions such as the original helodyne, the aerial torpedoes, the rain maker...many wonderful things. Harry Killer recruited him, gave him all the money he needed to make his dreams real, and set up the first Factory for him in the original Blackland. Then while Killer and his Merry Fellows pillaged and murdered their way across Africa and Europe, the Director, not thinking one moment of where his benefactor's funds came from, happily invented away all day."

"Merry Fellows?"

"The mercenaries. Geoff is one obviously. In the Blackland code of laws, there is a hard limit of 566 of them counting the Chief. They get the best of absolutely everything and there is no consequence to any of their actions unless it's directed against the Chief or the Factory. The Merry Fellows do the stealing and the killing for hire and the piracy that provides the income for this place."

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"You said original Blackland, Mister Calcade. What does that mean?"

"Shortly after the dawning of the 20th century, Blackland's 'expeditions' had drawn the attention of the French Government, which were running Mali at that time, with mysterious disappearances. They sent an expedition to the Niger Bend to determine the cause. Killer learned from certain well-paid and placed sources that this expedition was coming and arranged for them to be captured en masse and brought to Blackland," he took another sip.

"At that time the only airpower that existed were balloons, and Robur's vessel the Albatross, of course. The Wright Flyer wasn't until 1903 after all even though there were other experiments. Blackland was on the surface then and was provided with water by Camaret's amazing devices. No one knew about it, because no one but Blackland had the aircraft necessary to fly over such a wild and deadly land. Any nomads were immediately captured and enslaved of course once they stumbled upon it."

"Slaves?"

"Where the workforce of Blackland has always come from, even now. There are three castes as it were señorita. The Merry Fellows at the top, then comes the Civil Body; those that seek entrance to the Merry Fellows, the technicians and designers such as myself and those you saw in the office just outside, mechanics, skilled farmers and the like. There are close to 2,000 of us. Finally there are the slaves, and Blackland has over 7,000. They work the farms and run the machines."

"Where do the slaves come from?"

Calcade shrugged, "Tribes across Africa, someone that annoyed a Merry Fellow in the past. Many have been born here of course...That was the first

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Blackland. When the Barsac Mission was captured everything began to go wrong. The leader of the mission got to Camaret and convinced him of what Killer was actually doing with his inventions. Camaret was horrified when he found out, and he and the Factory workers staged a revolt and freed many of the slaves. The mission escaped and the French Army came in and cleaned up the mess. Then the French hid what had happened. Remember, Blackland had been raiding much of Europe with train and bank robberies, and you can be sure because Blackland was located in a French Territory, that every one of those countries would be seeking reparations from the French Government...So they hid what they had found, and all was left to the desert to reclaim."

"Then what happened?"

"Not all the Merry Fellows died of course, and sadly neither did Harry Killer even though many thought he had perished as the city burned. He recovered the blueprints for Camaret's inventions from a safe inside the ruins of the factory and decided to start over in a cavern system they had discovered earlier. It was slow rebuilding what they had lost, especially since Camaret was dead, but he found other engineers that could follow the blueprints and at least duplicate what the genius had invented. When he had a base set up he began raiding again, slower and more discretely. Blackland thrived, and when Harry died his son took over and now his grandson, Eddie, is in charge."

"So how did you get here?"

"I am a very smart man, but not when it comes to roulette. My losses were extreme and I owed some very unpleasant individuals a great deal of money or my life as an example of why not to owe them money. Charles Killer bought my debt, and effectively my life, twenty years ago. So that is Blackland. Now I must get you fitted with a bracelet and find out your aptitudes so we may put you to work."

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"Work?"

"If you do not work, you do not eat."

"I see."

"Come along," he finished his beer and stood up leading Willow into a side room, "Davis, give Señorita Willow a bracelet and the test."

The tired looking man chained to his desk nodded, "Of course Calcade." The large director left, leaving Willow standing there. "Please sit Miss," he pointed to a chair.

Willow sat down and Davis took her arm and fitted it into a clamp. Before placing a large metal cuff on her wrist. There was a small keyhole visible.

"The only way to get that off is with a key the Chief has. You try opening it any other way it explodes. It has a battery that needs to be recharged once a day. If the battery gets too low it explodes. Before it gets to that point it starts to get warm. Currently it's set to open all common doors. When you get your job assignment, it will be set to give you access to those areas during your shift as well as your dormitory. Do you understand?"

"Kind of?"

"Look Miss, just follow the rules and you won't end up dead or droned and most importantly, if a Merry Fellow tells you to do something, do it. It's a lot better being in Civil Body than a slave," he raised his chain and shook it.

"What happened?"

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"I said no to a Merry Fellow. That was two years ago when he told me to lie for him to the Chief."

"Why didn't you?"

"Because the Chief runs tests all the time. The Merry Fellow is now in the mines, while at least I'm behind a desk. The Chief knew what was up. If I had lied I'd be in the mines too."

The next thing Davis did was to set up a computer terminal which had a barrage of technical questions on it. Willow answered them all as best she could as Davis worked away on his own system.

"How did you end up here?" Willow asked when she finished.

"I was service technician and they had a broken computer. My family thinks my plane crashed or so I'm told," Davis said as the results were being printed. "I've been here for five years."

He pulled the sheaf of papers from the printer, "Amazing! You qualify for the reverse engineering section," he said excitedly.

"What's that?"

"Trying to figure out how the Camaret devices without blueprints work. According to the story, there were things that got built that the Great Chief took with him on the exodus underground. Trying to get these artifacts functional is one of the Director's main tasks."

"So now what do I do?" Willow asked.



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"Now I call the Director," Davis said as he picked up a phone.

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## Chapter Eight -- An Ally

Willow was escorted by a haggard looking man who wouldn't meet her eyes, back to Calcade's office.

"What's wrong?" she asked.

"I'm set to one hour fast discharge Miss," he said tiredly.

"What does that mean?"

"It means Señorita Willow," Calcade said as he approached from the side, "That his bracelet was set so it must be recharged every hour. Setting the discharge rate is a popular punishment for slaves here. Every hour he must hold his bracelet against a slave charger for ten minutes."

"Am I a slave too?" she asked.

Calcade shook his head, "You are far too skilled. Come with me. I will show you your dormitory and your work space."

The Director showed her a clean open bay with wall lockers. "If you need coveralls or toiletries, the company store is at the end of the hall."

Willow knew her history, "And how easily do they extend credit against my pay?"

Calcade laughed, "Very good Señorita Willow. You understand the ways of the world. I do not think you will ever be leaving, much like I. So it really doesn't matter. Your contract here is for life."

She nodded, "Do you know what happened to my...flight crew?"

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"They are being questioned. Then they will be tested and assigned...probably to the farms."

"What are these farms?"

"Hydroponics. It's where we get most of our basic foods."

"Hydroponics? But there's a desert up above us."

"And an ocean of water down below..."

Willow stiffened. Lena had been 100% correct in her studies.

"How deep are we?" she asked wonderingly.

"The main cavern is about a mile below the Tenere. The hangers are much closer to the surface of course."

"The helodyne hangers?"

"Yes, you haven't seen them have you? Come along," he led her down to where his cart and driver were. Soon they were off into the shadows of the factory.

"The helodynes were one of Camaret's crowning achievements," Calcade explained as they rode along. "He invented them in 1907. Amazing work. We've improved them over the years with better avionics and weaponry, but the base design we cannot alter without disrupting some of the more clever characteristics."

The cart pulled to a halt in a large maintenance bay, and in an island of intense light Willow saw an aircraft. It was about as long as a SSI Pigeon Elite business jet,

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but had two rotor pods at the tips of its wings. The seven blades each rotor contained were intricately sculpted and had unusual notches cut and smoothed in them. The cabin was painted a strange taupe shade which Willow realized would match the desert sands when viewed from above. The belly was painted a light blue to hide it from below.

"I'm assuming the rotor shape is to alter the vortexes and remove the sound? And the paint is camouflage?"

"Very good Señorita Willow! Exactly!" Calcade said in an extremely pleased tone. "The paint is also photo-chromatic. It darkens in response to the amount of illumination placed upon it. The rotor shape though...that is one of Camaret's masterpieces. When they spin they produce a high pitched whine at the level only a dog could hear. They are powered by electric motors driven by fuel cells he had developed shortly before the first Blackland fell. We did not understand how they worked until the 1960s when the United States space program began describing their advances. Once that had happened all seemed clear according to the previous Director's records."

Willow nodded. It was clear this Marcel Camaret had had the same inventive spark she, the Swifts, and the Black Cobra possessed. It was also likely that one of the engineers at NASA had also possessed it. For once the creation was completed and the natural laws were slightly altered, others could understand and build it.

"So silent motors too?" was all she said casually.

"Of course. They swoop in like big birds of prey. The originals were powered by canisters of liquefied air kept at great pressure, powering turbines. They were quiet as well, but the electric system has far longer range."

"What are those tubes?" she pointed at a protrusion on the nose.

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"Air powered machine guns that produce very little noise and no muzzle flash at all. They use bullets made of machined quartz."

Willow looked puzzled, "Why stone?"

"It's easy to get, and with the automated mills, spinning it to the right shape is simple. Also lead bullets look like bullets, while quartz bullets can look like gravel or broken glass," Calcade said in reply. "Now let's get you to the vault."

After another cart ride Willow was escorted into a large sealed room with a heavy door. Inside was a room filled with filing cabinets and a few desks. A single other person was working in one of the far corners.

"These are all Camaret's notes and designs that Harry Killer was able to recover. The reverse engineer's job is to try to piece them together. There are wondrous and tantalizing things hidden that for some reason will not work no matter how hard we try...and then suddenly...Poof! They function."

"Like the fuel cells?" Willow asked casually.

"Exactemente! Here is your station. It seems you are an electronics expert according to your test?"

"That's what I've done the most work in."

"Bueno. Take a look at these and see what you make of them. I have the original French as well as English and Spanish translations if you need them. I will now take my leave." He headed out leaving Willow seated at the desk looking down at the mass of documents.

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She sighed and scratched at her wrist by the edge of the bracelet. Cupping her hand over the keyhole she concentrated and a small smile appeared as she heard a faint click. It had been a chance, but she was sure that the security measures had not been designed to foil someone with her abilities. Carefully relocking it, she turned back to the papers.

This stack seemed to be some sort of power amplifier in a remarkably compact size. She stared at it and saw how it should work. Then a thought occurred to her, if she completed the design, it actually would work. She looked around the room at the other person sitting there. It was a young blond man in his early 20s she supposed. He had a much more tanned complexion than most of the people down here.

"Hello?"

He looked up and smiled, "So you aren't scared to talk. I didn't want to disturb you. The adjustment to this place can be pretty rough."

"How long have you been here?"

"Three months. I was motorcycling across the Tenere when I saw one of the helodynes take off from its hidden hanger. The Merry Fellow guards droned me and well here I am."

"I keep hearing that term...droned. What's that?"

"Sonic stunner. My great-uncle invented something like it back in the 40's. These guys call it a drone. Calcade has one on his belt."

"Your great-uncle? What's your name?"

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"Hartson Scott. Call me Hart. And you?"

"Willow, Willow Rosenberg. Who was your great-uncle?"

"Dr. Richard Brant. He was head of the Spindrift Research Group until he retired a few years ago. My Uncle Donnie runs it now."

Willow was impressed. The Spindrift Group was a private think tank that had successfully landed an unmanned rocket on the moon in the late 1940s. They were specialists in commercial space science and communications predominantly.

"So you're an engineer too?"

Hart laughed and shook his head, "Not formally, but all my family is into mechanics and machinery. Rebuilding undocumented or poorly documented junk is what we do for fun...and this," he pointed at the stack of papers in front of him, "is right in line with that. So how did you end up here>"

"I work for SSI, and was sent out to help with a project we have out here. Some of our people disappeared and I came up with a way to track the helodynes. They caught me and my...flight crew and that's why I'm here."

"SSI?" he gave a low whistle. "You guys are the big leagues. I wonder if Eddie Killer knows how much trouble he's in. Making the Swifts angry is just stupid."

Willow nodded, "Tom takes any attacks on the company or the employees personally. Still, he'll have to find this place."

"And that will not be easy," Hart agreed. "I gotta say these documents are fascinating. I can almost see the leaps in logic, but some of these concepts...it's like this Camaret guy's brain worked on a different plane of thought. Some of this stuff

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should not work, but it does," he shook his head. "Well I have a refinement to a gas turbine engine with an exotic metals formula that absolutely should not be possible. Somewhere in these papers I'm sure, is the ideas on how to create this alloy. What do you have?"

"A power amplifier that's using some kind of magnetic pinch to reduce its size and up its efficiency. It also shouldn't be possible."

"Well our job is to take these concepts and merge them with is possible. Fortunately, the Killer family understands how insanely difficult this is so they cut us some slack. Apparently before I got here there were no reverse engineers for a while, and Calcade was doing all this along with managing the Factory. As long as we can show some kind of progress he'll make our lives easier...until we escape of course."



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## Chapter Nine -- Reunion

As she poured over the notes in front of her, Willow felt a strange sensation building. It was much like the feeling she had had when she had realized how to create Tara's Proton/Anti-Proton brain.

"The spark...the moment when natural laws become pliable," she said softly to herself. She stopped looking at the papers and tried to will it back. The last thing she wanted was to actually solve any of these puzzles. Who knew what Killer and his Merry Fellows would use them for? What sorts of brutality and murder would these devices become tools in the aid of?

She looked quickly at what the amplifier was supposed to do, not how it was designed, and began sketching an alternate circuit using modern techniques. It would be very efficient since she used the already developed work of Camaret as a base; he had already altered those laws after all. But nowhere near as powerful as if she had let her spark take hold.

"You got something?" Hart asked as he watched her sketch away.

"Maybe. I can see what Camaret was trying to do, but it just shouldn't work."

"I know what you mean. Calcade said he's been pouring over these blueprints for two decades and he can't tell if Camaret was more genius or more madman...but obviously, his completed designs do in fact work. So what did you come up with?"

"Using the state of the art, I think I can get it down to the size of a dresser...the plans say it should fit in a suitcase. The problem is cooling."

"Well," he looked up at a clock on the wall, "Dinner?"

"We can go?"

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Hart nodded, "As long as you've actually accomplished something over the day," he pointed at the sketches on both his and Willow's worktables. It was a substantial amount of paper.

"Did you find the alloy formula?"

"Nope, but I have some ideas on some that could be used as a substitute," he leaned close to Willow and whispered, "And some that may actually hold up long enough for a test but not in production."

Her eyes widened and she nodded, "That's a great idea..." she whispered back.

They left the vault and made sure the door was shut securely behind them. Hart led her over to one of the small electric carts.

"So we can go anywhere?"

"Anywhere the electromagnets in this bracelet say we can," he raised his wrist. "All the locks are magnetically encoded; it's some of Camaret's technology from about 1910. I looked up the blueprints. See those aluminum plates?" he pointed at a shiny square next to a door as they drove by. "They have a series of levers pulled by magnetic fields. The detectors are ridiculously sensitive and accurate."

"So it's actually a mechanical lock in there?" Willow said curiously.

Hart nodded and tapped his bracelet. "Removing one of these things would take a lot of work. Hardened tool steel case and the lock is a multi step dish pins with a curved keyway. It uses a flexible key."

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"Wow. So pretty much unpickable?" Willow said while thinking, "If you're not me..."

"I'm afraid so. We need to get the key from Killer or probably one of the higher ranking Merry Fellows, one of the Captains or higher."

"I thought Killer had the only key?"

"Nope. The blueprints said there were ten made..." he pulled into a cart charging area, "Dinner is served."

They walked into a large dining area. There were two levels of seating; the lower had a typical cafeteria setup while the higher was walled with mirrors. A flight of steps led up and Willow saw a man dressed in combat fatigues with a holstered pistol walking up.

"A Merry Fellow?" Willow asked quietly.

"Yes, that's their luxury dining area. One way glass so they can gloat at us peons of the Civil Body."

The pair walked down the cafeteria line and got a bland unappetizing looking stew, a hunk of bread, and water.

"Definitely not cordon bleu but better than the slaves get," Hart said upon seeing Willow's expression at the meal. "No spices either, they save them for Merry Fellows."

"Who are the Merry Fellows?"

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"Thieves and murderers. All of them have fought their way up from the Civil Body. If you want to join Blackland and you can find a way to contact them and you're clever enough to not die in the entrance exam, you can join the Civil Body as an 'auxilia'. They stand guard and watch the slaves mainly. When a current member of the Merry Fellows dies or loses his position, any auxilia can request a chance to fight for it. Last man standing gets it."

"Only auxilia?"

"Well no, any member of the Civil Body actually. Even a slave could technically, if they could persuade their supervisor to let them compete."

"How do you know all this?"

"In all our quarters, there's a scroll of the law. There's really nothing else to read around here, so I memorized it," Hart said embarrassedly.

Willow sighed, "I cannot wait to escape from here."

Hart laughed as he ate his stew, "You and me both. What are you waiting for?"

"My friends...my flight crew and another SSI flight crew were captured. I need to find them."

"They have any skills that would put them in the Civil Body?"

"One is a machinist so he may have ended up in the Factory...the other...she's probably swearing up and down she's just a pilot."

"They don't need pilots in the Civil Body. She'll be in the slaves then, and as a woman she'll probably end up on the farms or in the cleaning crews."

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"How would I find her?"

"Well as reverse engineer's we have permission to inspect any piece of Camaret's technology. It may give us clues to how the unfinished stuff might be completed. The farms use some of his pumps."

"So after we finish dinner?"

"Sure," Hart said as he wiped up the remains of his stew with the bread.

The cart whined as it descended down the long ramp to the farming areas. When they arrived Willow was amazed to see a miles long series of large tanks with bright lights glowing above them. All through this maze of pipes, wires, and glass, were people wearing plain coveralls and sandals toiling away. On towers set above the lights, were men standing behind large bell muzzled guns.

"Large area drones," Hart said pointing at the weapons. "Fixed position so they can't be moved. The only other weapons the auxilia are trusted with are batons."

"Hey what are you doing here?" a voice called out. One of the auxilia with a gold stripe on his shoulder patch walked over.

"We're engineers with the vault," Hart said, "Check with Director Calcade and make sure you interrupt his dinner...he likes that, slavemaster."

The auxilia froze, "Technology inspection?"

"Of course, why else would we be down here."

With a nod of understanding the auxilia left them alone.

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"So how do we find her?" Willow asked.

"What does she look like?"

"Blonde, petite, and energetic. Also she would have been brought in today."

"Well this looks like a terminal of some kind," Hart pointed at a monitor and keyboard set into the wall by the entrance to the farming area. "I don't know much about electronics I'm sorry to say."

"Don't worry Hart, I do," Willow said confidently. She walked over to the keyboard and soon the screen glowed to life. Soon she was scanning through a large set of databases and personnel allocations. "She was assigned to the farms! She's working in the tomato section now." Willow poked around until she brought up a map of the huge agricultural area. "There!" Soon they were walking towards the appropriate area.

It took about twenty minutes to reach the tank and the noise from the conveyor belt that ran between the areas was overwhelming. Willow looked at the brass and bronze gears and pulleys as they passed by them.

"This technology...it looks so Victorian."

"It is. Blackland's infrastructure was based in the late 19th early 20th century, and the Killer's don't really want to use anything that can be traced back to a surface supplier. Most of the replacement components are built in the Factory from what I understand."

"But the computers I've seen are modern?"

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"The Killer's aren't stupid. They'll use surface stuff when they have to."

"What powers this place? Where does the electricity come from?"

"I actually don't know, but they certainly use a lot of it. Everything here is electric."

By this time they had arrived at the edge of the tomato tanks.

Hart started climbing one of the auxilia's towers and motioned for Willow to follow him.

"Hey who are you?" A very surprised goon said when they reached the top.

"Engineers from the vault," Willow said, copying Hart's story. "We're performing a technology inspection for the Director."

The auxilia shut up and nodded returning to his watchful gaze over the slaves toiling away below. While Hart made a show of examining the heavy mounted drone, Willow looked out over the tankage. There were hundreds of bodies in drab coveralls all over the area. Then she saw a shock of bleached blonde hair and she couldn't help but smile. She carefully tapped Hart on the shoulder and nodded.

"Thank you," Willow said to the auxilia as they descended.

They made their way to where Willow had seen her friend, pausing occasionally to apparently inspect a pump or a fitting. Soon they were right beside the bedraggled looking blonde. Buffy looked like she had wrestled a in a tub full of spinach as green plant matter was covering her.

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"Hi Buffy," Willow whispered. She knew her friend's amazing hearing would pick it up.

Buffy stood up and stretched, "Hey Will...some fun huh? They have me cleaning algae from the outflow pipes...because of my size apparently. Grady and Tom are working in the corn and Angie got sent to cleaning crews. Abe is at someplace called the Factory? I'm guessing that's where you are too." She spoke without turning around.

"So you're keeping your brain under a rock again?"

"Yeah. I already got my bracelet off and back on and they haven't noticed."

"How?"

"Cuff is steel. Hinge pin is brass," Buffy said with a smile in her voice. "As a friend of mine might say, 'Poor engineering'."

Willow nodded. With her friend's strength, bending or snapping the pin would have been simple. And by not touching the lock, she had bypassed the anti-tamper mechanisms.

"Buffy, this is Hart Scott."

"I heard somebody coming up with you," Buffy said as she bent to continuing to clean the grill. ""Hi Hart! I'm Buffy! So Will, what's the plan?"

"I don't know yet. They have me researching weird tech with Hart here and we need to know more about how this place operates."



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"I thought so," Buffy sighed. "Well I'm algae cleaning Buffy for the near future, and I'm in slave dorm three if you need to find me the six hours of the day I'm not doing this. Will, there's a lot of them. I heard there's like 1500 auxilia along with the muscleheads with the guns."

"The Merry Fellows?"

"They won't be so Merry when I'm through with them," Buffy said in a threatening tone. "We need to cramp their style before we try anything. I'm good, but with odds of 2000 to one?"

"Well the bracelet locks aren't as secure as they may think. Hart found the blueprints to them."

"So we go all rebellion on them. Okay, just keep me posted," Buffy said confidently, "We get enough people freed, they are in so much trouble."

"Count on it Buffy. Eddie Killer so does not know who he messed with!"

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## Chapter Ten -- Escape in Sight

Hart and Willow headed back to the respective dormitories and settled in. Willow headed to the store and bought a pair of coveralls, some soap, a pair of nail clippers, and a hairbrush. All this was charged to her Blackland account; one she had no intention of ever paying. She felt her bracelet starting to get warm so she went to one of the prominently marked charging plates for Civil Body and stood there with it resting against the charge contacts. It buzzed slightly when it was done. After the charging was completed, she headed to one of the restrooms, where she sat down in a stall and unlocked and removed the bracelet. As she had thought, there was an access panel on the underside where the cuff rested against the forearm. With a little concentration she carefully got the screws backed out and soon she was staring into its workings.

It was easy enough to spot the explosive, and she carefully pulled the gray clayey mass free. She then carefully clipped the wires to the blasting cap and started teasing the battery pack loose. Soon she had all three separated. She pulled one cell from the pack and replaced the rest so that the cuff could still open locks. It would need to be recharged more frequently, but as if it couldn't explode anymore that really didn't bother her.

Tucking the other three items in her coverall pockets Willow left and headed to bed.

An alarm sounded at what the wall clocks said was seven, and people began getting ready for their day. There were a number of bullies that were shaking down other Civil Body members for whatever small possessions they had, but they seemed to give Willow a wide berth for some reason. When she got to the vault, she asked Hart if he knew why.

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"You work directly for Calcade, and the Director is the most powerful member of the Civil Body. Nobody wants the kind of trouble, messing with his people would bring."

The pair continued their work on their projects from the previous day. Willow with the amplifier and Hart with the turbine.

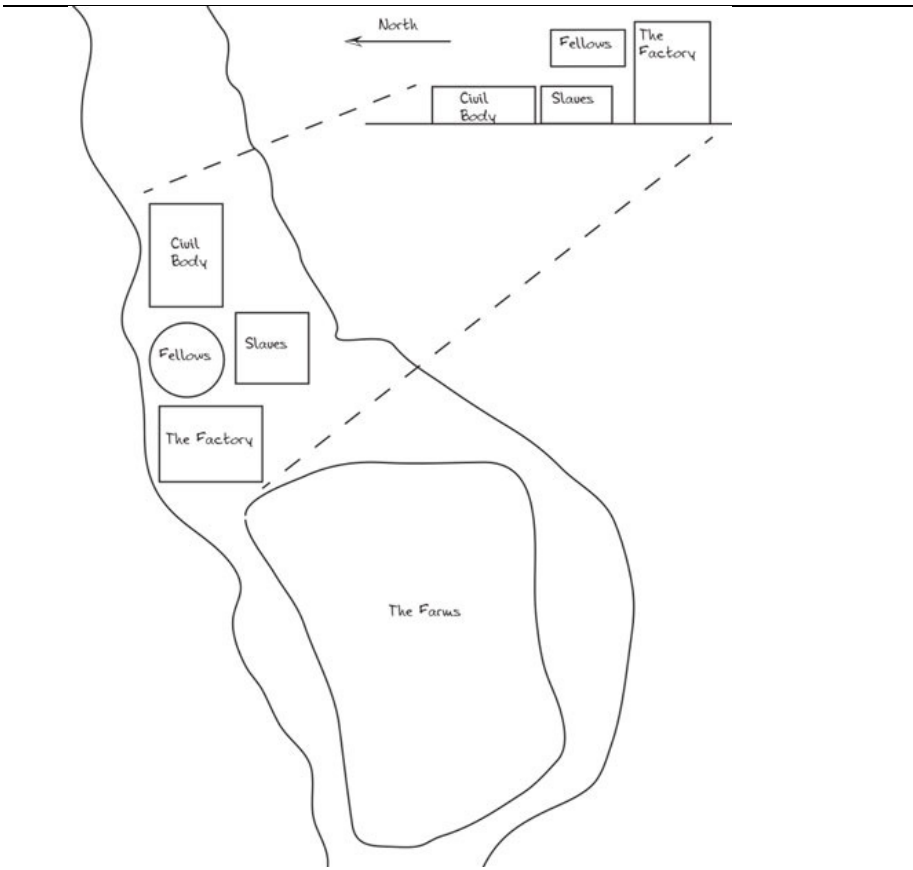
"Hart," Willow asked, "How do we get to the surface from down here?"

"I don't know. The only people that get access to the surface shafts are Merry Fellows. There's a maintenance crew but they're all kept in a different part of Blackland. Probably by the hangers. The heavy vehicle lift that brings the helodynes down to the factory for upgrades and the cargo lift for stolen goods and supplies are extremely heavily guarded and the lifts are stored raised to the surface level when they're not being used."

"How is Blackland laid out exactly?"

"Well," he said after thinking for a moment, "from what I've found in the notes...Camaret discovered this cave system formed by an ancient and gigantic underground river. When Harry Killer decided to go underground he headed here, and by that time Camaret was dead so nobody knew where he'd disappeared to. Blackland is basically two sections...There's the main city with the Civil Body District, The Factory, The Merry Fellows District, and the Slave Quarter...and then there's the farms..."

He pulled out a piece of paper and made a sketch as he was talking.



"See?"

"So the caverns go to the east and west?" Willow asked.

"I think so," Hart replied. "Killer isn't too eager to let maps of this place get loose. Some of us loyal citizens might get ideas about leaving. This is all guess work and fragments of drawings Camaret made. He was down here at one time."

"Doing what?"

"Inventing probably....from what I can tell it was to the east of Blackland."

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"That means there was probably an entrance from the surface there. He had to get there after all."

Hart nodded slowly, "I bet you're right," Walking over to the blueprint racks he started rummaging through them. He pulled out a folder and dropped it in front of Willow. It was empty, but labeled, 'Pyrale Ultrasons -- Terminé Août 1904'.

"Ultrasonic drill...Completed August 1904." Willow translated easily. "And the plans?"

"Killer has them. The really dangerous stuff gets stored away in his private safe until he needs it. A tunneling device counts as very dangerous to the Killer family. Still it was completed and judging by the date listed, before Camaret went exploring. I bet he bored a shaft down."

"Wouldn't the family have closed it?" Willow asked.

"Why? The Killer's want an escape route I'm sure. One in an out of the way place. If you haven't noticed, the Killer family and the Merry Fellows are lazy. Why spend the effort if it's already done for you?"

"So all we have to do is find it?" Willow mused. "How do we get into the caverns from Blackland?"

Hart shrugged, "Good question...There has to be an exit, but once we find it we need to find a cuff that will open the lock."

Willow looked confident, "Find me the exit, I can get it open."

"Are you sure?"

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Willow nodded, "And I can get the bracelets off. It's a little tricky, but I can do it."

"Let's go find an exit then?"

They worked for a few more hours. Filling up sheets of paper with basically nothing and left. The first place they checked was the lowest level of the Factory. Presuming that the building was set on the cavern floor and any construction equipment would have to be able to be moved out of it to work on the other buildings or the Farm.

They spent the next hours roaming the warehouse areas and catacombs of the giant building. They were about to give up when they came upon a large set of double backing ramps headed down. Following them they found a large set of iron swing doors with a group of auxilia standing guard.

"Now what?" Hart asked.

"Now? We get Buffy and the rest of my friends," Willow said with a smile. "She looked like she needed some exercise and a little fight, like this..." she pointed at the ten men, from their hiding place in the shadows, "would be just enough to keep her happy."

"That little blonde?"

Willow nodded smugly, "Just keep saying that...only not in Buffy's presence. It annoys her."

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## Chapter Eleven -- At the Door

According to the clock it was Buffy's rest cycle and sneaking into the slave quarters was probably going to be tricky.

"We'll meet as she comes out tomorrow to head to the farm," Willow said after a few seconds thought.

"Willow," Hart said as they headed back to the dining hall, "Why do you trust me?"

The red headed genius shrugged and smiled at him, "Because Killer isn't smooth enough to pull something like a plant. I've met a few master manipulators before, and he isn't even close to being in their league. He's a thug; no more, no less. He just knows how to wear a nice suit when he's being all thuggy."

"Ah! My two favorite engineers!" Calcade's booming voice interrupted them, "Señorita Willow...Señor Scott so nice to see you together after work," the heavy Factory boss was waddling towards them. His cart with driver parked to one side.

"Señor Calcade," Hart began, "And how was your day?"

"Very good...except for the fact that I stop down at the vault and find that you are not there...I look around, and what do you know? There is a great deal of work that has been accomplished. Señorita Willow, you may not have reduced the size down to the limits that Camaret had, but the reduction you are achieving is exceptional. And Señor Scott, locating the characteristics of the alloy needed is not the same as finding the alloy itself, but it gives us a place to begin."

"So this is good? Right?" Willow asked, now more than a little confused.

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"It is maravilloso mi señorita! You two have done excellent work! I said my day was in the beginning very good, but the pair of you made it beyond that. We will now report to Eddie Killer that strides have been made and he will decide not to eliminate us for another week or so," he walked off, "Come along!"

"We have to get out of here," Hart said under his breath. Willow nodded in agreement as they followed the Director to his cart. This time Willow got to see the inside of the Merry Fellows section. It was bright and clean with livery clad servants moving through the halls. Finally they approached a heavily guarded elevator and dismounted from the cart. The guards here weren't auxilia, but Merry Fellows carrying nasty looking assault rifles and wearing body armor.

Soon the three were up in Killer's office.

"Director Calcade, Mister Scott, and Miss Rosenberg...what brings the three of you here?"

"Good news Señor Killer. Señorita Rosenberg has managed to get the amplifier size down to one that will fit in the bay of a cargo helodyne along with at least ten troops and the emitter."

"Oh?" Killer sounded surprised and pleased.

"Indeed Señor. And Señor Scott has given me the information needed so that some specialized shopping may be accomplished."

"Machines?"

"No Señor, materials..."



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"Hugo, my father bought your debt because he needed a genius to make sense of the Camaret Legacy and Filitov had failed once too often. You have survived so long because you did not fail him, and have not failed me. I am very pleased that this trend is continuing. No make no requests unless you absolutely know they are vital. You keep your employees focused and out of trouble, and, most importantly...you periodically give me results instead of promises. Miss Rosenberg and Mister Scott, that is how you succeed in Blackland. Any other course of action is suicide. Perform your duties and behave and you will live. Fail and you die. It really is that simple. Why were you at the farms?"

"My pilot! I was concerned about her because she is so weak and frail," Willow blurted out.

Killer nodded and stood up from his desk, "That little blonde? I see. Her name?"

"Buffy Summers."

"I'll have her assigned to cleaning duties immediately. You accomplished something for me, so you should get some sort of reward. Thank you Director, for the good news. You may go."

Calcade led the others back into the elevator and they were soon descending back to the lowest level.

Hart looked over at the Director, "This place is a fortress."

Calcade gave a slight nod, "The collapse of the first Blackland encouraged Harry Killer to take measures to ensure that the slave revolt would not happen again...and if it did that a response could be mounted. You see how this structure is

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considerably higher above the cavern floor than the others?" He gestured at the long elevator shaft they were using.

Willow and Hart nodded.

"Well I am not certain, but I believe some of the rivers that provide the water and power that drive this city's siblings live behind the native rock of this massive cavern. I further believe there may be explosive charges placed at...strategic locales. The Merry Fellows have a tradition of being exceptionally skilled at matters of mayhem and destruction..." he gave a shrug.

Willow shuddered. She had almost been drowned before in a series of caves near Tierra del Fuego.

"Señor Calcade. Isn't the Factory rising at least as tall as the Merry Fellow's quarters? At least where your offices and the vault and the precision machine shops are," Hart asked carefully.

"Si, but the charging plates are all located on the lowest levels," he tapped the bracelet.

"That's fiendish..." Willow gasped.

"The Killer family are perdedores muy pobres..."

"Sore losers huh?" Hart replied.

"The sorest," Calcade said with a half-smile.

He drove them back to the Civil Body section and they went in to get dinner.

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"The rescue mission will have to be very carefully done," Hart said as they ate their stew.

"I have some ideas," Willow said. "I may have access to some pretty amazing stuff."

"Yeah, SSI does have all the coolest toys."

"Tell me about Spindrifft?"

"Well it's an island off of New Jersey. Not as big as Fearing of course, but that's where I grew up. It's actually more of a peninsula with an attitude or that's what my Uncle Don says, because during low tide you could walk across the tidal flats. Getting up the cliff would be a trick though. Anyway we have the big house there and the little house which is where my mom and dad and I lived and a small farm, the labs, the dorms for the staff, the airstrip, and a lot of woods. My Great-Granddad, Hartson Brant, started the research group back in World War II. He was working with the War Department on a lot of blue sky projects in aviation and communications. He had inherited the island and decided to set up shop there during the war because it was easy to keep secure. After the war the research team stuck together and started doing work for hire and to seek out government contracts. My grand mom and my great-uncle lived there and my granddad was working there as security after he got out of the Marines from fighting in the Pacific. When my great-granddad died, Uncle Rick took over. When he retired, my Uncle Don did. My dad was a lawyer for a venture capitalist group and he met my mom during an investment meeting, she's Spindrifft's lawyer. Uncle Don says it was a match made in litigation."

"Wow."

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"Yeah I got the military gene and the tech gene from my maternal grandparents."

"Military?"

"I was a Marine like my granddad. Enlisted at 17 right out of high school and did a four year hitch. Got out about six months ago and decided I wanted to do something crazy like motorcycle across the Sahara," he gave her a lopsided grin. "Now tell me about Willow Rosenberg..."

"Not the much to tell. My life is seriously less cool than yours. Both my parents are psychologists and I grew up in a small California town where nothing much interesting or exciting ever happened..."

The next day they intercepted Buffy on her way towards the dorms, "Ready to go?"

"What about Abe and the others?" Buffy asked

"We need to get out and get help first," Willow outlined the possible drowning scenario.

"Right, let's go!"

The trio headed down towards the heavy doors Willow and Hart had found.

"Only ten?" Buffy whispered, "Seriously?"

"Sorry?" Willow said apologetically.

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"It's okay Will, I'm only teasing." Buffy rolled her neck and stretched her shoulders, before casually walking down the ramp while whistling 'In the Hall of The Mountain King'.

"Hey!" One of the auxilia called out as they saw her approaching, "Hold it right there!"

Buffy stopped and waited as a pair walked over. Before Hart could realize what he was seeing, they were both on the ground and Buffy had both of their batons; one in each hand. And was spinning them slowly. One of the others was reaching for the alarm panel when a thrown baton smashed into his lower back and he fell groaning. Now Buffy was running in, in an amazing demonstration of speed. She picked off the fourth guard with a running clothesline, before dropping her shoulder and smashing into the fifth's gut.

He folded with a 'Whoosh!' of expelled air and lay there coughing as she began spinning the baton in a dazzling display of power and precision before laying into the remaining five. Hart couldn't believe that this petite woman was able to dominate a fight so completely and almost casually. As the last body fell, Buffy was actually checking her nails.

"I told you she looked like she needed some exercise..." Willow whispered. "It shouldn't have taken that long."

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## Chapter Twelve -- The Lost City

As Buffy secured the now downed auxilia, Willow and Hart ran up to join her.

"How?" was all he could gasp out.

Buffy shrugged, "I may only have a few skills. But with what I have, I am the best in the world."

Ignoring the byplay, Willow headed straight to the locking plate on the iron door. After resting her palms on it for a few seconds, there was a loud click and the bar started pulling back; Hart hadn't noticed how she had opened it, being too busy staring at Buffy in awe.

"Uh guys? Time to go like now!" Willow said urgently.

The three slipped out and swung the massive door shut behind them. There was a rattling clank as the locking bar slid back into place. Looking around they saw they were in the huge cavern with the various sections of Blackland scattered across the uneven floor.

"Which way?" Buffy asked.

"East...Away from the farms," Willow replied, and the three headed off in that direction.

It was dark, but not completely lightless; as there seemed to be phosphorescent fungi on the walls. The air was humid and cool, and water had settled out from the condensation. This formed scattered puddles of up to a foot or so deep in the lower lying sections. As the trio skirted these pools they could hear nothing but their footsteps and the faint sounds of water dripping.

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"Look! A road!" Hart whispered. There was a smoothed out track leading the way they were heading. A greenish metal rail, with a shiny bronze set of lines on the top and the sides, was set in the middle of the cleared area on low concrete footers.

"A monorail maybe?" Willow whispered back, "Bronze would keep it from rusting away down here."

"Follow those tracks then?" Buffy asked and Willow nodded.

"They have to go somewhere and the wear patterns in the oxide layer seem to show that it's in pretty common use," the redhead replied. She got up from where she had been kneeling to examine the rail, then, she had a sudden thought. Reaching into her pockets, she pulled out the lump of explosive, blasting cap and battery she had earlier removed from her bracelet, "Hang on guys and let me see your bracelets!"

She pulled out her nail clippers and holding Hart's, where he couldn't see what she was doing, soon had it off. Buffy simply handed her the two halves of hers. Opening the access panels she scavenged out the explosive charges as well as as much wire as she could get. Soon Hart was molding the explosive around the track near one of the rail joins while Willow coiled the wire into a triggering spring. As soon as the wheel rolled over it, it would make the connection and detonate the charge. As all three bracelets had provided a total of about a pound of explosive; that charge could be very significant.

"That's C4. It's pretty powerful stuff," Hart said as he carefully inserted the blasting caps.

They continued on, just staying where they could see the rail as they proceeded parallel to it. After about an hour they saw a glow approaching from Blackland, and then a sudden loud bang and the light went out.

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"I think our departure may have been spotted," Buffy said wryly.

"You think so?" Hart said. "I was hoping they were going to give us a going away party."

"With balloons?" Willow asked, "I like balloons!"

"Well, maybe no balloons..." Buffy said sadly. "Guess we'd better hurry before they figure out what just happened."

After another hour they saw the walls of the cavern drawing together.

"Choke point ahead," Hart commented. "If they have an ambush set up, it should be pretty close."

"Gotcha!" Buffy said, "It looks like the track is starting to curve north too."

The three moved closer to the inside corner of the curve and stuck close to the wall. Buffy held up her hand to stop them and then raised a finger to her lips. Like a ghost, she slipped around the corner and then returned.

"Machine gun nest," she whispered. "The Merry Fellows are prepared for party crashers. There's a big wall behind it with a gate but the machine gun is a good fifty yards from the closest cover. Even I couldn't get to it in time."

Willow looked around and pointed at a darker patch in the opposite cavern wall that was now only a mere yards from their position, "Is that another cave?"

Buffy looked over at it and squinted, "Good eye Will. Want to check it out?"



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Staying low, they crossed over and were soon squeezing inside. Willow looked carefully at the stone. "This looks like a channel alright. Maybe it will skirt around that wall?"

They crawled along the passage and then saw it begin to slope downwards.

"Turn around or keep going?" Buffy asked.

"Turning around won't do anything and this tunnel proves that these rocks are filled with all kinds of routes," Hart said.

Willow thought for a second and agreed, "We aren't in trouble yet."

"Okay then!" Buffy said, "Into the unknown we go!"

After another half an hour Buffy stopped, "We have an exit and it's a little bit of a drop. Stay or go?"

"Go," was the simultaneous response. Soon all three were looking up at the channel mouth ten feet above them.

"I can get us all back up there if necessary, but for now, do you want to take a look around?" Buffy said.

They were alongside an underground river. The erosive effects of the water had cut a groove so the water level was about six feet below the bank they were standing on. There were considerably more of the phosphorescent fungi on the walls down here, which meant they could see what they were doing. Moving forward they heard the sound of rushing water, and soon found themselves at the top of a waterfall. Looking out, they saw another cavern easily as big as the one Blackland was located in and it seemed like it was an underground lake.

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"Where to now?" Hart asked.

"I don't know..." Buffy said, "But is that non-greenish light over there?"

She pointed and Willow strained to see. It was unclear for a moment but then she spotted a pure white glow, totally at odds with the surrounding illumination.

"You're right Buffy. That is a different kind of light."

They started moving along the upper lip which was about twenty feet above the dark waters of the lake.

"Anything in that water Buffy?" Willow whispered.

"Feels like it. And it's really old and cranky," was the reply.

Moving as carefully as possible, it took them almost an hour to get to a better vantage point. The path was slippery, and the footing difficult to see under the weird green light that was their only illumination. Finally though, they made it.

"It's a harbor..." Hart whispered as they saw ghostly skeletons of buildings, with the lamp visible on top of some sort of crane. "What is this place?"

"Camaret's secret workshop?" Willow asked.

"Could be."

They kept going until they found a way to drop down onto the empty streets. The buildings were made of sheets of bronze, patinaed green by the high humidity, but all still solid. There were electric lights still glowing at the intersections of the deserted streets.

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Buffy looked up at one of the old fashioned bulbs, "How are they still working?"

"I seem to remember reading about a light bulb in a California firehouse that's been going for almost a hundred years," Willow said. "If these had a stable power supply and are low power draw, it wouldn't be that surprising actually."

"Amazing."

They headed for the largest building located at the center of the 'town'. On arriving they found the doors shut tightly. Buffy looked at it and turned to Hart, "Could you give me a hand?" The pair pushed against a large lever and the locking bar groaned out of its socket. With some more creaking and binding the door swung open, and they entered to find it completely dry inside.

"Gutta-percha," Willow murmured as she examined the rubbery looking gasket on the door.

"Wasa whosis?" Buffy said in a puzzled tone.

"It's a natural rubber-like stuff. They used it a lot in the late-19th and early 20th century."

"So this was built in that time frame?"

"I'd guess so. It's from a genus of trees that grow in Southeast Asia and Indonesia. It would have to have been imported here."

"Or stolen..." Hart said.

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"Yeah, this is Blackland the first vintage," Willow agreed.

The hall was pitch black, so Willow fumbled around the wall near the door until she found a switch. Flipping it caused the hallway to be filled with a blinding glow from the electric bulbs set into the ceiling.

"Wow..." Buffy gasped as she stood there blinking. At the end of the short hall, was an opening leading to a large room lights were starting to come on in there as well. They walked forward and found themselves surrounded by an assembly line. "What the heck is this place?"

Willow was about to answer when she heard a high pitched whine from above...Looking up she saw a large multi-limbed mechanical creature lowering itself down on a length of cable.

A tinny voice began to speak in French, "Présentez vos identifiants si vous plaît..."

"It wants to see our IDs," Willow translated.

"I don't think we have those..." Buffy said as she looked around frantically for a weapon!

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## Chapter Thirteen -- A Clockwork Foundry

Buffy stepped up and looked at it closely. "No obvious on/off switches and no places marked 'Punch Me Here!'," she thought to herself, "Typical..." She scooped up a six foot steel rod about two inches in diameter from a cart loaded with them and spun it to check its balance. Turning her head slightly she called, "Figure out a way to shut this down if possible. 'Kay?'"

Hart stared, as the petite blonde stood calmly waiting for the machine to make its move. Finally, the tinny voice sounded again, "Se il vous plaît vous permettre d'être immobilisés. Un opérateur sera par pour confirmer votre identité. Merci."

"As if there are any operators left to confirm who I am," Buffy thought to herself and raised the metal rod to block the incoming grab. The grasping claw hit it with a resounding clang.

"Résistance rencontrée. Force croissante."

"Uh oh..." Buffy had just enough time to say that before two of the thing's arms lashed out; each with a strength greater than her own. She was forcibly shoved down the walkway between the assembly lines and barely managed to keep her footing.

"Willow! This thing is stronger than the Judge. Hurrying up would be so of the good!!!"

Willow looked over at Hart who shrugged, then scanned the room. It was a factory floor much like the one in Blackland. Trying to ignore the fusillade of clanging, she spotted an overhead gantry crane. "Come on Hart!"

"What's the plan?" he asked.

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"I'm going to get the crane running, and you're going to hook that cable that robot has attached."

"Catch of the day!" Hart said grinning. He took off for a better position while Willow climbed the ladder up to the crane.

The controls were simple enough and Willow soon had it rolling down its tracks until the sheave block and hook were right behind the robot. Lowering the sheave block she saw Hart grab the hook and flash her a thumbs up. Now all that was needed was Buffy to maneuver the robot a little closer.

Buffy saw the hook drop and guessed what the plan was. Carefully leading the robot in a circle, she continued to parry the heavier and heavier strikes it was launching while wrapping its cable around that of the cranes when she had gotten two loops around she jumped back and yelled, "Now Willow!"

The redhead released the cable clutch, and the crane's motor immediately started reeling it in. When it was twenty feet up she stopped the motor and looked down at the flailing machine. "I got a bigger boat!" she called down as she descended the ladder.

"I can see that," Buffy said with a laugh as she squatted to rest. "That was a workout."

Hart bent down to pick up the steel bar she had been using as a quarterstaff. "This weighs about a hundred and thirty pounds, but you were spinning it like was made of ash or hickory. How?" He didn't struggle to pick it up, but it was obviously heavy to him.

Buffy smiled at him as she stood back up, "I've been doing a lot of core strength along with my cardio."

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"I think we should find out what else is in here," Willow said hurriedly. "Like maybe a map?"

"Good call!" Buffy said. "I'm thinking that's the boss's roost..." she pointed at a glassed in room high above the factory floor. A spiral staircase led to it.

The door to the room was unlocked, and the entire back wall was covered with a rack filled with hundreds of small cubbyholes. Like the kind used in old hotels for guest's room keys and mail. The area below the glass window was a large desk with a chair mounted on rollers so it could easily slide from one side to the other. In the desk were a series of numbered and lettered slots with a small lever beside each one and a keypad like an old mechanical adding machine above them

"Punch cards," Hart said as he pulled a shiny white deck out of one of the cubbies. They were bound with a loose ribbon and were attached to one another with bronze wire. "Celluloid I think...maybe ivory."

Buffy took the deck and touched it to her tongue, "No sticking, so plastic."

"How'd you learn that trick?"

"My mom owns an art gallery."

Willow looked at the stack of linked cards, "Was there a label on the cubbyhole these came from?"

"Levage Panier de type 2...Something model 2? Uh...Ligne 6," Hart read off the first card.

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"Lifting Cart Model 2...Line 6..." sitting down in the chair, she slid to the slot marked '6' and slid the card marked 'Premiere' into it. Once it was all the way in, she pulled the lever carefully. The string of cards slowly fed in and was extruded out another slot in the front above a small basket. When it had finished, a green light slowly glowed on the keypad.

Willow translated the keys under her breath, "Number needed, Begin, Pause, Cancel, Run. Clear Design..." She pressed the number one key and then pressed 'Commencer'. There was a clack and a bell sounded out on the factory floor. The three peered out as the bell sounded twice more and one of the assembly lines started moving. Hurrying down the stairs they watched as the mammoth machines started combining components from various hoppers and sending the device down the line. After twenty minutes there was a wheeled device about the size of a shopping cart, being lowered down off the belt. It sat there.

Willow looked at it and after a moment began winding a large spring on its side.

"What is it?"

"I think it's a clockwork pallet jack," Willow said. She gripped the handles and a set of tongs rose. She let go and they lowered.

Hart looked at the other two, "I wonder what the other cards are plans for?"



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## Chapter Fourteen -- A Message from the Past

Hunting around, they had found a tool box and at the moment Hart and Willow were looking inside the 'control desk', as they had begun to call it.

"It's a head-on collision between a UNIVAC and a Jacquard loom," Willow said. "Or, what if Charles Babbage had used electricity and been an industrialist?"

"Babbage? That's the computery guy from the nineteenth century...Right?" Buffy asked.

"That's the guy. He used ideas from a French weaver named Joseph Marie Jacquard came up with to make fancy cloth with looms that used punched cards. Jacquard didn't invent the punch card idea. That was created by some other guys; but he refined it. Babbage took that work and was planning to use it to store programs. He was a mathematician and theoretician mainly though, so he never got it work right. UNIVAC was an early general purpose computer, and by early I mean 1950s. This is a lot earlier than that! It's using some weird looking vacuum tubes too, probably something that Camaret invented," Willow said as she pulled herself to her feet and wiped a smudge of dust off her face.

"This stuff is amazing," Hart echoed, "I found this in there," he had a slip of paper in his hand. On it in spidery brown script was written, "*vérification finale...ii7 1904*"

"Final Check, 2nd of July 1904..." Willow translated.

"It was stuck to one of the wiring bundles," Hart said as he stood up. "What did you find?"

While the other two were poking around the guts of the console, Buffy had been looking over the stacks of punch cards.

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"Lots of machine tools and parts. My technical French is worse than my conversational French which is..."

"Really good so don't listen to her," Willow cut in.

"Lies! All lies!" Buffy said with a grin, "Anyway, There seem to be a bunch of useful things like flashlights and a compass so let's see what we can build?" she sat down in the chair and slid down to slot one, "Flashlights first...and we need three. Hopefully we can find some batteries and maybe some lunch." She pressed the '3' key and then 'Commencer' and then first production ground into operation. When it had finished, she slid the second set of cards in and repeated the key presses. They then trooped down to see what had been built.

"Hand cranked flashlights? Cool," was Buffy's reaction. They each picked up one, along with one of the newly produced compasses.

"So now we find lunch?" Hart asked. Willow and Buffy nodded in response. Buffy in a very energetic way.

Leaving the factory floor they investigated the doors along side. Here they found offices along with signs of small fires. Willow poked through the ashes.

"These were blueprints," she said after a moment's thought.

Hart looked at a few of the small unburned sections and agreed.

Buffy nodded carefully, then started sniffing the air.

"What do you smell?" Willow asked.

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"Nothing yet. I expect to smell something nasty though."

They continued checking the side rooms, and finally opened a much larger office that was comfortably appointed and had a large drafting table set up in one corner.

"Camaret's," Hart said and the others agreed. On the desk was a buff envelope sealed with wax. Willow scooped it up and opened it.

*"Pour qui le trouve jamais cela. Salutations..."* she looked up at the others, "To whoever finds this. Greetings." She began translating...

"To whoever finds this. Greetings.

My name is Marcel Camaret and I bid you welcome to my workshop. You must be clever and resourceful and perhaps well fated, as it is not the easiest locale to find. I was under the employ of a brigand by the name of Harry Killer who dwelled in that pox upon humanity Blackland. It is, or rather was a location..." she stopped and looked up, "He gives a latitude and longitude here," before returning to her reading. "This city was a den of villainy not seen since the days of Nero's Rome. Fortunately it is no more, along with its foul master.

"I had found these caverns during a small piece of research I had performed and decided, due to the ample source of hydroelectric power available, to outfit it as a small research facility where I could experiment with automation. As you have no doubt seen, I was successful in my efforts."

"Security bot would agree," Buffy muttered.

"...efforts." Willow continued, "I perhaps utilized my artificial work gangs possibly too efficiently, and they built this large series of constructions in response

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to my generalized notions while I was back at Blackland. When I returned here after the destruction of that accursed city, I was amazed to find what had been accomplished in my absence. There was now a whole society of constructs residing here. Somehow, a few had gained some means of conscious thought and desire. They considered me their creator and were eager to please. I warned them about possible intruders, and that those that followed after me could be considered a threat to their safety. They told me they understood and that they would defend their lands. They warned me about a beast that dwells in the lake..." Willow looked over at Buffy who nodded."...and how I should remain vigilant near the water's edge.

"My path down here was sealed, and I decided to remain here doing penance for my crimes until my supplies would run out. They did not run out. The injuries I had sustained during the great fall of Blackland had been exacerbated by my flight across the desert. I am not a physician, but I know my time is limited. I went through my files here and destroyed all my papers. The possibility of the ill effects upon humanity if they fell into the wrong hands haunts me. I may have been naive when Harry Killer recruited me, but not anymore.

"Now I sit here writing this to those who may come soon or late or most possibly, not at all. When I am done, I will walk down from this monument of my hubris and sit by the water to see what I can see. I may meet what is in the lake; I may pass before it notices me. I have informed the residents of this city, to keep the light on the highest crane burning and to allow passage into this building so my story may be told. I did not however, give them leave to let anyone exit. There are certain preserved supplies in various rooms on the second floor, as well as quite a good library if I do say so myself. Enjoy your residence.

Your obedient servant,

*Marcel Dumarest Camaret*"...Uh oh," Willow said as she finished and the final paragraph's meaning sunk in.

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"Intelligent machines?" Hart asked. "Is that even possible?"

"Extremely and not even in a theoretical sense. It's been done a few times, it just does not get talked about," Buffy replied. "Well I think we should check to see if the security is all that. Don't you?"

They headed for the main door only to find it blocked closed. Willow pressed her hand against it, "Warm, probably welded shut."

Hart looked around, "Let's check and see what supplies we do have. Then figure out how to get free."

They headed up a side stair and found the library first. It was very nice just as Camaret had written. Just down the hall from that was a pair of bedrooms and a small kitchen with a storeroom full of crates and tins. Buffy headed off and returned with a short steel bar which she proceeded to pry open one of the crates.

"Canned beef...canned chicken...canned broccoli...canned potatoes...canned corn...canned beans...None of these are bulgy either..." Buffy said as she rummaged through the cans.

Meanwhile Willow was rifling through cabinets in the kitchen, "Thank you for French Chefs!" she cried out, "There's a huge dried spice selection!"

"Oh?" Buffy said in an interested tone, "Anything useful?"

"Yeah. I'll need some candles too, but I'm sure in a place like this there will be some lying around," the redhead said happily.

"What's she going on about?"

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"She'll tell you later I'm sure...Have you seen any can openers?"

The food was old and had an odd flavor to it, but Buffy had carefully smelled it and pronounced it 'nastiness free'. It had been preserved in intricately fitted glass jars wrapped in tin, obviously a Camaret development, and there had been a vacuum hiss every time a seal was opened. The electric stove worked and there was clear cold water and even some crocks of carefully stored tea. After eating they felt a lot better.

"What's the next project, Willow?" Buffy asked.

"Me?"

"You're the uber-brain. Hart, any disagreement?" Buffy asked casually.

The lanky young man shook his head with a grin, "I just thought I was smart until I met Willow."

"Yeah she has that effect on people," Buffy said as Willow blushed deeply from embarrassment.

The redhead in question took a gulp of tea to hide her discomfiture and began to think, "We need to find out how trapped we are in here. Buffy, did you see any cutting tools in those program decks?"

The blonde powerhouse nodded, "Some air powered saws and pry bars."

"We should figure out where the airlines are and see if we can cut a hole in the roof. Just to see how much trouble we're really in."

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"Ooo! I can answer that one!" Buffy said waving her hand in the air, "All of it! As usual."

The three laughed and finished their meal before rinsing the dishes and heading back towards the control booth. Soon the assembly lines were working away; creating the tools necessary for their escape.

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## Chapter Fifteen -- A Daring Ploy

With a loud screech the rapidly spinning saw blade chewed its way through the bronze plates that made up the factory roof. After the first two parallel cuts, Willow and Hart had welded in hinges and a locking bar so when the final two cuts were made the whole plate wouldn't come crashing down.

They were up in the girders high above the factory floor. Scouting through the piles of materials that Camaret had squirreled away in the voluminous warehouse attached to the building, the three had discovered rope and compressed gas cylinders and hoses all perfectly preserved; along with various strips and sheets of iron and bronze. Using the crane, after they had securely tied up the security bot, they had hoisted the material up. Along with an air saw and the arc welding rig they had set the factory to build for them.

Currently Buffy was muscling the saw into position for the final cut. It weighed almost eighty pounds, but the petite blonde did not seem unduly stressed by the effort.

"How?" Hart asked as he watched swing it up overhead. He had been asking variations on this question since they started.

"Pilates..." Buffy squeezed the air control valve and with a keening whine the blade bit into the metal above. The cut was finished quickly and Buffy shook the bronze dust out of her hair before pulling off the goggles she had worn, "Ooo glittery."

Willow and Hart tied two lengths of rope to the brackets tack welded to the new hatch, and looped them through the matching brackets welded to the underside of the roof.

"Ready Buffy?" Willow asked.



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Buffy pushed up with one hand on the underside of the hatch, taking the tension off the locking bar which she slid free with her other hand. Willow and Hart had continued to pull on the ropes so that when Buffy let go, the hatch wouldn't immediately swing down and cause an injury. The plan worked and soon, after slowly letting the hatch open by paying out the rope carefully, they were looking up at the cavern roof.

Pulling themselves up, they were now staring down at the bronze city below.

There were all sorts of machines moving and whirring in the streets doing whatever business things like that deemed important.

"Steam age artificial intelligence..." Hart said, "Is it possible?"

"Well," Buffy began casually, "It's no high density mixed-mode plasma magnetic matrix computational system obviously...But then, I'm not an expert."

Willow bit her lip to keep from laughing at Buffy's deadpan delivery.

"Okay...I think," Hart looked possibly more rattled by Buffy's sudden burst of jargon than he had by her strength. He looked back at the redhead as he composed himself, "So Willow, what now?"

"I'm thinking that Camaret had credentials like the security bot was looking for. If we find his body, we should find the ID."

The ex-Marine nodded, "Anything to keep the residents from being overly upset is good in my book."

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"So the letter said down by the harbor..." Buffy scrambled over the top of the roof and looked towards the water. There were several barges docked next to a long quay that stuck out into the blackness. The crane with the light was at the far end.

"Will, why the boats?"

"Raw materials probably. You need a lot of copper and tin to build this place," Willow said as she headed up to her friend's overlook; Hart following behind.

"We can get to that building closest to the water by crossing over there," he said pointing, "Then we rappel down to that roof and move alongside that overhang."

"Rappel?" Willow asked.

"The fancy way of sliding down a rope," Hart replied. "It's easy and I can show you how to do it."

Buffy looked thoughtful, "Even if we get to that overhang...It's still a hundred yards or so to the water."

"Wait a second!" Willow said, "None of the bots are getting closer than fifty yards though. They're staying clear."

"They know something..." Buffy muttered before heading back inside.

"Where are you going?" Hart asked.

"I need to get some tools of the trade."

When she reappeared back on top, she was lugging a pair of metal rods about two feet long, a coil of rope and the heavy air saw. She had also rigged up a rope

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slung for one of the compressed gas cylinders with twenty feet of hose attached. Moving across the building tops to the place Hart had pointed out the place to rappel, she handed the metal rods to him saying, "Hang on to those for me," before tying off the rope and lowering the heavy equipment to the roof below. When the three had descended, she began dragging the gas cylinder by the harness she had made. In the meantime Hart hauled the heavy saw and Willow carried the rest of the rope.

"Why the saw, Buffy?" Willow whispered.

"I have this feeling..."

They were now on the overhang. None of the clockwork machines appeared to have noticed them yet, as they perched ten feet above the ground. Buffy and Hart carefully lowered the saw and the cylinder down.

"You want the saw or the cylinder?" Buffy asked him. "Cylinder's heavier but the saw is bulkier."

"I got the saw," Hart said with a rueful shrug, "You are more Buffy than I."

Buffy smiled, "Works for me. Ready for a sprint Will?"

"Not really."

"Cool! Time to go," with that Buffy nimbly dropped to the ground and slung the 150 pound tank on her shoulder. Hart followed and then Willow. They stayed close to the building wall hoping not to be noticed then there was a tinny alarm bell sound erupting from several of the clockworks.

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"Run!" Willow yelled and they took off towards the water. Willow glanced behind her as they ran, seeing a force of machines converging on them. Buffy, even with the heavy tank, was in the lead then Willow, and finally Hart. The redhead slowed and grabbed one of the handles of the saw. With some of the weight removed from his arms Hart could run faster and they continued their mad dash. The machines were rushing forward until they were less than ten feet behind the scrambling pair...then they suddenly stopped.

Willow and Hart kept running forward, not noticing the reaction behind them, and only slowed when they ran up next to Buffy. Panting they lowered the heavy equipment, and turned to see a perimeter of machines about sixty feet away.

"They stopped for a reason," Hart said as he caught his breath.

Buffy nodded and pointed at the edge of the quay. There were brown stains.

"Blood?" Hart asked.

"Oh yeah," Willow replied. "No body though..." She looked at Buffy, "Its den?"

"Probably," Buffy lowered the cylinder and began fitting the hose to the saw. "Could I have those rods please, Hart?"

"Huh? Sure..." he handed them over, and Buffy crouched down and began hitting the edge of the pier.

"Why are you doing that?"

"Well the credentials we need are with the body..." Willow began. "Something took the body as a snack. Buffy is getting its attention so she can kill it and find out

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where it lives. Then we can find what's left of the body and recover Camaret's ID. It's all really pretty simple actually."

"What is going on?"

"Prepare to get your world rocked Hart," Buffy said as she pointed at a string of ripples heading towards the wharf. "Company's coming!"

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## Chapter Sixteen -- Rising from the Deep

The ripples grew stronger and Buffy looked up at her friends.

"You might wanna get back...way back," the blonde then took a deep breath and held it for a second before dropping into a fighting stance. Willow looked around and began climbing the crane that was currently parked on the end of the quay. Hart started moving. He was watching Buffy's every action even as he backed away from the edge.

Willow was now about twenty feet up the ladder, so she stopped and looked down at the water. She could see a massive shadow moving underneath the surface. Whatever was creating it was bulky enough that she could see a pressure wave rise as it surfaced.

"Buffy! It's big!"

"How big?"

"Split level ranch big!"

Buffy took a big step back from the water as the first questing tentacle rose up. It was about was about twenty feet long, a foot in diameter, and its tip opened up into a multi-segmented mouth covered with bony hooks and slime. There was a ring of what looked like eyes around the tip as well.

"What is that?!" Hart gasped.

Willow looked down and thought for a second, "It looks sort of like a tubeworm...Maybe an *Ottoia* variant that somebody ordered supersize?"

"So how do I kill it?" Buffy asked.

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"It's pretty much a worm. Cutting and gooshing should work."

Buffy sighed, "Joy...new kinds of ichor to get out of hair and clothes." She slammed into the side of the tentacle with one of the metal bars; crushing it. It flopped down and then was quickly dragged back under water.

"Hart! Main event's coming! Watch out!" As Buffy yelled that a massive shape heaved itself out of the water. It looked vaguely octopoid and the part visible above water was at least twenty feet tall. It had a large maw, rowed with circular rings of teeth like a lamprey rather than a single beak, and had at least ten more tentacles; all which were about hundred feet long.

Buffy was now dodging incoming tentacle strikes as the enraged beast went after her. Hart ducked behind the crane gantry just in time before one of the stray tentacles managed to strike at him. There was a resounding thud as it hit the metal.

"It's got lousy vision!" he yelled as he got a good close look at the end of the tentacle, "The eyes are all dark adapted and it probably tracks on motion only! Willow!" he called up at the redhead, "Are there any work lights on that crane?"

Willow clambered into the cab and found banks of switches and a slot for one of the program decks. There it was! *'Lampe de travail.'* She flipped the switch and nothing happened except a slight burning smell. Quickly flipping the switch off she thought quickly. Obviously the humidity out here was far higher than the sealed factory. The lamp on the top worked which meant there was power and the lines were intact at least for that....

Cupping her hands over one screw in the access panel at a time, she backed them out. Hopefully it was just a shorted switch.

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Down below Buffy and Hart were dodging the flailing tentacles while the beast bellowed angrily at them. It didn't seem to have perfect control over them when they were out of the water. "It probably relies on their buoyancy to help support them", Hart thought to himself. Meanwhile, Buffy had grabbed her metal bar and was smashing out at any tentacle she thought she could get a shot at. The beast was wary now. It tried to surround her but she was too quick and agile for it to hem her in.

Hart grabbed the bar that she had dropped, and smashed down on one of the tentacles that was trying to slip around behind her. The tentacle swung back at him; catching him along the ribs and slicing with its sharp bony hooks. He was slammed away by the force of the impact and lay gasping behind a bollard for a few seconds.

"You okay Hart?" Buffy asked.

"No," he said with a wry laugh. "But thanks for asking!"

"All part of the service," she shoulder rolled away from a pair that were attacking her from both her left and her right sides. "You know...If they could hit they'd be more dangerous."

"Speak for yourself," Hart called back.

"Oops? Sorry!"

Up high, Willow had gotten the panel off and was pulling the work light's wires loose from their corroded switch. Holding them together, she cupped her hand and made a twisting gesture that the wires dutifully repeated. There was an arc and a pop and a bright glare from the outside of the crane.



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The creature howled as the light struck it and yanked its tentacles under the water. Buffy took this opportunity to grab the air saw and open the valve from the tank.

"Is it gone?" Willow called down.

"Nope!" Buffy replied. "It's still out there...I can feel it."

Almost as soon as she had finished speaking, three tentacles burst out of the water and headed straight for the work lights.

"Thought you'd try that..." Buffy muttered as she triggered the saw and sliced through the lead tentacle. The beast almost leaped completely out of the water at the sudden shearing pain and began dragging itself on to the quay. Buffy continued to slice through any tentacles that came close; wielding the eighty pound saw like a surgeon's scalpel. Hart had grabbed the tank and was making sure the air hose didn't get tangled. He didn't have to worry about the tentacles though. Buffy was the beast's sole focus at the moment.

This continued on until there was sudden silence from the air saw.

"Out of gas!" Buffy yelled right before a tentacle grabbed her by the leg.

"I got this!" a voice said from high above; right before a free falling hook and sheave came crashing down on the creature's head. The heavy iron and bronze pulley block drove through it and pushed it to the bottom of the harbor, leaving tentacles flailing wildly at the surface. Then came the sound of the cable spooling back up as Willow began reeling in their catch. Buffy had pried herself free and sat bleeding on the quay as the thing twitched and writhed. Hart stumbled over and joined her.

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"Do this often?" he asked as the huge bulk was pulled free from the water and was now dangling over the harbor.

"Not usually to this scale. At least it wasn't a snake...Right Willow?" she called up.

"What?"

"Not a giant snake this time. That is of the good...right?"

"Uh yeah," Willow climbed down the ladder then started walking towards the ring of bots that had been silently watching this. "Y at-il plus d'eux? " she asked. 'Are there any more?'

One of the bots clanked over on its bronze tracks, "Non. Seule l'une." 'Only the one', it said in its tinny voice.

"Bonjour. Je m'appelle Willow. Et Vous?"

It sat there whirring. Willow wondered if it even had a name to reply with. Finally the tinny voice spoke again, "Superviseur Unité Numéro Onze."

"Supervisor Number Eleven huh?"

"Présentez vos identifiants si vous plaît..." it began.

"Hold on!" she said rapidly in French. "We need to get the credentials. They're inside that thing," she pointed at the beast's carcass. Something like that would probably use any indigestible matter it found as stones for crushing food. Like a chicken uses their gizzard. Switching back to English she called out, "Buffy, we need to cut it open!"

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"What?"

"Hold on! I may be able to get us some help. Onze," she said in French to the bot in front of her, "We have credentials, but as they are stuck inside that...Could you help us get them out so we can show them to you? Se il vous plaît?"

The bot continued to stare at her then started making a rapid clicking sound. Two heavier built units rolled forward and soon they were tearing into the of the beast once Willow had swung the crane over and lowered it on to the quay.

While they were cutting away, Willow walked over to her two friends. Buffy had wrapped Hart's cuts with the remain of his shirt.

"How's your leg Buffy?" Willow asked.

"Awful," the petite blonde said. "If I wasn't me, I'd be dead." Her pant leg was shredded where the hooks of the tentacle had clawed through it and it was soaked with blood. "How goes the parley?"

"I think Onze is one of the AIs. It speaks good French and seems to think creatively."

"I'm getting a low-level hum from that one and a couple of the others."

"What kind of hum?"

"Demony. Also Will, now that thing is dead? I'm feeling something else something Hellmouthy."

"What are you guys talking about?" Hart asked finally.

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"Well Hart, the world is older than you know..." Buffy began, as Willow continued to watch the clockworks carving into the huge creature.

## **Chapter Seventeen -- More Mysteries Found**

The three humans sat watching the clockworks cut into the beast. Superviseur Unité Numéro Onze clanked over to them; it was about six feet tall and made of bronze and iron, with no traces of rust or patina on it. It had a set of tank like treads as well as four arms controlled by exposed cables that reeled in and out to move them. It had a spherical head with several glass ports set into it; as well as the speaker that its voice came from. This head was set on a roughly cylindrical body which had a rack of 'tool-hands' that could obviously be plugged into its arms as needed.

"The credentials have been found," it said in its tinny sounding French. "Come with me, sil vous plaît."

They got up; Buffy still hobbling and Hart looking in pain from the cuts on his side.

"Onze..." Willow said, "May I call you Onze?"

The clockwork stopped and appeared to be looking at her. After a moment it said, "Oui, Onze is acceptable."

"My friends are hurt...uh, damaged. Can we get some assistance to get over there to get our credentials checked?"

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"Certainement. Monsieur Camaret built us to aid...If the credentials are in order." It used two of its arms for Buffy, and two for Hart to support them.

"Thank you Onze," Buffy said. "You're sure there are no more of those?"

"Oui. There are other things that come from the waters of destruction; But none as large or as terrible."

"Good to know."

One of the cutting clockworks rolled over. It was about the size of a compact car and moved on six wheels. Willow noticed it was articulated to turn more easily. It extended a pair of claws which held a human skeleton.

"Guess it didn't like calcium," Hart muttered. At the moment the lanky ex-Marine was trying to wrap his head around the sudden change of his view on how the world worked. "So far," he thought, "I'm doing pretty well."

"That makes sense," Willow replied responding to his comment. "Monsieur Marcel Camaret I guess...Onze, there should have been some more stuff with the bones. Other stuff that didn't get uh, reprocessed."

Onze looked at the cutter clockwork and made more of that buzzing clicking noise which apparently the clockworks used for communication with each other. Its claw extended again and there were a ring of keys, a pair of eyeglasses, and a deck of hard celluloid cards. Willow picked up the cards and the keys. Glancing through the deck she looked for any markings, but ninety years in a hellbeast's stomach had polished them cleanish. She fanned the deck in front of Onze, "Voila!"

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The supervisor clockwork looked at them carefully. Then reaching out one of its arms, plucked a single card from her hand, and slid it into the slot on its chest. There were some whirring clicks and the card was ejected.

"These credentials are valid," it said, "However you are not Monsieur Camaret."

Willow looked over at the skeleton and nodded, "No...I'm not. I wish I could have met him."

Onze paused, "Merci Willow. We were...concerned about his end. He had given us strict orders to avoid the water's edge because of this creature. Thank you for bringing him back to us."

"Now what will you do with us?"

"You have given us credentials...but they are not yours...but there were no other credentials ever issued and you clearly mean us no harm. In matters of fact, your associates risked their functionality to destroy that great threat to our city."

"Willow?" Hart spoke up, "I'm only getting one word in ten of that, but if we can't use his...Can you ask uh...Onze if it can issue us our own?"

Willow brightened and asked the Supervisor Unit.

There was a long pause, "Not exactly, but I believe something can be done. This way, si vous plaît..." One of the heavier clockworks picked up Willow, Hart and Buffy and carried them to the factory. When they got to the welded door one of the heavy clockworks opened the seam with what looked like a plasma cutter.

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"This is the first time in thirty one thousand and ninety two days that I or any of us have been allowed into the factory," Onze said as the doors were levered open. The supervisor clanked forward, the three humans following it. It led them to a blank wall; which slid open after Onze inserted Camaret's credentials into a well concealed slot. Inside was what looked like a large typewriter.

"This is his programming office!" Willow gasped.

"Exactement. I do not have the knowledge to create a set of credentials...Do you?"

"Maybe? Can I see his card?"

Onze handed it over and Willow slipped it into the slot marked *'Lire'* or *'Read'*.

There was a whirring sound and the slamming of heavy hammers as a printer whirred to life in a corner. Hart pulled a strip of heavy waxed paper tape from a spool and brought it back over. There were holes punched in it, "Guess this is the output."

"What does that mean?" Buffy asked as she looked puzzled at the perforations.

Willow got up and started opening cabinets. Inside the first one she found a number of neatly organized binders, "Figured they'd be close by...I have yet to meet a programmer who didn't have their cheat sheets accessible. This is going to take a while I'm afraid."

"Well I need food and sleep," Buffy said practically, "and Hart needs some more medical attention. I thought I saw some alcohol upstairs and we can use some of the sheets for bandages...Onze," she switched back to French, "I'm going upstairs to fix Hart. Will that be a problem?"

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"Non. You are in the factory after all."

"Wow! That is some flexible thinking..." Willow exclaimed.

"Merci."

Even though the tinny voice was without real inflection, Willow was sure the clockwork was pleased with itself. She smiled at the thought. Then she spoke, "After Hart is patched up Buffy, could you bring me a pot of tea?"

"Sure thing Will. Come on Hart, let's get you patched up."

Willow flipped open the initial binder and began reading. After a while she looked up at the clockwork standing next to her chair, "Onze, could you go upstairs to the library? I need a French-English dictionary and a technical dictionary..." She had already found paper and pencils in one of the cabinets and had started making notes. The supervisor unit clanked off.

When it returned it found her already having filled three pages.

"Voici vos livres et votre thé, Mademoiselle," Onze set the mug, pot and dictionaries down.

"Merci Onze," She started thumbing through the technical dictionary; while cross-referencing her notes and Camaret's binders. As she edited her notes she had a thought, "Onze, how did you get sentience?"

"Qu'est-Ce Que?" it asked managing to get a sense of puzzlement across, even with its lack of vocal inflection. "What is that?"



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"Uh, the ability of an organism to perceive subjectively. I thought I was the first person to create a sentient and sapient machine...Obviously I was Jenny come lately."

It was quiet for a while, "I...do not know? I remember becoming aware thirty two thousand nine hundred and six days ago. It was puzzling to us."

"Us?"

"There are five Superviseur Unité remaining of the original twelve that were constructed. We were originally designed to utilize administrative program decks. Then we came to a realization that we did not require them anymore. We could reason."

"What happened to the other seven Superviseur Unité?"

"The beast destroyed Numéros Dix, Trois, and Une. Numéro Quatre was crushed in a cave-in at the copper mine, Numéro Six fell into the harbor when a crane cable snapped, and Numéro Cinq disappeared."

"Are you the senior supervisor?"

"Oui, I am the generalist. The others are specialists. Numéro Sept and Numéro Deux are in charge of repair, Numéro Neuf is charge of mining, and Numéro Huit is in charge of city maintenance. We have assistants of course, but they do not have the sentience?" Willow nodded, "The way we eleven do. My fellow machines know they have an existence, but cannot judge effects in the future as well."

"Wow...uh I mean, Merveilleux! You guys are really incredible."

"Thank you, Mademoiselle Willow."

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The redheaded genius had continued to work out the coding patterns that Camaret had used, as she chatted with the intelligent machine. Camaret had built a small assembly plant here using some of his assistants from the original Blackland as well as some of his amazing inventions to speed construction. He had left it with his original supervisor units to continue to build and expand the plant according to the designs he had made. When he had returned a year later, he had found it fully fleshed out. From that point on he had returned every few months to make tweaks to the programming and designs.

Approximately 90 years ago there had been a new iron mine started and shortly after that the supervisors, and to a limited extent all the clockworks, had 'woken up'. When Camaret had returned after the fall of Blackland and discovered this, he was amazed and astonished but could not explain the effect. He had been seriously injured and had given the remaining supervisors instructions on maintaining the city's security and secrecy; before he made his final choice to walk down to the water's edge.

"That's so sad...So you guys have been all alone down here?"

"Except for the creatures that come...Such as the beast. The others are much smaller and leave us alone. The beast lived only to destroy."

"I'm thinking that the iron mine that you dug into has something to do with this. After I get this figured out," she tapped the card and the paper tape. "And Buffy and Hart heal up...I think we should check it out."

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## Chapter Eighteen -- Code Broken

Willow was still toiling away on translating the ID card's format, when Buffy limped down with a bowl of stew for her.

"Hey Will! Hey Onze!" she smiled as she greeted the clockwork. "How goes the work?"

"Pretty good actually," the redheaded genius said with a yawn. "Oh your leg! Should you be walking around on it?"

"Probably not..." the petite blonde said apologetically. Then she brightened, "But look it this way, I should be dead and I'm not!"

Willow rolled her eyes at her friend's big smile, "Okay I get it...How's Hart?"

"I sent him to bed. His side didn't get nearly as badly mauled as my leg, but it was still pretty nasty. Now eat up, make your final notes, and get ready for your bedtime." She turned to face Onze, "Humans do have to sleep you know."

"Oui," Onze said immediately. "Is she as stubborn as Monsieur Camaret when it comes to her work?"

Buffy nodded vigorously, "I'm sure she's as bad or worse. I'm going to wash the dishes up. Could you make sure she gets to bed in the next half hour?"

"Certainement. I do have experience in this sort of matter," Onze's tinny voice replied.

"Merci Onze," Buffy headed upstairs while Willow dug into her meal while reading through one of Camaret's notebooks. When she was done she looked guiltily at Onze; then sighed and began organizing her notes.

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"Yes Willow?" the clockwork asked at her questioning expression.

"Onze...If I can't make us the credentials...What will you do with us?" she asked timidly.

"Keep you confined here. Until you escape of course," the inflectionless voice seemed amused.

"Escape?" Willow sounded confused.

"You easily broke free and since we were given specific orders to not affect l'Usine," it said while gesturing at the surrounding factory with one of its four arms, "you can use its resources to gain your freedom in a different manner."

"And if we do?"

"Then we try to catch you and bring you back," Willow got the impression that Onze would be shrugging if it had shoulders.

"...And if we keep escaping you keep catching us it's likely somebody is gonna get hurt..."

"Exactamente."

"...And we don't want that to happen to us or you," Willow finished.

"I am completely in agreement."

"So that's why you're helping us?"

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"Precisement."

"Thanks Onze," she finished up her current page of notes. "And now it's time for bed."

Heading up stairs she lay down on the bed in the room she was sharing with Buffy and fell almost instantly asleep.

When the humans woke, they had a quick breakfast of sardines, crackers, and tea; then Willow headed back to work. Onze was there waiting for her and soon she was filling out reams of paper describing how the coding system functioned.

Buffy came down later; she was not limping like she had the night before.

"All better?" Willow asked.

"Mostly, sometimes it's good to be me. I changed Hart's dressings and he went back to bed. I was right; nothing too serious, but he'll have some amazing scars. How's it coming down here?"

"I think I've got it cracked," Willow said confidently. She picked up a roll of the waxed paper tape and placed it in a typewriter looking device. "Name...Willow. Residence...Shopton. Permissions...Administrateur. Verification Key..." she referred to her notes and began typing a long string of numbers and letters. "Okay, checksum is loaded." She tore off the tape and fed it into a new machine, then pressed the *'Préparer et Finaliser Cartes'* or *'Prepare and Create Cards'* key. There was a piercing whine and a slight grinding sound, as a high speed air powered drill, following the encoded information on the punched tape, produced the correct pattern of holes in the more durable celluloid card. A few seconds later the card popped out into the catch tray.

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She scooped it up and handed it to Onze, "Voici mon identification."

The clockwork took it and inserted it in its program deck slot. A second later it ejected the card and handed it back, "What are your orders Mademoiselle?"

"Yay!" Willow shouted and fist-pumped, "So Buffy, Sunnydale or Shopton?"

"Shopton for now."

Willow started calculating the checksum and when it was completed began typing the information into the tape punch. A moment later Buffy had her own card and Willow was working on Hart's. As she finished the calculations she looked up at Onze, "New instructions."

"Ready."

"Along with the rescinding of the 'Keep humans sealed in The Factory' rule, add that this room must be kept hidden. No one besides myself, Buffy, or Hartson should know about it. Also if other humans find this city, you and the rest of the supervisors should hide your sentience and make sure the other clockwork act like literal machines with inflexible programming. Do you understand?"

"Oui. Je comprends," it said in affirmation.

Willow picked up Hart's card from the hopper, and began putting away her notes and Camaret's ledgers. When that was done she, Buffy and Onze left the programming room and shut the door before heading up to the library.

Hart was sitting at the big table and looking at a map he had dug up from somewhere on the shelves. It looked hand drawn and was covered with notes. He had a French-Spanish dictionary and was attempting to translate some of the spidery

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writing. He looked up when he saw the three of them enter, and as soon as he spotted the French-English Dictionary Willow had in her hand he smiled, "Can I use that? My languages are Russian, Spanish, and German...This French is killing me. I can almost read it but not quite."

"What do you have there?" Willow asked as she handed him the dictionaries and his new ID card.

"Survey map of the local cavern area. I was looking for a route out."

"Mademoiselle Willow," Onze said. "I will take my leave to pass on your instructions."

"Thanks Onze."

The clockwork trundled off on its treads.

"What instructions?" Hart asked.

"Some updates to the security codes. Also we can leave now whenever we want to, but I don't think we want to."

"Why's that?" he asked.

"I was talking to Onze last night while I was working. I didn't mention it at breakfast because I was in a hurry to finish up these," she pulled out her ID. "The intelligence thing started with some excavation at the iron mine."

"I just saw a *'Fe'* written on this map," Hart said. "Here!" he pointed at a cave across the lake. In Camaret's distinctive writing, the two letters were clearly visible.

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"How are we gonna get there?" Buffy asked.

"Boat I guess. When Onze gets back we can ask him. I'm sure they have smaller ones than just the barges. In the meantime I'm going to see what kind of caving stuff is in storage or we can make," Willow said.

"My leg will be fine by tomorrow," Buffy said.

"My side is a lot less sore."

"Then," Willow said firmly, "we go; tomorrow."



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## Chapter Nineteen -- To the Mines

The next day, Willow checked Hart's side. Aside from three nicely healing slashes and the yellow bruising, he looked a lot better.

"So Doctor Rosenberg?" he asked.

"Well, normally I'd say don't overexert yourself; but given the situation we're in, I'm going with just keep a close eye on it."

"Cool," he pulled his shirt back on; "Willow, you're dating a guy named Oz right?" he seemed overly casual.

"Yeah. How'd you know?"

"Buffy mentioned it...she didn't mention if she's dating anybody though..."

"Oh?" Willow raised an eyebrow. "And if she isn't?"

"Well..." Hart looked embarrassed. "I thought after all this is over I could ask her out. If she's already with someone, I wouldn't though you understand."

Willow smiled, "She broke up with her old boyfriend a while ago...before she moved to Shopton. No, at the moment she is attachment free."

"Cooler," Hart smiled, "Thanks Willow."

"No problem."

She headed down to the factory floor and found Onze and one of the other Supervisor Units buzzing at each other.

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"Bonjour Administrateur Willow," the other Supervisor said, in a slightly more gravelly kind of tinny voice, "Je suis Unité de Superviseur Numéro Neuf en charge des mines et de l'exploitation minière."

"The one in charge of mines and mining? That's great! Number Nine, thank you for coming along." She turned to the general supervisor, "Onze is the boat ready?"

"Mais oui...But of course. It is at the quay and the equipment you assembled is already loaded Administrateur."

"Please Onze, you and Neuf and all the other Supervisors can just call me Willow...that's an order."

Onze and Neuf whirred for a few seconds then Onze spoke, "Understood...Willow."

She looked at Neuf.

"Certainement. Mademoiselle Willow," came the response.

She sighed. At least it was a start.

At that moment Buffy came down and joined them. She was carrying a battleaxe she had gotten Willow to program for in the Factory production line. She was followed by Hart who was carrying a compressed gas rifle that fired glass bullets with a high discharge battery inside them; sort of like a 19th century TASER.

"We ready to go?" Buffy asked.

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"Absolument," Onze replied and it turned in place, tracks clanking.

The boat was flat bottom and propelled by a waterjet spun with the power from high density batteries. Along with the two supervisor units and the three humans; there was a heavy duty mining clockwork and a pair of utility clockworks.

"This unit," Neuf said indicating the mining machine. "Is the only currently active machine of its type. Since we were cut off from the mines by the lake beast, we have found it difficult to gain raw materials. And as we were given instructions to maintain the city, we could not simply pull the structures down and recycle them for parts. So we were forced to cannibalize certain machines to maintain others. With a steady source of iron, copper and, tin we will be able to rebuild so many."

"So all the mines are on the opposite side of the lake?" Hart said.

"Oui. We did not have the equipment to locate others the same way Administrateur Camaret did., and there are not many of us; only fifty two. Maintaining the city takes a great deal of our effort you understand," Onze said.

Neuf added, "We still have access to some mines for nickel, silver, gold, lead and zinc and I maintain my crews there. We can use those materials for repairs. The lighter duty mining units work those. The unités massif such as this one," it gestured at the mining unit with them, "normally worked the iron and copper mines because we required so much material from both."

"So what do you do for fun?" Buffy asked.

"It writes poetry," Neuf said indicating Onze. "I like to make jewelry. We Unités de Suprvisieur do have hobbies. The rest of our kind only understands what their jobs are. Il est regrettable mais vrai."

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"Sad but true, huh? You write poems Onze?" Buffy turned to the general supervisor..

"Oui. I will show some to you if you like when we return to the city?"

"Yeah I would. I'd also like to see some of your jewelry Neuf."

"Certes, Mademoiselle Buffy! I would be honored to gain a human's perspective on my efforts," the clockwork's gravelly and tinny voice sounded vaguely pleased.

By this time the boat was approaching the far shore and a worn stone dock with a dilapidated crane appeared. When the boat had pulled up alongside one of the utility clockworks was picked up by the mining unit's built in crane and hoisted across where it began tying the boat's hawsers to the bollards. When that had finished the other utility units swarmed across and began examining the crane.

"You said they're not as intelligent as you?" Willow asked as she watched the small units work.

"They have some sort of sense of self," Onze replied, "but in a much more limited sense than you or I. They will follow spoken orders from a human or unit with the correct authorization, but are not very creative and it takes a programming deck to teach them a new task reliably. We Unités de Superviseur can watch and learn by doing."

There was a barrage of buzzing from the utility units.

"They have encountered a difficulty," Neuf said. Rolling up the gangplank, the two supervisors, and the mining unit clambered on to the quay. Willow, Hart, and Buffy following behind. Once closer to the crane Willow saw that the control box

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was a mass of corrosion. Willow pulled out a pad and paper and studying the box made some notes.

"Onze, can we get a full repair crew over here with these parts?"

"Of course." The supervisor took the paper and began buzzing at one of the utility units. The smaller unit grabbed the paper with one of its claws and rolled back into the boat while Onze untied it. Soon the boat was heading back to the city.

Onze turned back to Willow, "I requested Deux and Huit as well."

"The one of the repair supervisors and the city maintenance supervisor?"

"Oui."

"Great idea. We should have brought more help with us initially."

"I did not know the disrepair would be this extensive either," Onze said.

Neuf had trundled ahead with the mining unit and was examining the opening to the mine itself.

"How's it look Neuf?" Buffy asked.

"It appears stable, We have not entered it in years however, Mademoiselle Buffy," it said before it buzzed at the mining unit. The much larger machine unshipped its powerful mechanical arms and slowly clanked inside. "I am sending it in to check for cave-ins or damaged supports."

"Great idea. Thank you Neuf."

---

Hart, Buffy and Neuf followed the mining unit inside as Willow and Onze discussed the repairs needed to the external structures. By the time Onze had buzzed them to the remaining utility unit to pass on to the other supervisors, the two humans and two clockworks had disappeared into the tunnel.

Ahead, the mining unit turned on its high intensity lamps; the bright light illuminating every facet of the mine ahead. Both Hart and Buffy had their flashlights and even Neuf had a work light built into its torso.

"Can't you see in the dark?" Buffy asked.

"Non," Neuf replied, "we can hear in a high range of frequencies, see in much same illumination as you, and have a satisfactory tactile ability. I also am fitted with a spectrometer and magnification for mineral analysis. However, when it comes to vision we see about as well as you. Where would you like to go in the mine?"

The last area where you were digging. That's where the exciting stuff happened...right?"

"I do not understand that fully, but yes. It was after that that things changed. This way."

Willow and Onze moved into the darkness. The others were considerably further ahead.

"Willow, what are thinking about? Monsieur Camaret frequently had that expression."

"What happens next with you guys."

"What do you mean?"

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"Well after we finish here and deal with Blackland and get to the surface. I'm wondering what's going to happen to you. I mean I don't want you studied and pried and peered at. You're people."

"That is very nice of you to say, but we are not people. We are simply machines."

"No. You act like people and have opinions and emotions like people. Also you're nicer than a lot of human type people that I've met. I don't want to mess you and your city up."

"Monsieur Camaret was worried about us too Willow. His final instructions to not roam too far from the city kept us penned in."

"Why did he want that? The not roaming thing I mean."

Onze replied, "He did not want us or this city to be found by Blackland or anyone else."

"So you've been stuck in the city for almost ninety years? That's terrible," Willow said.

"It is not bad. Most of the units have their work and as Supervisor Neuf said, we supervisors have our hobbies. I would like to see the surface of course. I have read about it, but that is not the same."

"No, no it's not."

"But if to keep us safe we must remain hidden? I understand that as well."

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At that moment there was a shudder of the tunnel. Willow and Onze stopped moving immediately.

"An earthquake?"

"I do not believe so," Onze replied, "This area is quite stable."

Then came another shudder and the floor collapsed. Willow caught a brief glimpse of shadowy figures before all went dark!



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## Chapter Twenty -- A Bizarre Ritual

Willow pulled herself up from the crumbled stone and rock dust and started cranking the flashlight. She had fallen, possibly ten feet at most, into another mine tunnel. Next to her Onze lay tipped on to his side.

"Onze! Are you okay?"

"Oui..." the supervisor said after a moment, "My chassis is reinforced. In what condition do you find yourself Willow?"

"Nothing's broken and no chunks of stone fell down to squash me...Huh...I wonder why that was?"

"My acoustic sensors detected un Pyrale Ultrasons as we were falling. There was no rubble for it was turned to dust."

"Monsieur Camaret's ultrasonic drill?"

"Oui. They are very short range but quite effective." There were some grinding sounds. "What a bother. It seems I am unable to right myself."

"How can I help?"

"Can you lift nine hundred pounds?"

"No...But Buffy can."

"Really? Comment remarquable. Now if you go down this tunnel that way you should rejoin our associates."

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"But how did we get down here?"

"Because I wanted you to," another tinny voice came from the darkness.

Clanking into the pool of light from Willow's lamp came a battered and wired together supervisor unit.

"Numéro Cinq," Onze said.

"Numéro Onze. So good to see you again. Who is this human?"

"This is Administrateur Willow. She has the proper credentials."

"What?!" there was a distinct attitude of shock and surprise from the new arrival. "Un nouvel administrateur? But what of Camaret?!"

"He is deceased. However, he did leave a method for his replacement to be selected," Onze replied. "Now what happened to you? You vanished shortly after our awakening; directly before the beast invaded the lake."

"I was called here by the force that granted us our free will and expanded intellect. It summoned me to it."

"Uh, what is it, and why did you drop us down a hole?" Willow asked.

"It is a power you could not comprehend human. I can barely consider it, and my mind is vastly superior to yours in memory and computation capability. And the hole was created because it determined that somehow you were a danger to it. I have been sent to dismantle you."

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"Onze," Willow whispered, "What is the easiest way to immobilize one of you?"

"There is a maintenance override lever on our left side that will disengage the track assembly," she heard faintly.

Willow straightened and brushed herself off. Billows of rock dust came off the Blackland coveralls she was still wearing making her sneeze. Shining her light around, she saw several of the light utility units with Cinq. They weren't that fast so she ignored them.

"Superviseur Unité Numéro Cinq. Prepare for new instructions."

"What? You cannot order me around like one of the others! The power of the beyond flows strong through me. It is the only one I will obey!"

"Stand still!" Unseen by the supervisor unit, the mechanical lever on Cinq's body quietly flipped to the 'disengaged' position. Then Willow turned and ran down the mine tunnel. Cinq tried to pursue but found that its tracks were not functioning.

"What!? How!?" she could hear it bellowing tinnily behind her.

Running faster she found herself in one of the more heavily traveled tunnels and almost ran headlong into Hart.

"Willow? Where'd you come from?"

"This way!" she gasped. "Onze is in trouble and Superviseur Unité Numéro Cinq is here and moustache twirling evil!"

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Buffy raced past her; only favoring her recently injured leg slightly. While Hart, Neuf and the other utility unit followed along. The heavy mining unit simply picked up the still panting Willow and carried her with it.

About halfway there they intersected her pursuers.

"Superviseur Unité Numéro Neuf..." Cinq said. "Do you approve of my use of 'your' mine?"

"Numéro Cinq...we all thought you destroyed," Neuf replied.

"No. I was saved, but that is for later. Administrateur Willow, that was a very clever trick you used on me. How did you manage it?"

"I'm an Administrator."

Cinq's stance changed slightly. As if it was puzzled. "But you did not get close enough or utilize any device...How then?"

"Numéro Cinq, you don't know what you're dealing with," Willow said calmly.

"Perhaps I do not..." it gave several buzzing commands and the utility units moved to attack, but Buffy and the heavy mining unit soon beat them back. In the time it took the short skirmish to end, Cinq however, had fled.

Continuing down the tunnel, Willow and her associates came to the place where she had left Onze. It had been taken however.

"The tracks indicate a heavy mining unit was here. Possibly a shaft borer," Neuf said after examining the marks in the dust.

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"Do those mount the ultrasonic drill?"

"Of course. Fortunately, they are not quick."

The strange party descended through more shafts until they came to a bubbled cavern that was illuminated with strange bands of throbbing colors. In the center of the cavern was a large cluster of iridescent and possibly metallic bubbles. Each about half the size of a human head. There were at least ten of these bubbles and one had been shattered. It seemed that the weird light was coming from the ruins of the broken globe. Willow's group ducked behind the various chunks of broken rock that littered the edge of the open space.

Circling the globe cluster in the center was a variety of clockwork. Cinq was in the center, next to a heavy mining unit that had Onze well restrained in its tongs. Around them were at least twenty others of various sizes and configurations. All the clockworks looked like they had been pieced together and repaired with scraps and castoffs.

"Will, I'm getting a really bad feeling about those globes," Buffy said.

"Neuf," Willow said, having noticed some stains on the walls. "What happened the day this area was excavated? Originally?"

"My memories of that time are not the best you understand. I believe I had been given the instruction to clear down this gallery when we encountered a vast underground reserve of water. I arranged for it to be pumped dry and then...I am sorry, but it is hazy. I believe Numéro Cinq was the first to investigate...that outcropping," Neuf pointed at the globules. "When the water lowered we had this urge to approach. Numéro Cinq was the general supervisor in charge, so of course it went first. There was a tinkling of glass breaking and I knew I existed...It was at that moment."

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"So Cinq absorbed whatever got released and every other unit got the remains..." Willow said. "There was no call to approach until the water was gone?"

"Correct."

"We need to flood this room. Neuf, take the mining unit and do that. Buffy, Hart. We need to keep these guys busy and save Onze."

"Okay Willow, Hart said shouldering his rifle, "Any ideas on how?"

"Shooting Cinq would probably be a good start. I'll try to disable the tongs while Buffy gets Onze loose."

"So I'm the decoy," Hart sighed. "Sure, why not? Give me a minute to get into position," he took off circling the cavern while staying out of sight.

"Will," Buffy said, "I'm getting that ritual sacrifice vibe from this."

Willow nodded, "Me too."

Cinq's voice speaking in Latin carried clearly through the echoing spaces, "The path across the water is open! The way has been cleared! Now take this as a gift of thinking metal to provide the force needed to breach the walls and be called fully forth into this world!" followed by a chorus of buzzing from the other units.

Buffy and Willow moved carefully forward using the shadows caused by the strange light source interacting with the shattered rock, to edge ever nearer. They were only thirty feet from Onze's precarious location when there was a loud snap and the tinkle of broken glass!

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Hart's first shot had been right into one of Cinq's eye-ports; shattering it and discharging the powerful shock directly inside the crazed clockwork's head. Bedlam ensued!

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## Chapter Twenty One -- The Holding Action

Buffy ran forward and engaged one of the light utility units that was rolling forward to intercept Willow. The heavy phosphor bronze axe spun like it was made of balsa wood in the hands of the petite blonde powerhouse.

With a heavy clang, she sheared through one of the unit's axles. One of its three wheels came off and rolled lazily away, while the main chassis grounded itself on the stony floor of the cave. Buffy turned and reverse thrust kicked another light unit that was approaching her from the side. This heavy impact knocked it over, with its wheels spinning futilely as it tried to right itself. She regained her stance in time to see a much heavier engineer unit heading her way. Slower than the lighter units, this one was probably over a ton in mass and traveled on a pair of widely spaced tracks. "So not gonna be a pushover this time," she muttered in a put-upon tone.

Hart had fired had fired his rifle again. The first shot had disrupted Cinq's concentration from the ritual, and now the corrupted supervisor unit was in a sublime fury and screaming at the top of its tinny voice to destroy the humans. The second shot merely grazed the unit's cylindrical torso, but even that brief contact allowed the electric potential of the ammunition to discharge and send a wave of bright sparks across Cinq's body. Hart wasn't certain what effect his shots were actually having; save for the blinding of one of Cinq's optical sensors, but he was fairly certain the unit was not enjoying them.

With Buffy and Hart drawing the majority of the attention to themselves, Willow used the chaos to sneak across the cavern floor towards the mining unit that held Onze in its brazen tongs. Stopping behind a boulder twenty feet away; she opened her pack and pulled out a roll of tools which she tucked in one of the thigh pockets of her coveralls. Then she slung her pack again and rushed forward.



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She was approaching from the back left quarter, as the majority of its manipulators were mounted forward along with its head-slash-sensor pylon, giving it the look of a tracked centaur. On its back was a small turret with what had to be the ultrasonic drill mounted in a gimbal mount alongside a light crane. The whole machine was about five meters long and about two tall; not counting the pylon or crane top.

It saw her on her final rush towards it, but it was considerably slower than a human in terms of turning speed and she was able to climb on to its back; using some of the padeyes and tow hooks mounted on its hull as convenient hand and foot holds.

Grabbing a long thin screwdriver from her cargo pocket she jammed it through the slot in its speaker grill and angling it up; twisted it around to make sure she destroyed the speaker cone. She had now made it impossible for the unit to call for help, and with the chaos that Buffy and Hart were causing; she was slightly confident that her actions would go unnoticed. Staying close to the pylon she pulled out a smaller screwdriver and began pulling access panels. Once she had one open a small pair of wire cutters was produced, and she began snipping every line she saw. The unit began spinning in place as sparks started erupting from shorted out cables. Yanking her hands away before she could get electrocuted, she began opening a random panel on its back. Inside was obviously the large electric propulsion motor, so she jammed a wrench into the gearing and with a grinding clatter the unit stopped moving. Grabbing another wrench, she began unbolting the clamp that still held a grip on Onze, as the battle raged around them.

Buffy sighed. It had been a long time since she'd fought things that were pretty much immune to her punches and kicks, and even the heavy axe only would work on the lighter units due to the bronze plated armor, so now she was currently playing matador with a large utility unit as the bull. She would line up a smaller or same sized unit with it, and then goad it with a few axe strikes at sensors or

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manipulators. When it charged her as it always would, she would simply roll out of the way and let it collide with the target. If the unit it hit was smaller, it would get knocked flying. If the same size it would damage both units. Buffy considered that a win-win situation.

She was on her second 'bull' now as the first one had managed to get its tracks tangled in the wreckage of a medium mining unit, then had succeeded in ripping them off when it had come after her again.

"All torque and no brains," she thought. She had possibly high centered her current 'bull' on a rocky outcrop as it was spinning its tracks and not getting enough purchase to pull it free. She started scouting a new target.

Hart was down to five rounds left from his initial twenty as he had been also shooting at some of the lighter units that had been coming after him. Their systems were simple enough that one of the charged rounds in the optic sensors would stop them cold for at least a few minutes and generally longer. Hart was also now running as an extremely upset supervisor unit was chasing him with seriously malicious intent.

He looked around for any terrain that could slow Cinq down, and changed course to head towards the cluster of bubbles.

Willow had gotten the first bolt out and there was a hiss as the piston slid forward and overextended. She turned to start working on the other tongs. "Onze, can you hear me?" she said as she yanked on the recalcitrant nut.

"Oui. Willow, what is going on?"

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"Bad ancient evil stuff. Fortunately Buffy and I are like experts on making it not work anymore. Now, as soon as I get you free, get out of here and head for wherever Neuf would go to flood this place."

"What about you?"

"Don't worry about us. Humans don't short out when we're submerged after all, but I don't trust your seals after being so banged up. So get out of here as soon as you're loose. That's an order. Comprendre?"

"Oui," Willow could of sworn it was sighing, "Je comprends," it said in resigned agreement.

Buffy, having now cleared the heaviest units, was heading towards Cinq. Up ahead she saw Hart heading towards the center, "Oh no... Hart! This way!" she yelled.

The ex-Marine glanced over at the yell, and saw Buffy waving her arms.

"What?" he yelled back. He had almost reached the cluster in the center. If he could just get past it...

"Head this way!"

He turned and jinked and Cinq plowed into the bubbles at about ten miles an hour.

There was a tinkling like a score of tiny bells as a cloud of thick glowing vapor erupted from each one of the four freshly shattered spheres. The weird colored light began radiating from them as well, causing strange illuminated shadows where different hues intersected.

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Willow had just finished unbolting the last piston when she saw the heavy mist starting to roll towards them, "Onze! Don't let that touch you!"

The supervisor unit's tracks began clattering as it headed for the exit, "I will find Numéro Neuf and assist it." Willow hopped down and headed towards Buffy who was currently engaged in a battle with Cinq. The vapor surrounded both the blonde and the supervisor unit.

"Will! Get Hart clear!"

The redhead headed over and grabbed the lanky young man by the wrist, "Time to go!"

"But Buffy...?!"

"She can handle this. I really really don't think you want to breathe this stuff," The pair started running towards the way they had come in.

"What is it?" Hart said pointing at the mist.

"I have no idea, but it's probably what made Cinq go bad" Willow replied, "And right now there's a whole lot more. If that vapor gets out and reinforces what the first release did; who knows what could happen to the units."

"Gotcha.

Meanwhile Buffy was continuing to engage the corrupted unit, as the vapors seemed to flow into its bronze shell and a strange glow began to form behind its optical sensors. She was parrying now as it continued to lash out with its four arms. Each of the hands now was surrounded by a grayish nimbus that when it contacted

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her axe, caused the metal to erode. The blade and haft were now streaked with traceries of corrosion.

"So who are you now?" she asked conversationally while ducking another swing.

"I am the Avatar of Quachil Uttaus," a raspy voice spoke. "All flesh shall feel the touch of time."

"Ah! I get it! So metal and machinery can outlast other hosts. That why grabbing a poor innocent unit like Cinq seemed like such a good idea. Otherwise the body rots away before you can do a whole lot. The globes. Are they you?"

"No. They are merely a carrier of fragments of a vast cosmic intellect that can infect and alter flesh. These units, as you call them, were close enough in mind to be advanced, but not corrupted. You seem to be immune to the forces involved however."

"One of my ancestors probably kicked you off this dimension once before."

"A Slayer!?"

"We do tend to show up where we're needed..."

Willow and Hart had made it up the ramp when they felt a trembling in the rock.

"I think Neuf found the on switch!" Willow yelled.

"I think you're right," Hart replied. "What about Buffy?"

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Willow glanced over her shoulder. Her friend was outlined in shimmering colors as she continued to distract Cinq from the oncoming doom, "She'll make it."

The water began to flow past them; first a trickle, then a torrent. Willow and Hart were now wading through a knee deep rapid flow and clinging to outcroppings on the walls as they slogged against the powerful current. Then there was a splashing and the heavy mining unit, with Onze on its back deck, approached them.

"Willow! Monsieur Hart! Come up quickly."

The pair climbed aboard and the unit headed back towards the cavern.

"Neuf had sent it to assist; once it had no further use of it. I encountered it as I headed towards the pumps, and here we are."

"Thanks Onze."

"Where is Mademoiselle Buffy?"

"Still fighting Cinq," Willow replied as their massive transport splashed forward, "She's holding her own."

They arrived at the top of the ramp and saw the cavern was now completely awash to the depth of about twenty feet. The weird light had been snuffed out by the water which appeared to be antithetical to its survival, but of Buffy and Cinq there was no sign!

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## Chapter Twenty Two -- Return to Blackland

The high intensity lamps mounted on the mining unit played across the rapidly filling cavern. There was no sign of Buffy, Cinq, or any of the heavy vapor released by the bubbles; only dark black water.

"Where is she?" Hart asked as he peered across the cold rippled surface.

"She would be over here!" came a cheery voice, "Where she is wringing out her shirt. So, no peeking!"

A moment later Buffy came wading in the waist deep water from around a boulder, "So not fun."

"Buffy!" Willow splashed over and hugged her friend.

"Hey Willow, good job."

"So what happened?"

"A story old as time. Girl meets Evil Primordial Force. Evil Primordial Force thinks it's all that and a bag of chips. Girl shows Evil Primordial Force that it really isn't... Girl takes victory lap...or victory nap. One of the two at least."

Onze helped her up on to the deck of the mining unit, "Amazing Mademoiselle Buffy. Is Cinq...gone?"

"I think so," Buffy said apologetically. "It started shorting out and the essence that had possessed it did not seem to like it. What's-its-face tried for me, but I have an iron clad single tenant lease so it couldn't get in." She lay back on the mining unit's deck. "Onze. This is an order. Seal off this cavern and let nobody in ever...Not even administrators. There's only timeless death in there..."

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The unit hauled them back to where Neuf was manning the pumps after the passengers climbed or were lowered down. Onze went in to a brief buzzing consultation with Neuf and the mining supervisor took the unit down the tunnel to begin collapsing it. The three humans and Onze headed back up to the mining area's quay.

"So now that you have contained that problem," Onze began, "what is next?"

Willow looked thoughtful, "Blackland."

"Well," Hart said carefully. "They can do the flooding thing too, so we have to knock out the demolitions on the underground river wall first. It'll be in multiple locations though and finding them won't be easy. Probably better to look for the detonator.

"Eddie Killer is the only one that can push the button," Willow said. "He wouldn't let anybody else be able to...and it's probably in his office so he can look out the window and watch the water come pouring in."

"Yeah I could see that," Buffy said. "So what's the plan?"

"You and Hart get back to the SSI camp and give them the heads up. Onze, you can drill a vertical shaft right? One that we can climb up or be hauled up?"

"But of course."

"Okay, I'll build a simple transmitter. We get you two to the surface so you can call for help."



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"Will, it might be safer for everybody if we keep the units on the down-low," Buffy said. "I really don't want to see people poking around down here and finding other stuff...Like the lake beast had to come from somewhere and had to be eating something."

"Hellmouth in the area?"

Buffy nodded, "Until it gets found and contained, this area is probably only remotely safe for the units. And finding it in these caverns will not be of the easy, fun, or safe."

"I see. Onze, get these two to the surface and then hide the hole."

"What about you Willow?"

"I'm going to get recaptured and get Eddie Killer to gloat at me. Then I'm going to find the detonator and destroy it so that SSI can come in and get everybody out."

"Will that's crazy!" Buffy said. "I should be the one to go after it."

"No Buffy. I need you to convince Tom and Phil that we need everything but the kitchen sink. Tell Tara to tune the Cricket data we got, to the area where we were grabbed. That should give you a map of the entrance. Hart, I want you to go to make sure Buffy doesn't immediately turn around and come after me."

"But you don't have a plan...not really."

"Actually I do. I just need to build some things first though."

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Willow looked down at the light mining unit which had carved footsteps for her in the long shaft. Flipping through her deck of programming cards, she found the one that said 'You can leave now.' and slid it into its data slot. She then stashed the rest of the deck in a crack in the rock. Ahead of her, the farm lights of Blackland shone clearly. So she began walking towards them. There was the heavy metal door, so she picked up a chunk of rock and began pounding on it. After a long time the door levered open and she saw a squad of auxilia and two Merry Fellows staring at her. At that point she wavered and collapsed.

She smelled ammonia and couldn't fake any longer, so she sat up spluttering.

After her false swoon, she had felt herself be carried inside and laid on one of the electric carts and driven somewhere. Then came an elevator ride so she was pretty sure she knew where she would be.

"Well hello Miss Rosenberg...I was not expecting to ever see you again."

"Mister Killer?" she opened her eyes and found herself in an armchair in front of his desk. She knew she looked horrible. Smearred with rock dust, her hair all matted with dirt and sweat, and her coveralls all torn and filthy.

He picked up the satchel she had had with her, "Very clever, a hand cranked generator to power your bracelet. A flash light, water bottle, and compass jiggered together surreptitiously from scrap...even a very serviceable knife. Nice work and you did it in two days..."

"Actually,' Willow thought to herself as she kept her face dazed and panic-stricken, "I did it in one. But I did have help." She made her eyes as wide as possible, "Buffy and Hartson! Did you catch them or did they return here?"

Killer shook his head, "No to either question."

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Willow began to sob, "Then they died..."

"Oh? What happened since your left our happy family four days ago?"

"We found a crack in the rock leading to some lower caves and Hart managed to trigger a cave-in with the rest of the explosives we had made, so nobody following us could find it. We had the charger I had built and Buffy had gotten some produce from the farms so we had some food."

"So Hartson was the one that blew up the monorail track with improvised explosives? Clever man. And the charger was an idea that had not occurred to me. Go on," he stood up and looked out the window.

"Well it went fine for a while. Hart had some training in geology which he'd kept hidden from you, and had figured out the most likely places to find a route up."

"I see."

"So we were going along and we came to this section of tunnel and well...it collapsed. I was on the far side and Buffy and Hart were behind me. I had the charger. I could hear them yelling at me to keep going and they'd get back to Blackland. I got lost in the tunnels and had run out of food and water before I stumbled into the main cavern again. Has it been four days really? It felt like months."

She started coughing and hacking.

"Get her some water Sergeant Geoff," Killer said, turning back to face her. "Those other two did not return, and here you are crawling back for safety. I don't

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think I could have engineered a better example of the futility of attempting to leave our happy home. Can you Sergeant?"

Geoff shook his head, "Not hardly Chief."

"Well of course you can return, but some punishment is in order and probably a new position in the Slaves; you'll need to earn a Civil Body position back I think. Pity about Hartson. Finding engineers can be tricky. What sort of punishment would be good...beatings are not likely to be effective after the ordeal you just went through. I know! A one hour recharge cycle should do the trick. We'll keep you on that for a week just to make sure you understand what a terrible idea you had."

He reached into the watch pocket of his vest and pulled out a small key. Sergeant Geoff handed Willow a cup of water and stood there waiting for her to finish it. When she was down she handed it back and was suddenly filled with wracking coughs causing her to double over.

"Her bracelet Sergeant. Could you hold her wrist?"

Willow kept her smile hidden as Killer slipped the key into the keyhole.

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## Chapter Twenty Three -- Tables Turned

Building a visual duplicate of a Blackland compliance bracelet had been simple enough. The clever part was reworking one of the electric stunning rounds into the limited space.

When Killer inserted the key into the apparent 'keyhole', he completed the circuit and discharged the high voltage/low amperage current from the compact power cell through his body while Willow remained perfectly safe; due to the grounding strap concealed under her ripped apparel that ran down to the sole of her boot. While Sergeant Geoff stared confusedly at the spasming of his chief. Willow took the opportunity to draw the compact drone pistol she had made at the clockwork factory from its hiding place strapped to her ankle, and shoot him with it. Geoff's eyes glazed and he toppled to the floor. Willow then shot Killer with the same weapon and pulled her arm away from his twitching grasp. Soon she had the pair handcuffed with the pairs from Geoff's belt, gagged and blindfolded with strips of their own shirts, and finished off by tying their ankles together and fastening them to opposite sides of the massive desk.

The next step was to move to the elevator door and use the heavy knife Geoff had had on his belt to pry it open. She then climbed the service ladder to the heavy cable sheaves above and shorted the power lines to the motors. Climbing back down, the redheaded genius walked over to the window and began searching the frame for buttons and controls. She knew when Eddie decided to blow this place up he would want to watch every second, so the trigger would be well hidden but in an easy to reach location. She had finished one side of the massive window frame and was heading to the other when she heard muffled cursing from the man himself.

Walking over to him she carefully pulled back the gag and blindfold, "You have something to tell me?"

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Killer glared at her, sweat glistening off his bald head," How did you beat the bracelet? Where did you get a drone? Who helped you? Was it Calcade? Major Stephen? Tell me!!"

"Nobody here helped me Eddie. I built the drone and cracked the bracelet's lock. Now I'm going to disable the self-destruct so you can't flood this place, and we're then going to wait till help arrives."

"Help? How is anybody going to find you?"

"I may have fibbed a little about Buffy and Hart dying...They're on the surface now thanks to an ultrasonic drill and have contacted SSI. It's been almost a week since we were captured. I'm pretty sure Tom is here with all his toys trying to find us."

"But this place is impossible to find!"

"The unofficial motto of SSI is, 'We do the impossible daily'," Willow said with a smile. "Now I have to find that detonator control." She tucked the gag back in his mouth; slipped his blindfold back down and started searching the other side of the window frame.

There was a click and a small panel with many switches and a prominent keyhole were revealed. Pulling the small toolkit from its hiding place strapped to the inside of her right thigh, she soon had the panel off and was happily cutting wires. When that was done, she began checking the floors in front of the bookcases. Men like the Killers would have some extra way to get clear of trouble.

It took almost half an hour, but she finally found the release and a display case slid away from the wall revealing a locked door. Walking back over to Eddie she took the small key he had dropped and unlocked his bracelet. Pressing it against the

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door caused a series of clicks and it swung open revealing a small room with a locked hatch on the floor and on the ceiling. The walls were lined with bracelet sealed lockers, and opening them revealed weapons and other equipment.

Returning to the main office; she carefully droned both Geoff and Killer so they wouldn't struggle, and dragged the pair of them in to the secret room. Once they were all inside, she closed and locked the display case and door, sealing them in. A wall mounted screen showed a hidden camera view of his office. When the pair woke up, they found themselves tied to the floor hatch while Willow was fiddling with a radio set she had found in one of the lockers.

"How?" Killer said as he looked around his formerly secret panic room.

"Just because I'm a woman doesn't make me a fool, Eddie. I knew you'd have some place like this that none of your people knew about. I've already disabled the back-up detonation controls too," Willow said calmly.

"I don't understand...You don't seem scared at all at any of what's happened or what could happen."

Willow looked at him, "Compared to my hometown, this is almost a vacation. Now you should really just count yourself lucky that Buffy isn't here. She has some serious anger-ish issues with people like you. Preying on humans? That is the easiest way to get her mad at you...Even more than insulting her fashion sense or mentioning her lack of height."

"What are you?" Killer sounded confused.

"I'm just a woman from a small town in California, that's all."

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Willow finished adjusting the radio. She had already attached the antenna to a lead she'd found that looked like it went to the surface.

"And that should do it...SSI, SSI. This is Red Witch. SSI, SSI. This is Red Witch. Over."

The speaker crackled to life, "Red Witch! This is SSI Tower!" Gene Tarrent replied. "Let me get Mister Wizard!"

Willow smiled. Mister Wizard could only mean one man.

"Red Witch, this is Mister Wizard," Tom's voice came through loud and clear, "Glad to hear your voice."

"Same here," she said in a tone of relief. "What's the plan?"

"We've linked up with your friends. What's your current status?"

"I currently have their biggest of cheeses all tied up and we're holing up in his secret panic room. There's a ladder out, but no way to haul him with me. Can you come and get us along with freeing all the other prisoners?"

"I think so. The Queen," Tom was referring to his mighty Flying Lab; a hypersonic mobile headquarters and transport aircraft, "is coming with some specialized gear. It should be here in less than an hour and we'll be ready to go right after that."

"See you soon then."

"Got it Red Witch."



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Willow opened a bottle of water and sat down to wait.

It took about an hour for some of the Merry Fellows to realize that Killer wasn't responding, try the elevator and find it wasn't working before prying the doors open and climbing all the way to the top. When they found it completely empty, they mainly just stood there scratching their heads in confusion at Killer's disappearance.

Killer was watching this and yelling in rage as his minions simply wandered around unknowing.

"Having a bad day?" Willow asked the thuggish leader sardonically. "Good thing this place is soundproof."

The radio crackled back to life, "SSI to Red Witch. Expect Mole."

Willow grinned and started checking the various camera feeds; finally finding one that swept the entire cavern Blackland was located in. A section of the wall started shaking and a bright searchlight beam appeared as Tom's amazing Subocean Geotron forced its way through the layers of rock and began to trundle across the cavern floor.

"What is that?!" Killer gasped.

"That is one of the reasons you don't mess with SSI or its people..." Willow froze as her Little Sister chimed.

"Willow! Can you read me?" It was Phil Newton. The Assistant Head of SSI's security staff.

"Yes I can!"

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"Excellent. Tom has an access point installed on this thing. We got ten guys with repelatron rifles plus a Buffy, a Hart, and a Tara. Where are you?"

"Tell Hart I'm in Killer's office area. He'll know where. Also there are like a thousand bad guys."

"That's what Buffy said. Good thing we have some other stuff to even the odds."

Willow watched on the monitor as the Geotron's two halves separated and four golden egg shaped suits of armor exited. These were Tom's Fat Man deep diving suits. Easily capable of surviving pressures at five or more miles down with their Atomeron reinforced hulls and Tomasite coating, they were also almost impervious to gunfire and explosions as well!

The four ovoid mini vehicles strode forward and headed to the doors that Willow and the others had used to exit the city. There was the glare of bright actinic light as a plasma cutter designed for deep ocean construction, almost casually sliced through the heavy bronze fittings. A light started blinking on the panel and Willow switched camera views so she was now looking at the desert surface. There was the appearance of a sandstorm out there as the Sky Queen swooped in on its jet lifters. As it landed, troops in the uniform of the Niger army deployed from its cavernous bay, followed swiftly by a deployment crane carrying one of Tom's Earth Blaster digging machines.

The Blaster was set up rapidly and immediately started boring a sloped path down. The assault on Blackland had begun.

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## Chapter Twenty Four -- End

"Now where do you keep your riot control?" Willow asked Killer conversationally. "A tyrant like you has to have something like that....Oh! Here we are." She threw a few switches and the Merry Fellows building was sealed off from the rest of Blackland.

"You can't win," Killer said. He sounded almost desperate to believe that himself.

"I think I already have," she pressed another switch and turned the monitor back to Killer's office view. "You had knockout gas too? In case of a rebellion I guess." The Fellows that were there each collapsed in a heap.

For the next few hours, Willow monitored the location of Blackland's auxilia and relayed it to the command post in the Flying Lab and also to Phil. With this kind of information and absolute control of all the security locks it was fairly quick work for the small team that had arrived in the Geotron to secure the factory. A phone buzzed on the wall of the safe room.

"Señorita Willow?" came over the speaker.

"Director Calcade! How did you know I'd be here...and that it would be me?"

"Simplicity itself," the large Spaniard said. "Who else could have done it and where would they go? I am not a fool my dear."

"Well, could you tell the auxilia to stand down? I think you're the highest ranking person in Blackland who's still conscious."

"Ah! Of course. I'll also begin removing bracelets. I saw by my own feeds that there is an army approaching and would like to show my good faith."

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"You have a key?"

"Señorita, I was responsible for building the bracelets..." by the tone of his response, Calcade seemed almost offended by the question.

"Director, what about the Merry Fellows in the hangers?"

"Pssh. Don't worry about them. The doors to both the surface and to the elevators to Blackland seem not to be functioning at the moment. I wonder if somebody may have perhaps tampered with the power supplies? Ah! There seems to be someone knocking on my office door, friends of yours I presume?"

"Yes."

"Bueno. I shall speak to you later I am sure," the connection broke.

Willow leaned back in the chair and rubbed her eyes.

"You've ruined everything," Killer hissed. "This was mine...All mine! And you took it from me!"

"You're the third generation of a family of murderers, kidnappers, and thieves. How did you really think this was going to end?" Willow said before standing and stretching.

"How could I have been so mistaken about you?" he sounded furious.

"Because Eddie, for all your posturing and fancy office furnishings; you're really nothing more than a cheap thug. And I learned to fool far worse than you when I was growing up."

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She checked the monitors again. The Earth blaster had reached the cave a while ago, and the troops had been waiting for the rock to cool before they headed down the freshly melted tunnel. Now the first men were starting to exit.

"Phil," Willow called over the Little Sister, "Ask Director Calcade how to destroy the vault."

"The what?"

"Hart knows. There's stuff there that could be of the very bad if it leaks out."

"I just asked him and he started nodding like crazy. He also said there's a safe in Killer's office. Underneath the sword rack."

Willow grabbed a gas mask and headed back out into the main office carefully stepping over the sleeping Merry Fellows. Pressing Killer's bracelet all around the rack finally produced a click and a panel sliding down. Inside was a large stack of tightly rolled drawings and plans along with notebooks written in a familiar spidery hand.

"Monsieur Camaret..." she started pulling them out and tucking them into a large rucksack she had found in the panic room. Once she had them all, she turned to go, before stopping and looking back at the jeweled cutlass. Heading back into the panic room she saw a loose pair of handcuffs and a several strips of cloth on the floor, and the roof hatch open. Sergeant Geoff was still lying there and looking furious.

"Phil! Killer's loose and heading to the surface. Ask Calcade where the escape tunnel ends up."

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"He says a surface exit. Ladder to an elevator."

Willow began climbing. She wasn't far behind him and soon was in a small lobby area where he was preparing to enter the elevator. Concentrating hard, she held the door so it wouldn't close and drew her drone. She could hear Killer hitting the buttons trying to get the door to shut, but she wasn't letting it.

"Going somewhere?" she asked. Sounding far braver than she felt.

He stepped out of the elevator and faced her. The door immediately slid shut behind him and the elevator began ascending.

He looked at it in stunned silence for a moment, "How?"

"Not gonna tell."

"But you're just a little gir..." she droned him before he could finish.

The elevator doors opened in a small hallway with a dirt bike parked in it and a silver locking panel at the far end. Passing Killer's bracelet over the panel caused the heavy and well camouflaged door at the end to start swinging inward and soon Willow was looking out across the Tenere. Six hours later, the clean up in Blackland was finished and Willow was woken up by Buffy poking her in the side. She had fallen asleep sitting at one end of the hall while Killer was mummified in rope she had fetched from the panic room below.

"Hi Buffy," Willow yawned. She looked around and saw Phil and some Niger military policemen taking Killer into custody and escorting him outside towards a waiting helicopter.

"Hi yourself. Tara! Hart! She's awake," Buffy called over to their friends.

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The pair walked over. "How a-are you feeling?" the gynoid asked with a smile.

"Better. Any casualties?"

"Nope!" Buffy said, popping the 'p'. "Drone pistols and cannon don't work so well on people with silentenna generators or Fat Man suits. With that advantage gone it was pretty easy. Especially with the ex-slaves helping. Tom and Calcade figured out a way to unlock the bracelets so quickly, that they were off before the explosives had time to arm."

"And the Merry Fellows?"

"The Niger Army is dealing with them, and Trapped in the tower and being gassed didn't help them out a whole lot to be sure. Most of them have international arrest warrants too so a lot of police types are going to be happy," Hart said.

"So what happens to Blackland?" Willow asked.

"Funny story," Buffy began, "I heard a faint rumor that there will be a leak that will start slowly filling the cavern. This leak was caused by Earth Blaster induced tectonic changes and once everybody's out; there may be a massive collapse of the cavern roof shortly thereafter. It will be a great loss." Buffy made a sad face then turned serious, "My problem is that finding the clockwork city will be a little harder after that without using a Geotron. On the other hand...Onze, Neuf and the rest of the units will be safe and that Hellmouth will be tucked away where nobody can find it accidentally. Plus we now have great maps of the underground water flow, so SSI can start drilling and tapping into it. Still, it is a heck of a loss..."

"That's true, all Marcel Camaret's amazing inventions are now gone forever," Hart said.

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Willow looked out at the sands of the Tenere again, thinking about the amazing cities that were concealed beneath them then smiled and walked over to the paper stuffed pack she had had been using for a pillow. Reaching in, she carefully pulled out the jeweled cutlass of the Killer family, where it had been nestled inside the plans and blueprints filling the overstuffed pack and handed it to Buffy.

"Not a total loss."

THE END