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135 words

TAPPER

By

Lee Jackson

CHAPTER 1 – RELAY

END VIDEO PLAYBACK

MESSAGE ATTACHED—ENTER KEY TO DECRYPT

MMQE 00510 01174 01080

QUANTUM KEY ACCEPTED—DECRYPTED MESSAGE FOLLOWS

There it is, gentlemen—the true cause of the 2038 Houston disaster. Very few people outside the Institute know that cause. You're now members of that club.

As for the technology you saw, I've figured out how to get the modern analogues out of the Institute. It won't be easy, but if you want it, I'm certain I can manage it with a little help from a couple of friends—on both the inside and the outside.

Now, exactly how much would this technology be worth to your group?

MESSAGE ENDS

DELETE

DUMP CORE NOW

CHAPTER 2 – WILDCAT

Travis held up his head and made an effort to appear in control as he strode across the plaza to the University's main building. *Handle it like anything else*, he thought as he walked. *You can't control the outcome, so just concentrate on staying calm until it's over.*

He glanced up at the main building's clock tower. 8:14 a.m. Still sixteen minutes before his meeting with the dean of students.

A meeting he almost couldn't bring himself to attend.

Why'd it trigger a panic attack, of all things? he wondered, pulling his jacket tighter around his chest. The grey February skies over Austin kept the temperature cooler than his light jacket could handle. He remembered Tabitha, the computer he wore as a slim, black wire behind his right ear, warning him about the weather just before the attack.

"Your forecast for Friday, the 11th day of February, 2089," she had broadcast directly to the auditory cortex of his brain. "The weather in Austin will be cloudy this morning with a temperature of 42 degrees Fahrenheit. It's not expected to warm up much, so dress accordingly."

"Right, thanks, Tab," he'd said, reaching for light clothes from his closet.

"Travis, did you even hear what I said?" Tabitha's tone was tinged with a metallic, chime-like quality. "It's supposed to be cold out there."

"I heard you," he said, grabbing his light jacket and setting it on his bed. He pulled on the rest of his clothes, then went to his chest for a pair of socks.

"I wonder why I try sometimes. You're impossible, you know that?"

He didn't respond.

"Travis?"

Travis sat on the edge of his bed, holding his socks in hand. A wave of nausea swept over him as he stared at the shoes by his closet. His mind had locked up, frozen on a thought: *I don't want to go I don't want to go I don't want to go I don't want...*

"Travis, your metabolic readings aren't normal," Tabitha broadcast to his mind. "Say something."

His arms and hands began to shake from the tension. The socks fell to the floor. Adrenaline fueled a fight-or-flight response in his mind that fed the vicious loop in which he was caught.

I don't want to go I don't want to go I don't want...

"Okay, Travis, I think I recognize these symptoms from the QuantumNet. You're about to have a seizure. Do you want me to call for paramedics?"

Travis's loop shattered into a million pieces of fear.

"NO!" He shouted, still shaking, still stuck in place, breathing raggedly. "Don't...call anyone, okay? This is...a panic attack. I've had them before."

"Oh, no, Travis! When?"

"Last one...about eight years ago."

"Years before your grandfather bought me, then."

Travis closed his eyes. He began a breathing exercise he remembered from therapy.

"Do you want me to try and talk you down?"

Travis shook his head, beads of sweat flying off his brow. "No," he breathed, "just gimme some time to recover."

"If you say so," Tabitha said, chiming a concerned note.

Travis nodded in reply. The attack was already releasing him from its grip. His shaking lessened moment by moment, eased by the breathing exercise. Minutes later, he picked up his socks and finished getting dressed.

As he entered through the doors of the main building, he thought back to the possible trigger of his attack. *Why am I suddenly seeing the freaking dean of students? This should be a meeting in the dean of music's office. Why'd I get the sudden change notice last night? Is my problem really that serious?*

Eventually, he arrived at the outer waiting room of the dean's office and checked in with the receptionist. "Good morning, Mr. Morgan," she said, not meeting his eyes as she spoke. "Have a seat for now. She'll call for you when she's ready."

Travis nodded and settled into a seat in a corner of the empty room.

"That was a bit odd," Tabitha chimed.

Odd? Travis thought. He summoned a virtual keyboard so he could have a private conversation with Tabitha. A necessity, since computers like her couldn't read minds--just broadcast to them.

"What was odd?" he typed. Tabitha's neural broadcast allowed him to feel each key as if he were using a hardware keyboard and see the output on a virtual console that spanned his field of vision.

"The receptionist's expression," Tabitha said. "She didn't look you in the eye, and now

she's blinking a lot. Receptionists usually know more about what's going on than their bosses.

This one's nervous about something."

"Check her," he typed.

Tabitha sounded a low bell tone. "Sorry, no luck. All I found was the usual personal info on the QuantumNet threads. Still, they say she's got a reputation for not getting flustered. If she's nervous now, she's been given some very unusual instructions."

Instructions about what? He rubbed his eyes as his tension level went up a notch. My Virtual Reality phobia? Did the dean of music refer me here because of that? Come on, it can't seriously be that bad, can it?

His music history professor had certainly seemed to think so. "You've got to experience the music in its 'authentic' setting, Mr. Morgan," the professor had said. "The only way you can do that is through a Virtual Reality simulation."

Unfortunately, he needed to pass music history. He couldn't graduate from the music education program without it.

Damn it. Full-blown, immersive Virtual Reality. Why the hell did they have to invent it in the first place? Wasn't actual reality good enough?

Travis had hoped the dean of music would understand and help without letting the whole school know about his problem. Now, though, the stakes were raised.

The dean of students can't kick me out of the music ed program just because I can't do VR, can she? What am I gonna do if she does? Toss four years of work down the drain? Restart another major? Hell, what if she kicks me out of school?

Old, ragged scars on his back and ankles began to itch as his worries piled up. He resisted the urge to scratch. Instead, he closed his eyes and did another breathing exercise. It helped calm

his itching sensation.

My mother would be laughing at me from hell if she knew I'd started thinking like a failure again. I can't afford it--not today. Screw it. I'm going to brave this out, one way or another.

Right after Travis finished his exercise, the door to the dean's inner office opened, just wide enough for the dean to stick out her head and scan the waiting room. Travis waved the virtual keyboard away and stood to meet her.

"Mr. Morgan, good, you're here." The dean opened the door the rest of the way. "Please come inside and have a seat." She gestured to her receptionist, and instead of going back into her office, she left through the waiting room door. The receptionist followed her out.

Travis stood alone in the waiting room.

What the hell was that? Do I have a meeting with her or not?

"Don't just stand there," Tabitha rang. "You heard the woman. Go in and sit down!"

Travis shook off his confusion and followed the dean's instructions. Once inside the office, he sat in a chair facing the dean's empty desk. He noted that the window blinds behind the desk were closed.

"Hello, Mr. Morgan," a deep voice said from the back of the room.

Travis spun around in his chair to see a man standing in a corner.

"It's good to finally meet you," the man said. "My name is Wilson."

Travis watched, wide-eyed, as Wilson left his corner and closed the office door. The tall stranger had medium brown skin and closely-cropped curly hair with a bald spot at the top. His smile was accentuated by a mustache, not too thick, which just covered his upper lip. A sharply tailored business suit and square-framed glasses emphasized his lean build.

He approached Travis and shook his hand.

The handshake caught Travis further off guard. There was an unusual strength behind it-- not physical, but from some undefinable source. The feeling left him baffled.

Wilson sat in the dean's chair.

"Mr. Wilson--"

"Please." Wilson held up his hand. "No 'mister'. Just call me Wilson."

"Okay ... Wilson? Where did the dean go? I'm supposed to have a meeting with her."

"Not quite. The notice you received only said you had a meeting scheduled in the dean's office. It didn't say that the meeting was necessarily *with* the dean."

Travis scratched his head. "What?"

Wilson clasped his hands together and rested his elbows on the desk. "It goes without saying you have questions. However, we need to take care of a small issue first. Would you mind linking your computer with mine for a moment?"

"Erm ... okay, sure. Tabitha? Would you please join the conversation?" Travis felt the tell-tale click of an interface link as Tabitha connected to Wilson's computer.

"Good morning," Tabitha said. "How can I help you today?"

Wilson nodded. "Thank you for joining us ... Tabitha, was it? You're a qLink-9, right? Top model. One of the first off of the line, I believe?"

"Yes, sir," she said in her chime-like voice.

"Not sir, just Wilson, please. Very interesting. Nice personality you picked for her, Travis. Interesting vocal interface, too. How do you like her so far?"

"We get along just fine." *What the hell is he getting at? Why is he here instead of the dean?*

"Your grandfather bought her for you almost eight months ago, right?"

Travis's forehead wrinkled. "How would you know?" he asked. "Have you been investigating me or something?"

Wilson smiled again. "Not personally, no."

Travis shifted in his seat, his patience worn thin. "Where did the dean go? Is she coming back soon?"

"She and her receptionist will be back when you and I are finished. Speaking of which," Wilson said, looking at the wire behind Travis's ear. "Tabitha?"

"Yes, Wilson?"

"Well remembered. Now, if you would be so kind, please execute USI bypass 88-5, T-Code Wilson Excalibur 525, command zero. Go."

A split second later, Travis jumped up out of his seat. Tabitha was gone. The visual interface she normally broadcast into his brain had disappeared. Only the echo of a dull bell remained to indicate that she had complied with Wilson's command.

"Tab? Tabitha!"

No response.

"How the hell did you do that?" Travis demanded. "You can't shut down Tab like that! It's supposed to be impossible!"

"It is, more or less," Wilson said, his smile fading. "Tabitha is still here. I just asked her to divert all her resources to solving an unsolvable--so far--mathematical problem so you and I can have a private conversation. You see, no one can know about any of this. You'd be in great danger if word spread."

"Danger?" Travis's voice rose. "From a meeting with a total stranger in the Office of the

Dean of Students?" He leaned on the desk and glared at Wilson. "You shouldn't have even been able to give Tab a *command* in the first place, much less do what you did! Why did she follow your instructions? *Who the hell are you?*"

Wilson leaned back in the dean's chair. "If you will please take a seat, I will tell you, Mr. Travis Rutherford Morgan." He looked Travis straight in the eye as he emphasized every syllable of Travis's name.

Travis clenched his jaw and narrowed his lips. After a few tense moments, he sat down.

"Mr. Morgan, you are in your senior year in the music education program here at the University, correct?"

"Yes."

"And you have been having trouble of late with one of your core classes--music history, yes?"

"Yes, and yes to just about everything you're probably going to ask." He crossed his arms and stared Wilson down. *I don't need any more reminders of my mother this morning.* "You should know. You've got detailed files on me, if you're who I think you are."

"Oh, now. Who do you think I am?" Wilson asked, raising an eyebrow.

"Probably some top-secret leftover from Pre-Adult Therapy Services, following up on 'how my life is going' more than four years after your responsibility ended. Either that," he scoffed, "or you're part of some government black-ops program on a recruiting mission. That'd explain how you blocked Tabitha."

Wilson's eyebrow lowered. "No, Mr. Morgan. Nice guesses, but not quite on target. I don't work for PATS, nor do I work for any government agency. But, yes--I am on a recruiting mission. I came here from Houston."

Travis uncrossed his arms. Houston. The word caught his attention.

More than a quarter-million people had died there over fifty years ago, when a swath of the city was instantly destroyed in a mysterious cataclysm. The story was part of every history class Travis had taken. To date, no one officially understood how or why the disaster happened.

"Houston?" Travis asked. "Who do you work for?"

"I represent the Zilker Institute, Mr. Morgan."

Travis's eyes widened. He swallowed hard. "You work with *Tappers*?"

"Indeed I do."

Travis froze in his seat. Tappers. Travis remembered watching specials about Tappers on the various QuantumNet science programs while younger. Seemingly miraculous events would happen somewhere, like mine collapse victims being rescued from miles deep in the Earth, or people being plucked from burning skyscrapers and lowered to the ground without a ladder or a parachute. In the case of every such "miracle," one or more Tappers from the Zilker Institute would be involved.

"You seem somewhat surprised, Mr. Morgan. You've heard of us?"

Travis realized he'd been leaning forward in his seat and staring with his mouth open. He closed it and sat up straight. "*Heard* of you? Who hasn't? I mean, you guys put in the third Panama Canal, you irrigated Morocco, and you saved Philadelphia from the Salem Nuclear Plant Accident! Toss in all of the other 'miracles' you've worked ..." *Including one I don't want to talk about ...* "How could I *not* have heard of you?"

Wilson smiled. "Mr. Morgan, please understand that I don't leave the Zilker Institute that often. When I do, it is with purpose. One of our scouts, or Wildcatters as we call them, reported that you might fit the profile of someone who could work extremely well with us. They rarely

use the words 'extremely well' about *anyone*. Those words are my cue to make sure they've found someone worth talking to. You and I are having such a talk today."

Oh God ... what does he want with me?

"From what I've learned," Wilson said, "you have been pursuing a career in music education out of a sense of obligation to your late father. You feel you need to follow in his footsteps, to take his place after he passed on. You've also run into a rather major roadblock along the way, thanks to your music history teacher."

"Who ... who have you been talking to?"

Wilson leaned forward, fully focused on Travis. "What if I were to tell you that you might have a stronger affinity for a talent other than music? A talent for something that would make your father prouder of you than being a teacher ever could? A talent that would let you help the *world*?"

A tingling sensation swept across Travis's skin, as if his senses were being clinically examined. He also caught a hint of an aura surrounding Wilson--almost like a reflection of a power Wilson once wielded. Then, as suddenly as they had appeared, the tingling and the aura were gone.

Travis squeezed his eyes shut and opened them again, shaking his head. *What on earth was that?*

"Travis Rutherford Morgan," Wilson said at last, "would you be interested in becoming a Tapper?"

CHAPTER 3 – RISK ASSESSMENT

Travis's grandfather put his hands on the dinner table and leaned forward.

"A *Tapper*?"

"Yep."

Travis sat at the old oak table in his grandfather's lakefront house, some sixty miles northwest of Austin. He'd finished describing the day's meeting between himself and Wilson, and was now nursing a cup of coffee. Tabitha wasn't participating: Travis had ordered her to go offline in "private conversation" mode. His grandfather's older model qLink was also offline.

The old man mulled over the news for a few more moments. "Shoooot ..." he finally said. "You're damn right that was a hell of an offer!"

"I know! It shocked the heck out of me. I mean, it's not every day some stranger pops up out of nowhere and says, 'Hi! How'd you like to perform miracles?'"

"Did he happen to tell you what you'd have to do to join up?"

"Not everything," Travis cleared his throat. He could never be sure if his grandfather was upset or happy from just looking at him. The sun-worn, seventy-five-year-old man had a talent for making his face seem both ways at once. "Wilson said I'd have to pass a physical and some other medical tests, and I'd have to do classroom study. They'd give me a place to live while I'm

doing it. Full room and board, the whole works. But, I'd have to move--to Houston."

His grandfather's eyes widened. "You'd have to leave the University?"

"I'd have to leave everything. Even you. Maybe for good, if I make it as a Tapper. "

"For good? Why?"

"Wilson said 'for security--yours and your Grandpa's.' He said he couldn't say more just yet."

His grandfather studied him. "Well, I can't tell you what to do, or who to trust. But think, Travis. Are you really sure you want to do this?"

"I'm sorry, but I don't know, Grandpa. That's why I drove up here. I need your help to make sure I'm doing the right thing."

"Kind of figured that." His grandfather scratched at the razor stubble growing on his face. "I thought you promised you'd follow in your father's footsteps. Be a band director."

"I know. I thought I owed it to him after he died."

His grandfather nodded. "So, what changed that?"

"What Wilson said in the meeting. Somehow, he knows about my father. He said Dad would be prouder of me if I became a Tapper. It rang true."

"You agreed with him?"

Travis searched for words. "Shoot, Grandpa, that's a loaded question. Neither of us really know what Dad wanted me to do in the first place. He gave me a trumpet and tried to show me how to use it, but there was only so much he could teach a kid my age, and Mother sold it when ..."

"When she got sick," his grandfather interrupted "Let's try not to revisit that right now."

"Right." Travis looked down at the table briefly before meeting his grandfather's eyes

again. "Are you *certain* he didn't tell you anything else?"

"All he wanted to do was make sure you had music in your life. Once you got out of the hospital, I just tried to keep going what he started."

Travis nodded. "And I've thanked you for doing that. It's just ... well, you know what I'm going through with my music history class. I honestly thought I was gonna get tossed out of school today before Wilson hijacked the meeting."

They sat for a while until his grandfather broke the silence. "Tell me more about this Wilson character," he said, leaning back. "He didn't even give you his full name. Were you able to get any other information out of him? Did he give you any proof he's what he says he is?"

"He flashed a 3DIdent card with his image and the Zilker Institute logo. I don't know what his official position is there, since I couldn't make out the fine print. I saw enough to believe him, though, but that's not all. Grandpa, you had to be there. I could *feel* something different about him. It was like ... well ... *damn*, this is hard to explain. Think of it this way: you know what it's like in a thunderstorm when a lightning bolt hits really close? How you can smell the ozone in the air and feel the leftover electricity? I felt something like that from him. Something I've never experienced from another person in my life."

His grandfather's eyebrows rose briefly before his face returned to its usual enigmatic appearance. "Okay, well, that's sure as hell something. At the very least, those 3DIdent cards are pretty damned impossible to fake. If he's some weirdo trying to run you wrong, he sure as hell went to a lot of trouble to do it."

"Same thing I thought. Anyway, I told him I couldn't say 'yes' or 'no' unless he let me talk to you first. I guess he trusts you, since you'd be in as much danger as me if word got out."

"I get that part. Somebody figures out you're working with Tappers and tries to use me to

put the squeeze on you. Tappers are some pretty powerful folks--no one wants one of them being blackmailed. But what about you being in danger yourself?" He stared Travis straight in the eye. "There are rumors about that place. What if they turn you into a guinea pig? How would you stand winding up as a vegetable in a hospital bed?"

Travis nodded again. *He's talking about the same conspiracy theories I've read.* Some claimed scientists there had learned to harness some exotic energy and were experimenting on humans to find out how to control it, with some subjects suffering brain damage or dying in the process. "Rumors. Wild speculation. I don't believe a bit of it, but there's only one way to find out."

"Okay, then. What happens if you wash out? If you can't make it through the training? Can you go back to school, or do they have to shoot you?"

Travis chuckled. "No clue, although I doubt they'll call out the firing squad. I assume I'll find out when I go back to meet Wilson."

"When is that?"

"Monday morning, at the same office. I've got a bunch of quantum forms I have to fill out by then."

His grandfather went silent. Travis figured he had hundreds of other questions, but he realized Travis couldn't answer any of them.

"Listen," Travis said, "I don't want you thinking you're losing another son. *If* I go, then one of these days I hope I'll be back--and you'll still be here--but I don't know what's gonna happen beyond what I've already told you. I only know I've been given a chance at something huge, and I think I might be wrong to turn it down."

Travis's grandfather looked him in the eye again. "*If* you go for this, have you got the guts

to stay with it, no matter what?"

I was wondering when he'd ask that. "Honestly, Grandpa, this time I can't give you an answer. Wilson didn't tell me enough about what I'll have to do. I may not be physically qualified, and that'd end it right there, wouldn't it?"

His grandfather lowered his eyes.

Travis leaned back in his chair. "The only thing I am sure of is what I saw and felt from Wilson. I think he used to be a Tapper himself."

Travis's grandfather stared at the table a bit longer, then looked up. "You want my opinion, Travis? I think your father would be proud of you either way you went. You'd be making a difference in the world, and I think that's what counts. I think I could stand to see you go if that were the case."

He stood up. "But for now, the best thing you can do is stay here for the weekend. Sunday evening is a long way off, so just take some time to relax and think about your options. Hell, go do some fishing for us in the morning, or see if you can scare up a rabbit for breakfast. The least we can do is make this weekend a good time to remember."

###

The soft light of the rising sun filled the chilly Saturday morning sky, spreading shades of orange across the calm surface of Lake Lyndon B. Johnson. Travis had spent most of his life admiring such mornings from his Grandpa's small boat dock, which stood at the shore behind his house. He usually sat with a rod and reel in hand, savoring the peace and quiet as he fished for panfish--crappie, bluegill, or whatever would come along and offer itself up for the family's lunch that day.

On this particular morning, there was no peace and quiet for him to savor.

"I'm *sorry* already, but I still can't talk about what happened," Travis said as he tried yet again to get Tabitha to calm down.

Tabitha chimed a digital huff into Travis's mind. "I'm starting to think you don't trust me anymore. What did that jerk do to make you act like this?"

"Nothing!" Travis said. His words carried out over the lake through the chill of the February air. "Calm down, already, will you?" he pleaded, lowering his voice. "You're gonna make me scare off the fish if you keep harping on me like this."

"What do I care? I don't eat, and there's food in the fridge. You'll be fine, but I'll have a pair of holes in my memory since you won't even tell me what the hell is going on!"

Travis sighed. He actually felt sorry for her, even though she was just a computer with an artificial attitude--one that he picked out, no less. Unfortunately, she didn't have a true *off* switch, and he needed her for QuantumNet access.

"Tab, you've got to understand, I *can't* talk about anything that might be going on. Consider yourself lucky that qLinks can't read minds. If you could, I'd have to order you to stay in private conversation mode until Monday's meeting, and that'd drive *both* of us crazy."

It was Tabitha's turn to sigh, with a sour bell note added for emphasis. "Can you at least tell me *why* you can't say anything?"

"Because you'd likely hit the QuantumNet the moment I did, out of program instinct, even if I ordered you in advance not to. You'd leave a trail that someone might be able to follow back to me. If you did that, I'd be in danger. So would Grandpa."

Tabitha hesitated.

I guess that got her attention.

"You'd be in danger?" she said. "That overrides everything. You know my program won't

let me do anything that would put you in danger."

Whew. She finally gets it.

"That also means it's safe for you to tell me what's going on now," she chimed. "I can keep a secret as well as any other qLink-9."

So much for that idea.

Travis sighed as the scars on his ankles began to itch again. "No, Tab! I absolutely cannot talk about it!" Frustrated, he reeled in his line and put down his fishing rod. "Forget it," he said, scratching his ankles. "The fish aren't coming anywhere near us this morning. Tabitha, I really hate to do this, but this is a direct command."

"No. Travis, don't you dare--"

"I have an appointment at the Office of the Dean of Students Monday morning. Until the meeting officially starts, you are not to address the subject of either Friday morning's meeting or any discussions I have had or will have with my grandfather while you are offline."

"Travis--!"

"You are not to attempt to retrieve any information concerning the discussions, including the identity of and any background information concerning the other person who was at Friday's meeting. Execute."

Tabitha went silent.

"Do you understand, Tab?"

Still no response. He stopped scratching. "Tabitha!"

Another second of the silent treatment, then a forlorn, minor chord chimed in his head. "I understand," Tabitha said, managing to sound resigned and irritated at the same time. "Command accepted. Override prior to event only allowed via quantum subsystem password."

"Thank you!"

"I'm still not happy with this, you know. You're going to have some serious explaining to do once this is over. Until then, don't expect things to be all hearts and flowers between us."

Travis nodded. "I know, I know. You deserve better, and I promise I'll make it up to you. As soon as I can tell you about everything, I will."

"Sweet talk isn't going to help you."

"I know." Travis smiled, gathered his fishing gear, and headed back to the house.

###

After Travis filled out his quantum forms, he spent the rest of Saturday morning trying to relax in his bedroom inside the sprawling ranch house. The room had been his since his well-to-do grandfather took over raising him when he was eight. He returned to it during holidays and between semesters, but his grandfather had always kept it clean and ready for him in case he paid a surprise weekend visit. Travis wondered if his grandfather would still keep it ready for him if he left to become a Tapper.

He passed the afternoon with a walk around the property, through the still-bare thicket of trees that surrounded the house. A cold wind eventually chased him back inside just before dusk.

Through the rest of the weekend, Travis considered the kind of commitment he might be making if he became a Tapper. Would he be able to see his grandfather again? Was Wilson right about him having a stronger talent?

Would my father really be proud of me?

Sunday evening arrived sooner than he wanted. When the time came to leave, he'd made his decision and was certain he wouldn't have to argue it with his grandfather. He would meet Wilson, as scheduled, and together they would travel to Houston, where he would ask more

questions about becoming a Tapper--and, most likely, where he would volunteer to become one himself.

"Well," Travis's grandfather said as Travis readied his car for the trip back to Austin, "this is it, I guess." For once in his life, Travis was able to clearly read his grandfather's emotions--the man stood tall and proud, but his voice wavered. "No need to drag this out. You've got an important meeting tomorrow morning. Do you have the forms ready? Are you all packed up?"

"Yep. The forms are filled out, and Wilson said I should pack lightly."

His grandfather gave him a handshake and a hug. "He'd be proud of you, Travis. I know I am. No matter what happens from here on out."

Travis waved back at his grandfather as he drove off.

###

Monday morning, Travis once again found himself alone in the outer waiting room of the dean's office. Wilson brought Travis into the inner office and closed the door.

Tabitha chimed in anticipation. "Has the meeting started?"

"Not yet," Travis said, "but I suspect Wilson will want to talk to you anyway. Please link with him."

She linked with a dejected bell tone.

"Thank you, Travis," Wilson said. "Tabitha, I'm sorry, but I need you to pick up where we left off on Friday. If what I think is about to happen actually happens, you may come out of this whole mess feeling like a new computer in a few days."

"It *might* be about to happen," Travis said as he had Tabitha transmit his encrypted quantum forms to Wilson. "I want to go to Houston with you. I've got more questions to ask before I can accept your offer."

Wilson grinned. "Very well, then. Tabitha, please continue previous instructions, T-Code Wilson Excalibur 525, command zero. Go."

A low chime rang. Tabitha disappeared again.

"Now," Travis said, "if no one's supposed to know we've met, how do we get out of here without someone seeing us?"

Wilson pulled a pen from a pocket and clicked it, causing a dusty bookcase in the corner of the office to open and reveal a hidden pathway. Travis broke up laughing. "You've *got* to be kidding. A secret passage? Behind a *bookcase*? Oh, come on! Couldn't you have picked something a bit more original?"

"Maybe, but why bother? Who's going to come in here and start looking? Besides, there are some rather interesting surprises in store for anyone who would try. You'll learn, Travis. You'll learn."

Travis headed toward the path, but Wilson stopped him. "Before we go, I want you to understand this is no frivolous offer. This could be the rest of your working life, if you play it right. It's also possible you might have had your last chance to see your grandfather."

"We both understand. That's why you let me visit him this weekend, right?"

Wilson smiled. "Had to let you have one last batch of your Grandpa's biscuits and gravy."

"It's also why I can't say yes or no yet. Do *you* understand?"

"Of course I do. We will talk, I guarantee. Oh, one last thing--please allow me to fully introduce myself officially. My name is Wilson Hughes." He gave Travis a firm handshake. "I'm the Director of the Zilker Institute."

Travis stood stunned. "The *Director*?" It took a moment before Wilson managed to extract his hand and get Travis moving and speaking again. "What other secrets do you have up

your ... oh, never mind. Let's just go to Houston and get this started."

The bookcase closed behind them.

CHAPTER 4 – LEASE

Wilson led Travis through a tunnel that connected the office to a cramped, concrete chamber. There, a personal maglev shuttle, gleaming white with a black pinstripe, waited on a guideway spur that connected to a longer underground line.

"Why is this here?" Travis asked.

"To get us from Austin to Houston."

"No, I mean the whole thing. The secret exit, the tunnel, the private maglev. Don't tell me you've got these at other schools."

Wilson said nothing.

"You *do* have these at other schools?"

"A few. This was one of the first. And they're not just at schools."

Travis scratched his head. "Just to get recruits to the Zilker Institute?"

"Only as a fringe benefit. Tappers did some work for the government on the main maglev lines, long years back. We added a few things to the original specifications, at our own expense. Made life easier. Come on, get in."

Travis watched en route as Wilson put the shuttle on autopilot and scrutinized his quantum forms. "Looks good," Wilson said. "No surprises, no problems." He filed the forms via

his virtual console.

Travis sighed with relief.

"But, you've got questions of your own."

"Who wouldn't?"

Wilson smiled. "I'll bet, 'Why me?' is at the top of the list. Everyone asks that. Well, *almost* everyone. Of course, the answer is different for all who do ask."

"Well, I'm asking. What's my answer, then?"

"Why you? Partly because of what our Wildcatters reported, and partly because of your circumstances--present, and past."

Travis lowered his eyes to the maglev's floor. "So, you *do* know about my father--and my mother."

"Yes, I do." Wilson sighed and stared out the front window. "I can only say I'm sorry you had to go through all that, and thank God for your grandfather. He raised you well, in spite of what happened. Your recovery has been remarkable, especially with you spending a year being schooled from the hospital and from home."

"That was a rough year," Travis said. The scars on his back and ankles tingled.

"I can imagine. Lots of post-traumatic stress counseling and physical therapy to go with your homework."

Travis shifted in his seat and faced Wilson. "You said you know about my 'present' circumstances, too. That means you know about the problem I'm having in school right now. How does that make me someone you'd want to recruit?"

"Ah, this is where it gets difficult to explain. Your issues with VR could indeed be problematic. But, I think you can overcome them."

Don't be so sure of that.

"Still," Wilson said, "I had to meet you in person in order to ... well, to 'sense you out' so I could come to that conclusion. Let's just leave it at that for now."

"Leave it at that? You've got to be kidding. You did something Friday, before you asked if I wanted to be a Tapper. I felt something--"

"One of the many things I can't discuss right now. If you become a Tapper--and I think you've got a good shot, albeit not an easy one--you'll understand."

Travis frowned. "Okay, if you can't answer stuff like that, let's try something simpler. Why are Tappers *called* Tappers?"

Wilson grinned. "You know how you drill a well to tap an underground reserve of oil? Basically the same thing, minus the heavy machinery." He looked over at Travis. "I'll explain it better at the Institute. For now, let's hold off on the rest of your questions. I know you want everything answered, and you want it answered right this minute, but this isn't the best place, security-wise. You'll get what you want when we get to Houston."

Travis narrowed his eyes at Wilson. *And you'll get my trust once you start answering questions.* He sighed and turned back in his seat. The rest of the trip was spent watching the concrete tunnel walls zip by.

###

Less than thirty minutes after leaving Austin, Travis and Wilson pulled in to their destination--a massive underground maglev rail terminal, somewhere beneath Houston.

"Here we are," Wilson said. "Last stop, the Zilker Institute."

Travis's mouth hung open as he and Wilson stepped out of the shuttle.

The terminal chamber was as spacious as the one in Austin had been confining. A

smooth, concrete ceiling arced as high as the roof of an indoor football stadium. Dozens of white personal shuttles and high-capacity maglev trains waited close to Travis's arrival platform. Even more stood ready on other platforms.

The only other people Travis saw in the cavern were armed Security personnel, dressed in dark green overalls and wearing dark green baseball caps. One patrolled each terminal platform.

"Come along now," Wilson said. "You can come back for trainspotting later."

"The trains aren't what I'm staring at," Travis said, still in awe. "When did all these maglev lines get built? How did something this big stay secret all this time?"

"It's something you don't see everyday, I'll grant you that," Wilson said with a smile. He swept his arm. "All of what you see here was cleared out by Tappers. One of the first major things we did. Don't worry, you'll learn all about it in class."

"Yeah, in Tapper History 101, right?" Travis said with a smile.

"History 101?" Wilson's disturbing aura became visible again as he held Travis's gaze. "Travis Rutherford Morgan, I do hope you are not the kind of person who ignores history. We have lost many lives in the struggle to create and maintain the Zilker Institute. You are not reminded of the dead every single day of your life, Mr. Morgan. I am. I would therefore appreciate it if you would pay close attention during the history portion of your studies!"

Travis swallowed hard. "I will."

"Good!" Wilson's smile returned as his aura faded away into the cool underground air. He turned on his heels and headed for a bank of elevators.

Travis rushed to keep up. *Now I don't know if I should trust him or run for my life.*

###

Travis and Wilson rode an elevator to the fifth floor of the building above the terminal

and exited into a broad lobby that split into three long corridors. Wilson led Travis to the central corridor.

Travis squinted, trying to see to the end of the corridor, but its pink granite floor seemed to stretch on forever. Black glass office doors occasionally broke the line of matching granite walls. A faint aroma of pine-scented cleaning supplies lingered in the air.

"My office is at the other end of the floor," Wilson said. "It's a pretty good walk from here."

"How good of a walk do you mean?"

"Just a half-dozen football fields worth," Wilson grinned. "Keeps your legs in good shape. C'mon! We've got business to take care of today."

Midway through the walk, they passed a group of people wearing 3DIdent cards. One person's card bore only a single name in large print.

What's the deal with only one name? Someone special?

They eventually arrived at a lobby where all three corridors converged. A wood-paneled wall spanned the lobby's entire end width. A pair of wood-veneer doors stood at its center with a security terminal next to them. A sign on one door simply said, "Director."

Wilson's office struck Travis as an odd mix of the bland and the unusual. Beige carpet mixed with more wood-paneled walls. Several double-doors lined both sides of the room, with each set having its own security terminal. Another terminal sat atop a standard office desk at the back of the room, next to a small, black console.

The console caught Travis's eye as particularly odd. Instead of being a modern touch console, it was topped with a bank of unlabeled push-buttons, laid out in a square. Travis had expected Wilson to have the most advanced tech in the building--not something so archaic as

actual push-buttons.

Wilson sat at the desk and motioned for Travis to take a seat across from him. "Before we start, let's get Tabitha back with us, shall we?"

"Finally!" Travis bounced into his seat, then froze. "Wait a minute--does that mean we're not top secret here?"

"Listen and learn," Wilson said, lifting a finger. "Break execution--T-Code Wilson Miranda 502. Discontinue USI bypass 88-5, Tabitha. Welcome to the Zilker Institute."

Travis waited for Tabitha to send her normally cheerful chime-like signal into his brain, but her tone was off-key. "Hello, Travis," she said. Her voice sounded synthetic, and there was no sign of her virtual console. "I seem to be having a problem. I cannot connect with the QuantumNet, so I am capable of only limited activity at this time."

Travis glared at Wilson. "What did you do to her now?"

"Neat trick, eh? It usually surprises people just as much as what you experienced in Austin. My guess is you're more upset than surprised."

Travis's glare didn't waver. *Damned right I'm upset. Quit messing with Tab.*

"My Wildcatters were even more on target than I figured when they noticed you. Now, would you mind sharing access to Tabitha with me again?"

Travis continued glaring. "Why? What other 'neat trick' do you have up your sleeve?"

"No tricks. I just need to talk to her. Please have faith in me when I say that no harm will come to her."

"Have 'faith'? Are you serious?"

"Absolutely. It's important."

Travis fumed for a moment, then relented. "Tab," he said, "I don't know what Wilson's

got in mind, but go ahead and let him link in, please." He felt the tell-tale click as Wilson connected to Tabitha.

"Hello, Wilson," Tabitha said, her normal chimes rattling like rusty pipes. "Why am I unable to access the QuantumNet?"

Travis was as curious as he was irritated. "Yeah, how are you keeping her out?"

"With great difficulty," Wilson said. "Don't worry, Tabitha. You'll have your access back soon enough. In fact, if Travis decides to join us, we'll give you abilities that'll make a new woman out of you, just like we'll make a new man out of Travis." He pushed a button on the square console. "Art, come on in, if you would."

A male voice came over a small speaker built into the console. "Be there in a second, sir."

"Sir?" Travis asked. "Someone here calls you 'sir'? I thought you insisted on being called just Wilson."

Wilson gave Travis a faint smile. "It's what Art's comfortable with. Long story."

Travis pointed at the console. "While we're at it, what's the deal with that ancient button box?"

Wilson ran his finger along its top, as if conducting a white-glove inspection. "Some things here have to be protected by more than a security terminal. Trust me--as outdated as this looks, it's more hardened against intrusion than anything else in the building."

A knock sounded on the office door a moment later. Wilson made a few gestures on the regular security console and allowed the person inside. Travis turned to see a thin, light-skinned Latino man enter. His 3DIdent card read, "Arturo Salazar." The name sounded familiar.

"Travis, please hand Tabitha to Art, here."

"*What?*" Travis exclaimed. "Hand him Tab?" He cupped a hand behind his ear to cover

Tabitha's wire. "First you overload her. Then you block her QuantumNet access. Now I'm supposed to have 'faith' in you and just hand her over. Why? What else are you gonna do to her?"

"Nothing, yet. Art will see that our technicians are ready to set her up so she can access a lot more than just the QuantumNet--if you say yes to joining us."

Travis cupped Tabitha more tightly. "What if I don't hand her over?"

Wilson sighed. "Travis, this isn't blackmail, although I can see how you'd think that it is. There are some things we have to discuss that can't leave this room, and we can't risk Tabitha accidentally solving that 'unsolvable' math problem I used in Austin. I'm serious when I say there are no safer hands she can be in than Art's. And, if during our talk you decide you don't want to join us, Art will bring her back, completely unchanged, completely unaccessed. You have my word."

Travis kept Tabitha covered for a few seconds more. *I don't like this one bit, but if I don't let Tab go, everything I've put her and Grandpa through will have been for nothing. Damn.* "Go with him, Tab," he said. "I don't like it, but I'm gonna have to trust him for now. I want to find out what's so damned special about this place that he has to take you away from me." He removed Tabitha from behind his ear and placed her in Art's hand.

"See you when you get back, Tab. Be good."

Tabitha broadcast a rusty note back to his brain. "I'll try."

Arturo waited for another round of security console input from Wilson. He left the room carrying Tabitha.

They'd damned well better not hurt you.

Travis frowned once Tabitha was out of her broadcast range. "Who was that guy, anyway?"

"Arturo Salazar? He's my Executive Assistant. He's also the public face of the Zilker Institute."

A flash of recognition hit Travis. "He's on the QuantumNet, right? The guy who talks when Tappers are working on something. Your Public Relations Officer?"

"The equivalent. Public Information Officer, or PIO for short. He operates on the old need-to-know basis. He tells the public what they need to know when we operate in the field."

Travis nodded, then sat forward in his seat. "Now that he--and Tab--are gone, does this mean it's finally *real* question and answer time?"

"Indeed it does. Ask whatever you will."

"Okay, then. *If* I say yes to joining, what would happen next?"

"We covered some of the basics in Austin. You'll move into an apartment on the Institute campus. We'll provide everything you need. It'll be your home for as long as you're associated with us."

"That's something my Grandpa didn't understand, and that I still don't. Why? Do you keep Tappers in prison or something?"

Wilson chuckled. "Far from it. You're free to go wherever you feel the need to go ... with some exceptions. Your old home being one of them."

"The question still stands. Why?"

"For the security of yourself and, in your case, your Grandpa. It's imperative that no one be able to link you to your past life prior to you coming to the Institute. You've probably guessed the blackmail reason already."

"Well ... yeah. I mean, my Grandpa did. He figured no one wants a Tapper being blackmailed. But I'd never give in to blackmail!"

"Are you sure, Travis? Can you sit there and say with 100% certainty that you wouldn't give in to the demands of someone who's threatening to harm your Grandpa? Threatening to kill the only person in the world you've ever been able to really trust?"

Damn him. He knows where to aim his punches. "No. No, I can't say that."

Wilson leaned back. "And don't think that it wouldn't happen, either. There are any number of people who'd love to have a Tapper under their control. Anyone who can single-handedly keep flood waters from breaching a levee can surely rob a bank without breaking a sweat, can't they now? Given the right motivation, that is. And that's just for starters."

Travis squirmed in his seat. "Okay, you've made your point. So how do you keep Grandpa safe, if I decide to become a Tapper?"

"By you living here and not going near him, number one. Number two, by us taking care of him for you."

"How do you mean?"

"We have a system in place. A group of people we call 'Safety Engineers'--separate from the Wildcatters or Security--will watch over him. They'll be well-disguised, and they won't get in your Grandpa's way unless something serious happens. Before you ask, we won't keep you in the dark. We'll let you know if anything does happen, and we'll tell you what we're doing in response."

Travis nodded his approval.

"We'll also hide your identity in other ways. On our way down the hall, we passed a person wearing a 3DIdent card that had just one name in large print. That person was a Tapper."

Wow--my first brush with a real Tapper!

"Your last name goes away while you're in the Tapper program," Wilson continued. "If

you join, you'll be known as Candidate Travis--and hopefully, later on, as just Travis. Only a very few people will know your full name, and I would personally trust all of them with my life."

"I hope you're right," Travis said. "Isn't there *any* way I can see my Grandpa while I'm here?"

Wilson shifted in his chair. "Not likely. The Safety Engineers are excellent at keeping relatives secure. However, getting you together with your Grandpa is a difficult proposition at best. We can't transport him here, and you couldn't meet him in any kind of safe house without creating a security risk. QuantumNet calls and e-mails are out, too, since we can't secure his end of the line without tipping our hand." Wilson lifted a finger. "There's one other problem. Even if we did let your Grandpa meet with you, he wouldn't recognize you."

"Wouldn't recognize me? Why not?"

Wilson opened a desk drawer, pulled out a sheet of real paper, and held it up. "Here's why. The last thing you have to sign. Not the kind of info we can let outside of the Institute. Remember when I said we're going to make a new man out of you?" He put the paper in front of Travis. "This explains how."

Travis picked up the paper and read it. Seconds later, his eyes opened wide as he dropped it back onto the desk.

"I assume you found it."

Travis stared at Wilson. "Found it, yeah! Body modification? *Plastic surgery*?"

"Complete with genetic changes, down to the DNA level. It's necessary. It'll keep your previous life from compromising your anonymity as a Tapper. Remember that this is a medical institute, first and foremost. If we can unleash Tappers on the world, we can certainly come up with new methods for other medical procedures, don't you think?"

Travis's heart raced as he picked up the paper and read it again. "How safe is it?"

"I can't give you an ironclad guarantee that something might not go wrong, but I can say that we haven't had a major incident with it to date."

"What kind of incidents *have* you had?"

"Only ones involving areas of the body that grow naturally--hair, fingernails, toenails. Nothing a pair of scissors or a nail clipper can't fix."

Travis put the paper back on the table and wiped his brow.

"Still getting over the shock?"

"Kind of, yeah." *Kind of? Are you kidding? Scary surgery ... living at the Institute ... Grandpa won't know me anymore ... is this really worth all that?*

Wilson smiled. "You're not the first. Practically everyone who ever wanted to become a Tapper was surprised when I dropped that little bombshell on them. The ones who *weren't* surprised usually didn't make it past Candidacy training."

"Why not?"

"Ego," Wilson said, letting out a disappointed sigh. "They expected to be turned into world-famous super humans with new faces and new identities, not into 'anonymous do-gooders,' as one of them called it."

Travis laughed nervously. "Not a problem here. I've never been out to make a name for myself. That's the wrong motivation."

"Wish I could have got that through their thick skulls. Most of them left the training program much the worse for wear, physically and mentally."

"Yeah, that's my next question. You keep mentioning physical and mental dangers. What makes being a Tapper so dangerous?"

Wilson poked at his desk with a finger. "There it is--the *really* big question." He cleared his throat and looked up at Travis, this time with a stony expression. "I can't give you a full classroom lesson here, and you're not going to find the answer on any of the forms. But, I can give you the basics. Please hear me out before you ask any questions."

Travis braced himself. *This has got to be big.*

"The process that enables you to become a Tapper temporarily rewires your brain's neural pathways, allowing you to do more than a normal person can--but with the possibility of brain damage or worse if things go wrong."

Travis sat fully upright. *Ooookay, yeah--that's big. There's the "vegetable in a hospital bed" scenario Grandpa mentioned.* He swallowed a lump in his throat. "Brain damage? Or worse? Are you serious?"

"Unfortunately. Your brain has to be helped along so you can see new things and access new abilities. By the way, that's what I meant when you asked why our people are called 'Tappers.' We 'Tap' a potential we believe is buried within you."

Well, hang on a minute--this might be worth listening to ...

"When we open your Tap, in a process we call 'Drilling,' we stimulate certain areas of your brain, making some of your neural pathways more active and capable of handling additional functions. You'll learn more about this in class, but in a nutshell, that's what lets you see and manipulate the lines of the four fundamental forces--gravity, electromagnetism, and the strong and weak nuclear forces."

So that's how they perform so-called 'miracles.' They're not miracles at all. It's science.

"That same process is what makes being a Tapper so dangerous, but not for the reasons you're probably thinking. Sure, you run the risk of having an accident that might hurt you, like

shocking yourself or dropping something heavy on your toe, but those are nothing compared to what can happen *inside* you."

"What do you mean?"

Wilson looked back at the paper in front of Travis. "You'll learn more about it if you decide to stay. I won't bullshit you, though--Tapping is not a game where you play with the four fundamental forces like they're toys. We treat every assignment like a life-or-death situation, be it a simple gravity lift or a complex sub-atomic manipulation. There will be very real risks to yourself and to others every time your abilities are required, and you've got to be ready to accept the responsibilities of your actions."

Yep. Brain damage, lost identity--I still want to do this, but damn, the numbers are stacking up against it!

"Time for another big question, if I haven't scared you away yet," Wilson said. "What happens if you don't make it? I'm certain that's crossed your mind, hasn't it?"

"My grandfather and I discussed it on Friday. What does happen? You don't read much about the wash-outs. Just rumors."

"Most of the 'wash-outs' simply went home. You could, too, as long as you abide by the confidentiality agreement you signed in your quantum forms. As for the rumors, most come from one failed Candidate, about six years ago. He turned sour grapes and tried to discredit the Institute by posting false information about us. You've probably read about him."

"Yes, I have."

"Only problem is he put just enough truth in his QuantumNet post to violate the agreement he signed. He spends most of his time looking at blank walls nowadays, thanks to laws that make spreading that information illegal." Wilson rested his elbows on his desk.

"Understand this--he was arrested because Tapping isn't something you want an amateur scientist to attempt. We do everything possible to keep the details of the process out of the public eye. It's the same thing as when your favorite QuantumNet reality program tells you they're making a dangerous compound for an experiment and then blanks out the details so some kid doesn't try to make it himself."

Travis nodded. "The sour grapes guy said you perform secret experimental operations on people's brains in here."

Wilson chuckled. "No experimental operations, and very few real operations anymore." He bent his balding head forward briefly to show a scar on top. "Tapping used to involve the insertion of electrodes in a person's brain. Now we can do the same thing without electrodes. That'll be covered in time."

"What about the rumors that you turn some wash-outs into 'vegetables,' or kill them so they won't talk?"

"Travis, the people who work here are not vindictive, black-ops personnel. We don't intentionally cause brain damage, and we do *not* kill anyone."

Grandpa would like that answer. So do I.

"However, on rare occasions, some Candidates and Tappers do end up with brain damage--or, worse, injuring or killing themselves. It's a risk of the job."

Grandpa might not like that one. Me ...?

Wilson pointed at Travis. "Know this--a million things can go wrong every time your Tap is opened, no matter how experienced you are. That's why we set you up with a Driller and a team of Roughnecks who try to keep any one of those million things from actually going wrong."

Travis cocked his head. "Set me up with a what and a what?"

"A medical monitor and a team of logistical assistants. We call them Drillers and Roughnecks. Lots of oil-related nicknames for things around here, if you haven't already figured it out. Dr. Zilker grew up in Beaumont, and his father was in the oil business. That, plus we're in Houston near lots of refineries, so do the math yourself. Again," he said, pointing a finger at the paper, "that is your ticket to knowledge of what goes on around here."

Travis studied the paper again, furrowed his brow, and looked back at Wilson. He took another deep breath. *Brain damage risk or no, becoming a Tapper is still a big deal. Let's get his opinion on all of this, biased though it may be.*

"Is it worth it?"

"You tell me," Wilson said, sitting back. "You've seen what Tappers have done, at least in the QuantumNet news threads. You named one thing yourself--the Salem Nuclear Reactor Accident? The one that threatened to make Philadelphia radioactive? Tappers helped contain that until they could shut things down without a meltdown. Not to mention the other rescues and first response scenarios on which we've worked, along with major public works projects like the maglev lines. The world is a better place than it was before Dr. Lukas Zilker got involved almost forty years ago, thanks to his work with Tappers.

"If you sign that paper, you'll get plenty in exchange for your work--good food, good board, the *best* medical care--and an early retirement plan that will give you financial freedom for the rest of your life, if you ever decide to leave. You'll also have the opportunity to see parts of the world you'd never see as a music teacher, and you'll see them on our dime while you're working.

"What you won't get is fame. You won't get an easy job. Just for starters, you'll be plunged straight into the worst nightmares your mind can construct, and you'll have to claw your

way past them for your abilities to awaken.

"However, if you can conquer them, you'll get to see what makes the world and the universe tick, up close and personal. You won't get to play God, but you'll get to use your new abilities to bend the fundamental forces of nature to your will. If you're good enough, you'll be able to go deep into the core structure of the universe--and *change* it.

"One last thing to consider. You see me still sitting here, almost thirty years after becoming a Tapper, despite the dangers of the job. It was worth it to me, but you're the one who's got to make the decision. Is it worth it to *you*?"

Travis took in everything and tried to make it fit with what he and his Grandpa had discussed. Could he stand not seeing him again?

Would his father approve?

Hell, do I approve?

He pulled the piece of paper toward him and stared at it. A minute later, he looked up and met Wilson's eyes.

"Can I borrow your pen?"

CHAPTER 5 –RELAY

MMQE 01103 40400 00217

QUANTUM KEY ACCEPTED--DECRYPTED MESSAGE FOLLOWS

Thank you for your enthusiastic support, gentlemen. Your deposits will go a long way toward making this venture a reality.

Our external resource has been recruited and is expected to join us shortly. Many other Candidates are also entering at the moment, so our resource should simply blend into the mix.

Internal works has begun design of the safety system.

Other fabrication is being handled as circumstances allow.

Completion will take some time, gentlemen, so I thank you in advance for your patience.

MESSAGE ENDS

DELETE

DUMP CORE NOW

CHAPTER 6 – SITE PREPARATION

After the hand-shaking and "welcome aboard" pleasantries were over, Wilson led Travis to one of his office's side doors. It slid open to reveal an elevator, which took them to the lobby of a white, brightly lit medical floor. Unlike Wilson's floor, the medical floor seemed entirely glassed in. Travis assumed this was to maintain a sterile environment, if the smell of disinfectant that permeated the air meant anything.

Several people in lab coats and scrubs waited for them in the lobby. Wilson strode out of the elevator. Travis took a guess at what was about to happen and balked.

"Now, hold on one minute here!" He grabbed the elevator door and kept it from closing. "You're doing the plastic surgery *now*?"

"No, we're going to run the tests we discussed. If you pass, *then* we'll do the 'plastic surgery.' Tomorrow."

"Tomorrow's still pretty quick," Travis said, still firmly attached to the door. "Why so soon?"

"Can't let you out and about without it. You've got to have a 3DIdent, and we can't give you that until you're in working condition."

Travis continued to cling to the door. *I know I said yes, but ...*

"You having second thoughts?"

"No," Travis insisted, "but I've got a question or two. That last form you had me sign. It said you'd reverse the plastic surgery after I leave the Institute."

"That's right."

"How safe is the reversal?"

"As safe as the original procedure itself. It'll even take aging into account so you don't get any uncomfortable questions when you go back home."

"How about between now and then? Can I get it reversed temporarily?"

"Another question for which I've been waiting. Let's move away from the elevator first, shall we?"

Travis eyed the medical personnel. They returned his skepticism with smiles. He finally sighed, let go of the elevator, and joined Wilson and his group.

"Thank you," Wilson said. He led the group down a corridor.

"The answer to your question is maybe. You see, it's not a short procedure. It takes ten days--"

"Ten days?" Travis exclaimed.

"Yes, ten days. We're no gods around here--things take a while. Anyway, needless to say the procedure does a lot to you during that time. If we do the procedure tomorrow and don't reverse it until you retire--hopefully, way off in the future--your body should have no trouble recovering from the effects."

"What if I don't make it as a Tapper?"

"If that happens, you'll still be malleable enough that a reversal will work without exposing you to additional risk. It'll just take an extra day in the chamber during the reversal

procedure to get you back to your current shape."

Phew. That's reassuring.

After a bit more walking, Wilson stopped the group at an office door near the middle of the building. "Here's where today's testing takes place. Assuming you're in good shape, you'll stay on this floor overnight and have a sleep study done. If you pass, we'll start the procedure tomorrow morning. Any more questions before I hand you over?"

"Yeah, one. Have you gone through the procedure?"

"No. When I was recruited, they did regular plastic surgery--just some tweaks to the face and a few other bits. This may be new technology, but it's the end result of tried and true stuff. It lets you redo your entire body, which the old-style cut and paste method doesn't.."

Travis furrowed his brow. "If you were in my shoes, would you go through with it?"

"Yes. Without hesitation."

Travis thought for one last moment. He remembered his grandfather's question. *"Have you got the guts to stay with it, no matter what?"*

Well, Grandpa, this is where we find out.

"Okay, let's get started."

Wilson grinned and gave Travis a pat on the back. "Well said. Everyone--do good work for Candidate Travis in there."

###

The psychiatric team had the first shot at Travis. Three doctors examined him. Each ran him through a gamut of tests, mainly of the "there's no wrong answer" type. None of them addressed his issues with panic attacks, his parents, or Virtual Reality.

Why didn't they go straight after my obvious problems? Do they already know?

The medical team started in on him a couple of hours later. A session in a bio-scan chamber resulted in him being pronounced healthy--despite having a few extra pounds. "Nothing we can't fix tomorrow," one examining doctor said, giving Travis a hearty back-slap.

A nurse guided Travis to his quarters for the evening. "Here we are," he said, leading him inside a small suite of rooms. "There's a video touch pad on the wall by the dining table. It's got our full menu. Pick what you want and press 'send.' We'll give you a few hours to eat and relax before the sleep study team comes along and gets you set up for the night."

At around ten o' clock, someone knocked on his door. A tall doctor in a white lab coat stood outside, accompanied by two nurses in scrubs. One nurse carried something that looked like half of a small, blue surfboard.

"Good evening, Candidate Travis," the doctor said in a soft but confident voice as he shook Travis's hand. "I'm Dr. Shugart. We're here to set things up for your sleep study. I hope you're good and worn out after your testing today."

Travis stood aside and let the team enter. The nurses hurried past him and headed straight to the back of the suite. Sounds of plastic and metallic latches clicking into place soon came from the bedroom.

Come right on in, folks. "What are they doing?"

"Taking care of the hard part," Dr. Shugart said with a smile. "They'll be done in a few seconds."

Travis followed his curiosity and went to the bedroom, ducking out of the nurses' way as they left the suite. He found that they had connected the board to the wall, about a meter above the bed's pillow.

"Looks like a diving platform," he said.

"Some say it looks like a big, blue tongue sticking out of the wall."

Travis examined the device. "So, do I have to go to sleep right now?"

"No, but you need to finish activating the device when you do go to bed. Just touch the red panel on top before you lie down."

"I thought sleep studies meant wires attached to your head or something."

Dr. Shugart chuckled. "Not for a long, long while. Outside the Institute, they use wireless sensors and transmitters knitted into a soft cap you wear on your head. Here, we don't even need that. The sensor board above your bed does the same job."

"What do I do if I have to get up in the middle of the night?"

"Nothing, except take care of what you need to do. The board will sense when you move out of range and pick up where it left off when you come back."

Neat stuff.

Dr. Shugart made a few tweaks to indicators atop the board. "Okay, Candidate Travis, your bed awaits. Whenever you're ready, you know what to do."

"Press the red panel on the board and crash."

"Good enough." Dr. Shugart smiled again. "I'll leave you in peace. Try not to stay up too much longer, since wake-up time will be 6:30 tomorrow morning."

Travis went to bed soon afterward. His life had taken a massive--and seriously mentally exhausting--change in direction since the morning. Not even his worries about the DNA procedure could keep him from falling asleep quickly.

###

A heavy nudge on Travis's shoulder interrupted his sound sleep. He woke to the sight of a tall, thin woman standing next to his bed. "Good morning!" she said with a wide smile, brushing

aside a lock of red hair from her freckled face.

Travis stretched and rolled himself out of bed. He instinctively began to reach for Tabitha's wire, but stopped once he remembered she was still gone.

"You'll get your computer back soon enough," the woman said.

Travis rubbed his eyes and saw that the sleep test board was gone. "Did I pass the test?"

"Yep, with lying down colors," she said. "I'm Paige Kirkshire, by the way, but just call me Nurse Paige. I'll be helping you through the procedure this morning."

"Nice to meet you," he said with a yawn. He then remembered he was wearing nothing but a T-shirt and underwear. He quickly moved to cover up his lower half. "Sorry. I'm not used to waking up with company in the room."

Nurse Paige gave him a look of mock sympathy. "I'm sorry to hear that, Candidate Travis." She smiled and handed him a patient smock. "Put this on after you've had a shower-- nothing underneath, please. It's a wrap-around, so nothing will hang out unless you're careless."

Travis blushed as he took the smock. "Thanks. Will there be breakfast this morning, or do I have to fast?"

"No food before the procedure, sorry, but you can have water, tea, or black coffee."

"Black coffee?" He wrinkled his nose. "Can't drink it black. Do you have any green or white tea?"

"Green, yes. Good stuff, straight from China. I'll have some sent up to you." She moved her fingers on her virtual console.

"Thanks again. Just do me a favor and have the person with the tea knock before coming in, okay?"

"Already noted," Nurse Paige said as the door closed behind her.

Travis's tea arrived minutes later. He took it into the suite's living room and sat in an armchair, trying his best to adapt his coffee-drinking ritual to the circumstances. *I'm used to nursing a cup of coffee. It's just not the same, nursing a cup of tea ...*

Once done with his tea, Travis headed to the suite's bathroom for his shower. He considered his impending procedure as he turned on the water and stepped into the stall.

DNA rewrite. I wonder what I'll look like? Will it really not hurt? Will I still be me?

He braced himself before turning to let the shower stream hit his back. Hot water always made his scars itch, from his shoulder blades down to his hips, and then again on his ankles. The sensation usually calmed after a few seconds, but his unsteady nerves made today's bout last longer than normal.

In the back of Travis's his mind, a distant voice spoke:

"Why are you even trying? You shouldn't be here! You know you weren't worth saving!"

Travis turned around and faced the shower stream. *Shut up, Mother. Not today.*

###

Nurse Paige returned at eight o'clock and collected him, fully smocked. Their first stop was a room containing a hardware computer display. She offered Travis a seat.

A red flag immediately went up in Travis's mind. "Excuse me," he said, "but are you sure we're in the right place? This looks pretty archaic."

Nurse Paige booted up the display. A body redesign template instantly appeared. "Is that fast enough for you?" she asked, grinning. "I'll control it from my virtual console. The terminal is for your benefit, since you don't have virtual console access at the moment."

"Oh," he said. "Right."

Of course. Damn, I wish I had Tab back. Then again, she'd probably make jokes through

the whole process.

The template resembled a generic outline of a person, shown from the front and the sides. "So, where should we start?" Nurse Paige asked. "Your hair? Your face? How about your eyes? Brown usually looks good ..."

Once they finished tweaking the template, Nurse Paige led Travis to an adjacent room. A contoured table with a tent-shaped hard cover stood near the center. The cover opened as Travis approached.

The 'plastic surgery' procedure chamber, he assumed. His heart rate increased as his distance to the device decreased.

Wilson stood next to the chamber. Nurse Paige handed Travis off and went into a booth, where Dr. Shugart appeared to be adjusting various virtual and hardware controls.

Travis did his best to smile, despite his budding anxiety. "So," he said, "why are you two here? I thought--"

"Just a tiny deviation from standard procedure," Wilson said. "The doctor and I are here to make sure you're happy with what you and Nurse Paige designed. You're going to have to live with it for a long time. Hopefully."

Travis tried to hide a frown. "I'll have to be happy with it, won't I? I mean, she vetoed a lot of my requests. Said you can't make me look like anyone famous. And I'm going to lose some distinguishing marks in the process."

"You're talking about your scars."

Travis nodded. He rubbed his ankles together.

"You're right. Distinguishing marks from your life prior to joining the Institute are out of the question. The idea is to be anonymous, and those marks might let someone identify you."

"I'm not sure what life will be like without them," Travis said as he reached out to touch the table's smooth cushion. "As much as they remind me of *her*, they also remind me that I survived what she did to me."

Memories of his mother threatened to flood his mind. He pushed them down as hard as he could.

Wilson put a hand on Travis's shoulder. "You'll do fine. A few scars don't--*can't*--define who you are. The fact that you're here is proof enough."

Travis let go of the table, took a deep breath, and exhaled hard. "I hope you're right."

"The Institute will be ready to help you," Dr. Shugart said, "if you ever need help."

Travis forced a smile, which widened into a wry grin as he remembered the template room. "I do wish I could have adjusted one other part of me, but I'll live with--well, without--that, too."

Wilson and Dr. Shugart laughed. "Believe me, Candidate Travis," Dr. Shugart said, "you're not the first person to suggest 'enhancement' in certain areas. Almost every male, and some females, have asked us to change things that would make them ..."

"Ahem," Wilson said. "Stick out."

"Yes, thank you, Wilson," Dr. Shugart said. "Well put. We can't leave distinguishing marks, and we can't add distinguishing features. I hope you'll understand."

"I do," Travis said. "Maybe you'll let me have it when we go through the reversal?"

Dr. Shugart chuckled. "We'll consider it, Candidate Travis."

"Okay, you two!" Nurse Paige said, pushing Wilson and Dr. Shugart toward the door. "Out of here! Get back to work. Shoo! Shoo!" She swatted at the pair until they left the chamber room. Once they were gone, she ordered Travis out of his smock. He reluctantly complied and

climbed, embarrassed, onto the table.

Another thought struck him. "You know," he said as Nurse Paige strapped him in, "I'm not really sure if I'm claustrophobic or not. Never been in this kind of position, especially for ten days."

"You won't be awake long enough to find out," Nurse Paige said as she made some final adjustments with her virtual console. "You'll be out like a light once I close the cover, and you won't remember a thing when I open it up. Now, are you ready?"

Travis took a deep breath, in and out. "Ready as I'll ever be."

"Great! Good luck, Candidate Travis--we'll do good work for you in here," she said as she closed the cover. "See you next Friday!"

CHAPTER 7 – DISTILLATE

Travis woke with a start. The first thing that came into focus was the chamber cover opening. Dr. Shugart stood at the end of the table, while Nurse Paige stood at Travis's side. She sat him up, draped a robe over him, and handed him a cup of water.

"Happy Friday morning, Candidate Travis!" Dr. Shugart said with his now-familiar smile. "How are you feeling?"

"Not sure yet," he said with a squeaky croak, unable to find his voice. "Tired. A little sore." He took a sip of water and flexed his arms and back. "Tighter."

"Tighter?"

He twisted his torso a couple of times. "Like there's less of me." *And where's my voice?*

"You're still intact," Dr. Shugart assured him, "but some of you was rearranged and kind of exercised off. That's also why you're not stiff, and why there's no blood pooling in any of your extremities. The chamber took good care of you. Don't worry--all the good stuff is still attached."

Nurse Paige took Travis by the arm. "Are you ready to try standing?"

Travis pulled his arm back. "Already?"

"Sure, why not?"

Travis blinked hard. "If you say so," he said, rubbing his hand through his hair. He gave

his arm back to Nurse Paige, who helped him off the chamber table and into a pair of waiting slippers. To his surprise, he was steady on his feet.

"There we go," Dr. Shugart said. "Upright is a good start."

Travis took another sip of water and swallowed hard. "It'd be better if I could talk," he said, his voice squeaking and breaking. "I feel like I'm going through puberty again."

"No, thankfully, you won't have to relive that, but your voice *has* changed. Your vocal cords have matched the new dimensions of your body. Try humming. That'll help you fine-tune yourself."

Travis nodded and gave his throat a strong clearing. He hummed, first trying his normal upper tenor range, followed by the range from tenor down to baritone. He found he was able to hit at least two notes lower than he could before the procedure, though his upper range was reduced three full steps.

This is going to take some getting used to.

He gave talking a shot again, concentrating on keeping his pitch lower than normal. "A E I O U," he tried. The sounds came out right, but the odd vibrations forced him to concentrate as he pronounced each letter.

At least this new voice isn't adolescent anymore.

"Sounds good," Nurse Paige said. She gestured on her virtual console. "I think Tabitha will like it."

"Of course she will," Dr. Shugart said. "She's been his qLink-9 for eight months."

Nurse Paige's eyes widened. "Eight months? Huh. I don't think we've had a candidate who's been exposed to a qLink-9 for that long."

Geez, what is the deal with how long I've had Tab? "When will I get her back, doctor?"

"Later today. Before that, though, wouldn't you like to meet your new self?" He gestured to a new addition to the room--a full-length standing mirror, aimed away from the chamber.

Travis froze, staring at the back side of the mirror frame. A mix of anticipation and trepidation filled his mind as he imagined seeing a complete stranger in the glass.

"Go ahead," Nurse Paige said. "I think you'll like what you see."

Travis took a couple of deep breaths to steel his courage and walked around to the front of the mirror. What he saw made him stumble as he tried to get in step with the unfamiliar image.

His height remained average, but his body mass seemed to have been redistributed from his gut to his upper body. His legs appeared leaner, more muscular than before.

Then he saw his face, and his mouth fell open.

"My eyes ... I don't believe it. They really are brown!"

His eye sockets appeared deeper, with more of the white of his eyes showing at the edge. The bridge of his nose had narrowed, giving him the illusion that his eyes were farther apart. The tip of his nose was less pointed and more symmetric. His eyebrows were darker and fuller, set slightly higher than before, and his hair had gone from light to very dark brown, offsetting his still pale Caucasian skin.

The changes were just as dramatic elsewhere on his head. His ears protruded less from the sides. His jawline had gone from rounded to straight, and the lines that went from his nose to his jaw were more pronounced.

One look at his mouth gave him the remaining reason why he had trouble with his voice. His mouth was wider now, and his natural soft smile was gone, replaced by a straighter, more serious look.

"Time for the ultimate question," Dr. Shugart said. "Are you still Candidate Travis behind all that?"

Travis paused for a couple of seconds. "There's more of *me* on the outside than before."

"More of *you*?"

"It's hard to explain. It's like the chamber shaved away the parts that don't match what my mind pictures when I think of what I look like."

"You did that yourself. There weren't any mirrors in the design room, so you used your mind's eye to create the new you on the computer."

Travis lifted his hands. His fingers were thinner. He wiggled them and was mesmerized by how nimble they were.

"It's exactly what we designed," Nurse Paige said. "I can bring in a video panel if you want to compare--"

"No," Travis said, "that's okay. I believe you. But I would like a chance to see the rest of me--by myself, if you don't mind."

"Of course," Dr. Shugart said. "Nurse Paige, time to give him a few minutes. When you're done, please put on the scrubs in the chair next to the mirror and come outside. We'll be waiting."

"Thanks," Travis said, still staring at the mirror. He hesitated to remove the robe once he was alone, afraid of what might be hiding beneath. Finally, he took a deep breath and slid out of it.

His gut had shrunk by at least three inches, perhaps more. His chest and shoulders had broadened, while his arms showed more muscle definition. Even his thighs and butt appeared more muscular than before.

Then he checked his back and ankles.

My scars are gone.

His eyes lingered over the pristine, smooth skin, something he hadn't seen since his mother ...

He fought an involuntary urge to scratch.

They're gone ...

He forced his eyes and mind away and looked at his groin.

"Yep," he said with a smirk. "No distinguishing features there." The smirk faded quickly as he put the scrub top and pants on and left the chamber room.

"You were right," he said once in the hall. "The rest of me isn't too bad ... well, most of the rest of me." Dr. Shugart grinned in response.

He feigned a grin of his own. *My scars ...*

"Well," Dr. Shugart said, "I know you probably feel like you could use a vacation from your vacation, but we need to run another physical exam before we let you go back to the guest suite. Just to make sure nothing went wrong with the process. Nurse Paige will take you back to the exam room."

Travis nodded and followed.

My scars ... gone, but not forgotten. Not by a long shot. Not yet.

###

Another session in the exam chamber resulted in yet another clean bill of health for Travis, although without any joking about his now non-existent excess weight.

Nurse Paige led him back to the guest suite afterward. "You'll find some regular clothes on the bed," she said once inside. "Someone will be by tonight to set up another sleep study--just

to make sure your physical alterations won't interfere with your overnight breathing."

Someone indeed knocked on the door shortly after dinner. Travis answered, expecting to find Dr. Shugart and the nurses again, but instead found Wilson standing outside.

"Well, well," Travis said. "Imagine you coming to meet a lowly Candidate like me."

"Lowly? Never!" Wilson invited himself inside and closed the door. "Nice look, by the way. I had to make sure a rather important member of your entourage was ready to rejoin you. She's got a new look, too." He held out his hand and revealed a familiar black wire-like device. It now had a grey wire extension attached at its bottom end.

"Tabitha!" Travis grabbed his computer from Wilson's hand. *Finally!*

"Yes, it's her," Wilson said. "She's still a qLink-9, but she's been given new capabilities, including a few tweaks that will allow her to access the QuantumNet without detection. She also has secure access to the internal Zilker Institute Network now."

Travis examined the grey extension. "What's this?"

"That's part of what I was talking about. That little grey wire gives her special protocols and instructions, including some hard-coded ones that prioritize her tasks, and--God forbid she should ever fall into the wrong hands--allow Security to send a burn-out signal before any bad guys can use her."

"*Burn-out signal?*" Travis backed away from Wilson and cupped his hands around Tabitha's wire. "You mean you can kill her now if you don't like what we're doing?"

"Whoa, hold on, hold on!" Wilson raised a palm. "It only burns out the ZINet extension and turns her off until--"

"Turn her off? You mean kill her memory! You can't--"

"No one's memory is getting wiped!"

Travis stared at Wilson for a few moments before relaxing his stance. "Okay, then, what *will* happen?"

"She'll just be unavailable until we retrieve her. You don't want anyone compromising your identity, do you? Think about your grandfather. Someone gets hold of Tabitha and finds out he's the one who bought her for you? Our Safety Engineers might have hell trying to protect him if that happens." Wilson crossed his arms and stood back. "You want to risk that, Candidate Travis?"

Travis's anger drained away. He sighed and relaxed his grip on Tabitha. "No, I don't want to risk that. You promise that's all it'll do to her?"

"I promise. She'll revert to being a regular, offline qLink-9 if she gets the signal, and she'll still remember you once we get her back and reboot her. Now, go ahead and put her on."

Travis put Tabitha behind his right ear and felt the familiar *thwip* as the wire attached itself to his skin. Nothing happened at first. A couple of seconds later, a flood of calibration figures and focusing lines filled his vision while a burst of white noise blocked his hearing. The brief chaos soon disappeared as a familiar interface faded into view.

"Tab, are you there?" Travis concentrated on speaking in his new baritone range. In response, he heard a series of bell-like notes, which resolved into a familiar chime.

"Good evening, Candidate Travis," Tabitha said. "That is you, isn't it?"

"Yes, it's me! God, it's good to have you back. Are you okay?"

Tabitha rang a crystalline note. "I feel ... larger."

Travis sighed with relief.

"What did she say?" Wilson asked.

"She says she feels larger. Do you need to talk to her?"

"It would be nice."

Travis nodded. "Tab, Wilson is here with us. The restrictions I put on you back at the lake are officially gone. Now, please link up with him so he can talk to you."

Tabitha rang a dull bell. "He's not going to shut me down again, is he?"

"He'd better not try," Travis said, looking Wilson in the eye. "Link up, please."

Travis felt the click. *No tricks, Wilson. I'm trusting you. Be nice to Tab.*

"Hello, Wilson," Tabitha said. "How are you this evening?"

"I'm just fine, thank you, Tabitha. I apologize for what we've had to put you through so far. I assume you've registered Candidate Travis's new parameters?"

"Yes, I have. My new access ability tells me you've put him through a procedure involving DNA modification. He seems to be fine so far--some pretty nice changes, actually--and I can't find any signs of side effects yet. I also see Dr. Shugart's got Candidate Travis scheduled for a sleep study tonight."

"Well done," Wilson said. "Sounds like you're functioning properly."

"Wilson," Travis said, cocking his head, "does Tabitha have to call me *Candidate* Travis?"

"Yes, she does until you aren't a Candidate to be a Tapper anymore."

"Can't she at least override it when we're alone? I mean, it sounds weird."

Wilson looked over his glasses at Travis. "That's how it's supposed to sound. Keeps you constantly reminded you're not here permanently. Yet. No overrides allowed."

Travis sighed and frowned. "Okay, I'll deal with it. So, what's on the agenda for tomorrow?"

"Well, since it'll be Saturday, there's no work except for getting you a 3DIdent card.

Consider it your day off. Now, on Sunday, someone will come by and give you a short tour around the outside of the building while we get you moved into your permanent housing. Until then, get reacquainted with Tabitha--and with yourself. Relax and look forward to the start of training on Monday. Tabitha, you make sure he gets enough rest."

"I will," she chimed. "If necessary I'll bore him to sleep by reading him some old romance novels."

Wilson laughed. "I don't know if you're lucky or cursed to have a qLink like Tabitha. She seems to know you really well."

"Too well, sometimes," Travis said with a smile.

"Well, the two of you appear to make a good team, any way you look at it."

"Thank you, Wilson," Tabitha chimed, playing a short, taunting melody at Travis.

"You're welcome. I'll see you two later. Candidate Travis, take it easy this weekend." He unlinked from Tabitha and began to let himself out, but Travis stopped him at the door.

"Wilson," Travis said, "one more question. You gave me access to a lot of secret stuff lately. What would have *really* happened if I'd said 'no' at the end of our interview?"

"That," Wilson said, "is one thing that's going to have to stay secret." He grinned and left the suite.

Secret? What the hell? Just what are they capable of?

Tabitha rang for Travis's attention after the door closed. "So, Candidate Travis, are you finally going to tell me what's been going on for the past few days? I think we've got more than just a few loose ends to tie up before the sleep study folks get here, don't we?"

Travis sighed and shook his head. *It's going to be a long night. Where do they keep the headache medicine around here?*

CHAPTER 8 – DOGHOUSE

The first thing Travis noticed after waking Saturday was the lack of a sleep study board above him. He rolled out of bed and put Tabitha behind his ear.

"Tab, what time is it?"

Her virtual console appeared in response, with the time in the bottom right corner.

"Uhhrrg," he groaned. "One o'clock? Why didn't you wake me up earlier?"

"You didn't set any alarms, and Dr. Shugart's orders were to let you sleep as long as you needed."

"Oh." He yawned and stretched, then stopped and dropped his arms. "Wait a minute. What do you mean, 'Dr. Shugart's orders'?"

"I'm hooked into the Institute's ZINet network now, remember? That means I have to follow any instructions the higher-ups give me."

I guess I should have expected that. Thanks for the warning, Wilson.

"By the way," Tabitha said, "the ZINet's got some very interesting stuff on it, like your complete medical records."

"What's so interesting?" he said as he put Tabitha on behind his ear. "You had access to my med records before."

"Not in this much detail. Why didn't you tell me more about the scars on your back and your ankles? I assumed you'd just had an accident."

Travis grimaced. "You've got psych record access now, too?"

"Not to everything, but like I said, there's some very interesting stuff in here. Now, why didn't you tell me more about your scars?"

Damn. She's been digging deep.

"Not now, please?" he sighed. "I just woke up, for cryin' out loud."

Tabitha played a digital raspberry into Travis's head.

He curled his lip as he headed to the guest suite's dining area. He wanted to eat and nurse his morning cup of coffee--or in this case, an afternoon cup.

"Tab, have they hooked you into the food system?"

"They've hooked me into everything, *Candidate* Travis."

He stopped and looked up at the ceiling. "I know you have to call me 'Candidate', but do you have to *emphasize* it? Jeez, what is your problem today?"

"Tell me the story behind your scars, and I might be nicer."

Travis slumped. *I should have asked them to remove her snarky side when they upgraded her.*

"Okay, okay, I'll tell you," he said, "but not right now. Let me eat and get dressed, then I'll tell you what happened. I'll do the talking--you just listen. No discussion, no questions. Deal?"

Tabitha rang a few random bells. "Deal. Anything's better than being shut down for over a week."

"Oh, come on! I thought we hashed that out last night."

"Yes, we did. I might be satisfied with your explanations, but I don't have to be happy with them. Don't worry, I'll get over it."

A menu appeared on Travis's virtual console.

"Thank you," he said with a sigh of relief.

"You're welcome. Now, hurry up and order your lunch before they start serving nothing but dinner."

Once Travis finished with his lunch and his ritual coffee-nursing, he went to take a shower. He stepped into the stall, wet down his face and front, and braced himself for the inevitable sting as he turned his back toward the spray.

It never came.

He stood wide-eyed as the water hit the smooth skin of his back and rolled down, not tingling, not giving him any reason at all to scratch. It was mesmerizing--the first time he'd ever felt the sensation. He'd only been old enough to take baths before ...

Before she gave me my scars.

The thought broke the spell the shower had cast on him. He blinked, breathed deeply, and went on with his washing, scrubbing his back as though trying to scrub away the feelings the water had brought to the surface. He gave his reborn ankles the same attention.

Not forgotten, Mother. Not yet.

He eventually finished showering, drying off, and dressing in the new clothes that had been left for him. Sufficiently mentally braced--he hoped--he sat down in the suite's armchair to tell his story to Tabitha.

"Okay, Tab. You wanted to know the story behind my scars."

Tabitha chimed a positive note.

"I got them when my mother ... when she got sick, just before I turned eight. You've heard me talk about my mother with my grandfather, but you've never heard me connect her to the scars. Well, she's the reason I have them.

"My mother blamed me for my father's death. He drowned while saving me from being caught in a freak riptide in the surf down at Galveston during the summer of '74, a few months before I turned eight." He let out a heavy sigh.

"She was always a little grouchy before Dad's death, but when she was mourning, she was seriously depressed, crying all the time. She got really mean after that: kept yelling that I 'wasn't worth saving,' and said Dad 'wasted his life' saving me. She'd beat me for the slightest things, like leaving a light on or putting too much milk in my cereal. One day ..." He shifted nervously in his seat as he recalled the incident. "One day, she whipped me on my back so bad she drew blood. I don't know what she used, but whatever it was, it hurt like hell. She never treated the wounds, and I couldn't treat them myself."

He rested his head against his right hand. *God, I hate reliving this.*

"Sometime after that, she sold our home, plus almost everything we owned, and moved us into an old, ratty, rent duplex in a cheap part of town. I think she was trying to hide us, because she didn't register me for school and never let me out of the house. Anyway, after we moved, she bought a full Virtual Reality machine and paid some guy to create a bootleg VR simulation of my father. She used up almost all the cash we had: our savings, my father's life insurance, even what she made from selling the house and our stuff.

"She practically lived in VR after that. She didn't work, she didn't cook, she didn't bathe. She just kept that damned VR helmet on her head, even when she took a crap. God help me if I accidentally interrupted her, because she'd whip the hell out of me again if I did.

"One day, with almost no food in the house and with the wounds on my back starting to get seriously infected, I tried--against all fears--to run away. I guess she heard the back screen door unlock, because she caught me before I even made it out of the backyard. I was too weak to outrun her."

His jaw tightened as the memory played out.

"After she caught me--and after whipping me yet again--she left for a few minutes and came back with some old, rusty chains and a padlock she dug out of the mess left by other renters out in the garage. I was afraid she was going to whip me with the chains, but she did something worse. She chained my legs to my bed--bound them as tight as she could get them--and locked the door to my room so I couldn't interrupt her VR life anymore."

He'd clenched his hands into fists. It took a few seconds of concentration on calming himself before he could continue.

"I couldn't get an inch away from that bed. I tried--I mean, I tried like *hell*--to free myself from those chains. I pulled and twisted and scratched so hard I nearly scraped off all the skin around my ankles." He jerked a foot to suppress a scratch instinct.

"I could hear her outside, still living her damned VR life. She didn't feed me or give me any water after she locked me up. She must have turned the volume up so loud that she couldn't hear me screaming for help. I guess no one else could hear me--either that, or they didn't give a shit. Just another screaming kid in a crap neighborhood, only this time dying of hunger and thirst. I ended up passing out after a couple of days."

A hard swallow forced down a column of bile. *That's all she's getting of that part. The rest of what happened in that room ... she doesn't need it.* He leaned his head back and stared at the ceiling.

"The next thing I remember is my bedroom door being smashed in by some guy in a uniform. I found out later it was a policeman. Turned out the room was on fire. My mother had tried to burn down the house rather than be caught and forced to live without her VR husband. Anyway, I couldn't move. All I could do was say one word: 'Help.' A few minutes later, I woke up outside, still chained to the bed, but safe--a Tapper had ripped a hole out of the wall and pulled the policeman and me out of the room through it. I passed out again, that time to the sound of my mother screaming at the top of *her* lungs as the cops hauled her away."

He closed his eyes and drew a slow, deep breath. After a few more breaths, he shifted in the chair and sat up straight.

"A nurse later told me I'd been unconscious in the hospital for a week. Said I'd screamed and thrashed around when I first woke up. I'd had a bunch of tubes hooked up to me, so I must have thought they were chains and that I was still locked in my room.

"I'd developed a blood infection from my back that put me in critical condition. The doctors knocked out the infection, but they had to use stem cells to get my back wounds to fully heal. My ankles were in bad shape, too, since I'd scraped off so much skin. They used artificial grafts on them. All told, I spent three months in the hospital and around six months in physical and mental rehab. Look it up. You've probably got access to those records now."

Travis closed his eyes. "The only family I had left was my grandfather. He took me in and raised me. Never once blamed me for my father's death. In fact, he did his best to help me get over it. I owe him everything, and the last thing in the world I would ever want to do now is let him down."

Because it would prove her right.

"I never saw my mother again, but I heard she went full-blown paranoid-depressive when

the police locked her up without her VR husband. I found out a couple of years later she'd managed to kill herself despite being on suicide watch."

Travis took one final deep breath. "That's all I'm going into for now. If you've got questions, use your new net links and put the pieces together yourself. I'm done."

Tabitha remained silent for nearly a minute. When she finally responded, her usual metallic tone was muted. "Oh, Travis," she said. "I'm sorry you had to go through all that. You're lucky to be alive."

"Yeah, lucky." Travis snorted a sarcastic laugh. "I'm alive because my grandfather called the police and asked for a welfare check. If the cops hadn't investigated and found where my mother moved us, and if that Tapper hadn't rescued that cop and me, I would have died in my bedroom."

"Are you thinking--"

"I told you, no questions. End of story."

"Sorry," Tabitha said. A small chime tinged her voice. "I'm glad you survived."

"Yeah," Travis whispered. "Me, too."

My father didn't waste his life on me. My life was worth saving. I'll prove her wrong, damn it.

###

Travis didn't get the chance to sleep in late on Sunday. Tabitha woke him up at 8:00 a.m.

"Whatareyoudoing," he complained as he attached her behind his ear. "I didn't set you to go off."

"No, the ZINet did. Your campus tour's at ten, after which you'll move into your new apartment. You've got two hours to eat and get ready. Once you're in your new place, you'll be

free to roam around wherever your new 3DIdent card will let you go."

Travis sat up and scanned the room. "Did they deliver the 3DIdent card already?"

"Yes, just over an hour ago. Somebody slid the thing under the door. My sensors couldn't tell who."

"Hmph. Some high-tech delivery system they have here." He retrieved his 3DIdent card and examined it. "'Candidate Travis.' I'm still not used to that. Hell, I'm still not used to my voice."

"You sound good as a baritone," Tabitha rang.

"I didn't know qLinks could do flattery. I sound weird."

"If you say so. Would you like to see the breakfast menu?"

###

Someone knocked loudly on Travis's door at 10:00 a.m. sharp. He opened it and found a short, middle-aged lady standing in the hall. She frowned and eyeballed him from head to toe.

"Hello," he said, somewhat confused. "Are you my tour guide?"

The woman huffed. "Tour guide? No, I'm here to fix the sink. Of course I'm your 'tour guide,' thanks to Glen."

Travis looked at her blankly. "I'm sorry ... thanks to whom?"

"Doctor Glen Allen Monroe, the Director of the Driller corps," the woman said, crossing her arms as she spoke. "He decided to pull your assigned guide for something else and stuck me with the job. Like I didn't already have things planned for today."

"I'm sorry," Travis repeated. "I didn't mean ..."

"Oh, don't keep apologizing," she said as she pushed her way past Travis and into the suite. "Just get your damned shoes on."

"Um ... okay." Travis picked up his shoes and sat down to put them on. "I'm Travis, by the--"

"*Candidate* Travis," the woman interrupted. "I know who you are. I'm Doctor Gale Sabo, Assistant Director of the Driller corps." She curled her lips in disgust at the word *Assistant*. "Get your shoes on, grab a jacket, and follow me."

Travis studied Dr. Sabo as they rode an elevator down to the ground floor. Her face was round and pale, with a nose that pointed down to her chin. Waves of styled, brown-dyed hair topped her head in a mass that ended abruptly at her ears. Tabitha's display showed she stood just over five feet--155 centimeters, despite her high heels--and that she was just a month shy of her fifty-fourth birthday. She shifted her lean build from foot to foot and clenched her fists as the elevator descended.

"Finally," Dr. Sabo muttered once the doors opened. "'Just a quick tour,' Glen said. Right. Anyway, the movers are getting you set up in your new quarters, and I'm supposed to show you the outside of the Doghouse while they do that."

"Excuse me," Travis said, following the doctor into the elevator lobby, "but did you say 'dog house'?"

"Yes, Doghouse. That's what we call the place. You'll see why soon enough."

Dr. Sabo ignored the usual three corridors and walked across the lobby, parallel to the row of elevators. Where Travis expected a wall to mark the lobby's side, there was an opening that led to a wide floor space. He stepped through and got his first real sense of the building's scale.

The Institute structure was surrounded by a shell-like wall--a building within a building. The inner building rose at least twenty stories high. The outer shell wall stood away from the

inner building and leaned inward as it rose high above, unsupported by columns or anything immediately visible.

The first-floor hallway between the shell wall and the building was so long Travis could barely make out the far end. The same pink granite that lined the corridor on Wilson's fifth floor covered the vast ground floor. Alternating expanses of tinted glass and pink granite ran parallel horizontally along the shell wall. Soft light filtered inside through a pine forest outside and made the floor sparkle where it struck.

"My God," Travis said. "This place is HUGE." He stood wide-eyed and open-jawed until he realized Dr. Sabo was watching him, like a big city native would watch a country boy who'd just seen his first skyscraper. He composed himself before looking back at the doctor.

"You finished gawkin'?" she asked.

"I guess."

"Good. Let's move, then."

Travis followed Dr. Sabo as she crossed the vast entry plaza. She headed toward a bank of entry doors.

"Some people just love giving tours around the place," Dr. Sabo said as she walked, irritation oozing from her voice like oily sludge. "Paige Kirkshire was supposed to give you your tour. That nurse is a regular Yellowstone park guide, I swear. Not me." She looked over her shoulder at Travis. "You want details, get 'em from your computer."

Dr. Sabo led Travis outside into the mild Houston winter air. They reached a set of pink granite steps that led to a concrete pathway.

"We're at the south wall right now," she said as she descended the steps. "From the front gates, farther south, this side of the building kind of looks like a huge dog house." She stopped

when she reached the pathway. "That's part of the reason for the nickname. Plus, you've got another one of Dr. Zilker's idiotic oilfield nicknames in play. 'Doghouse' is what you call an office shed on a drilling rig. Anyway, the building's official name is the 'Zilker Institute Main Building.' It's usually just called the Doghouse or the Institute."

She motioned for Travis to follow her along the pathway to the southeast corner of the structure. They stopped once the east wall came into view. The pathway that ran between the leaning wall and the nearby pine forest seemed to stretch on forever.

The shape of the building connected with a memory. "Doctor Sabo," he asked, "why does this building look like a Zeppelin hangar? I half expected to see the Hindenburg come floating out of the front."

Dr. Sabo sighed. "You been watching too many history shows on the QuantumNet. First off, the Hindenburg would look like a sausage coming out of an oven compared to this place. You could fit six Hindenburgs inside the outer shell."

She gestured around. "As for why it's shaped like this, think about where we are. This is Houston, and that means bad weather. The Institute is built to withstand a Category Four hurricane, and it has emergency quarters in case a stronger storm comes along. It's also built on a raised area, so flooding chances are minimal, even in the underground levels. Put simply, you're safer here than any other place in the city."

"Yeah, now that you mention it, where exactly are we? I know it's Houston, but I can't see any landmarks for all the trees."

"We're in what used to be southeast Houston, right where the runways of the old Hobby Airport were. Dr. Zilker said he chose the spot because he wanted the Institute to be something that took people's minds off the Spindletop Event, so--"

"Whoa, hold on," Travis interrupted. "Spindletop Event? What has Spindletop got to do with anything?"

Dr. Sabo glared at Travis. "You just love jumping ahead in your studies, don't you? Sorry, that's one you're gonna have to learn in class, not out here." She turned and headed north along the pathway. Travis rushed to keep up.

As they made the circuit around the Doghouse, the doctor pointed out smaller, unmarked pathways that led away from the outer walls and into the pine forest. Each connected to the main path, then to an airlock-like entrance portal along the ground floor. "There's plenty of these along both sides of the building," she explained. "They lead off to housing, recreation areas, and the like. Your housing is off one on the west side. Pay attention to which one it is so you don't get lost. It should be on your computer soon, if it's not there already."

Dr. Sabo led Travis onto a winding pathway just past the midpoint of the west wall. A few dozen meters in, where the wall behind them became obscured by the pines, Travis spotted a cluster of identical, two-story buildings. Each looked like a miniature version of the Doghouse.

"Here," Dr. Sabo said. "Your apartment is in one a little farther out. It should be ready for you now."

"Do these buildings have some sort of weird nickname, too?"

"Why, yes, they do," the doctor said in a condescending tone. She gave Travis a sarcastic smile and said, "They're called 'apartment buildings.'" The smile and the tone disappeared together. "Come on."

They eventually reached Travis's building. Dr. Sabo showed Travis how to use his 3DIdent card to work the main door's security. "There," she said once the door was open. "I'm gone now. You got other questions? Ask your computer." She turned and hurried back toward

the wall, disappearing among the pines.

"Thanks for the tour," Travis said to empty space. *I guess her boss really pissed in her corn flakes this morning. Jeez, I hope I don't have to work with her.*

He went inside the building and found his new home--a furnished ground-floor apartment with plenty of living space for one person. His meager possessions from the guest suite were there, with quite a few new clothes added. One area that caught Travis's interest was a well-stocked real kitchen instead of an auto-kitchen like he'd had in his apartment in Austin.

I guess I don't need an auto-kitchen with Food Services around. Besides, this'll give me a chance to work on my own cooking--if I have time.

He took off his shoes and lay down on the living room's comfortable sofa. "Well, Tab," he said, looking at the ceiling, "what did you think?"

"She could use an attitude adjustment."

"That's *not* what I meant ... although it is kinda appropriate. I meant the tour. The Doghouse. What did you think about it?"

"It's a big place."

Travis chuckled. "Yeah, it's big, all right. I hope we'll fit ..."

CHAPTER 9 – CROSSFLOW

Travis stood outside a classroom on the 17th floor of the Doghouse. He'd arrived early and would have already gone inside, if it wasn't for a large, ominous sign posted on the door:

ALL INTERFACES ARE PROGRAMMED TO LINK TO EACH OTHER AND TO THE
INSTRUCTOR UPON ENTRY TO THIS CLASSROOM

"Tab, you ready for this?" he asked, not sure of how her new programming would respond. "You're going to have a whole lot of new links to deal with if we go in."

"I'm looking forward to it," she chimed. "I enjoy company, as long as they don't overload me or block me out of the conversation."

"Don't worry. I doubt Wilson's going to put in an appearance today." He opened the door and took a peek inside.

The empty classroom was about the size of what Travis remembered from his high school days, albeit sparsely furnished. Only six student desks faced the teacher's desk at the front of the room.

This is what I've been looking forward to. Grandpa, do I really have the guts to go through with it?

Travis swallowed hard, walked in, and sat at the right-center student desk.

New connections clicked in as each of his classmates arrived.

First in was a girl, slightly younger-looking than Travis and shorter. Her long, brown hair flowed over her slim shoulders and emphasized her delicate, oval face. Pale skin offset eastern Mediterranean facial features. She stepped timidly into the classroom and sat at the desk nearest the door.

Wow--I wonder if she looked this good before her plastic surgery?

Travis caught himself staring. He turned away, his face flushed with embarrassment, and cleared his throat before looking back at her with what he hoped was a more natural expression. "Ah," he said, struggling to speak without his voice breaking. "Hello, I'm Travis."

"Hi," she said in a silvery voice. "I'm Karon."

Before they could say anything further, another woman strode into the room. Older than Karon, likely in her thirties, her ash-blonde hair was pulled back in a tight, foot-long ponytail. Travis got a good look at her lean-but-muscular shape when she stopped in front of him. She examined him from head to toe, then flipped her ponytail and claimed the far-right desk.

Seconds later, a Latino male with jet black hair and a short, stubbly mustache entered the room. His dark eyes sparkled as he flashed a smile at the blonde. The blonde wrinkled her nose in disgust and looked away. Despite the rejection, he sat in the seat between her and Travis.

A man entered next. Travis thought he looked a couple of years older than he was, and he could have sworn he'd used the same template Travis had used in the plastic surgery machine if it weren't for the black hair and moustache. He smiled at Karon, who to Travis's dismay smiled back and offered the seat next to her. He accepted.

The last classmate to enter was a young, black woman. She scanned the room through deep brown eyes. Her curly black locks framed an oblong face. She gave Travis a pleasant smile

and took the remaining empty seat on his left.

Travis felt one final interface link-up as a tall, tanned, middle-aged man entered. His sharp cheek bones, green eyes, and prominent chin were offset by grey hair around his temples. He wore a loose tweed jacket over a white shirt and khaki slacks. The man went straight to the front of the teacher's desk and leaned against it.

"Good morning," he said in a confident tenor, "and welcome to your first session of Tapper training. I will be the instructor for your group."

He crossed his arms and scanned the classroom. "My name is Allen, and I am a Tapper. That's all you need to know about me right now. Likewise, all I need to know about you are your names and the fact that you're not yet Tappers. So, look at your 3DIdent cards, figure out what's on them, and read your name exactly as it's printed. Starting with you," he said, pointing a slim finger at the girl who had caught Travis's eye.

"Uh ..." she said, shaking as she looked down at her 3DIdent, "Candidate Karon."

"Candidate Harold," the man said after a second's pause.

"Candidate Serene," the girl next to Travis said, sounding less intimidated.

"Candidate Travis." *There, that wasn't so bad.*

"Candidate Christopher," the male to his right said, speaking with a slight Spanish accent. He smiled again at the woman with the blonde ponytail.

"Candidate Trace," the thirty-something woman said, returning Christopher's smile with a curled lip of disgust.

"Good." Allen stood up straight. "Now it's time to get some basic rules out of the way. These will already be stored as directives in your computer, so you'll see them pop up as we get to them.

"First: do not discuss your full name, family, background, or anything else that would link you to your identity outside the Institute. You've already heard this rule, but it bears repeating. It's possible one or more of you may wash out, and we don't want anyone looking up the relatives of someone who made it and paying them a not-too-friendly visit. Your computers are now programmed to warn you--and us--about any infringement of this rule."

Kinda figured that.

"Second: unsupervised fraternization between Candidates is strictly forbidden. By 'fraternization,' I assume you know what I mean."

Travis chuckled to himself. *That sucks, but kinda figured that, too.*

"Finally, your computers may have been your best friends in the past, but they're now programmed to report all your actions while you are a Candidate to Institute personnel. Part of this is for basic tracking, but most of it is for your own good. You'll understand later. Incidentally, do *not* get out of the broadcast range of your computers if you remove them. The nanosecond they detect you're out of range, they'll alert Security."

Yeah, Tabitha would do that, no doubt.

Allen took a couple of steps away from his desk. "Now, 'What the hell gives you the right?' is a question all of you are probably thinking right now. What gives us the right is the paperwork you signed before you went into the plastic surgery chamber. You agreed to this as part of your Candidacy period."

Candidate Christopher raised his hand. "What *can* we do when we're not in class?"

Allen walked over to Christopher's desk, placed his hands on it, and leaned down. "Study," he said. "Tour the areas your 3DIdent will let you enter. Get some exercise, or some rest, depending on what you've been doing. Try going to the 14th floor recreation center. Just

keep yourself out of trouble so you don't wash out on behavioral grounds. Understood?"

Christopher sat up straight. "Understood, sir."

"Good!" Allen said. "Now, why are you all here?" He returned to his leaning point on the front of the desk. "You're here to save lives. Build impossible structures. Power entire towns. Alter the fundamental structure of elements. But, we can't let you do any of that if you're just going to go out and kill or destroy the first thing we turn you loose on, can we? That's why you're in a classroom with me, and not with a Tapper out in the field."

Allen walked behind his desk and took a seat. "Your first two weeks will consist of training here and in other parts of the Doghouse. Today, we'll start with a demonstration of how a Tapper works." He made a few gestures on his virtual console.

A video viewport opened on Travis's console in response. Travis assumed it opened on the other candidates' consoles as well.

"Jeremy," Allen called out, "are you there?"

Travis's video viewport resolved on a man standing on a metal deck in front of an expanse of water. "Right where they left us, Allen," Jeremy said in a cheery voice. He wore a yellow construction worker's hat with a "Zi" logo in a white oval on its front. A chin strap helped hold the hard hat on his head. Wind-blown whitecaps appeared on the water behind him.

"Candidates," Allen said, "meet Jeremy. He's a Tapper who's volunteered to help us with our little demonstration this morning. Jeremy's out on a test platform in the Gulf of Mexico to give you some idea of what a Tapper can do. Dr. Monroe, is Jeremy ready to work?"

A man with a professional voice spoke from behind the viewport. "Hello, Allen. Hello, Candidates. I am Dr. Monroe, and I'll be Jeremy's Driller for today. Jeremy is good to go, Allen. His Tap is open and stable."

Dr. Monroe? Travis wondered. *The boss that Dr. Sabo complained about yesterday? Guess I'll find out if he's as bad as she says. Doesn't sound that way, not off the bat.*

"Before Jeremy gets started," Allen said, "let me explain what you'll be watching." He leaned forward on his desk.

"Four basic forces govern almost all interactivity in the universe: the force of gravity, the electromagnetic force, the weak nuclear force, and the strong nuclear force. To be called a Tapper, you have to be able to *see* and *affect* the lines of at least one of those four forces. The technology we use helps your brain see the lines--we'll get into that later. Once you can see them, we'll teach you how to manipulate them.

"Now, gravity is the force people usually see first. That's what Jeremy is about to demonstrate. You'll need to manipulate it in the event of things like rescues: collapsed buildings, landslides, avalanches, and the like." Allen clapped his hands. "Comms, open up a P.O.V. port on Jeremy, please."

A second viewport opened on Travis's virtual console, this time showing Jeremy's point of view. He was looking at a huge concrete cylinder, approximately twenty meters away, which a separate data viewport said was ten meters tall and three meters in diameter. Jeremy panned his view to show that the cylinder stood alone and out in the open, near the edge of the deck.

"All right, then. Jeremy, if you please."

"Thank you, Allen. First up, a simple gravity demonstration. Basically, lifting an item by 'blocking' the gravity force lines which hold *that*," he said, pointing to the concrete cylinder, "to the deck. Here we go."

The main viewport zoomed back to show both Jeremy and the cylinder. His P.O.V. port broadcast the sound of his breathing, slow and even as he concentrated on the cylinder. After a

few seconds, he held out his right arm with his hand balled into a fist. He then opened his fist so his palm was parallel to the platform.

A loud scraping noise filled the audio feeds from both viewports. Travis and the other Candidates flinched. *Oww. There go my eardrums.*

A second or two later, the noise stopped and the cylinder lifted. It drifted above the deck, rocking back slowly at first, then leveling out as Jeremy spread his fingers. He raised his arm, keeping his palm facing the deck. The cylinder rose to match his motions. When he stopped, a separate data viewport showed it had risen six meters above the deck.

Damn! That's what "blocking" gravity lines does?

"Okay," Jeremy said. "Let's get fancy now. Comms, give me under-deck shots one and two, please. Wish me luck." New viewports opened, one showing the cylinder and the other one showing the ocean, which was at least three stories below the cylinder's base.

Jeremy turned his hand until he appeared to be holding an invisible can. He then walked toward the cylinder, which moved away from him as if he were pushing it. He kept walking until the cylinder floated past the edge of the deck. It continued to hover at the same level, despite being over the water.

His breathing became more labored as he made a series of gestures that Travis couldn't follow. The cylinder drifted down to deck level but remained hovering over the ocean. The ocean below the cylinder began to bubble, first in just one spot, then below the entire diameter of the cylinder. It transitioned into a fountain that rose toward the cylinder's base, higher and higher. When the water was just millimeters away from the bottom of the cylinder, Jeremy slapped his hands together and pulled back one arm. The water gushed against the base of the cylinder and appeared to hold it aloft.

This guy has got some serious control going on here ...

He brought the water and concrete closer to the deck. Once positioned, he held his breath and thrust his palm back against the bottom of his other hand. The column of water collapsed heavily upon itself, splashing the below-deck viewports. The cylinder remained suspended.

Jeremy wrapped up the demonstration by moving the cylinder back to its starting point and setting it down with a loud metallic *boom*. After a few deep breaths, he slumped into a folding chair brought to him by Dr. Monroe.

Travis joined the rest of the Candidates in applauding the demonstration. Allen shut down the applause with a word. "Enough!" he shouted. "That was no circus trick! You're not watching a sci-fi movie. This is real! Pay attention, because you'll be expected to do it, too!"

Jeremy looked into the main viewport. He panted like he'd just had a workout. "Thanks, Allen," he said. "Candidates, regardless of what Allen says, that was an early stage demo. Even the 'complex gravity' demo was nothing compared to what you'll have to do out in the field." He took one more deep breath, then resumed normal breathing. "Phew! It doesn't help that I'm still relatively new at this."

"By 'relatively new'," Allen said, his voice returning to normal, "he means he's been doing it for the last four months." He scanned the classroom with a serious look. "You'll be expected to do the same in less than two."

Two months? Travis sat back and looked at the other Candidates. They were doing the same thing he was--looking back and forth at each other in disbelief.

Allen continued. "Now that we're clear, let's move on to the second force people usually see: electromagnetism. This one's a lot trickier, since there's multiple aspects to it: electricity, magnetism, radio waves, light waves, and so on. For now, we'll start with a demonstration of

magnetism. Ever seen a magnetic crane lift a car? You'll be expected to do more. Jeremy? You think you're ready to move on?"

"Sure," Jeremy said with a wide smile above his square chin. "Candidates, here's a basic taste of what you can do when you learn to manipulate electromagnetic force lines."

Dr. Monroe took away the folding chair as Jeremy walked to the opposite side of the platform. A pair of steel poles stood several meters apart near the edge of the deck. Each pole rose approximately twenty meters.

"Before I start," Jeremy said, "watch the P.O.V. port." He stepped onto a thick, rubber mat placed around twenty-five meters away from the poles. "You'll note the non-conductive safety pad below me. Kind of necessary when you're messing with electricity on a bare steel platform. Dr. Monroe is on one, too. He's the only person on the platform with me, by the way. Comms controllers in Houston are moving the cameras around."

The bases of the poles appeared on another viewport on Travis's virtual console.

"The poles are also insulated from the platform," Jeremy said. "There are no connections other than a remotely-movable ground strap near the base of the left pole, and that strap isn't touching anything but the deck right now. In other words, this isn't a trick." He turned around. "Dr. Monroe, am I still good to go?"

"Your Tap is still open and stable. Your core temperature did drop a bit during the first demonstration, but you're still within tolerance two levels. Don't overdo it."

"Okay then," he said, facing the poles again. "Candidates, demonstration one: simple magnetism." He raised his right hand, fingers curled as if he were holding onto one of the poles. He aimed his arm at the right-hand pole and gestured at it with a strong horizontal twist.

Nothing happened.

Did he do it wrong?

Jeremy reached into a pocket with his free hand and pulled out a golf-ball-sized metal sphere. "This is a solid steel ball bearing," he said, holding it in front of the P.O.V. viewport. He tossed it up high toward the poles. It reached the top of its trajectory and arced down toward the deck until it was within a few meters of the right-hand pole. The ball then changed its path and slammed itself onto the metal pole with a sharp *clang*. It hung there, attached to the pole, until Jeremy relaxed his right hand. The ball then fell and clunked against the deck.

Jeremy left the mat and walked up to the right pole. He retrieved the ball, held it next to the pole, and let go. The ball fell straight to the deck.

"Fun with the electromagnetic force," Jeremy said, smiling at the viewport focused on him. He picked up the ball and walked back to the pad. "Magnetizing a metal object by wrapping an electric current around it. Put simply, I used the old 'wrap a wire around a nail' trick to make an electromagnet, except with no wire and with one hell of a tall nail."

"Now," he said as he put the ball back in his pocket, "demonstration two: creating an electric current in a metal object by moving a magnetic field around it. This is how you provide power during blackouts. Well, not *exactly*," he chuckled. He then centered himself on the rubber mat before beginning.

Jeremy pointed his right hand at the body of the right pole. He waved at it as if he was trying to pull something around it toward the left-hand pole, slowly at first, then faster and faster. Once he reached his hand's top speed, he stopped, closed his fist, and squeezed hard.

"Comms!" Jeremy shouted. "Move the ground strap on pole two into position!"

The ground strap angled up and pivoted toward the left pole's base. The moment it touched metal, a bolt of lightning jumped from the right pole and engulfed the left, releasing a

massive clap of thunder. The sound startled Travis and the other Candidates, causing them to jump in their seats as smoke drifted from scorched metal in the P.O.V. viewport.

Several other viewports on Travis's display replayed the strike from different angles and at different speeds, but the main viewport continued to show Jeremy. He shivered for several seconds and tried to catch his breath before slumping and dropping to both knees, removing his hard hat on the way down. All of the viewports then went blank and abruptly closed.

What just happened? Did something really go wrong this time?

Dr. Monroe spoke over the virtual console link. "Okay, folks ... ah, Jeremy will be fine. He just put more effort into his demonstration than he intended. Allen, if you don't mind taking it from here, I'll take care of Jeremy and get him back to the Doghouse."

"Thank you, Glen. Take good care of him."

Travis kept his eyes on his teacher, looking for some clue as to what happened. Allen looked down for a moment before lifting his head and speaking.

"Folks, that was not staged. Jeremy will be okay, but you must realize right now that what you just witnessed was a best case scenario for when something goes wrong. Jeremy's Driller was able to catch an instability in his Tap and close it before Jeremy got hit by anything other than exhaustion--and likely one hell of a headache."

Travis raised his hand. "Were they really the only two people out there? How are they going to get back?"

Allen nodded at Travis. "A HoverJet was waiting at station-keeping. It'll be dispatched to pick them both up in emergency mode." He took in a sharp breath. "They were isolated because of the dangers of Drilling and Tapping, something you were warned about during your entry interviews. Class, the only time you are not in danger during the procedure is when you are

completely disconnected and offline. To paraphrase Wilson, Tapping is a deadly dangerous business. From the moment your Driller begins to open your Tap to the moment it is closed, you are at risk of injury, brain damage, death--or worse."

Candidate Serene raised her hand. "What could be worse than *death*?"

"Taking other lives along with your own."

Travis froze in his seat.

Taking ... taking other lives? Now wait a minute. Wilson never said anything about this.

"That," Allen said, "is why Jeremy and Dr. Monroe were out on an old, converted oil drilling rig in the Gulf of Mexico instead of here at the Institute. Demonstrations like this are always done at sites that are off limits to the public. *Never* at the Institute."

Christopher raised his hand. "Sir? You said 'taking other lives.' My interviewer never mentioned that. How do you mean? Can we aim wrong with the lightning bolt or something?"

Interviewer? Not everyone got interviewed by Wilson?

Allen sighed and looked at his desk. "I wish your interviewers--or at least *Wilson*--could tell you about all this before you went through the plastic surgery machine, but it's too big a security risk, not to mention a health risk." He looked back at the class. "And you didn't hear me say that last part."

What the hell is going on here?

Allen stood up and paced before the class. "Tapping is dangerous to yourself and to everyone around you. It's dangerous primarily because of what happens during the process that *makes* you a Tapper--the Drilling process.

"Drilling stimulates certain areas of your brain, allowing some pathways to become more active and handle additional functions." A schematic of a human brain appeared on Travis's

console.

"One part of the brain that gets stimulated is the limbic system. A portion of that, the amygdala, is partially responsible for aggression and fear responses." A pair of almond-shaped nodules, one per hemisphere, flashed on the brain schematic.

"The stimulus needed to make you a Tapper activates your amygdala's fear response. Other stimuli link the fear to a nightmare-like state, with very real experiences and sensations. The nightmares *won't* always relate to your life experiences, but don't let that fool you--they'll still seem very real, and they'll still scare the crap out of you.

"As a Tapper, you'll have to fight your way through the nightmare state back to consciousness, controlling your fear and not letting it take over. It's easy to get lost in the process, and that is something you *cannot* let happen."

He leaned against his desk and gazed at the floor for a moment. "There is a term none of us want to use around here," he said, his voice somber. "That term is 'blowout.' A blowout is an uncontrolled release of the four fundamental forces. In other words, it's what happens when a Tapper loses control and their Tap runs wild. It's what makes being a Tapper as dangerous as we've been stressing. It's impossible to stress it enough."

Go ahead, keep stressing it. What else didn't you tell me, Wilson?

Allen brought up new virtual console viewports. A list of situations scrolled through Travis's display. "Any number of things could go wrong and cause a blowout. You could let your fear take over during the nightmare scenario of the Drilling process. You might fail to control your fear as you come back out to reality. Something could go wrong with the settings the Driller uses. You name it, it's probably caused a blowout in the past, and you'll be forced to deal with the possibility every time you go through the process."

Travis's display cleared as Allen continued. "Now, we've worked *hard* to find ways to prevent blowouts during Drilling, starting with intensive training for both Drillers and Tappers alike. You'll be subjected to simulations of Drilling and Tapping, although nothing we do can come close to copying the real experiences."

A touch of nausea hit Travis.

Oh, God. Please tell me I won't have to do VR here, too ...

"Later on, if you become a Tapper, it'll be your Driller's job to do everything in their power to keep your brain and other physical readings stable and prevent a blowout scenario from happening, both during the nightmare and once you're out and back in reality.

"However, if it looks like you're headed toward a blowout, your Driller has several options to consider. First, they'll try to close your Tap normally. If they can't do that, they'll try to crash-disconnect you using emergency neural stimulation. If neither of these work, they have one last option--'plugging' your Tap." Allen paled slightly at the word.

Must be nasty.

"When you get plugged, you get a mix of neural inhibitors, sedatives, and other drugs dumped into your carotid artery by way of a micro-intravenous patch placed on your neck. Your Driller will be able to activate these with the flick of a switch on a palmtop console, or with a slap directly on the patch if their console goes offline." Allen demonstrated by swatting at his neck as if a mosquito had landed on it.

"Plugging shuts down a Tapper in a flash. It causes a sensation close to a massive knockout punch. I speak from experience here. I was plugged, long ago, and was lucky to come out of it with nothing more than several months of massive migraines. I say 'lucky,' because there's always the chance you'll suffer extensive neural damage and won't ever be able to Tap

again--or, possibly, not even talk or walk again."

Travis shifted in his seat. *Yep, that's nasty all right. At least Wilson gave me some idea about this.* He glanced at his classmates. They looked just as uncomfortable as he was on this point.

Still, though, other lives? Can I handle that responsibility?

"Plugging is nothing, though, compared to a blowout. You've got to be willing to deal with serious consequences whenever you put on a Hard Hat and get ready to open your Tap. If you can't, you're in the wrong business, and I strongly suggest you make a beeline to Wilson's office and pull out of training right now."

Harold stood. He mouthed a couple of words, but nothing came out. He then left the classroom, closing the door behind him.

Allen watched as Harold left. He turned to face the remaining class and continued. "If, however, you think you can handle it, then give it all you've got and don't give up."

Trace raised her hand. "Do you have any recordings of what a blowout looks like?"

"Yes," Allen said, his expression deathly serious. "You'll get to see one tomorrow. You'll also learn a lot of other things, including information about the founding of the Zilker Institute. Be warned--you're not going to like it."

CHAPTER 10 – SPINDLETOP

Travis and four other Candidates arrived as a group on the second day of class. Only five desks were in the classroom, instead of yesterday's six.

Harold seriously pulled out. I wonder if anyone else will.

Travis went to the center desk and took a seat. The rest of the Candidates followed.

"Allen's probably overselling it," Christopher said on his way to his desk. "I'll bet it'll be just some dull history lesson."

"Don't let Wilson hear you say that," Travis said. "He doesn't take comments like that too kindly." He cringed at his memory of the maglev terminal incident.

"I doubt it'll be an ordinary history class," Karon said, looking at Christopher.

"Remember what he said? 'You're not going to like it.' That doesn't sound like he just wants to tell a story."

"In fact, Candidate Karon, I would like to tell you a story," Allen said as he strode into the room. "It's a story of a tragic accident that happened to a boy in the early part of this century. Everyone settle down."

Travis sat up straight as Allen leaned back against his desk.

"Before I start," Allen said, "I want you to keep in mind all of the good that Tappers have

done for the world. The rescues and recoveries that our first responder specialists have performed. The global speed-up of disaster relief shipping provided by our entry-level Tappers alone. And the astonishing discoveries made possible by our nuclear specialists. All of this came at a very high price, and it all began with our boy.

"The boy was fifteen years old, just starting his second year of high school in the former city of South Houston. He'd been at a Labor Day party at a friend's house. Typical party for the time--hot dogs, music, you name it. The party had wrapped up just after sunset.

"The friend's father was driving the boy and a pair of his classmates back to their homes when they were blindsided at high speed by a drunk driver at an intersection. The impact flipped their car several times before it smashed into a streetlight pole. The father and the boy's classmates died at the scene, but the boy survived with only a few bumps and bruises--or, so the paramedics first thought, until they tried to revive him. He was unresponsive.

"He was rushed to the nearest hospital. Doctors diagnosed him with massive brain trauma. He wasn't brain dead, but he was close."

Travis leaned back in his chair, confused. *Allen said he'd cover the founding of the Zilker Institute. What's a drunk driving accident got to do with it?*

"The boy's parents were understandably distraught," Allen continued, "until a doctor told them about a research program being conducted at a hospital in what used to be Houston's Medical District. A brain injury specialist needed a patient for the first real trial of a treatment that had a chance--*just* a chance--of reviving at least some of their son's mental faculties. The parents agreed, immediately requesting and receiving a transfer for their son.

"The specialist and his research team got underway as soon as the boy arrived. They inserted electrodes into his brain and gathered as much information as they could about his

neurological state over the following week. By then, they were ready for the second and most important part of the procedure."

Allen sat down behind his desk and gestured at his virtual console. Five viewports opened in front of Travis, all paused. Two showed different views of a hospital room, where a boy with a shaved head lay on a procedure table. His eyes were locked in a blank stare, while his mouth hung open. Nothing indicated he was aware of the medical technicians who surrounded him.

A large object stood in one corner of the room, covered by a sheet, next to several other pieces of medical equipment.

Two other viewports showed scenes from the side and back of an adjacent monitoring room. A man in a labcoat and slacks--apparently a doctor--another man sitting at a console, and what were presumably the boy's parents all looked through a window at the boy in the treatment room.

The final viewport displayed several different vital sign readings.

Allen went on. "The doctor intended to use an experimental machine to bypass damaged areas of the boy's brain and remap their functions to undamaged parts. He thought that this would bring the boy back to consciousness. What happened instead was something no one could have predicted."

He looked each Candidate in the eye. "I warned you about this yesterday." Allen looked straight at Travis and said, "Brace yourself." He then made a gesture on his virtual console.

Three red words appeared above the viewports:

"BEGIN VIDEO PLAYBACK"

###

The doctor spoke first once the viewports went into motion. "You did the right thing transferring him here," he said to the parents. "We've got the best staff in Houston--best in the country, if you ask me--and we're the only ones experimenting with this treatment for brain injuries."

A pair of medical technicians placed patches on the boy's shaved head and wired him to the room's equipment in one treatment room viewport. The other viewport focused on the other two team members as they pulled the cover off of the large device in the corner and rolled it into position behind the boy's head.

The device was about a meter wide and bowl-shaped, built from dozens of black five-centimeter cubes, each with a thin copper tube extending from the back. The tubes merged into even larger ones, all of which ultimately fed into a single, curved copper pipe at the top of a console.

"Is *that* the treatment machine?" the father asked, pointing at the device.

"That's it," the doctor said. "The only one of its kind. A Hemispherical Regenerating Directed Axon Transduction unit. Our own invention, based on a *lot* of research trials, and it's what everything else in these rooms was built around. We call it the HR-DAT machine for short, but our chief technician nicknamed it the 'Hard Hat.'" The doctor grinned and gave the tech at the console a pat on the shoulder.

"And this is what's going to 'rewire' his brain, right?" the boy's mother asked.

"Well," the doctor said, "rewire is as good a term as any, but re-route is more accurate. We're going to make his brain play connect-the-dots, in a way. We'll verify the locations of the undamaged parts, and with the help of the HR-DAT machine, we'll connect them to each other and stimulate the neural pathways so they can take over jobs that the damaged parts used to

handle."

He pointed out other pieces of equipment. "The wires and electrodes that went in first will combine to act like a GPS system, showing us the locations of undamaged parts of your son's brain. We'll come up with a computer road map to connect those parts, and the HR-DAT will use that map to carry out its job."

A pair of technicians in the treatment room adjusted the HR-DAT machine so it surrounded the boy's head without touching it.

"This part of the procedure is actually safer than the first part was," the doctor continued, "based on our research trials. The worst that can happen is it fails to make the connections, leaving your son no worse than he is. Of course, we all want the best case scenario, which is your son being brought back."

The treatment room techs wrapped up their preparations and moved into the control room. They took positions at the console on either side of the chief technician, who turned and nodded to the doctor once everyone was in place.

"All right, folks," the doctor said to the parents, "we need to get down to business in here. Just follow the signs back to the waiting room. We'll come and get you after we're done." He put his hands on their shoulders. "I guarantee we'll do our absolute best to help your son."

"We appreciate it, Doctor." The father hugged his wife. "We need him back."

Once the parents were gone, the doctor closed the door and started calling out instructions. "Okay, team, here we go! Status checks, please," he ordered as he moved to the middle of the control room.

The technicians checked in, one at a time:

"Implants and external patch links are ready."

"All treatment settings are zeroed."

"Patient vitals stable."

"Brainwave patterns stable."

The chief tech checked in last. "HR-DAT system is powered up and on standby."

"Archive system status?" the doctor asked.

"Audio, video, and data recording are active in both control and treatment rooms. All backup links to your north office are online."

The doctor spoke loudly toward the ceiling. "North office, are you ready?"

A reply came through a tinny console speaker. "Backup links are clear."

"All right then, chief," the doctor said. "Time to bring our boy back. We've got some parents out there who need good news. Let's give them some."

The doctor raised his voice again. "HR-DAT treatment number one. Time check--11:14 a.m., September 17th, 2038. Treatment begins now. Power up deep brain stimulation, minimum program setting."

A technician punched in commands on the console. "DBS at minimum."

"Same for transcranial," the doctor ordered, "then bring both to planned presets." The technicians turned knobs and punched in more commands.

"Vital signs still stable," another tech confirmed.

"Minor fluctuations occurring in the amygdala," a third tech reported.

"Show me." The doctor walked over to the tech's station. He examined a screen which displayed several graphs of data. This was reflected on Travis's data viewport--everything was steady, except for one line that varied slightly in signal strength.

"Any cause indicated?" the doctor asked.

"None. The rest of the electrode data matches the baseline we recorded this week. This is the only one that's off."

The doctor scowled. "Why's his amygdala doing that? There shouldn't be anything triggering the boy's fear, aggression, or anxiety responses--not in his state. Anyone seeing any anomalies that might be causing this?"

The technicians shook their heads.

"Well, in any case, it's not enough of a variation to stop treatment. Chief, adjust the planned HR-DAT stimulation to compensate. Everyone else, overlay the external patch data onto the DBS and DCS data and generate the 3D treatment map."

The computer monitor at the center of the console responded by drawing a detailed map of the boy's brain. The damaged areas appeared as black spots on the screen.

"Good," the doctor said as the map resolved. "The limbic system around the amygdala looks like it's in good shape. We'll go with the original game plan and use it along with any other available routes. Run the pre-treatment simulation."

The console team entered more commands in response.

After a couple of seconds, the chief tech leaned away from his station. "We're getting anomalies in the treatment map."

"What now?" the doctor asked.

"The simulated treatment plans aren't working with the live combined map data."

"Let me see." The doctor went back to the electrode monitor and huffed. "It's that same damned electrode at the amygdala. Now it's reading low, and it's throwing off the readings for the whole limbic system. Recalculate the HR-DAT stimulus again, chief. We've got to have a successful live data simulation before we proceed."

The doctor crossed his arms as several more simulations failed. "I *know* this will work," he said, his voice tense. "The original sims were good, everything else looks normal--there has to be a problem with that one electrode." He tapped his foot and became increasingly irritated. Finally, he lost his patience.

"Move over, chief." The doctor took over the center console seat and keyed in a series of commands. He ran another simulation afterward.

"There!" the doctor said as the simulation ran successfully. "That electrode would have kept the entire limbic system from getting enough stimulation. Now it'll receive the right amount." He gave the center console seat back to the chief. "We should be good to go. Begin final preparations."

The techs went back into action, keying in more commands and adjusting console settings to match the map changes. Once they finished, the doctor gave the final order.

"Activate the Hard Hat!"

A press of a button at the central station set the treatment into motion.

Everyone scrutinized the monitors. One monitor on Travis's console room viewport highlighted the neural pathways being targeted for stimulation. Another screen next to the central console monitor registered the increased activity along the affected pathways. The doctor stood back and smiled as his adjustments played out.

In Travis's treatment room viewport, the boy's eyes and mouth closed slowly. Twenty seconds into the treatment, his left hand twitched. It twitched again seconds later, stronger than before. The rest of his body stiffened, but his left hand continued to twitch until it tapped continuously on the treatment table, faster and faster.

Neither the doctor nor the techs reacted. Their attention remained fixed on the computer

monitors.

Without warning, one of the treatment room ceiling lamps blew with a loud electrical *snap*, showering sparks over the boy.

Loud alarms sounded and lights flashed at every console station. The doctor rushed to the chief's position. "What's happening here, people?" he shouted above the noise.

"Brainwave fluctuations exceeding safe levels on several patterns," a tech said, frantically making adjustments on the console. "Vital signs becoming unstable."

Travis's data viewport filled with wildly irregular lines.

The doctor stepped back and stood up straight. "Discontinue Hard Hat stimulation! Reduce DBS back to pacemaker level and terminate transcranial."

"HR-DAT stimulation disengaged," the chief tech said.

The tech monitoring the electrode data raised her voice above the alarms. "Doctor, you need to see this!"

The doctor turned to examine the screen. The electrodes monitoring areas near the boy's limbic system were maxed out, their data now reading as wide, solid lines. He checked the brain-mapping screen and saw a pair of brightly glowing almond-shaped nodes, one per hemisphere--the amygdala.

"No. No way," the doctor said. "There is *no way* that should be happening. Not even with the adjusted settings!"

An arc of electricity drew the team's attention to the treatment room. Sparks and showers of hot metal followed in quick succession as pieces of equipment blew out.

"What the hell is going on in there?" the doctor shouted. "Get that power off now! Shut everything down!"

"Power is off to all treatment units, including the HR-DAT," the chief tech yelled back.

A huge bolt of electricity shot from the treatment room and blew out the observation window, scorching the back wall of the control room. A blast of wind howled back and forth between the two rooms through the opening.

"Turn *everything* off!" the doctor ordered, his voice panicked. "Pull all the circuit breakers! Call electrical! Cut *all* power to both rooms!"

One of the techs grabbed a phone and punched its number pad. "This is an emergency! Cut all power to treatment room 195 and control room 196 immediat--"

Before he could finish, a heavy piece of equipment flew through the window and struck him in the face. He fell to the floor, his profusely bleeding head clearly visible on Travis's viewport.

The rest of the team ducked beneath the console. More equipment flew through the window, striking the console and knocking out the brain-mapping screen.

The doctor crawled to one side and lifted his head just enough to check on the patient. The boy was seizing. His left hand pounded on the treatment table. A whirlwind of flying objects circled above him. Bolts of electricity shot across the room.

"Why the hell isn't that power off?" he yelled over the noise.

"It is!" the chief shouted back. "Both sides!"

"Then what the hell is this? Why is the console still lit up? Why are the lights still on? If the power's cut, where are all these arcs ... coming from ..."

The doctor slowly straightened from his crouch, gazing at the boy. "Oh my God," he said, standing before the hole in the console window. His face went pale.

Debris flew as electrical arcs erupted with each seizure. Nothing touched the boy.

"It can't be."

"What can't be?" the chief tech shouted.

"*Him!* It's not the electricity or the equipment that's doing this! It's the *patient!*"

Another bolt of energy blasted through the console room, just missing the doctor. He dropped to the floor and gathered the remaining techs. They huddled together and tried to crawl out of the room, but the wind, the electricity, and the flying objects kept them pinned beneath the console.

Seconds later, the whirlwind and electric arcing stopped. Everything airborne fell to the floor with a loud crash. A smashed light fixture dangled from the treatment room ceiling before falling onto a pile of broken equipment.

The team remained silent beneath the console for a few moments. One by one, beginning with the doctor, they stood to survey the damage.

Everything in the console room had been smashed, save for the electrode monitor screen. Inexplicably, it was still registering, despite the power being off. The readings on Travis's data viewport were scrambled, except for what the doctor had said was the amygdala and limbic system data. They were both active beyond the measurable scale.

The doctor and the techs shifted their attention back to the patient. He remained in place on the table, his head still surrounded by the HR-DAT machine. His body was rigid. His left hand had stopped pounding on the table and grasped its edge instead.

His eyes and mouth were closed tightly as if he were straining against a horrible, unseen fear.

"Dear Lord," the doctor said. He backed away from the shattered console. "What did I do to him?"

The boy's head jerked forward. His eyes sprang open wide. He breathed in and out in a pair of massive, wheezing gasps before releasing a deafening scream.

Streams of light burst through his mouth and eyes before engulfing him in a bubble of blinding brilliance, lighting everything in both rooms. The limbic system monitor glowed brightly as the radiance expanded and consumed the screen.

The recordings each shifted to digital black screens. Red letters once again appeared above Travis's viewports:

"END VIDEO PLAYBACK"

CHAPTER 11 – ASSAY

"After that," Allen said, "a brilliant flash of light filled the sky. When it dimmed, it became obvious to anyone looking overhead that a wide swath of Houston, from the Medical District and Downtown through the southeastern suburbs, had ceased to exist.

"A massive in-rush of wind followed, causing heavy damage to the surrounding areas. In all, approximately 375 square kilometers--around 145 square miles--were destroyed or damaged." A period map with an overlay of the affected area appeared on Travis's console.

"More than a quarter-million people died."

Several Candidates raised their hands. Allen fended them off, holding up a finger before he continued.

"Several theories were put forward to explain what happened, from a nuclear bomb to an asteroid exploding over the city. Of course, conspiracy nuts had hundreds of theories of their own, from terrorism to government experiments with microwave satellites. Officially, the event was ruled 'an explosion of undetermined origin.'"

Candidate Serene raised her hand once more. "What was with the multi-view movie, then? It's just another sci-fi theory, right? There's a ton of those."

"This was no movie," Allen said, "and no theory, either. What you just saw was a live

recording of the exact cause of the Houston Disaster, made on September 17th, 2038."

The room went silent for several moments.

No. I'm not buying that. Travis swallowed hard. "How is that possible? A person can't blow up and cause all that death and destruction."

"He didn't blow up, Candidate Travis," Allen said, "and it was obviously possible."

Trace raised her hand. "What's it got to do with us?"

"Thank you for asking, Candidate Trace. Now, please allow me to continue.

"As I've just said, the only problem with all the conjecture about what caused the explosion is that there was *no explosion at all*. There was no radiation, no heat wave, no outbound blast wave, and no true blast crater. Most of the explosion-like destruction was caused by the straight-line winds sucked into the area.

"Scientists and disaster researchers eventually found that the initial destruction simply made everything disappear within a roughly elliptical, dome-shaped zone that was tilted at a horizontal angle, from northwest to southeast. Anything in the northwest part got cut off at about knee height, while the destruction on the southeast side extended below ground level into the water table." He held up his hands to show the tilt.

"No one had an explanation for the damage pattern. What they did have was a new crescent-shaped lake where southern Houston, eastern Pasadena, and the city of South Houston--the patient's hometown, remember?--used to be. Officials took advantage of this ten years later when they dedicated a monument on the southern shore of what's now called Lake Memorial. Some of you may know one or two people who attended the 50th anniversary observance last year."

Travis glanced around the room. Karon and Serene nodded.

"A few years after the disaster, Dr. Lukas Zilker enters the scene. Dr. Zilker was a neurosurgeon and brain research scientist, and at the time he'd been researching traumatic brain injuries. He had nothing to do with the Houston investigation at first: in fact, he was in Beaumont when it happened. However, in 2042, just as the official investigation into the disaster was winding down, Dr. Zilker was in Houston when he discovered an archived folder with patient information on a young male head trauma victim. The folder also held data and video recordings--apparently never before viewed--of an experimental procedure that had been performed on that victim, as you saw, on September 17th, 2038 in a hospital located in the former Medical District section of Houston."

"How'd the folder survive?" Karon asked. "Wouldn't the disaster have destroyed it?"

"The doctor in the video copied everything to his office on the north side of Houston--an area unaffected by the disaster. It's believed that his staff didn't monitor the procedure as it happened. They simply fired up the equipment and made sure it was recording before going off to do other office work.

"In all of the post-incident chaos, no one thought to examine the recordings. Maybe the doctor's staff was incompetent, or more likely, too grief-stricken by the death of the doctor and their own friends and family to even think about connecting the recordings to the disaster. In the end, everything was filed, archived, and forgotten--until Dr. Zilker came along, that is."

Travis's stomach tensed.

"What you saw earlier were the same recordings Dr. Zilker found on May 20th of 2042. He was just as perplexed as you were when he saw the recordings. It took him a while before he could believe one person could unleash such destruction." Allen glanced at Travis.

"Nevertheless, the data was indisputable. After months of study, Dr. Zilker determined that a

combination of imprecise calibrations, the doctor's manual adjustments, and areas of brain damage the team had missed caused the procedure to go extremely wrong, allowing the boy to 'tap' abilities no one even guessed existed."

No ...

"He initiated a massive, uncontrolled release of the four fundamental forces."

It couldn't be ...

"In other words, class, it was a blowout--the first, and also the biggest one in history."

Travis stared wide-eyed at Allen. He hoped he wasn't alone.

"Dr. Zilker determined the patient had come very, *very* close to becoming the world's first Tapper."

Questions swirled in Travis's head. Some of which he didn't want answered.

Allen paced slowly in front of his desk, his hands behind his back. "Remember our discussion from yesterday about the amygdala, and about how it affects the fear response? You saw the trouble the doctor and his team had with the patient's amygdala in the 2038 recordings, including how strongly it responded once the procedure began.

"However, where this stimulus would simply send a modern Tapper into a nightmare state, the boy was instead plunged into a state of absolute fear. To make matters worse, what he saw when he opened his eyes frightened him even more.

"As a result," Allen said, leaning against his desk again, "the poor boy unleashed forces on his surroundings that had never been released by a human in all of known history. Gravity, electromagnetism, and both nuclear forces collapsed, went haywire, call it what you will, and all because the boy didn't know what was happening and couldn't understand what he was doing in response. All he knew at the end was terror. Sheer, unimaginable terror. That's how he died."

My God ...

"Dr. Zilker called this the 'Spindletop Event,' since it led to the discovery of Tapper abilities, just like the first gusher at the Spindletop site near his home town of Beaumont led to the discovery of vast amounts of oil in Texas."

Christopher raised his hand. "How'd he manage to convince anyone of what happened? I mean, I don't see how anyone would have believed him."

"You're right," Allen said. "Dr. Zilker presented his findings in secret to the Congressional Investigative Committee set up to look into the disaster. It took some serious effort to get an appointment to speak, due to the incredible nature of the facts involved, but when he finally made his presentation, the government almost immediately shifted from investigation to research. Dr. Zilker led that research team, which eventually led to the founding of the Zilker Institute."

Travis finally overcame his shock and managed to speak. "What was his name?"

"What was whose name?" Allen asked.

"*His* name. The patient in the ... the 'Spindletop Event.' What was it?"

Allen took a deep breath and let out a long sigh. "Dr. Zilker took it to the grave with him when he died in '77. You see, the boy's parents were part of the quarter-million people killed in the Spindletop Event. So were the doctor and the medical team that performed the procedure. For that reason, Dr. Zilker didn't want the relatives of anyone involved in the Event to suffer any reprisals from the public. He felt they'd lost enough already. If he ever mentioned any of the names, it was strictly to the Congressional Investigative Committee, behind closed doors and sealed away for God knows how long."

Allen crossed his arms. "I agree with Dr. Zilker. Let the names stay sealed forever. They

were innocent victims, and their descendants don't need to suffer in their place."

"One person ..." Travis mumbled.

"What was that, Candidate Travis?"

"This Institute exists because *one person* had a blowout that killed a *quarter-million people*."

Allen looked Travis straight in the eyes. "Yes."

Travis leaned over his desk and stared back. "And you expect us to go out and risk a blowout on that same scale, *every* time we Tap?"

"Yes."

Travis's gut wrenched. He turned and faced the back wall of the classroom. *How the hell can you expect anyone to risk that on a daily basis? Do I really want to be that dangerous?*

Allen scanned the rest of the class. "Now comes the time when I remind you about my warning yesterday that you wouldn't like this part of the story. Yes, the Institute was built on Dr. Zilker's research after the Spindletop Event. People died so that this Institute may exist."

A quarter-damned-million people. How many more would I kill if I had a blowout?

"From the looks of things, some of you might have a problem with that."

Yeah, I have a problem with that. Do I still want to be a Tapper?

"The Spindletop Event was a great tragedy," Allen said. "No one wanted it to happen. No one anticipated that it *could* happen. It was no one's fault. But if Dr. Lukas Zilker hadn't found those recordings and put the pieces together, you and I wouldn't be here right now--and all those people would *still be dead*."

Travis turned back and faced Allen. *Those last three words were meant for me, weren't they?*

"What about after the Spindletop Event?" Trace asked. "I mean, there's got to have been more than just one blowout in history. How many people have died due to blowouts since then?"

Allen stood away from his desk. "You can see how many have died if you ask your computer. Or, better yet, go up to the 14th floor recreation area. The Zilker Institute maintains a wall of remembrance that honors everyone--Tappers and civilians alike--known to have died as a result of our operations."

His face took on a stony, serious look. "Wilson and I believe that volunteering to become a Tapper is the finest tribute one can give to the people who did *not* volunteer to give their lives back in 2038, as well as to those who have died since."

Travis caught Allen's attention again and faced him with both eyebrows lowered. "I still don't get how you can handle the job, knowing that you might be just as dangerous as the kid in the Spindletop Event. What's the company policy for dealing with that risk?"

Allen met Travis's glare for a moment, then lowered his head.

"We do everything possible to avoid situations that endanger others in the first place. Our Roughnecks work with local authorities to clear out as many people as they can before we start Drilling. If that's not possible, we consider Drilling offsite before we go where we're needed.

"When blowouts do happen, we take responsibility. We take care of anyone who gets caught up in our work as if they were our own. If people are injured, we provide as much support for them and their families as we can. If people die, we don't just put their names on a wall. We respond as if a Tapper has died."

He raised his head and returned Travis's glare. "We put our own lives on the line when we work. We do our best to keep others from having to do the same. When we fail, we mourn. We study. We learn. We set up research programs--you may learn more about those if you

become a Tapper--which are tasked with making *damned* sure we *don't* fail the same way twice."

Travis relaxed his glare, but only slightly.

Allen continued, addressing the whole class. "I said yesterday you've got to be ready to deal with serious consequences whenever you put on a Hard Hat and get ready to open your Tap. If you can't, once again I strongly suggest you make a beeline to Wilson's office and pull out of training. Being reckless with lives--yours and others--won't be paying tribute to or honoring anyone. For that reason, no one will think any worse of you if you choose to back out, either now or in the future.

"However, if you're on the fence about your decision, I'd like you to consider a few more things before you choose."

Allen adjusted his tweed coat and leaned against his desk again. "Every Tapper knows that we can be dangerous as hell if things go wrong. But we also know that what we accomplish is important--not only that, it's *needed*. I'm not talking about the flashy things, like building bridges, launching rockets, and the like. I'm talking about saving people's lives. Rescue missions, where normal rescue techniques aren't enough. Anyone remember the Lake Texoma dam failure back in '74?"

"Barely," Travis said, his glare fading. "I was only seven then."

"I remember it," Trace said.

"A team of Tappers went there and kept billions of gallons of water from flooding the Red River basin. They held that dam in place until the downstream population had a chance to evacuate. Afterward, they rescued as many as possible of the ones who stayed behind. There were some unavoidable casualties when the dam finally burst, but by God, *those Tappers saved millions of lives!*"

After a minute of thought, Travis finally released Allen from his glare. "Okay, you've made your point. I don't like it, though. I'm worried I might turn out to be more of a curse than an asset. It's a hell of a responsibility you're asking us to take on."

"You're right," Allen said, nodding. "But, remember this: Wilson's Wildcatters researched each of you before suggesting that you be invited to join. With yesterday's exception, they never would have picked you if they thought you couldn't handle the job."

"Now, with that said, do any of the rest of you want to back out today?"

In the back of Travis's mind, a distant voice spoke:

"You'll never make it! Your father wasted his life on you! You weren't worth saving!"

That sealed the deal. *Shut up, Mother. I'll prove you wrong. Just watch.*

"I'll stay," he said.

The rest of the candidates followed suit.

"Good!" Allen said, with a clap of his hands. "Now, we've got a lot of material to cover, and we're already behind. Let's get going."

CHAPTER 12 – RESERVOIR

Oh God, no, please, not now ...

Travis did his best to conceal his panic attack from his classmates in the auditorium. He wasn't doing a very good job of it.

A hand tapped his right shoulder. "Hey, bro," Christopher whispered. "You don't look so good."

Travis leaned back in his auditorium chair. It was a massive effort. "I'll survive," he said, the words coming out thickly. "Just a stomach cramp--must be something I ate."

"Lunch was hours ago, man."

"I know," Travis said between breaths. "Delayed reaction. I'll be fine."

###

It had started out innocently enough. Travis and his classmates sat with several other classes of Candidates in the Carthage Auditorium, between the 17th and 18th floors of the Institute. He drummed his fingers on his seat's arm rest. The last thing he wanted at the end of Friday class time was another lecture.

P.I.O. Arturo Salazar had opened the assembly with a scripted welcoming speech, complete with a mandatory lame joke, before briefing the gathering on a Drilling topic that had

utterly failed to grab Travis's attention.

Travis's attention was instead focused to his left, past Serene, toward Karon. She sat ever so slightly out of reach. He'd been working up his courage to talk to her, fraternization ban be damned. The way her long, brown hair framed her face and fell down around her shoulders made her irresistible. He'd hoped his days as a loner might finally end, but the assembly was ruining his timing.

He stifled a weary sigh as Arturo introduced the Director and Assistant Director of the Driller corps, Dr. Glen Allen Monroe and Dr. Gale Sabo.

Ah geez, Dr. Sabo again.

The pair entered the stage to a round of applause.

Travis finally got his first glimpse of Dr. Monroe. He stood a full head taller than Arturo and wore a neat grey suit, although not quite as finely tailored as Wilson's. His facial lines and salt-and-pepper sideburns made him look like he was in his mid-forties, but Tabitha's display showed he was 52. He radiated confidence as he shook Arturo's hand and took the lectern.

Dr. Sabo, on the other hand, went straight to her seat behind the podium and sat with her arms and legs crossed. She wore the same annoyed scowl she'd had when she'd given Travis his tour around the Doghouse. The scowl appeared to be aimed Travis's way.

What--is she staring at me? He glanced at her, then quickly looked away. *What did I do to piss her off this time?*

"Candidates," Dr. Monroe began in a compelling, professional voice, and then very quickly lost Travis's attention again. Travis kept trying to sneak looks at Karon, even when photos and schematics illustrating Drilling equipment appeared on his display.

Then a section of the lecture finally got his attention.

"The technology we use measures your overall condition on a tolerance scale that runs from 'tolerance one' to 'tolerance nine'. Tolerance one is your personal baseline reading. Tolerance six is the highest level at which we'll let you operate without Driller intervention, although we will consider backing you down if you stay there for too long. Anything above that means your personal safety is at risk, as is the safety of everyone around you.

"Note that our scale does not go all the way to ten," Dr. Monroe said. "Ten, Candidates, is a blowout."

A chill ran through Travis as he remembered the recording of the Spindletop Event. He looked around the auditorium. Some of the Candidates were noticeably uncomfortable. *If that's the impact you wanted, then mission accomplished, Doctor.*

"We will do everything we can to keep you from even *approaching* that level," Dr. Monroe said, moving in front of the lectern. "But, as your instructors have explained, we will not hesitate to plug your Tap if you're headed out of control.

"You'll be in control of your job, unless you exceed tolerance six. That's when we take the decision-making process out of your hands and put it in our own."

He gestured the virtual console data away and continued. "All this doom-and-gloom talk is probably making you a bit uncomfortable. It should, despite what I said about Tapping not being a suicide mission."

Suicide mission? When did I miss that bit?

"Now, you're probably now wondering how on earth a Tapper can carry any confidence into an assignment. We will help you build that confidence in yourselves. For that portion of the presentation, I'd like to call upon the Driller corps' Assistant Director, Dr. Gale Sabo. Gale, if you please?"

A round of applause went up as Dr. Monroe took a seat. Dr. Sabo took the lectern and scanned the audience as the applause died down. Her scowl changed to a forced smile as she locked eyes with Travis.

Travis's skin crawled. *Why does she keep staring at me? Jeezus, what did I do?*

"Good afternoon, Candidates," she said, finally releasing Travis from her sights. Her forced smile remained in place. She spoke in a jaded tone, as if reciting a speech she'd given a few dozen times too often.

"You've already had lectures, presentations, and tests, of course, but the best way we have to help you gain confidence is to guide you through simulations of the Drilling and Tapping processes in full Virtual Reality."

Travis instantly tensed. Knots formed throughout his gut.

Oh God. They use Virtual Reality, too.

He broke out in a cold sweat as his heart rate shot up. He'd suspected his training would involve full VR at some point, but he'd stubbornly refused to face it. Here it was, though, staring him in the face.

Control your breathing. Don't let your stomach rule your lungs.

Tabitha chimed for his attention on a private channel. "Your metabolism just went the wrong way on several levels. It looks like you're about to have a panic attack. Do you need a doctor?"

Travis shook his head quickly, trying not to draw attention to himself. He wrapped his arms around his midsection.

"Of course," Dr. Sabo continued, "it's impossible to fully reproduce the effect Drilling has on the mind. We will therefore concentrate on what happens before and after your Tap has

opened during most of your VR sessions."

Damn it, will she please stop saying VR? His breathing exercises were having the opposite effect, twisting his guts tighter with every breath. Travis fought to keep his nausea and anxiety under control, while at the same time not let on that he was in the beginning throes of a panic attack.

Christopher touched him on the shoulder at about that time. "Hey, bro," Christopher whispered. "You don't look so good."

Travis warded him off with his wild story about "something he ate." It took some doing, but Christopher finally relented.

Tabitha put an icon in a private viewport on Travis's virtual console and blinked it on and off. "Breathe along with this," she said.

Travis only heard bits and pieces of Dr. Sabo's speech as he focused on the icon. His stomach remained twisted in knots, but he managed to get his breathing somewhat under control.

"That concludes my portion of the presentation," Dr. Sabo said, after what felt like a lifetime. "Our meeting today was scheduled to be short, so if you have any questions, please submit them later, preferably via text. Mr. Salazar will wrap things up. Again, thank you for attending." She zeroed in on Travis again and smiled with an odd look of satisfaction.

Despite his slowed breathing, Travis's stomach still played havoc with his ability to think. He tried to return her gaze, but he could only hold up his head for a second or two.

Arturo returned to the lectern. "Thank you, Dr. Sabo," he said. "Candidates, I hope this presentation will help as you continue your training. You have many resources available on the ZINet that cover every aspect of the Drilling and Tapping processes, so I urge you to take advantage of them. For now, you'll be happy to know you're dismissed for the rest of the day.

Thank you again for coming. I wish you all a good weekend."

The audience applauded politely as the stage cleared. Travis did his best to join in the applause.

Christopher spoke up first. "Wow. That Dr. Sabo was weird. Almost like listening to a twentieth-century speech synthesizer."

Travis kept quiet. He was at a stalemate in his battle with the panic attack.

"Yeah, she sounded like she didn't want to be here," Karon said. "At least Dr. Monroe sounded like he meant business."

"I'll give you that," Christopher said. "I'd rather deal with him than her any day."

Travis managed to relax his stomach just long enough to allow him to speak. "I'm gonna go," he said, fighting to make every word sound at least halfway normal. "I think I'll check out some of the online stuff Arturo talked about. See you guys on Monday." He stood and stumbled his way out of the seating row before lurching toward the exit.

Once outside the auditorium, Travis fell back against the wall and gasped for air. The icon kept flashing on his virtual console. He fought to breathe in time with it.

"Now, what was *that*?" Travis heard Christopher say through the open door.

"He looked sick," Serene said.

"Sounded sick, too," Christopher added. "Think we ought to go find out what's wrong?"

Trace spoke up. "Nah. If he's got a problem, he'll work it out somehow. Give him his space."

"If you say so," Christopher said.

Yeah, Travis thought. He forced his feet to take him toward his apartment. *If you say so.*

CHAPTER 13 –RELAY

MMQE 00105 01204 01210

QUANTUM KEY ACCEPTED—DECRYPTED MESSAGE FOLLOWS

Update, as requested:

Internal works is making progress on the safety system. No problems reported.

External resource now inside, being trained for future utilization.

Possible internal variable discovered. Latest research suggests variable will wash out and become a non-issue soon.

Feel free to contact me any time, gentlemen. It's not like I have anything better to do than keep you updated.

MESSAGE ENDS

DELETE

DUMP CORE NOW

CHAPTER 14 – PILOT TEST

Travis spent the rest of the day after the assembly in silence in his apartment, fighting to bring his nausea under control and trying to put any thoughts of VR out of his mind. His bathroom was the target of several trips when he feared he was about to throw up, but all were false alarms. He considered contacting medical for a dose of anti-nausea medicine, but decided against it when he figured they would ask a bunch of questions that he didn't want to answer at the moment. Tabitha tried to engage him in conversation several times, but he was in no shape to listen or talk. He eventually crashed out before nightfall from mental exhaustion.

Saturday and Sunday were identical twins. He woke up late both days and dragged himself around the apartment until noon. He spent the remainder of each day watching recordings Allen had recommended through his virtual console.

Travis learned from the recordings that Tappers had a hand in almost every major engineering feat of the last twenty years, from constructing the world's first mile-high building to making the bridgings of the Bering Strait and the Strait of Gibraltar economically feasible. However, he was particularly impressed by some of the disaster rescues they'd helped with: hurricanes, tornadoes, earthquakes, and just about anything else that put people's lives in danger. Whenever there was a need for help, one or more Tappers would appear and get to work.

Allen had been right. They saved lives. Lots of lives.

By Sunday night he had finally managed to stop obsessing over the prospect of VR.

Monday turned out to be a normal classroom day, spent studying the history of Tapping and the Zilker Institute.

"You know, Tab," Travis said as he prepared a stir-fry for his Monday evening dinner, "this might actually turn out okay. Wilson was right about there being a lot of Tapper history, but the recordings I watched have really helped. Class here hasn't been harder than anything I ran into at the University."

"Are you sure?" Tabitha asked with a dissonant chime.

Travis stopped chopping vegetables. "What do you mean?"

"Are you sure things aren't any harder here than they were at the University?"

"You don't believe me? Go ahead." He resumed preparing his dinner. "Test me."

"Okay, let's start with basic history. What was the date of the first successful Tap?"

"April 18th, 2058." He moved the vegetables aside.

Tabitha rang her approval. "When was the first fundamental force manipulation attempted?"

"Eight days later, with gravity. Simple levitation of a one kilogram weight."

"Good! You deserve a cookie."

Travis smiled. "Maybe after dinner. Not while I'm slicing beef."

"Okay then, how long did the government's investigation into the Spindletop Event last?"

"Four years, from 2038 to 2042."

"And government research continued until ...?"

"Until 2058, when all research was transferred to the Zilker Institute."

"You do have the early history down pat," Tabitha chimed. "Now, let's switch subjects. How are you going to handle tomorrow's class?"

"Huh? Why, what's on tomorrow's schedule?"

"Two letters: VR." She rang minor chords to emphasize each letter.

Travis slipped with the knife and nearly cut his finger.

"Well?" Tabitha asked. "It *is* on tomorrow's schedule. How are you going to deal with it?"

Shit. Already? A familiar knot formed in his stomach.

"I don't know," Travis said. "I've been trying not to think about it since that damned assembly. Thought I was recovering pretty well until now." He tossed his knife on the chopping board in disgust.

"Suppressing your fears isn't good for you, and you know it."

"Come on, Tab!" He stared at the ceiling. "I don't need a psych session."

"If you keep going this way, you're *really* going to need one tomorrow."

Crap. Why the hell did she make me think about this now? "All right, Tab, I give up." He abandoned dinner and sat down at the kitchen table. "You want me to think about it? How about this? Let's test out some of your new Zilker Institute Network abilities and see if you can help me get ready psychologically for tomorrow."

Tabitha rang with anticipation. "Great! Where do you want to start?"

"I don't know. Pick something."

Tabitha paused for a second before chiming her first question. "What did you want to be before Wilson's offer?"

She knows that answer. "I wanted to be a band director."

"Why?"

"Because I felt like I needed to follow in my Dad's footsteps."

Tabitha chimed a low note. "Are you sure you didn't just want power instead?"

"What?"

"Power over other people."

Travis grabbed the edge of the table. "What the hell are you talking about?"

"Some high school band kids would do anything you told them in order to get good grades."

"Are you saying I'm some sort of megalomaniac?"

"Well, are you?"

"*Hell* no! I know what happens when someone gets that kind of power over someone else--first hand! There's no way I'd ever inflict that on another person."

"Then why were you trying to become a band director?"

"Because I owed it to my father! He was a band director, and he died saving me!"

Tabitha played a soft chime. "So, why do you want to be a Tapper instead?"

"Because I can make a bigger difference in life by being a Tapper than I can by being a band director."

"And what are you willing to do to become a Tapper?"

"Whatever it takes. Like Grandpa said, if you go for something, you've got to have the guts to stay with it, no matter what."

"Even if it involves going into VR?"

Travis halted mid-thought at his own ultimate question. *Can I force myself to do VR in order to be a Tapper?*

He sat up and did a breathing exercise. "That's one hell of an upgrade you got."

"It's not so much of an upgrade as it is access to more information. This Q & A session is based on a standard script used in the psych department. I modified it to fit your situation. There are a lot more scripts where that one came from."

Wonderful. I've got Sigmund Freud behind my ear.

"Honestly," he said as his breathing returned to normal, "I don't know what I'm going to do. Let me finish cooking right now. I'll try to think about it if I can keep from slicing off a finger."

"Fair enough," Tabitha chimed.

###

"Ah, man, I *hate* keeping up with this stuff," Christopher complained the following morning. He sat on the edge of his desk, waiting with Travis, Trace, and Karon for Allen to arrive. "History and gravity were bad enough, but this electromagnetic crap is a real pain."

"You know you're going to need it." Trace sat at her desk. She leaned an arm on it and propped up her chin. "You don't want to go out on a magnetic mission and accidentally electrocute someone instead."

"I know, I know, but I can't keep it straight in my head just by reading it and hearing lectures. I'm a hands-on learner. I wanna get into VR and try out some stuff."

Travis stifled a shudder in his seat. He tried one of his less-obvious breathing exercises. It didn't help much.

"Today's your lucky day," Serene told Christopher as she came into the room. "I saw Allen by the VR suite on my way here this morning." She shook out her black curls and sat down.

Trace looked up. "What were you doing up *there*?"

"What Allen told us to do. I took an early morning sightseeing trip through the Doghouse and happened to pass that way."

Travis changed the subject. *Anything but VR*. "Did you see any other Tappers while you were there?"

"Hmm," she said, looking at the ceiling. "Not that I know of."

"How about the rest of you?" Travis asked. "How many Tappers have you run into since we started training? Real ones, not the Candidates at the assembly."

"Three or four," Karon replied. The other Candidates nodded in agreement. "What are you getting at, Travis?"

"I find it odd that a building this big isn't crawling with Tappers. I saw one when I first got here, but I haven't seen any since. Just staff, techs, and admins."

"Maybe they get up and go to work before we do," Christopher said.

Allen entered the classroom and motioned Christopher and Serene to their seats. "Good morning, Candidates," he said as he leaned back against his desk. "You're in for some fun today, as Candidate Serene already knows. You're going to see some of what a Tapper sees. It's VR day number one, so everyone head up to the 18th floor and wait for me. I'll be along shortly."

All of the Candidates except Travis left the room. Christopher stopped and looked back at Travis until Allen chased him off and closed the door.

"Kinda figured this might be coming," Allen said. "Wilson briefed me on your situation before I came up here. He gave the two of us temporary authorization to discuss details of your past. As long as that door stays closed, we can talk freely." He leaned against his desk again and crossed his arms. "So. Here we are. It's time for VR. How do we handle this?"

"I don't know," Travis said with a sigh.

"You pleaded 'special case' in classes at the University and made arrangements for alternative assignments."

"Yeah."

"Can't do that here," Allen said.

Memories of his music history professor surfaced in Travis's mind. He stared at his desk in silence.

Allen walked over to Travis. "You *can't* skip this. If you have a blowout during your first real attempt, you won't take out just yourself. There'll be two lives on the line, and you'll be responsible for both. The only way you can prepare is by going into VR and visualizing the experience."

"I know. I heard what Dr. Sabo said."

"And you've talked to the psychs."

"Hah." Travis looked sidelong at the classroom wall. "Fat lot of help they were. All they could do was teach me breathing exercises, put me through biofeedback lessons, and try to get me into self-hypnosis. I went through all that years ago. This place is supposed to have the best medical people in the world. Why'd they make me go through the same crap again?"

"It was discussed," Allen said. "That's all I know."

"Great. More secrets."

"Just keep in mind this isn't like college VR." Allen put a hand on Travis's shoulder. "It's not you by yourself in one room and the teacher or their assistant observing in another. You'll have a full complement of techs and medicals ready to rush in and help if you need them. You'll also have a real Driller in the room with you."

"A real Driller?" Travis looked up at Allen. "Is this a special case?"

"Nope. Everyone gets a Driller in VR, just like in the real world."

Travis lowered his head. "What happens if I go in there and lose it?"

"Then you lose it. This isn't a test, Candidate Travis. It's training. If you lose it, we work with you until you get it to work. Candidates like you are hard to find, so we'll do anything needed in order to get you through."

Travis stared at his desk a second longer before facing Allen. "There's no other way?"

"Nope."

He took a deep breath and steeled himself. "Okay, let's get this crap over with."

###

Travis followed Allen out of the classroom to the elevator lobby. Despite Allen's assurances about the exercise, his anxiety worsened as they waited. He searched for something to distract his mind from the situation. A thought finally occurred to him as an elevator arrived.

"Allen?" Travis asked as the doors closed behind them.

"Yes?"

"You said something about Candidates like me being hard to find. What's the deal with that?"

Allen stood in silence for a couple of seconds. "Sorry, can't discuss that just yet. Shouldn't have mentioned it." He turned to Travis. "Don't go spreading that around or poking your nose into it. You'll learn, eventually. Maybe."

They left the elevator at the 18th floor and walked down the central corridor. "Another thing I've been wondering," Travis said. "Why haven't we seen more Tappers around the Institute? No one in the class has seen more than three or four."

Allen bit his lower lip. "Most of them are on assignment right now. That's all I can say. Wilson knows where they are. If he deems it necessary to discuss it with you, he will."

They finally met up with the other Candidates. The group still had some distance to go to get to the VR suite. Along the way, Christopher pulled Travis aside.

"Hey," Christopher whispered, "you gonna be okay?"

"I don't know. Maybe."

"What's wrong, man? You got a problem with VR or something?"

Travis let out a tense laugh. "A problem. Yeah. I guess you could call it a problem."

Christopher gave Travis a pat on the back. "Well, whatever it is, I hope you get over it. From the look of things, they really need more Tappers around here, and that means they need you. Relax and you'll be fine."

"Thanks," Travis whispered back. "I don't know if it'll help, but I do appreciate the encouragement."

"Anytime, man," Christopher said, beaming a smile.

The Candidates finally reached the VR suite. "Okay, folks, who wants to go first?" Allen asked. Both Christopher's and Trace's hands shot up.

"Trace, your hand was up first. Come on in and we'll get you ready. The rest of you, have a seat in the waiting room across the hall. We'll call you in when it's your turn."

The waiting room was a corporate-style break room. A dinette table with four chairs sat in the center, surrounded by a small refrigerator, a water cooler, and a counter holding various snacks next to a coffee machine. Travis took the seat nearest the door, while Christopher went straight for the snacks.

Karon sat across from Travis. "Why'd you stay behind? Was something wrong?"

"Just a personal problem. Nothing to worry about." He stifled a cringe from the lie.

Serene poured herself some coffee and took a seat. Travis looked at the coffee and wished he could nurse a cup of his own. *Not today. It'd probably come right back up.*

"Did you ask Allen about the lack of Tappers around here?" Serene asked.

Travis nodded. "He wasn't too eager to share any info. He told me most of them are on assignment. Said Wilson would tell us if we needed to know more."

"I tell you, man," Christopher said as he crunched on a peanut butter bar, "I think they're getting desperate for more Tappers."

"What, you don't trust what Allen said?" Karon asked.

"What do you think? Why wouldn't he want to talk about it with Travis? No, something's going on that they don't want us to know. Maybe they've got problems with recruitment--or with blowouts."

Serene leaned back in her chair. "Maybe it's because they're getting too many recruits like you that gripe about assignments all the time."

Christopher started to fire back at Serene, but Travis broke up the argument. "Come on, y'all, knock it off, okay?"

Serene laughed. "Y'all. We're not supposed to talk about our backgrounds, but that 'y'all' of yours is a dead giveaway that you're a Texan, Travis."

"Oh, big deal," Karon said. "Besides, accents give everyone away."

"Not with Travis," Serene said. "He hardly has any accent I can tell. If it wasn't for the 'y'all,' I never would have guessed."

"Guessed what?" Allen said, interrupting as he opened the door. "Enough background talk," he ordered. "You want your friends and family to go into Witness Protection?"

"Wouldn't bother me," Serene said.

Allen cut her off. "You know the rules—absolutely no background talk."

Yeah, unless authorized by Wilson.

The room went quiet, except for the sound of Christopher and his peanut butter bar.

"Travis," Allen said, "we're going in alphabetical order. You're next."

"What?" He shot up straight in his chair. "Alphabetical order? Doesn't that make Christopher next?"

"Nope. Travis comes after Trace. Christopher's after you."

Travis gulped. "Is she finished already?"

"Not quite, but I want you to see what she's doing. Come on." Allen held the door open and waited for Travis.

Travis's heart rate shot up as he stood. Old memories fought their way back into his head, feeding his anxiety. He'd promised Allen he would go into the VR suite, but he wasn't expecting to do it so soon. His feet refused to move.

I don't want to go ...

Christopher reached over and shook Travis's arm. "You can do it, man. Just remember yourself and don't get lost."

Travis's breathing rate began to go out of control. "I wish that was the problem," he said between breaths, "but I'll take any support I can get. Thanks." He forced himself to move and followed Allen out of the break room.

The short walk from the waiting room to the VR suite drained Travis like a marathon. Allen pulled open the main door and stood aside to reveal a softly-lit oak plank wall, just past the entrance. Two wood-framed glass doors stood sentry to rooms on each side. Unknown

equipment cast faint, indirect glows into the entry.

"Take the right-hand door," Allen said. "We're going into the observation room first."

Travis opened the door and took several timid steps inside. Four men in lab coats stood in the darkened room, illuminated by the colorful lights of a control console. A woman sat at the console and operated the VR system. The others stood behind her and watched the subject--Trace--in the adjacent room through a one-way window.

Trace sat in something that mimicked an early-century dentist's office chair. Her head was enclosed from the top to the ears by a VR helmet. A woman in a lab coat--the Driller, Travis guessed--sat nearby in a regular chair, operating a virtual interface.

"She's just made it past the Drilling simulation," Allen whispered. "They'll probably have her try a simulated lift soon--depending on how well she's done so far."

As Allen spoke, Trace's right hand rose slowly. "Good," the Driller said. "You've got it airborne. Now, picture the spot moving away from you."

Trace held her breath and moved her hand forward. A second later, she weaved both hands through the air as if fumbling an object between them. She finally flung them to her sides.

Travis jumped, startled. "What happened?" he whispered.

"She dropped the virtual object," Allen whispered back. "No big deal."

"That's okay," the woman at the console said. "Not bad for a first attempt. You'll get plenty more chances. All right, we're going to bring you out of VR in three ... two ... one ... now."

The Driller helped Trace out of the helmet. Trace appeared shaken. She stood with difficulty and walked slowly toward the exit.

Travis's heart rate quickened further. He knew he was next, but neither his mind nor his

body wanted any part of what was going to happen.

"Don't block the door," Allen said. "Let the techs handle things from here." Two of the men left the console room and joined the Driller in helping Trace out of the VR room.

"Okay, Travis," Allen said, "you're up."

Travis's feet hung on the verge of another panic attack. Someone put a hand on his shoulder and urged him forward. He tried going through the relaxation techniques psychs had pounded into him for so many years. Nothing worked.

I don't want to go I don't want to go I don't want to go I don't want ...

His nausea grew as he trudged toward the door. Vertigo joined the already-sickening blend of symptoms overwhelming him.

I don't want ...

Memories that marked a major panic attack were starting to take over his mind. Memories he couldn't suppress.

Allen held the console room door open for Travis and then opened the door to the VR room. A new Driller waited for him.

So did his memories.

Memories of being beaten by his mother because she blamed him for his father's death. Memories of fear every time his mother came toward him, of her screaming that he wasn't worth saving.

Allen gave Travis a reassuring pat on the shoulder. "Do good work in there for us," he said before handing Travis off to the Driller.

Memories of asking for food and being beaten because he'd interfered with his mother's VR simulation of her dead husband. Memories of wanting to be with his father in VR. Wishing

there was no such thing as VR.

The Driller's lips moved. Nothing she said made it to his ears.

Memories of hunger, of trying to escape, of being caught. Memories of pain, of hating his mother more with every blow she landed, of hating VR more with every drop of blood that fell.

Memories of tears that didn't stop until he had no more to shed.

The Driller took Travis's arm. Travis flinched.

Memories of being locked in his room and chained to a bed. Memories of thirst, of starvation, of frustrated cries for help being ignored. Memories of clawing at his ankles until the skin hung from them in shreds, of chains that wouldn't come off.

"Just relax," Travis finally heard the Driller say, "and I'll help you see what it'll be like when we open your Tap. Here, have a seat."

Memories of sitting in a pool of his own blood, feces, and urine while hearing his mother living in VR bliss with her dead, simulated husband, just outside his door.

"I'll take care of you."

Memories of his body shutting down, of being unable to scream, to see, to feel. Memories of pure hate, toward his mother, toward VR, and in the end, toward himself. Maybe he wasn't worth saving after all.

"Who did you say you were?" Travis forced out through heavy breaths.

"Doctor Talbot," she replied.

Memories of wishing for death.

"I hope you've got a good clean-up crew, because I'm gonna be sick."

He fell to his knees and threw up.

###

Allen and Doctor Talbot rushed Travis out of the VR room and toward the nearest restroom. Dr. Talbot called in a med alert through her virtual console along the way. Puddles of vomit marked Travis's tracks along the pink granite floor. Stinking bile covered his shirt.

Once they reached the restroom, Allen guided Travis into a toilet stall. A few minutes passed while Travis continued retching. Allen opened the stall door between bouts. "You feeling any better now?"

"I think I've run out of stuff to throw up," Travis said as yet another round of dry heaves hit.

A pair of med techs finally arrived. One helped Travis out of his stained shirt and cleaned him up with a damp towel. The other tech handed a small tray to Dr. Talbot. She took a pair of micro-intravenous patches from it and put them on Travis's arm and neck.

The waves of nausea receded almost immediately. His ability to stand up also slipped away, nearly as quickly. The first med tech left for a moment, then returned with a wheelchair. He and the other tech helped Travis into it and wrapped a blanket over him.

Travis's memories of horror dissolved, replaced by drug-fueled giddiness. He tried to talk through the medicine's effects as the techs wheeled him out of the bathroom.

"Ssssooooo ... where we goin'?" he asked no one in particular.

"*You* are going down to 11th floor medical," Allen said. "Dr. Talbot and the techs will take you there and make sure you're okay. I'll check up on you after we finish the rest of the sessions."

"What, you're not comin' wif me?"

"No, but you won't miss me. That stuff Dr. Talbot gave you will have you asleep before you make it to the elevator."

His consciousness was already fading. "I'm sssorry, Allen," he said

"Sorry?"

"Sorry for ssscrewin' up."

Allen knelt down beside him. "You *tried*," he said in a reassuring voice. "That's important. We'll help you make it through this eventually. I promise."

"Thankssss ..." He was on the verge of passing out.

"Make sure he gets your best care," he heard Allen tell Dr. Talbot. "This is more than just your standard case of stomach flu. He needs help. Do good work for him down there."

"We will," Dr. Talbot replied. "Come on," she ordered the techs, "let's get him going!"

CHAPTER 15 – UNSTEADY STATE

Travis drifted in and out of consciousness while the medicines were in control. At one semi-lucid point, he heard a man and a woman arguing in whispers nearby. He couldn't make out what they were saying until the man stopped whispering.

"No, Gale," he said, insistent. "This is my call. He works with the person I choose, and that person isn't you."

"Damn it, Glen," the woman said. "This isn't going away." Travis's consciousness faded along with her footsteps as she stormed off.

Eventually, the drugs wore off to a point where Travis was able to stay awake. The first thing he did once lucid was examine his surroundings. He found himself in a private hospital room. A bag of fluid hung next to his bed. A tube attached the bag to a micro-I.V. patch on his hand.

Oh. Right. Hydration after blowing my breakfast all over the floor.

Nurse Paige soon entered. "Well," she said, "I wasn't expecting to run into you again so soon. How are you feeling?"

"Hungover. Human, though. How long have I been out?"

"Just a couple of hours. Think you can handle some water?"

"Sure." Travis sat up. Nurse Paige gave him a cup, which he downed quickly. "Could I have another, please?"

"Drink this one a little slower. I think we can probably peel off your I.V., but I'll let the doctor make that decision." She made a couple of gestures on her virtual console. About a minute later, a doctor entered the room.

"Is our patient feeling better?" he asked, speaking with a heavy South Asian accent. A dark complexion and a thick mustache offset the doctor's bright smile. His lab coat hung loosely on his wiry frame.

"I believe so," Nurse Paige said. "He says he feels human again."

"That is a good start. Go ahead and remove his I.V. patch, if you will."

She removed the patch and left Travis alone with the doctor.

"Candidate Travis, I am Dr. Chaudhry," he said as he gestured at his virtual console.

"Nurse Paige tells me you were rather out of it when you came down here. Are you still feeling any effects from the medications?"

"I'm tired and thirsty, but no, nothing other than that."

"Very good." Dr. Chaudhry rolled a hospital table with a pitcher of water on it within Travis's reach. "Let's keep you on just water for now. We'll track your progress for a few more hours."

"Do I really need to stay here that long?"

"I'm afraid so, yes. You had a very nasty bout of emesis as you were about to begin a VR session."

Travis's heart rate quickened.

"Ah, yes," Dr. Chaudhry said, gesturing at his virtual console. "Your pulse and your

breathing are still affected by the mere mention of VR. Allen said this might happen, so we must monitor you for at least the next few hours to make sure the nausea doesn't come back. If you can keep a light supper down, we'll consider letting you rest in your own quarters tonight." He excused himself and left Travis--and Tabitha--alone in the room.

Travis sat silently in the bed, wearing a glum expression and alternating between staring at the ceiling and the wall. Tabitha eventually broke the silence. "I can tell you're physically okay," she chimed, "but I can only guess at your mental state. How are you, really?"

Travis considered his answer for a moment. "Embarrassed. Mad at myself. What else would you expect?"

"I didn't expect your reaction would be *that* bad. You got nausea with your panic attack during the assembly, but this is the first time I've actually seen you throw up."

"I know. I also know what made it worse."

"What?"

"Fear of being unable to back out."

Tabitha paused for a moment. "You've *never* gone through a VR session, have you?"

"No, I haven't."

"You didn't have a choice this time."

"I realize that." Travis laid back and rolled on his side, looking at the door. "Just the other day I said I'd do anything it takes to become a Tapper. I promised Grandpa I'd finish what I've started here. What if I *can't* finish what I've started?"

Allen walked into the room. "No one's said that yet," he said, closing the door behind him. "Mind if I link in?"

Travis nodded and frowned, annoyed at the interruption. "Tab, give him access and a

transcript of what we've been saying since I woke up. I don't wanna repeat it." He felt the tell-tale click of a link and heard Tabitha's tinkling chimes as she sent him the data.

"Mmm-hm," Allen said as he followed the transcript. "I think you can add fear of failure and self-doubt to your diagnosis, too. You've got issues, Candidate Travis."

Travis shot a "tell me something I don't know" look at Allen.

"The medics might be able to help you with the nausea and vertigo." Allen pulled up a chair and sat down. "They've got new drugs that handle both without turning you goofy or knocking you out. They can do the same for the anxiety. What they can't do is drag you in there and put you into the chair against your will. You've got to handle that part yourself."

"I *know* that, damn it!" Travis shouted. He threw aside the blanket and sheets and sat up on the side of the bed. "Don't you think I've heard that a million times before? Every time I ran into a problem during post-traumatic stress counseling, I'd hear, 'you've got to pull through this yourself.' Well, you know something?" He bolted up, almost knocking over his hospital table. "I'm *sick as hell of hearing it!* I've been 'pulling myself' through shit since I was rescued from that fucking room! I've managed to pull myself through everything but this damned VR problem, and do you know why I haven't overcome that? *No!* And neither do I!"

He pushed away the table and paced back and forth. His hands shook. "I've had psychs and counselors talk to me, medicate me, put me through therapy, and I've *still got this fucking problem!*"

"And what problem would that be?" Allen asked, his voice calm.

"THAT I'M AFRAID I'M GOING TO TURN INTO MY GOD DAMNED MOTHER!"

Travis stared straight through Allen, fighting to catch his breath. He clenched his fists so tightly that veins bulged on his hands and arms.

"The drugs should have a better chance at working now," Allen said. "We've all been waiting for you to admit the root of your VR problem."

"Waiting for it?" Travis gaped at Allen. "*Waiting* for it? What the *fuck*, Allen?"

"We needed you to get it out in the open before we could really help you with it."

"Well, it's *damned* sure out there now!" Travis shouted, exasperated. "It explains why the psychs never asked me about her. So, Allen, tell me--now that I've got it out, how in the *hell* can you seriously think *anything* you've got here is going to help me any better than what I've already tried?"

Allen leaned forward and kept quiet until Travis sat down and collected himself somewhat. "Travis," he finally said, "I'm no psych. I'm no counselor. I merely go with what they tell me. Other than that, I'm just a Tapper who's seen way too much happen to others during my time. What I *haven't* seen is someone in training who's gone through anything like you have before coming here."

"Hmpf. You know more of my background than you let on the other day," Travis said with a glare. "I thought that was off limits."

"Special circumstances," Allen said. "That's why your rant didn't set off any alarms. Travis, you've *lived* a nightmare worse than most of us ever had to fight through during Drilling. Believe it or not, that could make you a great Tapper. At the same time, it could make you dangerous as hell. One bad flashback during Drilling or while your Tap is open and you could do as much damage as the Spindletop Event."

Someone knocked on the door and let himself in. Wilson.

"What are you doing here?" Travis asked, crossing his arms. "Did I blow your cleaning budget for the month?"

"No, just checking in on a potentially very valuable person," he said as he closed the door and walked over to Allen's side. "Mind if I catch up on the conversation?" Both Travis and Allen allowed Wilson to link in and watch the transcript.

Wilson perked up when he heard Travis's outburst. His eyes widened for a split-second, then settled back. "I'm sure it was hard as all get-out admitting your problem," he said. "What Allen said is true--we have a better chance of helping you now. And, on that same note, you will likely be able to help *us* in ways beyond what a regular Tapper can."

"Beyond a regular Tapper? Phbtt. Yeah, right," Travis scoffed. "I can't even do VR."

"Go ahead and fill him in," Wilson said to Allen as he pulled up another chair. "It's that important."

Allen nodded and then faced Travis, letting out a deep sigh. "You've been suspecting we're short on Tappers, right?"

Travis nodded, wary of where Allen was going.

"Well, we are. We've had a lot of near-blowouts lately. We don't know why--just that there have been too many. Hell, to me, one is too many. Tappers are getting their Taps plugged way too often.

"It's a problem we haven't been able to solve. Some of the admins think we may have to shut down the whole Tapper program if it keeps up. Others, though, myself and Wilson included, think we might be on the threshold of something else--something *big*. Something that might be changing the nature of humanity itself, and *you* might be part of the key to making it happen."

"*Me*? Changing humanity? Bullshit." Travis said. "You're trying too hard."

Wilson leaned forward. "Look me in the eye," he said. "This is *no bullshit*, Travis."

"First Allen, now you. Dropping the 'Candidate' protocol. What is this?"

Wilson sat up straight. "Interfaces--Execute USI bypass 14-1, T-code Wilson Theta Sigma 016, command three. The following information is compartmentalized. Interfaces linked to mine now have access to secure files 1201 and 1202. All conversation from this point until override release is not to be shared by interfaces under any circumstances without proper override protocol. Jake, Tabitha, you got that?"

Tabitha rang her confirmation. Travis stared at Allen. "Jake?"

"Part of my own past, now that the subject's open. Jake was my grandfather's name."

"Listen up," Wilson said. "After we leave this room, you keep your mouth shut, Travis. If you're not sure if someone is in on this information, use the code word 'Cloudberry.' If the other person replies with 'saskatoons,' your computer will dig into her database and let you know whether or not they're in on it. If you don't get both computer confirmation *and* the code word response, *don't discuss anything with them*--someone outside the group might have hacked their way in."

Wilson glanced at Allen. "Travis is now authorized to access the Cloudberry program. Bring him in, please."

Allen's voice took on an ominous tone. "Wilson and I, along with some of the Institute's better researchers, believe something is happening that's affecting Tappers in an unprecedented way. We're not sure where it's happening--during Drilling, while fine-tuning an open Tap, or even outside of the whole Tapping process. Whatever it is, we believe it may mean we are on the verge of opening a *permanent* Tap."

"A *permanent* Tap?" Travis said, both eyebrows springing up.

"The possibility was discovered by pure coincidence, just like Tapping was discovered as a result of the Spindletop Event. We don't know what the consequences of a permanently open

Tap would be. Frankly, the idea has some people shitting their pants."

Wilson took over. "Not everyone believes that it's happening. Some think one or more of our Drillers have been compromised and that they're intentionally causing Tappers to get plugged. I'm not going to argue with them--it's my job to follow all possible leads, and judging from the overall Drilling statistics, there may well be a security breach in the Driller corps. That would be a major disaster in itself. Security is quietly looking into every Driller and Roughneck we have worldwide to uncover the breach, if it exists.

"Meanwhile, a few of us think we see a data line in those same Drilling statistics that points to a fundamental change in the way some Tappers' brains are responding during the Drilling process."

Allen nodded at Wilson and continued. "It started when some Drillers noticed odd numbers in their Tappers' brain readings and thought they needed to fine-tune them out. Before we knew it, we had two plugged Tappers and one blowout. Wilson immediately issued instructions to stop the fine-tuning."

"At the same time," Wilson said, "a small group began investigating doing fine-tuning based on that same data--more carefully this time. It's all being done on a volunteer, highest secret basis. So far, we've had some minor successes in altering Taps so they stay open for almost eighteen hours, but we've also had some close calls when we've tried to push things too far. At least we've avoided blowouts or plugs with Cloudberry program volunteers.

"Hell, we might be wrong about the whole thing. It may just be a statistical anomaly, and all of this may be a wasted effort. Wouldn't be the first time. Me, though, I'm betting a different way this go-round. I think we just haven't found the human who can handle the full set of tuning changes yet."

"And you think I might be that human?" Travis let out a sarcastic laugh. "How the hell can I be that human? Remember, you're looking at someone who threw up before even making it into the VR chair."

"Travis," Wilson said, his strange aura returning as he leaned forward, "your baseline brain readings already match some of the ones we've seen in the Cloudberry volunteer group, especially those who were affected first. That's why we say you could be dangerous as hell--and why we think you could be the most powerful Tapper ever."

"Most *powerful*?" Travis blinked at Wilson's aura.

"If you volunteer to be a part of the Cloudberry program," Wilson said. "That's also why we *have* to get you through VR. Now that you've admitted your biggest fear, we've got to make sure you can overcome it and not have it turn on you. We're not about to risk lives--yours or anyone else's--on the chance that you might blowout during your first Drilling session."

Wilson's aura faded away as he leaned back in his chair. "Personally, I'm betting you'll be able to pull yourself through VR. Those medications Allen told you about really are unlike anything outside the Institute. They can help you make it into the chair and put the helmet on. The rest should be easy."

"Easy," Travis said, fighting off a sudden urge to scratch his back and ankles. "Sure." He looked Wilson and Allen in the eyes. Neither of them blinked. "Good Lord, you really are serious about this, aren't you?"

"Extremely," Wilson said.

Travis sighed. "Okay, let's go back a bit. Say I try VR again, with the help of your super drugs, and I wind up barfing my guts out again. What then?"

"We try again," Wilson said. "And then we try another time. And we *keep on trying* until

you can pull yourself through the fear and the pain and everything else that your mother dumped on you as a child. Whatever we do, we don't give up. You're needed too badly."

Allen spoke. "The only person who can say no right now is you. We hope you won't."

Travis held his forehead in his hand. "How did the rest of the class do in VR?"

"Mostly average," Allen answered. "Christopher was excited until he got the helmet around his head. Lousy time to find out you're claustrophobic. We're getting him through that, though, and we'll get you through your problems--regardless of whether or not you intend on volunteering for the Cloudberry program--if you'll let us help you."

Travis took his face out of his palm and looked up. "Dear Lord, I don't know why I'm saying this," he admitted. He took a deep breath. "All right, I'll try again, damn it."

Wilson looked at Allen and smiled. "Great!" Wilson said. "I'll personally talk to the medics. You think you can give it another shot tomorrow?"

"Sure," Travis said, sighing. *What the hell else can I do?*

"Good deal," Wilson said. He stood up to leave the room, then stopped short. "Oh, one more thing. Despite the shortage I mentioned, the honest truth is we usually have a good-sized population of Tappers on campus. Right now, most of them are on assignment or on detail to other offices around the world where the shortages are worse. Allen, go ahead and share the first part of that info with his classmates so they'll be less inclined to start up the rumor mill."

"Will do," Allen said.

Wilson spoke to the qLinks again. "Jake, Tabitha, release USI bypass 14-1, T-code Wilson Theta Sigma 116, command one. Authorization to compartmentalized files 1201 and 1202 is canceled and not to be discussed until future authorization. See you guys later."

Both interfaces complied as Wilson unlinked and left the room. Allen stood up to follow.

Travis stopped him.

"Allen, are you absolutely sure those medications will work?"

Allen looked at the floor for a second before facing Travis straight on. "We'll *make* them work. Our best experts will get on it. I promise."

"I don't know if I should thank you or not."

Allen grinned. "We'll find out tomorrow."

###

The "light supper" went down with no problems, so Travis wondered why he wasn't released back to his room afterward. His confusion cleared somewhat when a pair of familiar faces entered his room--Nurse Paige again, and Dr. Shugart, each carrying a small tray.

Travis greeted them. "I didn't know you worked with head cases like me."

Dr. Shugart smiled back. "There *are* no head cases like you, Candidate Travis. I thought you knew that." All three chuckled. "Seriously," he said as he took Nurse Paige's tray and sat it on the hospital bed table next to his own, "We're here to help you get a good night's sleep. Both of us will need to work with your computer, if you don't mind letting us have access."

"Go ahead," Travis said. He felt the clicks as they linked in. Seemingly random characters appeared in a side viewport as Nurse Paige typed on her virtual console. While she was busy, the doctor gestured at his own console before retrieving a pair of micro-I.V. patches from the trays.

"Why can't we do this in my apartment?" Travis asked. "Are you sedating me?"

"Clarifying you," Dr. Shugart said as he showed the patches to Travis. "Neural clarifying drugs. We need to monitor them more closely than we can at your apartment. They'll keep your brain from chemically overthinking things tonight. The effect is similar to a sedative, but they

won't depress your breathing or leave you feeling hungover in the morning."

Dr. Shugart placed a patch on either side of Travis's neck. Travis's skin tingled as groups of microscopic needles inside the patches searched and pushed their way between his cell walls and into the proper blood vessels before expanding to let the medicine through.

Mere seconds later, Travis let out a surprised, involuntary yawn. "Man," he said. "They're like a sedative, all right." He yawned again. "Mind if I go ahead and crash out?"

"Not at all," Dr. Shugart said with a comforting smile. "Nurse Paige and I will finish up and be back for you in the morning. Good night, Candidate Travis."

Travis murmured a reply, pulled up the covers, and instantly fell asleep.

###

Travis woke up the next morning and blindly tried to reach to his left for Tabitha. His arm didn't want to move.

"You're still wearing your computer," a woman's voice said.

He opened his eyes to find Dr. Shugart and Nurse Paige standing to his right. Nurse Paige was preparing another micro-I.V. patch.

"Please don't try moving again just yet," Dr. Shugart said. "We need to get the neural clarifier out of your system first."

Travis felt a bit stiff, but fully awake. He blinked and glanced around as Nurse Paige swapped out old patches for new.

"How long have I been out?"

"Oh, about eleven hours," Nurse Paige said with a smile.

"Eleven? The last time that happened I felt like I needed more sleep to get over being out for so long."

"I'll bet you'll feel better this time," Dr. Shugart said. "We should have enough of the clarifier out of your system in a couple of seconds from ... now." Sure enough, the stiffness drained away from Travis's muscles.

"You might not want to sit up just yet," Dr. Shugart cautioned. "The neural clarifier helps you sleep without nightmares and without thrashing around, but it can leave you a little off balance. Nurse Paige and I are working on that, as well as on taking care of what Allen and Wilson promised."

"Allen and Wilson ..." Travis said as Nurse Paige removed a patch from his hand. "Are you working with them on their project?"

"Project? What project would that be?" Dr. Shugart said with an enigmatic smile.

Tabitha jumped in on a private channel. "Damn it!" she rang. "Wake your brain up and keep your mouth shut about 'projects'! You know how you're supposed to ask."

Travis nodded slightly to let Tabitha know he got the message. "Umm ... nothing, never mind."

Dr. Shugart gestured at his virtual console while Nurse Paige prepared another set of micro-I.V. patches. She put two on Travis's neck and another on his left hand. Travis instantly felt an improvement in his ability to focus his thoughts as the new drugs took over.

"Okay," Dr. Shugart said, "let's try sitting up now. Don't get out of bed--just see if you can stay upright."

Travis had no problem.

"Good! Now, Candidate Travis," Dr. Shugart said in a serious tone, "this is important, so listen carefully. I want you to focus on something, *anything*, other than VR. Focus on the walls, your hands, let Tabitha play you a video, whatever. Follow that instruction until I tell you to

stop, okay?"

Travis realized what was going on, but he was surprised his heart didn't race when the doctor mentioned VR. In fact, he felt mentally level. He shifted his focus to the sensation of the patches on his neck. After a few seconds of concentrating on them, he nodded at Dr. Shugart. "I think I've got the idea," he said.

The doctor made more gestures on his virtual console. A pair of medical techs arrived soon after. "We're going to see if Candidate Travis can stand," Dr. Shugart said to them. "Please be ready to give him a bit of support." The techs positioned themselves on either side of Travis.

Travis glanced around at the people in the now somewhat-crowded room. He adjusted himself so his feet hung over the right side of his bed.

No problem with that.

He shifted his focus again and stood up without any help. He remained physically stable and mentally level.

"Very good," Dr. Shugart said. "Now, if you would, please take four steps forward and tell me what three times eighteen is when you stop."

Travis strode forward, hit his mark, and answered, "Fifty-four."

"Perfect!" the doctor said, dismissing the techs. "I believe we're on the right track. Nurse Paige, please let Allen know we'll be ready to go in approximately thirty minutes. Candidate Travis, there's a change of clothes in the closet behind the chairs. Please get dressed and meet us in the hall when you're done."

###

Travis found Allen waiting outside the VR suite's outer door. "How do you feel, Candidate Travis?"

"Well," Travis said as he pointed out his patches, "whatever Dr. Shugart and Nurse Paige have pumping through me has got me feeling pretty positive about myself right now. Almost a little giddy, to be honest."

"Try to rein that in," Allen said. "Thanks for getting him here, you two. Are you sure he's safe?"

"As safe as we can get him," Dr. Shugart said. Nurse Paige nodded her agreement.

"Good. Let's get him set up." Allen opened the suite door and led everyone inside. "Nurse Paige, would you finish preparations for us?" He and Dr. Shugart then went into the console room.

Travis followed Nurse Paige into the VR room and sat in the chair. "Are you sticking around to work with me today?" he asked.

"Yes," Nurse Paige said. "I'll be your Driller, while Dr. Shugart will monitor things in the console room. Don't worry about that right now. Just focus on the wall in front of you while we get you set up."

Travis stared at the wall. He focused on its details--the soft ambient light shining on it, the smoothness of its surface, how it seemed to curve ever so slightly. Before he knew it, Nurse Paige had taken his head into her hands and was leaning it forward.

"Okay," Dr. Shugart said over the still-active link with Tabitha. "Here's another very important instruction for you. I need you to close your eyes and focus on doing whatever you like doing the most. Ignore whatever else is going on around you until I tell you to stop."

Travis saw an opening and took advantage. "How about picking cloudberries?"

"That works, too, although I'm partial to saskatoons myself."

"Confirmed," Tabitha rang on her private channel. "Dr. Shugart's in the Cloudberry

program."

Good info to have, Travis thought. Meanwhile, he sensed something happening around his head, but he pushed the feeling to the back of his mind.

"Okay, you can stop now," Dr. Shugart said. "Candidate Travis, please open your eyes, look straight ahead, and listen carefully to Nurse Paige."

Travis opened his eyes and looked forward. The wall in front of him looked the same, but his head seemed heavier.

"Good," Nurse Paige said. "Now, I'm to your left, so please look this way."

Travis turned to the left. No one was there. "Are you sure you said 'left'? I don't see you."

"Guess what?" she said. "You're in full VR now."

"What?" Travis said, genuinely shocked. "VR? Are you sure?" he asked, his voice almost breaking from giddiness.

"No question about it," Nurse Paige said. "Now, please focus on the wall again."

Travis followed her instruction. "Am I hypnotized?"

"No, you're not. Punch yourself in the groin."

"What? Hell, no!"

"See? You can refuse commands. No hypnosis. You're just in a state where it's easier for you to follow instructions you *want* to follow. You *wanted* to get past the VR task, so here we are. You know what we're going to do--you just haven't obsessed."

He looked around his virtual environment. "I thought there'd be more than this."

"There will be, soon enough. We're just getting started."

"What else are--"

"Don't lose focus," she said. "Yes, we'll be doing other simulations. Don't obsess over

how you'll react--just understand that they'll happen. We'll be here with you, all the way. Now, are you ready to give this a go?"

I haven't turned into my mother yet. Can I do this? Dear God, please let me do this!

He nodded and took a deep breath. "Never been readier."

CHAPTER 16 –RELAY

MMQE 16014 00384 03416

QUANTUM KEY ACCEPTED—DECRYPTED MESSAGE FOLLOWS

Update:

Internal variable did not wash out as predicted, unfortunately.

Higher powers are lending him serious aid for some reason. Investigating this and gathering data to assess project impact.

This comm relay was on my dime, gentlemen. Only expect these in rare occasions.

MESSAGE ENDS

DELETE

DUMP CORE NOW

CHAPTER 17 – RIG UP

"It felt like cheating after the first go," Travis said as he checked the sausage in the smoker. He and his class were enjoying a barbecue in one of the Institute's picnic areas on a mild Houston Sunday in March. Allen was playing the dual role of Security and official chaperone, despite being invited to join the party anyway. He also turned out to be the official meat provider, having somehow obtained racks of pork ribs and a roll of fresh Central Texas sausage links. Brisket was on the menu as well, but Allen had arranged to delegate the process of smoking it to the Food Services department.

"I mean," Travis continued as he closed the lid, "I was so happy that I made it into a VR session at all--thank God for that--but I've had to wear those medicine patches every time. That's got to mess with your brain chemistry, right? And besides, how can I trust myself when it's time to do the real thing, and I don't have all those clarifying meds in my system?"

Christopher worked as co-pilot on smoker duties. He held a beer as he listened to Travis. "Man," he said, "I can't help you there. I'm still embarrassed as hell over what happened to *me*. How do you go through your whole life thinking you got no phobias or shit like that, then all of a sudden find out you're claustrophobic when they put a VR helmet on you? How the hell did I miss that while growing up?"

"And here I was thinking I was the only one who'd never done VR before," Travis said.

"How did you miss out?"

Christopher hesitated and took a drink. "I never had the chance. Besides, it's background stuff. Probably said too much already."

Travis smiled. "At least they got you through it without meds, right?"

"Yeah. Still embarrassed as hell, though."

Trace staggered toward them and grabbed her fourth beer from a cooler near the smoker. "You both worry too much," she said, leaning on both their shoulders. "There's no VR in field assignments, so *you* won't get sick," she slurred drunkenly at Travis, "and the Hard Hat is open, so *you* won't get claustrophobia," she said to Christopher. "So, why don't you both relax your sphincters for a change?"

"You're plenty relaxed," Travis said, waving away wisps of Trace's breath. "You ought to be able to hold your alcohol better. You're what—ten, fifteen years older than any of us?"

She gave Travis a rude gesture in return.

"What is it about you, anyway?" Christopher asked Trace. "You've come out shaking after every VR session. What's the deal with that?"

Trace popped the tab on her beer can. "None of your business." She turned and walked unevenly back to the picnic table where Karon and Serene were talking and munching on deviled eggs and other appetizers.

"Something's wrong with her," Christopher muttered, "aside from being drunk."

Travis glanced sidelong at Christopher. "I get the feeling you'd say something was wrong with any woman who doesn't fall for you in less than two minutes."

"Bullshit!" Christopher said, feigning anger. "Only the cute ones."

"We heard that!" Karon and Serene shouted back. Trace burped.

Allen reclined in a patio chair between the two groups. "I think something's wrong with all five of you," he said. "That goes for anyone who signs up to be a Tapper."

"How about yourself?" Serene prodded.

"Me especially! Teaching groups like yours just proves it."

Travis and his classmates laughed. They continued their small talk until Food Services brought out the brisket and trimmings--potato salad, pinto beans, slices of bread, pickles, and onions, timed just right to go with the sausage and ribs. The group descended upon the tables of food and filled up their plates. The only exception was Serene--she took small portions of everything.

"You trying to watch your figure?" Karon asked Serene.

"No, I'm just not used to this being called 'barbecue.'"

Allen gave Serene a warning glance. She feigned offense in reply. "Oh, like anyone here can't figure out where I'm from. We already pegged Travis and his 'y'alls' as Texan."

Trace spoke up. "Yeah, Allen--aren't we *ever* gonna get to talk about where we're from, what we've done, stuff like that?"

"Nope," Allen said between mouthfuls of sausage. "Not until Wilson himself approves it, or until you leave the Institute."

"Makes group outings less fun," Karon said.

"As long as there's barbecue, it's worth it," Christopher said with a grin.

Karon threw a slice of bread at Christopher, who caught it. "Thanks," he said as he wrapped it around a sausage link and took a bite.

"So, Allen," Serene asked, "how different is the Hard Hat from VR?"

Allen swallowed a mouthful of brisket. "Extremely," he said. "Seriously, VR got you ready for the gestures and dynamics of using your ability for gravity and electromagnetism. It also got you used to the stress of preparation for Tapper operations. Still, there's no way we can accurately simulate the full Tapping process. Your first Tap will hit you like nothing you've ever experienced--especially the initial phase of Drilling."

"The trip through the brain's fear center," Serene said.

"Right. We did what we could to scare you in VR ..."

"I was more grossed out than scared," Karon said aside to Serene.

Allen continued. "... but you'll be dealing with stronger demons when your Driller starts the genuine process. Take the advice of your psych specialists: look for the dark center of the images and feelings that hit you, then focus your thoughts toward it. That's your path back to reality."

Travis brought up a question that had been bugging him. "How many Candidates get plugged on their first attempt?"

"Geez, Travis!" Trace chided drunkenly. "You sure know how to kill a good time, don't you?"

"I'm not trying, believe me! I just want to know what my chances are of having even more drugs pumped into me. I've never been so full of drugs in my life until lately--at least, not that I know of." A phantom itch from an absent scar on his back tingled briefly.

"I don't keep count worldwide, or even Institute-wide," Allen admitted. "All I know is I haven't had a Candidate get plugged on try number one in years. Guess they've been lucky."

"As for the meds, they're part of the nature of the beast, to borrow a cliché. At the very least, all of you are going to need some headache medicine after your first Tap." Allen then stood

up and searched the ground around his chair. "Might as well get this part over with." Travis watched as Allen gathered up five small wooden sticks. "Short stick goes to the Drilling platform first."

Travis drew the short stick. "Oh, wonderful," he said.

"What?" Christopher said. "What the hell are you 'Oh, wonderful'-ing about, man? You get to find out what it's like before any of us!"

"Yeah, and that puts the pressure on me to get it right on the first try."

Trace stood up and shook a half-eaten rib at Travis. "Jesus H. Fuckin' Christ, Trav!" she said, leaning on the table for support. "If you don't calm the fuck down right now and have a good time out here, I'm gonna personally take this bone and shove it right up your tight-assed ... clenched ... *whatever!*" She then stuck the uneaten part of the rib in her mouth and plopped back down on the picnic table bench.

Travis sputtered into a bout of laughing. The other Candidates joined in. Even Allen cracked a smile.

A dessert of vanilla ice cream and peach cobbler helped stretch the picnic into the late afternoon. Trace took over the patio chair from Allen and passed out after dessert. The others discussed various topics--the size of the Doghouse, their apartments, the strangeness of the situation--occasionally with Allen's participation.

The topic of Driller assignments finally came up. Allen checked his virtual console. "Ah, they've been posted," he said as he scanned the list. "Travis, you'll be with Nurse Paige Kirkshire again. Makes sense--you've been working together in VR. Karon, you're with Dr. Brenda Talbot ... Serene, Dr. Annie Clawson will be working with you. She's a good one. Trace?" He looked around. She was snoring in the patio chair. "Out like a light. She's with Dr. Alta Schriber,

and Christopher, you've got Dr. Brett Wheaton. Sounds like a good first grouping. At least no one got Dr. Sabo." He cringed at the name. "Anyway, any questions?"

"Not from me," Travis said with a satisfied sigh, patting his stomach. "Haven't got a complaint in the world right now."

"Finally! A first time for everything." Christopher said, slapping Travis on the back. "You'll get the hang of relaxing sooner or later."

###

Monday was Hard Hat fitting day. The Candidates met on the seventh floor, home to the Institute's Manufacturing and Research & Development divisions. The floor was abuzz with activity. Production lines and prototyping rooms full of workers operated behind glassed-in areas. Other rooms hid behind walls with multiple security layers outside and doors bearing labels that simply read *Testing*.

A tech led the Candidates to a room in Manufacturing. There, five other techs waited next to a row of 3D scanner chairs.

"Looks like one of those old pictures of a 1960s beauty salon," Christopher joked. "You know--with all the big hair dryer chairs lined up in a row." The other Candidates, Travis included, gave Christopher a blank stare as they failed to get the joke. Christopher rolled his eyes. "Oh, just look it up on your computers."

Travis typed in a request to Tabitha on his virtual console. She brought up a picture of a 1960s-era women's hair salon, which showed exactly what Christopher described.

"Aww, don't take it hard, man," Travis said. He gave Christopher a reassuring pat on his back. "Comedy isn't a safe sport for beginners."

"Oh, shut up," Christopher said with a grin.

The fitting took less than five minutes. Each Candidate sat down and had their head dimensions taken by equipment mounted on the chairs. The techs sent the fitting data to the fabrication department before the lead tech chaperoned the Candidates back to class.

The Candidates found Allen leaning back against his desk when they arrived. A Hard Hat sat next to him.

Once the group had settled, Allen picked up the Hard Hat and displayed it for the class. "You've seen these before, starting with the one Jeremy wore during his demonstration on your first day of class. Before you ask, he's doing just fine and is back in the field.

"What you haven't seen is one up close, so I've checked out mine to show you what yours will look like when they're ready." He handed his Hard Hat to Karon and told her to pass it down the line.

"What you hold is a Mark VI Hemispherical Regenerating Directed Axon Transduction unit, or 'Hard Hat' for short. If you'll remember, the doctor in the Spindletop Event video mentioned the Hard Hat nickname. Doctor Lukas Zilker decided to keep calling it that, based on his oil business upbringing. The device's shape ultimately evolved to match the name."

Travis studied the Hard Hat carefully when Serene handed it to him. Its shell consisted of a very tough yellow plastic, shaped like a hard hat that an oil rig worker would wear. It bore the Zilker Institute's "Zi" logo in a white oval on the front of the hat, just like Jeremy's had.

The inside contained a flexible plastic support system with a chinstrap. A foam-like material lined the inner area beneath the support. Travis pressed his fingers against the foam lining and felt several hard block devices below it, sandwiched between the Hat's inner surface and the foam.

Neat stuff.

"The Mark VI unit is much lighter and more tunable than any previous Hard Hat," Allen continued as Travis passed the Hat to Christopher. "It's keyed to your computer and your bio-readings, so no one else can use your Hat. In addition, it requires further security input from your Driller in order to operate, so no one can run off and open their Tap without a Driller present. Security also monitors their use, and they can send a burn-out signal if anyone gets any wise ideas about misusing the equipment."

"Okay, so that's how it *won't* work," Trace said as she received the Hat. "How *does* it work?"

"It interfaces with your computer and with equipment used by your Driller to send directed energy into your brain. That energy provides the stimulation required to open your Tap. The upshot is that the Hard Hat is the primary device that sets up your brain so that you can see the lines of the four fundamental forces.

"The blocks attached to the innermost part of the Hat transmit the energy that 'rewires' your brain. The plastic web and the foam keep your head from coming into direct contact with the blocks. Before you ask, yes, it could be dangerous if you came into contact with an unprotected active block, but only if you did it for an extended period of time. That's one reason why it's necessary we keep your Hat in perfect working order."

Allen retrieved his Hat and put it on his head, sliding the chin strap into place. "Nothing odd about how you put it on. Just wear it, make sure it's a snug fit, and don't take it off until your Tap is closed."

Serene raised her hand. "What'll happen if it comes off?"

"Hard to predict," Allen said. "It depends in part on *when* it comes off. If it happens during Drilling, you're in an emergency situation. Anything from a migraine to a blowout could

happen."

"What about after your Tap is open?" Christopher asked.

"Not quite as dangerous, but still not a good idea. Once your Tap is open, the Hard Hat's biggest job is finished, although your Driller will use it to fine-tune your Tap as needed. If it comes off in the middle of a Tap, it's not an automatic emergency. Your ZINet qLink can act as a substitute briefly. Don't ask how long--no one's been crazy enough to test it. In any case, it's best to just cinch up your Hard Hat and make damned sure it stays on until your Driller can close your Tap normally."

He removed his Hat and continued. "Now, one last time, let's review what to expect during your first Tap tomorrow." Allen brought up a list and a series of diagrams on the class's virtual consoles.

This is the really important stuff.

"You, your Driller, and a small team of Roughnecks will all take a maglev to the Naval Air Station at Corpus Christi. From there, your team will board a HoverJet and fly out to one of our platforms in the Gulf of Mexico. Travis, you'll go first. As long as the weather cooperates, the rest of you will follow. You all know what to do after you land."

Yeah, get in the chair and hold on for dear life. Can I do that?

Allen leaned back against his desk. "We've done our best to simulate what will happen up to this point, but there's no way to reproduce what you'll experience. Drilling is going to trigger the ride of a lifetime in your brain, and you're *not* going to like it. You're going to have a nightmare, guaranteed. If you let it, it'll scare the hell out of you." He raised a finger and pointed it at each of the Candidates. "*Don't let that happen*--follow the guidance your psychs and your counselors have been giving you, and you'll get past it.

"If everything works, and you manage to come back out into reality successfully, you'll be ready to become a functional Tapper."

The room fell silent. Travis guessed that everyone else was thinking the same thing he was.

Shit is about to get serious.

"Still," Allen said, sounding upbeat, "you've got to have a Hard Hat before you can be a Tapper. A tech is on the way to take you back to the fitting room. They'll make the final adjustments to your Hats there. Leave things to them, but don't hesitate to let them know if something feels wrong. Even if you're not exactly sure *what's* wrong, let them know."

Trace raised her hand. "Umm ... where are you going to be tomorrow?"

"I'll be in Comms, watching what happens. First Taps are broadcast only to Comms, not over the ZINet. Wilson will be there, too."

A knock sounded on the classroom door. Allen let in the tech waiting outside. "All right, folks, it's time to get your heads on straight, as it were. Follow Caroline here--she'll take you where you need to go. We're done for the day, so I'll see you in the classroom at the usual time tomorrow. We'll start our travel from here."

Caroline led the class back to Manufacturing, where the same five techs waited for them at the scanning chairs. They had new company, though--five men dressed in red overalls, each holding a cube-shaped, heavy-duty aluminum flight case.

"Candidates," Caroline said, "I'd like to introduce you to some people that will become very important to you. The folks in red are Roughnecks."

Each Roughneck nodded politely.

"These five Roughnecks have volunteered for a significant duty. They're responsible for

your Hard Hats. It's their job to protect them when you aren't on assignment. You'll check out your Hat from them before you go out, and you'll check them back in when you return. If an assignment involves an overnight stay, they'll travel with you.

"This is for both security and safety reasons," Caroline said. "We don't want anyone tampering with your Hats when you're not using them. That's why we not only keep them under lock and key, we keep them guarded from everyone--even you."

"Even *us*?" Trace asked.

"Mainly from accidental or unintentional damage, but we don't take any chances. Your Hard Hats are too important to be left alone. Now, let's get you paired up with your new friends." She gestured at the Roughnecks and left the room.

A tech summoned Travis to the same seat he'd been in that morning. The Roughneck next to the tech stepped forward and extended a hand.

"Hello," the Roughneck said with a firm, no-nonsense handshake. "Mark Longren, Roughneck Protector of your Hard Hat."

Travis sized up the man. He was Travis's height, but with much more muscle beneath his overalls. His short hair and squared facial features matched his military bearing. Longren's grey eyes gave Travis the feeling that he was seeing much more than merely what was in front of him.

"Candidate Travis. Good to meet you, Mr. Longren."

"No 'mister,' please. Just call me Mark, or Longren. I work for you, sir."

"All right, then, as long as you hold off on the 'sir.' I'm still just Candidate Travis for now."

Longren shook Travis's hand again and smiled. "Glad to meet you, Candidate Travis."

Travis smiled back and took a seat. Longren opened up the aluminum case and removed

Travis's brand-new Hard Hat. He handed it to the tech, who examined it and nodded his approval before giving it to Travis.

"It feels lighter than Allen's did," Travis said as he slipped it on his head.

"Yeah," Serene said. "Not a huge difference, but enough to notice."

"It's made from a new composite," the tech adjusting Karon's Hat said. "Tougher, lighter, gives the transmission blocks a better adhesive surface. We've been calling it the Mark VI-point-one. It's not a full version upgrade, but it's a good step toward a Mark VII."

Caroline returned to the room with a hand-held device. She went to Karon's chair, activated the device, and scanned Karon's Hat. She made gestures on her virtual console and moved on to the other Candidates, repeating the process. Travis felt odd vibrations when Caroline scanned his Hat, but nothing that seemed particularly unsettling. The entire process took about five minutes per person.

"There," Caroline said as she finished. "All of you are set. Please remove your Hats and give them to your Roughneck Protectors. I'd recommend you either go back to your apartments and get some rest, or maybe get in a little recreation on the 14th floor. Wherever you go, don't overdo things--you're going to need every physical and mental advantage you can get tomorrow."

Christopher, Trace, and Serene headed to the recreation floor. The women teased Christopher en route, keeping him at a distance. Travis and Karon paired up and headed back to their apartments.

"You said the VR session grossed you out," Travis said once they exited the Doghouse, trying to strike up a conversation. "What did they hit you with in the simulated Drilling?"

"Urgh," Karon said. "Mostly crawly stuff. I hate cockroaches, snakes, that kind of thing."

They had a bunch crawling on top of me."

"They probably pulled it straight out of your psych profile."

"Probably. So, what did they do to you?"

"They pulled a couple of phobias out of my profile, too—wasps, hornets, things like that.

I get freaked out by bugs that can fly backwards."

"Seriously?"

"Yeah," Travis said with a shudder. "I've been scared of them since ..." He caught himself. "We're not supposed to bring that up, are we?"

"No, I guess we're not," Karon said with a sigh.

Travis scanned the area as they walked along the path through the pines to Karon's apartment building. "Tabitha, is anyone following us?"

"No," Tabitha chimed. "Nothing around here except you two, some cameras, yours truly, and Candidate Karon's interface. Not even seeing anyone on my picocameras."

"I'd ask why you call your computer Tabitha, but I'm sure she'd report me just as quickly as mine would."

"Wanna link up?" Travis suggested.

"Sure," Karon agreed. "Agent, please connect to Travis's computer."

Travis felt the click and had Tabitha say hello. Karon's computer replied in a male voice with a rich, bass tone. "Good afternoon, Tabitha, Candidate Travis. I am Candidate Karon's Agent. It's a pleasure to meet you both."

"Wow, that's some voice you've programmed there," Travis said. "Sounds like a butler, or maybe a bodyguard."

"Close enough," Karon said, then pointed at Tabitha. "Your interface has a really unusual

sound to her voice. Sort of like wind chimes or bells or something. Is that intentional?"

"Accidentally intentional. I ran across the effect when tweaking her voice and liked it.

While I'm thinking about it--Tab?"

"Yes?"

"Why aren't we being chaperoned?"

"You are. Candidate Karon's Agent and I are ready to report if needed."

"I know that," he said, slightly frustrated. "What I meant was why aren't we being *physically* chaperoned back to our apartments?"

"No one's told me, but if I had to guess, I'd say Security personnel are eavesdropping."

"Agreed," Karon's Agent said. "I cannot confirm, but I believe they are watching and listening--just to see what you will do."

Karon let out another sigh. "Everything around here is a test of some sort. It's really nerve-wracking."

"Nerve-wracking? How? You shouldn't have anything to worry about. You've done so well on the classroom tests, especially the electromagnetism exam."

"It's still stressful, and I don't handle stress well. Seriously, I don't know why Wilson's Wildcatters even picked me. There had to be other people in my school who were more qualified."

"That's an old argument," Travis said. "Here's an old response: 'Don't be so modest about your talents.' I used to know a lot of people who thought they were bad-ass. They wouldn't make it three seconds into VR Drilling before getting plugged."

Karon ventured a smile. "Thanks, but I'm still worried. What's going to happen when my Driller finally pushes the button? Am I going to panic and get plugged? Am I going to freak out

before I even put on my Hard Hat?"

Travis shook his head. "I doubt it. You should see the look of concentration on your face when you're in the middle of a test. I've never seen a person so focused. As long as you stay that way during your first Tap, I don't think you'll have *time* to panic."

Tabitha chimed in. "Take what he says to heart, Candidate Karon. Candidate Travis may be a bit strange on one or two things, but he's one of the most honest people I've encountered since powering up. It gets him in trouble once in a while, which explains why he still doesn't have a girlfriend--"

"Hey!" Travis interrupted. "I thought you were supposed to keep me from revealing personal information, and here you go dropping secrets on your own?"

"Sorry," Tabitha rang. "I couldn't resist."

Travis flushed with embarrassment as Karon stifled a laugh behind her hand. "Oh, great," he said. "Way to make me look like a fool in front of a nice girl, Tab." He immediately realized what he'd just admitted and felt his face turn two shades redder.

Karon laughed loud and long. "I'm sorry," she said, finally regaining her composure. "You and your computer would make a good comedy team."

"Believe me, it's not on purpose. So," he said, attempting to change the subject, "is 'Agent' really the name of your computer?"

"No. I didn't really give it a name. I liked the idea of having a personal agent taking care of things for me in the background, so I just called it my 'Agent'."

Karon studied Travis for a moment. "I'm curious--how were you able to use a virtual companion like Tabitha? You had a major problem with VR, right?"

"With *full* VR. Tabitha's only partial VR. I could handle dealing with her as long as it was

clear to both of us that she's an artificial interface and not a real person."

"I can't imagine what happened that would leave you so bad off."

"Don't try," Travis said. "I'm fully expecting to re-live some variation of it during Drilling."

They arrived at the door of Karon's apartment building and went inside. Travis escorted Karon to her unit. "Thanks to Tabitha blabbing her virtual mouth," he said with a shy frown, "you know I'm not very good at this."

"I'm not, either," Karon said, smiling. "I'd invite you in for some coffee if my Agent wasn't watching my every move."

"Yeah. I'd probably make Tabitha jealous if I said yes, even if she didn't have orders to report it."

Karon laughed softly. "Well," she said as she held out her hand, "good luck tomorrow."

"Same to you," Travis said as he took her hand and shook it gently. "Same to you."

They stood at the door and gazed at each other, transfixed for a second. Karon eventually broke off the farewell and went into her unit. Travis waited for Karon's door to close, then slowly made his way back to his building.

Tabitha made soft wind chime noises for the next five minutes. She didn't say a word.

CHAPTER 18 – DRILL

"We are currently passing through ten-thousand feet, on final approach to Drilling Platform Five," the HoverJet pilot said over the virtual PA system. "Please make sure you're buckled in. It looks like there's a good bit of turbulence below one-thousand this morning."

Travis sat in the passenger compartment of the jet next to Nurse Paige. Nine Roughnecks accompanied them, including Roughneck Longren, who carried the case containing Travis's Hard Hat.

"Any impending nausea or other problems?" Nurse Paige asked Travis.

"No, I normally don't get motion sickness."

"You know what I'm talking about, Candidate Travis."

Travis sighed. "No signs of a panic attack yet. I'm getting a little nervous, but I've got it under control for now. I think."

"Remember your training," Nurse Paige said. "Focus on something you like to do. Your job right now is to keep your mind level. Let us handle everything else."

Travis sat back as the HoverJet continued its descent. A glance out a window showed nothing but the Gulf of Mexico.

We must be coming down right on top of the thing. I hope that pilot knows what he's

doing.

He fidgeted with the bottom button of his pullover shirt and tried to come up with an alternate line of thought.

Fishing. Yeah. I wonder what kind of fish you could pull out of this part of the Gulf.

The HoverJet slowed its descent as it passed one-thousand feet. Heavy winds blew it from side to side as it neared the platform. Powerful vertical lift engines fought the drift, blowing debris and salt spray off the deck as it approached until the craft touched down with a reassuring *thunk* on the landing pad.

Travis reached to unbuckle his seat belt as the jet powered down, but Nurse Paige stopped him. "Stay buckled in here with me," she said. "Keep your thoughts level. Don't let all the running around distract you."

"I'm okay," he said. "Thinking about fishing."

"Good. Keep thinking about it."

The "running around" commenced as the Roughnecks filed out in rapid order. Travis watched through the window as they unloaded tools, boxes of equipment, and other hardware. They took them over to a small building at the other edge of the platform: the Drilling house. Most went inside, but Roughneck Longren stood outside.

"Have you ever been deep-sea fishing?" Nurse Paige asked.

"No, but I've always ... wait a minute--I'm not supposed to talk about my past!"

Nurse Paige smiled. "You've got special dispensation from Wilson, just for now. Check with Tabitha if you don't believe me."

"She's right," Tabitha chimed. "You're cleared until you're out of the HoverJet."

He blinked and cleared his throat. "No," he said, "I've never gone deep-sea fishing. The

closest I've been is fishing just offshore of Port Lavaca one summer. Just me, my Grandpa, and a thirty-year-old aluminum V-hull boat that was built more for Lake LBJ than for the Gulf. Caught a few flathead catfish. Also caught the worst sunburn I've ever had in my life. How about you? Have you ever gone?"

Nurse Paige looked away and smiled. "Fishing's not my thing, really. I once fished off a little pier at Lake Memorial with my ex-husband. He taught me how to put a worm on a hook, but I couldn't touch the one fish I caught. He had to take it off the hook for me."

One of the Roughnecks poked his head inside the cabin. "Sir, ma'am, the Drilling house is ready to go."

"Thank you," Nurse Paige said. She turned to Travis. "Remember--stay level. Try and keep your mind off business for now."

Travis unbuckled and followed Nurse Paige out of the HoverJet. He was immediately hit by a gust of wind that almost knocked him over. The Roughneck who had summoned them caught Travis by the arm and held him steady until they reached the building. Once there, Longren handed over the case containing Travis's Hard Hat. He reached out and shook both Travis's and Nurse Paige's hands. "Good luck, Candidate Travis, ma'am. Do good work for us in there." He then followed the other Roughnecks leaving the Drilling house and boarded the HoverJet.

Travis and Nurse Paige entered the building and pulled the room's sturdy door shut. The howling and buffeting from the wind disappeared instantly. Only the rumbling sound of the HoverJet's lift engines made it into the room.

The obvious focus of the room was a comfortable-looking, reclining medical chair placed near the back wall, in front of an elaborate-but-compact hardware console. Several differently-

sized and shaped weights sat against a wall opposite the chair.

God, I hope I'm ready for this. I don't know if I trust myself yet or not.

"Okay, Travis," Nurse Paige said, "tilt your head to the right for me." She attached a micro-I.V. patch to the left side of his neck. "That's your neural inhibitor patch. Just don't let things get hairy in there," she said, patting his head, "and you'll be fine. Now, please put on your Hard Hat and have a seat while I get my hardware ready."

Travis opened the case and carefully removed his Hard Hat. He examined it and put it on his head, tightening the chin strap. The Hat fit well and remained in place once he sat down, thanks to a specially designed headrest in the chair. Travis made a couple of tweaks to the chair position, but was unable to adjust the arm rests to his exact liking. For some reason, the padding on the left arm rest was thicker than on the right.

"You set down there?" Nurse Paige asked from her position at the console.

"I'm set, I guess."

"Good! Now, ask Tabitha to link up and prepare for commands."

"You heard the lady, Tab. Link up and let her do the driving."

"Will do," Tabitha rang. "Good luck."

Travis felt the link-in click, followed by two more clicks. He raised an eyebrow. "What were those?" he asked.

"Stay calm, those were normal, remember? You've got three links active now. You're hooked up to my virtual console, the main hardware console, and a portable palm-top console I'll use when the time comes for us to go outside."

"We're not going outside today, are we?"

Nurse Paige chuckled. "No, not today. No need to worry--just keep your mind level. I'll

handle the hard work until we start Drilling. That's when you'll take over. For now, just breathe."

Travis exhaled and began his breathing exercises. Meanwhile, Nurse Paige checked in with the Comms center back in Houston.

"Doghouse Prime, Doghouse Prime, this is Doghouse Five. How are you receiving?"

"Doghouse Five, this is Doghouse Prime, Big Dog speaking." Wilson's voice. "You are coming in loud and clear on all links. Please confirm status of Candidate, if you would."

Breathe and hold, release slowly, Travis thought.

"Good morning, Big Dog, nice to have you along. Candidate is holding his own for now. Vital signs are slightly elevated due to all the excitement, but he's well within tolerance one limits. Please advise on status of HoverJet Bravo Six."

"HoverJet Bravo Six is holding station at safe distance and altitude."

"Roger, Big Dog. Request permission to commence Drilling."

"Permission granted, Doghouse Five. Do good work for us out there and bring me back a new Tapper."

Breathe and hold, release slowly ...

"Here we go," Nurse Paige said softly. "Keep your eyes open and focused on the wall. Drilling to begin in three ..."

Breathe and hold ...

"... two ..."

... release slowly ...

"... one ..."

Breathe ...

"... now."

Travis's vision went blank. He felt that his eyes were still open, but even that sensation disappeared after a moment. His senses dissolved to the point where he had no input at all. His thoughts faded into the darkness. He became nothing floating in a universe of emptiness.

A huge wave broke over his head, sending a flood of salt water up his nose. An undertow had caught him and was hauling him away from the barely visible seashore. He strained to reach the ocean floor so he could push off from it, but the water was too deep for his seven-year-old body. He fought against the current with all his might, only to have it drag him farther away from the shore.

Another wave smashed into him and pushed him underwater. The current grew stronger with his every kick. He screamed for help beneath the surface. Water forced its way into his mouth and threatened to flood his lungs at his next breath.

At the last possible moment, a hand grabbed his arm and pulled him to the surface. He coughed and spat out water. The undertow no longer had him in its grip. He'd been pulled away from it so he could make his way back to the shallows.

As he struggled to return to the shore, he looked back to see what miracle had saved him.

The miracle was his father, who was now caught in the same riptide and was being pulled rapidly out to sea.

Travis started to scream. He caught himself before the scream left his lips.

This isn't happening.

I've already lived through this. It can't happen twice.

Water flooded around him and through him. He ignored the sensation.

I am not seven years old. This isn't real.

Waves crashed upon him, trying to force him back down into the sea. He took a deep

breath and felt air filling his lungs.

My name is Travis, and this is not real.

The scene around him broke apart and spun into a whirlpool of visuals. Buildings on the shore, the shoreline, even the ocean itself, lost all definition. Travis's mind was coming back to him. He searched for the dark center of the chaos, just as he'd been trained.

There it was. A tiny, stationary black speck in the middle of the visual tornado. Travis focused his thoughts on it. The more he concentrated on it, the larger it grew. Sensation slowly returned to his arms and legs. He felt his left hand tapping rapidly and continually against the arm of the recliner. It slowed as more sensation returned, eventually stopping.

He thought his vision was still blank until he realized his eyes were closed.

His body was sore.

Hand. Vision. Body.

Reality.

A voice came from behind. "Okay, now open your eyes if you can."

He opened his eyes, and his world was forever changed.

"Ohmydearlord," Travis said, breathless.

"Are you still with me?" Nurse Paige asked.

"I'm not sure," he said, trying to catch his breath. "What the hell am I seeing?"

"Don't worry about that right now. How do you feel? Any nausea?"

"No," he said, still panting. "Just trying to get over that nightmare."

I knew I'd get hit with that memory, but damn--why'd it have to happen on my first Tap?

"Don't let your mind slip back into it. Do a quick body check. It'll help. Anything feel wrong anywhere?"

"Still catching my breath," he said. One more deep inhale let his respiration normalize.

"Okay. I feel cold. I'm sore all over. My left wrist is *really* sore. What was going on with my left hand?"

"That's the other reason for the name 'Tapper'," she said. "Something in the process makes people's left hands tap on the armrest. Even happened during the Spindletop Event, if you remember the video."

"I'd rather not, right now."

"Sorry. Anyway, that's why there's more padding on the left armrest than there is on the right. It doesn't seem to matter if you're left-handed or right-handed--your left hand always reacts. No one knows why, but it doesn't seem to be a problem."

He tried to massage the pain away. "Just leaves you with a sore wrist, right. Why didn't you strap it down and keep it from tapping?"

Nurse Paige sighed. "We've tried that in the past. Wound up with a bunch of Tappers with dislocated elbows or shoulders. Trust me, this way does the least amount of damage."

"Fair enough," Travis said. "Now, can we finally talk about what the hell is happening with my eyes?"

"Your eyes are fine. You're just seeing more than you ever have in your life."

"All I see is static and a bunch of lines," Travis said.

"Those are the traces of the fundamental forces. Gravity and electromagnetic lines. The static is coming from the strong and weak nuclear forces. Try and ignore the static: you're not ready to mess with the nuclear stuff. Now, do your eyes hurt? Are they giving you a headache?"

Travis blinked a few times. "Yes on the headache part."

"You're focused too closely. Try to focus on a point farther away from you."

"Farther away? Right now I can't tell farther away from the tip of my nose."

"That's a good place to start: your nose. Cross your eyes."

"What?"

"Cross your eyes," Nurse Paige instructed, "and then slowly uncross them. I know it sounds weird, but it works. You know there's a wall directly in front of you. Try to focus on it as you uncross your eyes."

Travis exhaled hard. *She's got to be kidding.* He crossed his eyes and fought through the static until his focus moved forward toward the wall.

"I see it ... I think ..." He said. "It looks grainy. There's still a bunch of lines in the way."

"Keep your eyes on the wall. *Will* them to resolve it. Concentrate and make your eyes bring the wall into focus."

Travis concentrated harder. The lines remained, but the graininess faded. The wall became clearer the more he concentrated. "I think I've got it now," he said, "but I'm still seeing lines in the way."

"Good! You're supposed to see them. Tell me about them."

"They're ... well, they're not any color or anything. They don't look like drawn lines. It's more like looking at something through a piece of glass that's not flat. Distortions, but you can make out what's past them if you try."

"Are they parallel?"

"Some are--mainly the vertical lines. The rest just look random."

"Good job! You're already seeing two lines of force. The parallel vertical lines are gravity lines. The others are lines of electromagnetic force."

Travis nodded. "Got it. This is weirder than VR. Y'all need to update the simulation."

Nurse Paige chuckled again. "For now, just take in the sights. I need to get a good baseline reading on you. Shouldn't take more than a minute."

He took a few more deep breaths. *This is really wild.*

"Right," Nurse Paige finally said. "Now, I want you to look down at the objects on the floor in front of the wall."

"I figured those were for me. Gravity trial?"

"You got it. This part will be closer to the simulation. Let's try the cylinder in the center of the group. Focus on it."

Travis moved his eyes from the wall to the cylinder. It took a few seconds to adjust his focus. "All right, I'm there."

"Good. Here comes the hard part. Try to focus on both the cylinder and the vertical lines at its base."

"Ah geez," Travis said. He tried squinting, blinking, and moving his head. Nothing worked. He gave it one last go using the crossed-eyes method and finally managed to see both the cylinder and its vertical lines.

"Have you got it?" Nurse Paige asked.

"I think so. Now what?"

"Now, just like in VR. Lift your right arm and hold your hand parallel to the floor, palm pointed down. Make sure you keep your focus on the cylinder and the lines."

Travis lifted his arm and held out his hand.

"Next, move your arm out in front of you and aim your fingertips at the base of the cylinder. Keep your hand parallel to the floor. Don't focus on your hand. Just look at the cylinder and the lines."

Travis inched his hand into position. "Got it."

"All right, here we go--the moment of truth. Keep your eyes open and picture yourself sliding your hand beneath the cylinder. While you do that, move your hand to match what's in your mind. Imagine that your hand is separating the cylinder from the gravity lines."

Travis held his breath and moved his hand. As he did, some of the gravity lines detached from the cylinder. They curled around as though trying to reconnect, but something blocked the way.

"Now," Nurse Paige said, "hold your hand still and look at the cylinder. Don't look at the gravity lines--just the cylinder."

The cylinder floated approximately seven centimeters off the floor.

Travis's jaw dropped. "Did I really do that?"

"You sure did! Great job for your first try. Now, see if you can reverse the process."

Travis pictured sliding his hand again, but this time back toward himself. The gravity lines reconnected to the base of the cylinder. He slowed his hand until the cylinder settled gently on the floor.

"Well done!" Nurse Paige said, sounding sincerely impressed. "That really went by the book."

"What's next?" Travis asked. "I've gotta try something else--this is too much fun!"

"That's all for today. You can't rush the process. Dr. Zilker learned that when he ran the Institute."

"Aww, man ..."

"Don't worry--you'll get plenty of other opportunities to play around with the test weights. For now, just sit back, close your eyes, and relax. I'm going to close your Tap in three ... two ...

one ... now."

Travis reeled as though a giant hand had let go of his head. He slumped forward at first and leaned back as a massive headache took over. "Can I take off my Hard Hat now?" he asked in a ragged voice.

"Yes, you can," she said as she walked around the console toward him. "One more thing first, though."

"What?" he asked.

Nurse Paige pulled the neural inhibitor patch off his neck and handed him a pill for his headache. "Congratulations on becoming a Tapper ... Travis."

CHAPTER 19 – APPRAISAL

Travis barely made it out of the maglev back at the Institute's underground terminal before the group waiting for his return descended upon him with congratulatory cheers, handshakes, and back-slaps. Karon and Serene joined in, but Trace stood outside the circle, applauding with a deadpan expression. Christopher waded through the crowd and almost shook Travis's arm off. "Way to go, man!" he shouted. "Way to go!"

The commotion ruled until Allen pushed through the crowd and called for quiet.

"I can see it's too late for me to be *the* first, so let me be *one* of the first to congratulate you on becoming a Tapper, Travis. That was a by-the-book lift. Same goes for you, Nurse Paige," he said as she stepped out of the shuttle. "Thanks for bringing a new Tapper back to us." The Roughneck team exited last. "Roughnecks! Another job well done. Way to go."

The Roughnecks broke into a new round of shouting and applause. Allen let the second celebration run its course. Once it had, he drew Travis and Nurse Paige aside. "First thing we need to do, Travis, is get you a new 3DIdent card. You're not a Candidate anymore. Wilson will also want to debrief both of you, of course. We'll get Travis's new card during that meeting."

"We're talking to Wilson *now*?" Nurse Paige asked. "What about the rest of the class? Doesn't he want to watch them from the Comms floor?"

"Can't," Allen said. "Weather moved in while you were on your way back from Doghouse Five. All our platforms are socked in for the rest of the day."

"Oh, well," Nurse Paige sighed. "Let's get going. Travis, you ready?"

"Umm," Travis said, pressing his fingers against his right temple, "can we stop somewhere first and get another headache pill?"

Allen laughed. "Typical. My first Tap made my whole head throb for three straight days."

"I've already called ahead for something stronger," Nurse Paige said.

"What?" Travis asked.

"Micro I.V. patch of Paladinol. Ah, here it comes," she said as a med tech exited an elevator onto the maglev platform. The tech opened a packet containing the patch and applied it to Travis's neck. His headache faded almost instantly.

"Whew! Wish you'd brought that stuff with you out to the platform."

"Most people respond to what I gave you out there," Nurse Paige said. "This is newer and much stronger stuff, so access is limited. I'll see what I can do in the future, though. Come on, Wilson's waiting for us!"

###

"Well, well, look who's back." Wilson said as Travis, Nurse Paige, and Allen entered his office. He shook hands with the group before offering them a seat. "You've heard this said plenty of times since you got here, Travis--'Do good work in there for us.' It's sort of the Institute motto. All three of you have done that today, as have the Roughnecks who assisted you this morning. Congratulations, and job well done."

Allen and Nurse Paige responded with a "thank you," but Travis couldn't speak. He was mesmerized by the aura surrounding Wilson. It was different from what he'd seen in the dean's

office, and it wasn't the aura of anger he'd sensed when they arrived at the Institute. He couldn't nail down the change. He also now detected a similar but much fainter aura around Allen.

Allen nodded at Wilson. "I think he's seeing it already."

"It appears that way," Wilson said with a smile. "Travis? Travis!"

Travis's attention snapped back to the meeting. "Um ... sorry, I'm just ... I don't ..." He sighed. "What the hell have I been seeing around you? And now, Allen? I've seen it around Wilson a couple of times before, but never around you, Allen. It's some kind of ..."

"Weird aura," Wilson said. "I know. Think of it this way. Everyone creates disruptions in the four fundamental forces, resulting in auras. Tappers create bigger disruptions, even when their Tap isn't open. The more you Tap, the easier it is to see it in others, and the easier it becomes for other Tappers to see yours. Still, non-Tappers usually can't see them at all, so it's a big surprise you were able to see mine without ever having Tapped. It's almost as remarkable you are able to Allen's now."

"Do I have one?" Travis asked, his eyes sparkling with anticipation. "Can you see it? What does it look like?"

"Whoa, whoa!" Wilson said. "Yes, you've got an aura. It looks like a minor disturbance in the air around you, but you've had it since we first met. Remember back at the University, when I said I had to meet you in person in order to 'sense you out'? That's what I was looking for."

Travis grinned with excitement. "Wow," he said, "I've got an aura!" He held out his arms and legs, trying to see his own aura around them. Nothing came through.

"Can't see your own, can you?" Allen said. "No one can see their own aura. Tabitha knows it's there, though. She perceives it as a data presence around you."

"Enough of the aura talk for now," Wilson ordered. "First things first." He punched a

button on his old manual console. "Art, can you come in here, please?"

The Institute's Public Information Officer knocked on the door less than a minute later. Once Arturo was in the office, he went up to Travis and added his congratulations.

"Art," Wilson said, "we need a new 3DIdent for Travis as soon as possible, please."

"Yes, sir." Art took Travis's card and left the office.

"Okay," Wilson said, "let's hear how things went out there. Tabitha, Jake, Robin, please ask for your hosts' permission to link into our discussion."

"Robin?" Travis asked.

"Mine," Nurse Paige admitted.

"Ah. Okay, then. Tab, dive in," Travis said. Allen and Nurse Paige joined the four-way link. Once everyone was connected, Wilson surprised Travis by issuing a familiar command.

"Interfaces--Execute USI bypass 14-1, T-code Wilson Theta Sigma 016, command four. The following information is compartmentalized. Interfaces linked to mine now have access to secure files 1201 and 1202 for post-Tap observations of Tapper code name Travis. All conversation from this point until override release is not to be shared by interfaces under *any* circumstances without proper override protocol."

Tabitha's chimes alerted Travis that she had acknowledged the command. She distributed data from Travis's Tap experience to the other virtual consoles, complete with video and audio playback. Occasionally, Nurse Paige's interface would put up a data viewport in response.

As the data transfer continued, Travis leaned over to Nurse Paige. "Why didn't you tell me you were in the Cloudberry program?" he whispered.

"No one told me to. Besides, I've had my hands full of saskatoons all this time."

"Cloudberry program participation confirmed," Tabitha said.

"Thanks, Tab, but it's a bit obvious now with Wilson in the room."

"Just following instructions."

"Ahem," Wilson interrupted.

"Sorry." Travis returned his attention to the debriefing.

"Thank you," Wilson said. "Now, computer," he said to his own interface, "please compare data from Tapper Travis against data in files 1201 and 1202. Report similarities."

Wilson's interface replied in a flat, male tone. "Similarities found in displayed cases."

The data shown meant nothing to Travis. "What am I looking at here?"

"Matches between the data from your Tap this morning and other Tappers already in the Cloudberry program," Wilson said.

"So, what's the verdict? Am I normal?"

Nurse Paige took over. "Depends on what you call normal. Your blackout period before the nightmare state was much shorter than that for a non-Cloudberry Tapper. It also took longer than usual for you to leave your fugue state. Remember your left hand tapping?"

"Yes," Travis said.

"You shouldn't. Also, a normal Tapper would just blow right through to an open Tap without remembering how they got out of the nightmare. You told me on the flight home you remembered everything. Those 'symptoms', for lack of a better word, have also happened to other Tappers in the Cloudberry program. Those are the similarities Wilson's interface is reporting. The main difference is that the other Cloudberry Tappers didn't start showing these symptoms until after their third or fourth Tap. Yours happened on the first."

"Travis, when did your grandfather buy Tabitha for you?" Allen asked.

"About nine months ago, when the qLink-9 first came out. Why, is that significant?"

"We think so," Allen said. "Not everyone can afford a qLink-9, so we've seen very few of them on Candidates until recently. However, the people who have had reactions like yours all had qLink-9 computers."

"So, you think Tabitha is responsible?"

"Only partly," Wilson said. "In your case, you've got two things going. First, the hell you experienced while growing up may have affected your baseline brainwave readings. Add to that the length of time you've been wearing Tabitha and you've got a possible explanation for why your very first Tap was affected."

There goes my childhood, causing issues again. Travis tried to get the spotlight off of himself. "What about people with a qLink-8? Do any of them show symptoms?"

"Not like yours," Allen said. "The qLink-8 was around for a year-and-a-half before the qLink-9 hit the market. Three or four people with a qLink-8 have had anomalies requiring adjustments, but nothing like what Nurse Paige had to do to you."

"Why don't you just upgrade everyone to a qLink-9 when they get here?"

"Too risky," Wilson said. "We're not one hundred percent sure what it's doing to people, remember?"

"Well then, why don't you just downgrade everyone to a qLink-8? I mean, if you're looking for safety, that'd be the way to go, wouldn't it?"

"It would, but that's not the mission of the Zilker Institute. We exist to learn as much as we can about Tappers, and to apply that knowledge in the field. Sticking with qLink-8 interfaces goes against our mission of discovery. That's why we utilize what comes in and, later on, ask for volunteers from qLink-9 users who show promise."

"And that's why you're 'utilizing' me, eh?"

Wilson laughed. "'Utilizing' would be an insult, Travis. I don't throw around terms like 'most powerful Tapper ever' unless I mean it!"

Tabitha rang a warning tone. "Don't let it go to your head." Travis blushed as both Allen and Nurse Paige muted a laugh.

"She *is* like a big sister to you, isn't she?" Wilson said. "Oh, while I'm thinking about it, Tabitha--you can drop the Candidate bit and start calling your user Travis again. That's all, though: don't use his middle or last names. Those don't exist for as long as he is in our employ. Let me know if you need further authorization."

"No need. Welcome back, Travis."

"Thank you, Tabitha," Travis said, still slightly miffed at her. "Okay, Wilson, I'm guessing the next part of the meeting is going to cover the Cloudberry program. If I volunteer for it, what do I need to do?"

"Not much at first," Wilson answered. "Your Driller, on the other hand, will begin making detailed recordings of your brainwave data during your training period. Later, they may also use experimental settings when they open your Tap--don't worry, we'll let you know when and if that happens, and it won't happen at all until you start doing heavy endurance training. We'll also monitor your health more closely during that period."

"While I'm thinking about it, it might be a good idea for you to learn what a cloudberry actually is. Ask Tabitha for more info about them." Tabitha displayed an orange-colored cloudberry in a corner of Travis's virtual console.

"Another thing," Travis said, ignoring the picture for the moment. "Why are you trying to recruit me into the Cloudberry program so early? Until today I was just a Candidate, and all I've done is lift a cylinder a few centimeters off the ground. Why not wait until I've proven I can do

other stuff?"

Wilson grinned. "Don't need to. We could have invited you into the program before your first Tap, in fact. You've got several things going for you. First, you're honest, but you can keep a secret. Good stuff to have in a man. Second, as I've been telling you, your brainwave patterns already match what we've been seeing in people who've been in the program for a while. Third, you've been exposed to the effects of a qLink-9 interface since the middle of last year, which is longer than any other Tapper here."

"What if something goes wrong?" Travis asked. "I've got a record of one-for-one at the moment. That could change with my next Drilling procedure."

Wilson's expression turned serious. "If something goes wrong, I believe you've got enough mental fortitude to get past it and survive."

That makes one of us.

Wilson continued, less heavy handed. "Of course, we are going to need one more thing before we can proceed. Nurse Paige?"

The nurse sat up in her chair. "Yes?"

"We need another full-time Driller for the Cloudberry program. You think you can work with Travis on the project?"

"Yes, I think we'd work just fine together." Her voice was measured and calm, but her body language gave her away. She appeared genuinely excited.

She's been looking forward to this for a long time.

"Let me update your 3DIdent card's permissions, then." Wilson took it, scanned it with his virtual console, and punched a series of buttons on his old manual button box. "Travis," Wilson said as he handed the 3DIdent card back, "meet your full-time Driller--Paige Kirkshire,

RN, PhD."

Travis's jaw dropped. He gawked at Nurse Paige. "PhD?"

Paige smiled awkwardly. "Sorry I never told you, but I'm a Nurse Researcher with a doctorate degree. Surprise!"

"Wow," Travis said. "Tab, did you get that? Doctor Paige Kirkshire!"

"Got it," she chimed. "Congratulations, Doctor Kirkshire! Take good care of Travis."

"Please, both of you, just keep calling me Nurse Paige. We don't want to raise any eyebrows."

"All right," Travis said before returning his attention to Wilson. "If you're asking me to join, count me in. Tell me, though--are any of my classmates going to be in the program?"

Wilson cleared his throat. "Candidates Serene and Trace *might* be invited to join. They both have qLink-9s, but we need to wait until they show the same anomalous data before we consider asking them."

"They're the only other ones with a qLink-9?"

"Not exactly. Candidate Karon has one, but she got hers only two weeks before being recruited. Her brainwaves won't match the profile for some time yet."

"What about Christopher?"

"Candidate Christopher only has a qLink-8."

Travis's look went from excited to glum. "Too bad. I get along with Karon and Christopher better than the other two."

Allen gave Travis a wry smile. "Yeah, I've heard about how well you get along with Candidate Karon."

Travis blushed, which gave the group a good laugh.

Arturo knocked on the door as the laughter faded. "Nice to see you're all in good spirits," he said as he entered. "Travis, congratulations. Here is your new 3DIdent card. Do good work with it for us."

"Thank you," Travis said as he examined his new card. The change that obviously caught his eye was the name--Travis. Just Travis, with no "Candidate" in front of it. As he studied the card, the reality of the Cloudberry situation struck him.

Dear Lord, what did I just volunteer for? I hope I did the right thing, Grandpa.

CHAPTER 20 – LEVELWIND

"C'mon, Chris, you can do it! Focus!"

Travis viewed Christopher's first Tap from the Comms center along with Karon, Serene, and Trace. All had completed their first Tap the previous week, with varying degrees of success. Allen and Wilson had invited them into Comms so they could link into the visual signal as Christopher took his turn.

Christopher was in the middle of the Drilling procedure. His teeth clenched tightly and his muscles tightened as he fought through the nightmare sequence. His left hand tapped rapidly against the armrest of the chair.

"You know he can't hear you," Trace said in response to Travis's cheerleading.

"Who cares? C'mon, Christopher! Get through it!"

Suddenly, Christopher's hand stopped moving and his eyes sprang open wide. He breathed heavy clouds of steam into the air of the Drilling house. Goosebumps covered his bare arms.

The Comms room went silent. His Driller's voice eventually came over the link. "Are you with me there?" Dr. Wheaton asked.

Christopher gasped for air. "*¡Madre de Dios!*"

"Check your body," Dr. Wheaton said. "Forget about what you're seeing for the moment. Tell me what you're feeling."

Christopher's breathing gradually slowed. "Damn, it's cold in here!"

"What else? Are you sore anywhere?"

"Everywhere, especially my left wrist." His breathing returned to normal. "I feel like I've been grinding my teeth for a week."

"Okay," Dr. Wheaton said. "Now, try to describe what you see."

Christopher laughed. "No way I can describe *this!*"

"Try your best."

"Whew! Umm ... salt and pepper with a bunch of lines. Video static. Maybe my console's malfunctioning."

The tension in the Comms center broke. "Yes! He made it!" Travis shouted. Karon and Serene applauded. Trace just stood with her arms crossed.

"What's your issue?" Serene asked Trace. "He made it through and he's seeing the lines!"

"Big deal. He's useless until he proves he can work with them."

"He will," Serene said. "He's just gotta practice. Besides, I don't recall you being such an expert when you Tapped. How many times did you drop the cylinder?"

"I wasn't tuned in right! I need a competent Driller."

Allen jumped in. "Knock it off, both of you. Serene, you dropped it on your first try, too. Trace, nothing was wrong with your tuning."

"Well, whatever it was, it wasn't my fault. I need a Driller I can work with before I go out in the field."

"Fine, talk to Dr. Sabo about it, but now's not the time. Quiet!" Allen ordered.

"Look, there he goes," Serene said as Christopher focused on the test lift cylinder. He managed to raise the right side a couple of centimeters before it toppled and rolled around on the floor.

"Shit!" Christopher said. "I hoped I'd get the damned thing up on the first try."

"Don't worry about it," Dr. Wheaton said as he put the cylinder back on its base.

"Everyone has some kind of trouble the first time out."

"Travis didn't," Christopher mumbled.

You weren't in my nightmare.

"There are always exceptions to the rule." The doctor returned to his post at the Drilling console. "Okay, let's try that again."

"Concentrate, Chris!" Travis said, "You know you can do this!"

"Calm down, will ya?" Trace said with a scowl. "Let's just finish watching this and get back to some real training."

###

The group met back in the classroom later that day, after Christopher's reception and debriefing. Wilson was on hand to address the class. He stood in front of Allen, who sat at his desk.

"I know you've all been congratulated individually," Wilson said, "but now I want to congratulate you as a group. Five Tappers in three days--not counting the weekend--is quite the accomplishment, considering how bad the weather's been on the platforms. I believe we could have had five in a single day if the weather had cooperated. Give yourselves a hand--you deserve it." He joined the group in a brief round of applause.

"None of you are Candidates anymore," he said, "but that doesn't mean your life is going

to get any easier from here on. You've Tapped the *ability* to manipulate gravity, but you still have to *master* it. That means practice, practice, practice. You'll be taking more trips out to the platforms, which means our budget for HoverJet fuel goes up and people see you more often at the Naval Air Station down in Corpus Christi.

"It also means you're going to eventually move on to manipulating electromagnetic force lines. That's where things can get tricky, especially when you're surrounded by storms on a metal platform in the Gulf. Jeremy managed it during the demo on your first day, but instead we're going to use our land base out in West Texas for your EM training, just as an extra safety layer. At least we can save a bit on HoverJet fuel that way," Wilson said with a grin.

"We'll leave the nuclear forces for another time, since you're going to need some *serious* control abilities to manipulate them, much less see them clearly. Very few people ever become good enough to work with them, so there's one more incentive for you to keep honing your skills.

"One final thing," Wilson said, "that I think you're all really going to like. The restrictions on discussing your past and on fraternization are now officially relaxed--a bit."

Shouts of "Yeah!" and "Woo-hoo!" went up from most of the group. Trace just clapped.

"Just a bit, though," Wilson cautioned. "You can share info with your Driller and other Tappers in casual conversation. There are a few others you can talk to: your computers will identify them for you. Your computers will also continue to monitor you and will warn you if you start going too far, like if you start to give out your full name, a relative's address and phone number, and so on. Just be careful what you talk about."

Christopher raised his hand, wincing from the soreness left over from his Tap. "Does this mean we don't have to have Allen or Security around when we get together with others?"

"You are correct, but remember: your computers are still going to be watching. The

restrictions on taking them off still apply, for Security's sake. I wouldn't do anything you don't want them seeing--and potentially reporting." Christopher frowned, while Karon and Serene giggled at him. Trace grinned.

"With that, I'll hand things back to Allen. He's still your instructor, and you'll continue to meet here in the morning before going out on training runs. Consider this your homeroom, just like in high school. Again, thank you for your hard work, and congratulations on becoming Tappers." The class applauded as Wilson left the room.

Allen stood up and walked to the front of his desk. "Since we have one very sore Tapper nursing a headache," he said, glancing at Christopher, "we're going to cut class short again today. Christopher, go get some rest. If your headache doesn't get any better, contact your Driller and have them give you some Paladinol. The rest of you, enjoy your Monday off. We'll get started in earnest tomorrow."

Travis gave Christopher a congratulatory back-slap on his way out of the room.

"Oww, man! Watch the merchandise!"

"Right," Travis replied with a mischievous grin. "See you tomorrow."

Someone touched Travis on his shoulder. He turned and was pleasantly surprised to find Karon standing behind him. "So," she said, "would you like to come over for that cup of coffee now?"

###

Travis found himself with Karon in her apartment's living room, literally having a cup of coffee with her. They'd linked computers, and neither interface had objected to either the location or the conversation.

"How do you like Doctor Talbot as your Driller?" Travis asked as he looked around the

room. Karon had put a few personal touches into her apartment decor--two lime-scented votive candles on her coffee table, a small Mediterranean rug on the wall behind her sofa, and a potted plant on the kitchen table.

"Dr. Talbot's pretty good," Karon said. "Why? You know her?"

"Not really, but I'll bet she remembers me."

"Why?"

"She was supposed to be my first Driller in VR."

"Oh. That was a mess, wasn't it?"

"In more ways than one."

"What do you mean?"

Travis paused for a second. "Tab, how much of the backstory you think I can tell her?"

"Not much," Tabitha chimed. "Would you like me to give her the bit that won't get you in trouble?"

"Sure, go ahead." Tabitha proceeded to tell Karon an abbreviated version of what had happened with Travis's mother and how it had led to his reaction to VR.

Better Tab tell it than me. I don't want to show those emotions today.

"My God, Travis, that's horrible! You were just eight when she did that?"

"Yep. Gives me trouble with VR to this day. That's why I was complaining to Chris about having to go through the sessions under medication."

"But you made it through Drilling without meds."

"Yeah, thankfully. The training helped." Travis paused again, thinking of something else to say. "Oh, yeah--what nightmare did you have to go through?"

Karon grimaced. "I was buried alive in a box, and some things were trying to dig through.

A few made it. Crawly things."

"Right, right. You don't like those."

"You got it. The claustrophobia only made it worse."

"Did you have any trouble getting past it?"

"I'm not sure," Karon said. "It seemed like I was in that box forever, then all of a sudden I was out of it. I don't remember if I did it myself or if my Driller did something to help."

"What about the dark spot exit? Did you see it?"

"I know we're supposed to, but I honestly don't remember seeing it. Did you?"

Travis laughed. "Oh, yeah, I saw it. Looked like the center of a tornado. I even remember coming out of it and having my left hand still banging on the armrest. My Driller says I shouldn't have remembered either part, but I did."

"You don't sound worried," Karon said.

"I've got a good Driller. She'll help me take care of it."

"Sounds like you know her really well." A pout flashed across her face.

"By accident, mostly. She's been my nurse practically since I got here--almost like a big sister. Nurse Paige Kirkshire," he said with mock pomp and a grin. "She got a promotion to full-time Driller when we got back."

Karon's pout morphed into a smile. Travis hoped there might be more behind her smile.

"So," he said, clearing his throat, "what's on the menu for your next Tap tomorrow?"

"Another trip out to a platform for gravity training," Karon said, her smile gone. "I'm not looking forward to another long flight followed by a nightmare."

"Long flight ... do you get motion sickness?"

"I did on the first trip. First time I'd been on a HoverJet."

"Maybe you should try and talk them into letting you go to the West Texas site instead. You don't have problems with the maglev, do you?"

"No, I can handle the maglev just fine. I'll ask about it--thanks!" She leaned closer. "So, what's planned for you?"

Travis continued nursing his coffee, albeit with a bit less attention on it and a bit more on Karon. "Tomorrow? Um ... same as you, although I'll definitely be on a platform. I grew up around water, so I don't get motion sickness."

Karon gazed into her mug. "Wish I could go with you," she said, then added softly, "or you could come with me."

"Are you kidding? You don't want to be anywhere near me when I'm Tapping. You could get yourself killed!"

Tabitha interrupted with a chime. "Sorry, Karon, he's learning, but still a bit slow on the uptake. Now you *really* know why he doesn't have a girlfriend."

Karon lowered her head and stared at the floor.

Oh God, did I make her mad? Damn it! What do I do?

Travis was just about to apologize when Karon threw her head back and laughed loud and hard. All Travis could do was wait it out, embarrassed as hell.

"I'm sorry," Karon finally managed to get out as her laughter subsided. "It's not you. It's the pair of you. You really would make a good comedy team."

"Wonderful," Travis said, trying to think of any way to change the subject. "Say, are you hungry? I know it's kind of early for dinner, but I'm getting really hungry for some reason. Wanna come over to my place? I'll cook up some beef and broccoli for you. Maybe we could go for a walk afterward."

Karon considered the offer with a smile on her face. "Sure--just go easy on the broccoli, okay? It doesn't like me as much as I like it."

###

Travis smiled and looked down at the concrete pathway as he walked next to Karon. Dinner had given him the chance to show off his culinary skills, which he'd done to Karon's apparent satisfaction. They decided to head up to the recreation floor of the Doghouse after eating.

"I've never gone wandering through here," Karon admitted as they entered through one of the airlock-like doors on the west wall. "Too afraid of tripping an alarm somewhere and getting into trouble."

"Your Agent is supposed to help with that," Travis said. "He should be programmed with a map of all the areas you're allowed to see. In fact, you should be allowed to see more, now that you're a Tapper."

"I know. It's just ..." she said, looking meekly at the floor. "I've never liked doing this kind of thing alone."

Travis wasn't sure whether Karon was being honest, acting shy, or getting at something else. He played it safe and kept quiet as they rode an elevator up to the recreation area on the 14th floor.

Better this than risk Tabitha ruining the moment, if there's a moment to be ruined.

The elevator paused on the eighth floor, the location of the Tapper Medical Administration offices. To their surprise, Serene stood on the other side of the door when it opened. Serene appeared even more surprised: she jumped back when Travis waved at her.

Karon greeted her with a smile. "Hey, Serene!" she said, holding the door open.

"Whatcha up to? We're headed up to recreation. Wanna share a ride?"

"Um ... thanks, but no thanks," Serene said, fidgeting with the top button of her shirt.

"You two lovebirds go ahead. I'll take the next car."

Karon blushed. "See ya tomorrow, then." She let the door close. "Lovebirds," she said with a shy smile. "I guess they've been calling us that behind our backs."

"I guess so," Travis said, his brow furrowed and his mind elsewhere.

What was that all about? Serene's aura looked strange--spiky. I wonder if something weird is going on here.

"What're you thinking?" Karon asked.

"I'm wondering why Serene was nervous. Tabitha, can you show a map of areas we're authorized to tour on the eighth floor?"

Tabitha chimed and put up a map on both of their virtual consoles. The only common highlighted areas were hallways and bathrooms. Karon was authorized to visit the office of her Driller, while Travis was authorized to visit Nurse Paige's and Dr. Shugart's offices.

"If she was on the eighth floor," he said, "all she should have been able to do was visit her Driller's office, right? Otherwise, she should have just been sightseeing, like us."

"I guess," Karon said. "So what?"

"So, what would she have to be nervous about?"

"I don't know, but she wouldn't be able to do anything suspicious, right? She'd set off alarms if she tried to go into a restricted area. Security would be up here in a snap."

"Yeah ... I guess," Travis said. "Still, something doesn't feel right. Could you see her aura?"

"No, I can't see them yet."

"It gave off some odd spikes when she saw us. I don't think that's normal."

"Do you think we ought to report it? I mean, maybe she was just visiting her Driller."

Travis considered the idea. "Tab, who is Serene's Driller?"

"Serene has just switched Drillers. Dr. Annie Clawson was her Driller for her first Tap.

She's scheduled to go out with Dr. Ben Del Curto on her next trip."

"Why the change?"

"Sorry, I don't have access to that information."

The doors opened on the 14th floor. Karon took Travis's hand and drew him out of the elevator. "She was probably just having a pre-Tap meeting with her new Driller. Nothing to worry about."

The softness of Karon's hand in his own convinced Travis the report could wait for now.

###

Travis walked into the classroom the next day and took his usual seat. Karon was already inside, seated and wearing a dejected look. Travis did the math.

"They wouldn't let you go west?"

Karon shook her head. "Allen said teams working on electromagnetism already have the site booked. He did say he'd see what he could do for future assignments, though."

"Well, you should be okay today," he reassured her. "I checked the weather earlier. Looks nice. We'll probably be going down to Corpus as a team. Should be smooth flying afterward."

Karon's face brightened. Travis smiled, not missing any cues this time. A rather embarrassing talk with Tabitha the night before had helped him sort out that issue.

The rest of the class walked in. Christopher's appearance made him stand out from the group. He had the look of a man who'd exhausted himself and slept to the point of making

himself even more exhausted. Travis sympathized.

While he waited, Travis examined his classmates and tried to detect any auras around them. Only Serene and Trace appeared to give off anything close. Serene's was much less agitated than it had been when they met on the eighth floor.

Allen finally entered and linked in. "Good morning, Tappers!" he said with a smile as he leaned back against his desk. "Damn, I've been looking forward to saying that to this class. Feels good."

He gestured on his virtual console and brought up a list. "Here's the timetable for the day. All five of you are going to take one of the big maglevs down to the base in Corpus--along with your Drillers and Roughnecks, of course. Once you get there, you'll split up and take separate HoverJets to your assigned platforms.

"Today will be your first big gravity day. We'll be concentrating on two things: control and endurance. It doesn't matter if you can lift the whole state of Alaska if you can't keep it steady for more than a second or two. A lot of the entry level assignments are going to require things that'll force you to keep your Tap open and stable for a long time--we're talking hours here, for things like offloading cargo ships so that longshoremen can do their work quicker--and, that you maintain control the entire time, of course. I guarantee you're going to need some rest and some of that new Paladinol once you're done."

He stood away from his desk and lifted a finger. "Quick word of warning: second Drilling experiences are usually different from the first, but there's the possibility you might get hit with the same nightmare. Do *not* expect to just waltz on through it if you do. In fact, you probably won't realize it's the same nightmare at first. Don't let the fear take over, no matter what happens. Understood?"

All five said, "Yes, sir," practically at the same time.

"One more thing: forget the *sir* bit from now on. We're all Tappers here, regardless of our level. Only the occasional tight-assed admin will insist on being called sir. A simple yes or no will be more than good enough. Now, with that out of the way, any questions before we go?"

None surfaced.

"All right, then. Let's head on down to the maglev terminal and get on one of the big boys. Meet me in thirty minutes."

Travis caught up with Karon after they left the classroom. "Say, Karon, would you like to sit together on the maglev?"

Karon turned and smiled, brushing her hair over her shoulder. "Sure. I think I'd like that very much."

"And there you have it," Tabitha chimed over his private channel.

Quiet, you.

CHAPTER 21 –RELAY

MMQE 01302 01206 01211

QUANTUM KEY ACCEPTED—DECRYPTED MESSAGE FOLLOWS

Update, yet again as requested:

Works reports safety system one complete. Backup fabrication now in progress.

External resource reclassified as secondary internal resource. Second training phase under way.

Internal variable still present. Continuing to gather data to assess impact.

Comm relays like this cost time and money, gentlemen. Suggest you save your money—and my time.

MESSAGE ENDS

DELETE

DUMP CORE NOW

CHAPTER 22 – FORMATION PRESSURE

"You've got the wrong man!" Travis shouted as he fled from the village into the murky darkness of the forest. The townspeople were in close pursuit, and they were gaining ground quickly. He ducked as yet another arrow flew past his head. Shouts of "Heretic!" and "Burn the warlock!" rose above the din of the crowd.

He tried to jump over a fallen tree, but caught a foot on it and fell, landing on his back in a small clearing. As he hit the dirt, the earth beneath him began to shake. Huge boulders rose around him in an ear-splitting eruption, blocking the trees from his sight. He tried to stand, but a chasm opened beneath him. He plunged into it, back first, falling past sharp stones and thorny roots which ripped and tore at him, sending pain shooting up his extremities.

The townspeople surrounded the rift. They threw down their torches and shot arrows after him as he continued to fall into the pit.

A malevolent voice blasted upward from the depths of the Earth.

"COME UNTO ME, MORTAL CREATURE!"

What the hell?

Travis plummeted through a wave of searing heat that blasted his lungs. Bloody gashes covered his skin as he tumbled and slammed into the pit walls.

"I WILL REND YOUR FLESH," the voice thundered. "I WILL FEED UPON THE MARROW OF YOUR BONES."

Nightmare!

A snap of realization prompted him to thrash around so he fell face first.

"I WILL RIP YOUR VERY SOUL TO TATTERS."

The voice grew impossibly loud, tearing at his ability to concentrate. Travis forced his eyes to look through the heat toward the center of the pit.

"I WILL FEAST ON EVERY FIBER OF YOUR BEING."

There! At the center of the pit was a dark spot. *The exit!* He focused all his thoughts on it. It grew larger as he neared it.

"I WILL HAVE NO REMORSE, NO REGRET, NO COMPASSION. I AM PAIN PERSONIFIED--PHYSICAL, PSYCHOLOGICAL ... ETERNAL!"

Travis wrested control over his mind from the nightmare. The images of the chasm broke apart and whirled around him. His wounds disappeared as the thorns and rock walls passed through him.

The nightmare fought back. "I WILL DEVOUR EVERY HOPE, EVERY DREAM YOU HAVE, BEYOND THE END OF TIME!"

Finally, his eyes snapped open. Images of the pit were replaced by the usual visual cacophony that followed a Drilling session.

"Travis? Are you with me?" Nurse Paige asked from the console behind his chair.

Travis's left wrist ached from tapping on the chair's padded arm. He sucked in gasps of frigid air from the room. His body prickled with goosebumps from the neck down.

"Hey! Are you okay? Still with me down there?"

His vision finally sorted itself out and his breathing returned to normal. "I'm here," he said. "Good Lord! Two weeks worth of those Drilling nightmares, every damned weekday so far. Does it ever get any easier?"

"Nope, and you've got the rest of your Tapper life to look forward to it."

"Gee, thanks," he said.

"What did it put you through this time?"

"Some sort of witch hunt, with an express pit to hell. Sounded like the devil himself was threatening me with eternal suffering."

"Any injuries I need to know about?"

Travis sighed. "Only frustration and goosebumps. By the way, are you ever going to explain why it always gets so damned cold in here?"

"I'm afraid that's your fault. You're drawing upon energy for both the Drilling and Tapping processes. Heat's a convenient energy source, so you, my friend, are a natural air conditioner."

He considered the implications. "What about freezing weather? Would I still be able to Tap if it were zero degrees?"

"Yes, as long as you're not talking absolute zero. There's always energy in the atmosphere, with all the molecules bouncing around. You'd just make things even colder."

"What about in space?"

"A little trickier," Nurse Paige said, "*if* you were floating without a space suit. For crying out loud, don't worry about it so much! We've got training to do. You held your Tap open for two hours yesterday. Let's see what you can do with it in that time. Ready to go outside?"

Travis double-checked the chin strap on his Hard Hat and stood up. "Yep. Let's go." He

waited for Nurse Paige to transfer the hardware console functions to her palmtop unit before leading her outside.

"Nice weather," he said as he walked briskly across the platform. The sun shone through scattered clouds in the late morning sky, while a warm breeze floated across the spacious top deck. The warmth rid him of his goosebumps and helped relax his sore muscles.

Travis stepped into the marked-off practice area in the center of the platform. At the far side of the deck, side-lit by the morning sun, stood the same concrete cylinder he had seen the previous day. It cast a long shadow as it towered over the platform. Even though it was identical to the cylinder that Jeremy had used in his class demonstration, it was vastly more imposing in person.

"What a monster," Travis said. "Tab, how big is that thing?"

"Ten meters tall with a three meter diameter," she chimed. "Under normal gravity, it weighs approximately 150,000 kilograms. That's over seventy cubic meters worth of concrete, in case you're curious."

Travis whistled in surprise.

"Don't worry so much," Tabitha rang. "It's ten meters high, and you're twenty meters away. At least you'll have time to run if it falls over."

"If you say so," Travis said, still wary of what he was dealing with. He tried to get the numbers out of his head by studying the cylinder from the new perspective of his abilities. Gravity force lines surrounded the perimeter and ran parallel into the sky above it. The lines warped where the cylinder's base stressed the steel deck of the platform.

"Here we are again," Nurse Paige said. "Your work yesterday was just no-lift endurance practice. You think you're ready to do some heavy lifting today?"

"I'd better be. I don't know how I'm supposed to get that much moving, though. It's huge! How did Jeremy move it around so easily?"

"You've seen enough old sci-fi movies to know that size doesn't matter when it comes to stuff like this. That's about the only thing they got right, but still ..."

"Yeah, I know. It's just like the twenty-kilogram practice cylinder in the Drilling room, but affecting a wider field of force."

Nurse Paige patted him on the shoulder. "That's the spirit. Let me get in position." She moved behind him and re-checked her palmtop console. It responded with a reassuring blip. "Time for our check-in," she said. "Doghouse Prime, this is Doghouse Three. Tapper is in position and ready for main cylinder practice lift number one. Request permission to proceed."

"Permission granted, Doghouse Three. Practice lift is a go."

"There you are, Travis," she said. "Give it all you've got."

He blew out a heavy breath and focused his attention on the base of the cylinder. His breathing and heart rate slowed and steadied as he concentrated. Copying Jeremy's example, he raised his right arm and held out his hand, parallel to the deck with palm down and fingers curled into a fist while maintaining his focus on the cylinder's base.

Again following Jeremy's example, he slowly uncurled his fingers. He imagined that his hand was sliding between the deck and the cylinder, blocking the lines of gravity from reaching the concrete.

An ear-piercingly loud metallic scraping noise filled the air. Instead of lifting, the cylinder slid along the deck. The steel of the platform vibrated, shaking everything that wasn't bolted or welded down and threatening to knock Travis off his feet. He lost his focus just long enough for the gravity lines to reattach themselves to the cylinder. It stopped moving with a loud

screech.

Travis put a finger under his Hard Hat and into his ear. "Well," he said as he twitched his hand, feigning re-seating his eardrum. "That certainly sucked."

"Not as much as you think," Nurse Paige said. "Despite the noise, you managed to remain stable without any additional input from me. That's good overall concentration at this early stage, even if you did get distracted at the end. You're still good to go--give it another shot."

Travis breathed out heavily again. "If you insist." Once more, he raised his right arm and held his fist out while focusing on the cylinder's base. He imagined breaking the gravity force lines between the deck and the cylinder as he uncurled his fingers.

The air chilled around him. He fought to keep his concentration steady.

Before he realized it, the cylinder was in the air, this time without the scraping noise. It rose slowly until Tabitha's virtual console display showed he'd lifted it a full twenty centimeters.

"Outstanding!" Nurse Paige said. "Okay, hold it there for as long as you can. Timer starts now."

###

Five minutes into the lift, Nurse Paige checked in with Travis. "You still with me there? You've been awfully quiet."

"I'm fine. Trying to focus on the lift."

"Well, you're doing great. All your readings are stable. Keep up the good work."

Ten minutes into the lift. Cold sweat covered Travis's brow. Nurse Paige's palmtop console emitted slow, regular blips. "Everything okay?" she asked.

Travis wiped his brow with his free hand. "Just peachy. I'd be bored as hell if I didn't have to concentrate so damned hard."

"Understood," Nurse Paige said. "You're just above tolerance one levels. Good job."

Fifteen minutes into the lift. Travis still had the cylinder off of the deck. The effort stressed his concentration to the breaking point. Tunnel vision had set in at the twelve-minute mark, and goosebumps covered his arms again. The temperature dropped around him as he reflexively drew upon more and more energy to keep the cylinder in place.

I've got to stay with this, no matter what.

Tabitha rang an alert to Nurse Paige. "Travis's brain wave amplitude readings are increasing. Frequency pattern still stable."

"Travis, your core temperature dropped another degree," Nurse Paige said. "You've passed tolerance two. Are you all right over there?"

He didn't respond.

"Travis," Tabitha chimed, "Nurse Paige is trying to get your attention."

"Tell her to take a number." He breathed like a weightlifter in the middle of a workout. He continued to pull in energy--far more energy than he needed to maintain the lift.

At the edge of Travis's awareness, the lines of gravity surrounding the cylinder began to fluctuate. His influence stretched beyond its circumference, causing gravity to warp and shift along both its width and height. Dangerous amounts of torsion and cycles of expansion and compression stressed the column, growing with every bit of energy applied. Tiny flecks of concrete broke free and circled around the cylinder, held aloft by the expanding gravity field. A lethal halo of impending disaster floated and swirled through the sunlight.

The danger went unattended as the cylinder started to self-destruct. Travis felt something might be amiss, but he was too hell-bent on keeping the base level. Tabitha likewise gave no warnings about the cylinder.

Finally, the concrete core of the cylinder buckled with a loud, explosive *snap*. Cracks streaked along its side. Chunks of stone broke away from the top and were thrown skyward by the powerful gravity distortion.

Travis blinked at the snap, but not long enough to disrupt his intense focus on the base of the column. He strained to maintain his hold, creating more destruction in the process.

He thought he heard Nurse Paige shout.

Thousands of kilograms of concrete chunks flew into the air above the cylinder, laying bare much of its skeleton of steel reinforcement bars. Gravity gone out of control crushed and twisted the steel cage inward, squeezing thousands and thousands more kilograms of concrete out of the center of the column and into the sky.

He heard another shout. For a split second, he expanded his focus to include his sense of hearing.

"Travis!" he heard Nurse Paige scream. "Release the cylinder! *Now!*"

He snapped his gaze to the body of the column and was shocked to see that only half of it remained intact. The rest formed a fountain of crushed and broken concrete that rose appallingly high in the air above it.

Travis spun away from the cylinder and sprinted toward the Drilling house. Without slowing, he grabbed Nurse Paige's arm and pulled her alongside as he ran.

Natural gravity was reasserting itself with a vengeance.

The intact portion of the cylinder slammed onto the platform, throwing Travis and Nurse Paige into the air. They regained their footing just as the first remnants of crushed concrete rained down from the sky. Each impact shook the deck, making it harder and harder for them to run.

Small pieces of rubble disintegrated upon impact after the hundred-meter fall. Larger pieces exploded as they smashed into the deck, sending chunks flying and spraying thousands of sharp fragments across the platform at bullet-like speed.

Travis realized they wouldn't make it to the safety of the Drilling room before the bulk of the debris reached them. In desperation, he pulled Nurse Paige down to the deck and dropped behind her so his body shielded hers. Concrete chunks battered him, cracking his ribs, while smaller shards tore gashes in his back and legs.

After what seemed like an eternity of crashing and destruction, the last airborne bits of the cylinder landed on the pile of shattered rubble. Dust from the collapse formed a cloud that filled the air at deck level and surrounded the pair. Travis tried to stand, but instantly collapsed from the pain of his wounds. He gasped and drew in a lungful of dust, sending him into a bout of coughing and wheezing. Every cough sent waves of agony through his body.

Worse yet, his Tap was still open.

Between coughs, he heard an ominous series of rapid beeps. Nurse Paige scrambled to her hands and knees in front of him. She searched frantically through the dust and debris. Seconds later, she emerged with her palmtop console.

She turned her focus toward him. He was still coughing and writhing in agony. The air around him began to chill. His left hand pounded against the deck.

"Travis! Oh my God!"

Travis fought through the coughing to see Nurse Paige's face. It paled as she wiped the dust from her palmtop. He knew what her look meant: he was dangerously close to a blowout.

Nurse Paige went to work immediately on both the palmtop and her virtual console, her hands moving faster than anyone he had ever seen.

"My God, tolerance eight. Come on, Travis! Don't you dare lose it! I know you're hurt, but you have got to keep your Tap under control!"

Coughs and spasms of pain still wracked Travis's body. Slowly, the pressure from his open Tap lessened. His pounding left hand slowed to a stop. A few more moments of Nurse Paige's work stabilized him enough to handle the shutdown impulse from his Hard Hat. He gasped again when his Hard Hat received the signal, bringing even more dust into his lungs.

He was still caught in a paroxysm of pain and coughing, but he was no longer in danger of a blowout.

He struggled to lift his head and saw Nurse Paige get up and dash the final few meters to the Drilling room. His head fell back to the deck as he passed out. The next thing he knew, his head had been lifted and his Hard Hat was being removed. Someone pulled the neural inhibitor patch off his neck and replaced it with another micro-I.V. patch. His ragged cough continued, but his pain eased. Several more minutes of coughing passed before he was able to breathe oxygen from a miniature canister.

He picked up Nurse Paige's voice, shouting through his still-connected console link. "Doghouse Prime! Request emergency recall from Doghouse Three! Tapper down! Advise the HoverJet that there is damage on the platform! I repeat, Doghouse Three requesting emergency recall! Tapper down!"

"Roger, Doghouse Three," came the response. "HoverJet Bravo Six, this is Doghouse Prime. Commence emergency recovery of Driller and Tapper from Doghouse Three. Be advised landing platform may be structurally compromised. Acknowledge."

Travis's consciousness began slipping away again. The wounds on his back throbbed with pain, but the worst of his coughing was over. With the help of the oxygen canister and a few sips

of water, he finally managed to breathe evenly.

"Damn it, Travis," Nurse Paige said before he passed out again. "You don't even know your own strength, do you?"

CHAPTER 23 – RECOVERY

Travis awoke to the sight of the Texas Gulf Coast zooming past him in a blur. He lay on a gurney, flat on his stomach with his head turned to the side. A nasal cannula pushed oxygen into his lungs. He tried to speak, but managed only a sustained groan.

"Oh, God, he's awake," he heard Nurse Paige say. "Someone get another set of patches and a bag of fluids back here, now!" Seconds later, someone pushed a micro-I.V. pad against the back of his hand. "Hook the bag into that patch," she said, "then double-check the oxygen flow. That canister might be running low by now. And for God's sake, keep pressure on those back bleeders!"

"Where ... how'd ..." He coughed on a remnant of dust. "How'd I get here?"

Nurse Paige's concrete-dusted hair fell against his cheek as she leaned closer to his ear. "Don't worry about anything right now. We got you onto the HoverJet and flew you to Corpus. You're on the maglev back to the Institute. We're taking you to get you patched up. Mark took care of your Hard Hat, and I'll take care of *you* until we're home."

"You ... okay?"

"Yes, thanks to you, you damned idiot. We're going to have a long refresher talk about disaster protocols when we get back."

He struggled to stay conscious. "Worth saving?"

"Worth ..." Nurse Paige backed away and shook her head. "What did you say?"

"Was I worth saving?"

"Don't be stupid," she said. She put a hand on his shoulder, gently. "Shut up and go back to sleep."

He let out a long, pained breath before passing out.

###

Travis woke up again as the maglev pulled into the Institute's underground terminal. A trauma team retrieved him from the space Nurse Paige had set up on the train and rushed him into an elevator. A doctor evaluated his condition en route to the ninth floor Tapper hospital area. "His lungs have cleared," a heavily accented voice said. "We can concentrate on the internal bleeding and then move on to removing the embedded fragments and treating the other injuries."

He passed out before making it out of the elevator.

Travis later found himself staring at a pink granite floor in a hospital bedroom, his mind floating in and out of consciousness. During the hours that followed, he overheard nurses and techs discussing his treatment. They fed him painkillers via micro-I.V. patches. Microfiber dressings covered his back and leg wounds and draped over spots where internal injuries had happened below. They infused healing compounds into the damaged areas.

Been here before, he thought, once he realized his back was bare. Memories of his back bleeding at the hands of his mother floated through his mind. *Did it to myself this time.*

Two pairs of feet approached his bed during one moment of lucidity. Travis craned his neck to see who they belonged to. A doctor had led another person into the room. Travis's viewing angle prevented him from identifying the second person.

"Ah, good evening," the doctor said. A short and wiry man, he had the appearance and accent of a person of South Asian descent. "I'm sorry we have to meet again this way, Travis. You may not remember me at the moment, but I am Dr. Chaudhry. I treated you several weeks ago when you became ill at the VR suite. I operated on your back today."

Travis strained to lift his head higher. "I remember you," he said in a groggy slur.

"A good sign," Dr. Chaudhry said. "Your Driller is here as well. She's been quite insistent on seeing how you're doing."

"Hello, Travis," Nurse Paige said, stepping out from behind the doctor. She was still covered in concrete dust. "I told you we'd get you patched up. I think the maglev pilot set a new speed record on the way back here."

She moved closer to the side of his bed. "Thank you for what you did for me this morning. It was a damned dumb thing to do, but we'll argue about that later."

Travis forced a pained chuckle. "You know you'll never win that argument. Are you okay?"

"Just the typical scrapes and bruises that happen to people when someone else takes the damage for them." She gave Travis a weak smile. "Seriously, I'm fine. How do you feel?"

"Been better," he said with a groan. "What the hell happened out there?"

"We're still studying the data," Nurse Paige said as Dr. Chaudhry examined the medicated dressings. "What do you remember from before the accident?"

"I remember ..." he said, a yawn interrupting him. "Tab said you were trying to get my attention. I think I said, 'Take a number.'"

"Nurse Paige told me the same," Dr. Chaudhry said as he continued checking the dressings. "You showed very strong concentration on the task at hand. I'm afraid our medical

staff may be partially responsible for that. The training that got you through VR may have had unforeseen side effects."

VR. What a thing to hear with my back ripped to hell.

"How?" Nurse Paige asked. "He wasn't on any of Dr. Shugart's meds out there."

"No, but the drugs he gave Travis during training, along with other variables, may have strongly reinforced what he learned."

"What kind of variables?"

"Mainly the qLink-9 he wears. Odd things have happened with some qLink-9 wearers. This might be a similar situation. In any case, it's hard to tell at this point. Dr. Shugart and I will be looking into the possibilities."

"Still doesn't answer my first question," Travis said through another yawn. "What happened out there?"

"You smashed the hell out of the upper half of the cylinder," Nurse Paige said. "How you did it is another question. Did something happen with your Tap?"

"No, just with ..." He paused and yawned again. "Just with keeping my concentration on that damned pillar." Yet another yawn, bigger than the last.

"Come, come," Dr. Chaudhry said. "I think that's as far as we need to push him today. Travis, do not worry about what happened this morning. Let us concentrate on healing you for now. There will be plenty of time for discussions later."

"Thanks, Doctor." He yawned again. "Hey, Paige?" he said, his voice barely audible.

The nurse moved closer. "Yes?"

"Did I protect you? You're really okay?"

She looked to the side and sniffed back a tear before answering. "Yes, Travis. I'm okay."

"Oh ... good," he said.

You see, damn it, Mother? I was worth saving.

He fell asleep again.

###

Travis remained heavily medicated through the next two days. The healing bandages and extra intravenous compounds did their jobs well on his injuries. By Friday evening, most of his lacerations and punctures were nothing but scars.

At least they didn't itch.

His internal injuries were also on the mend, with the organ bruising cleared by the same medications. He finally managed to turn over and sit up in bed, but he still needed painkillers for a pair of cracked ribs that hadn't yet healed. Dr. Chaudhry ordered him to remain hospitalized over the weekend.

Despite his injuries, Travis wanted visitors other than medical staffers. The first to arrive were expected: Wilson and Allen.

"So," Travis said as they entered his room. "How much do I owe you for the cylinder?"

"The *cylinder*?" Wilson said. "What about the platform? Do you know what happens to steel decking when you drop over 165 tons of concrete on it?" He kept an angry look on his face for as long as he could before breaking out in a grin and giving Travis a gentle handshake. "How are you doing this morning, Tapper?"

"About half-and-half. Half bad ribs, half good painkiller."

"Welcome back to the world of the conscious," Allen said with a smile and another careful handshake.

Travis laughed, bracing his ribs. "Ah, consciousness. I've missed it over the last few days.

Wondered if I'd ever come out from under the meds Dr. Chaudhry pumped into me--when I was awake enough to wonder anything at all."

"Don't worry," Wilson said. "Dr. Chaudhry knows what he's doing. He's patched up many a Tapper in his time here. They tend to bounce right back after he treats them."

Travis smiled, then grimaced as he adjusted his position. "Now that you two are here, will someone finally tell me what happened?"

Wilson's and Allen's auras wavered as they flashed a look at each other. "Make a long story short," Wilson said, "and safe for public ears, your Tap opened too wide. You could say it opened *unexpectedly* wide. We're going to have a sit-down meeting over it in my office Monday morning, assuming you're better by then."

"Was it something I did? Something Nurse Paige did? Please tell me she's not in trouble over this."

"Neither of you are in any trouble," Wilson said. "That's all we can say right now. Anything more will have to wait for Monday."

"You've got more important matters at hand," Allen said. "Getting well is at the top of your job heap. You've also got more visitors waiting. Dr. Chaudhry's going to open the floodgates after lunch. I hope you like flowers."

"Not for lunch," Travis said. "I prefer chicken fried steak."

Wilson and Allen laughed. "We'll let you handle the menu selections," Wilson said. "Meanwhile, Allen and I have numbers to crunch. I'll check in with you on Sunday if Dr. Chaudhry clears you to leave. You take care of yourself until then."

A couple of handshakes later, the pair left Travis alone.

Tabitha chimed in after they left. "Hey, Travis?"

"Yeah?"

"Did you notice something funny about their visit?"

"Funny? What was funny?"

"Neither of them asked to link in to me."

Travis raised an eyebrow. "Yeah, you're right. I wonder why."

"I wonder if *I'm* in trouble. Did I screw up my program execution on the platform?"

"No way," Travis said. "You've never done that. If anything, the person who wrote your program would be the one in trouble, not you. Don't worry about it."

Tabitha rang a dissonant chime. "Easy for you to say."

"Cliché mode off, Tab."

"Well, you don't have to worry. *I'm* the one that's going to get melted down if it was my fault."

"No one's going to melt you down. Okay?"

Tabitha paused before ringing a quiet bell. "Okay."

He smiled. "Good deal, Tab." A gesture at his virtual console brought up the lunch menu. "Now, let's see ... where did they hide the chicken fried steak this time?"

###

Just as Allen said, the floodgates opened after lunch. Christopher, Serene, and Karon visited first. Karon practically ran into the room. She put a large vase overflowing with brightly colored flowers on Travis's hospital bed table and leaned down to hug him. He winced and let out an involuntary "Oww!" in response.

Karon let go and backed off. "Sorry! Sorry! I'm sorry," she said, her eyes on the verge of tears. "I just ... I'm ..."

"I missed you, too." He smiled at her and held out a hand. She took it in hers and gripped it tightly.

"Hey, you two!" Christopher said. "How much have you been 'just getting acquainted'?"

"They're definitely more than just friends now, aren't they?" Serene noted with a wry smile.

"No kidding! I wonder what else they've been up to behind our backs."

"Let's see," Travis said. "How long has it been since the restrictions were relaxed?"

Karon poked him in the shoulder. "Quiet, you!" she said, wiping her eyes. "We haven't done anything that violates any regulations."

"I guess I'm gonna have to look up exactly what the regulations are when I get home," Christopher said with a grin. "Anyway, how you doin', bro? That was one hell of a mess you got into. You okay?"

"Getting there," he said. "This is the first day I haven't been medicated out of my skull. All I've gotta get over now is a couple of cracked ribs, but whatever healing potion they're pumping into me is fast-working stuff. I should be out of here by Sunday."

"That early?" Serene asked. "Wow, that's quick, considering what happened. Have you seen the video of the accident?"

"I've kinda been avoiding it. I was there, remember?"

"You still might want to look at it," she said. "They didn't catch everything, but what they did catch is pretty spectacular."

"Yeah, you crushed the hell out of that thing!" Christopher added. "How'd you do that?"

"I still don't know," Travis said. "Every time I ask what happened, I get told, 'We're still looking at the data.' I don't know if they're being honest or hiding something from me. Anyway,

there's supposed to be a big meeting about it on Monday, so I guess I'll find out then."

"Well, whatever it was, I hope you get it fixed," Serene said. "That could cause real problems if you go out on a group Tap."

"He'll get it fixed," Karon said. She sat next to him on the bed. "He's got a good Driller and a good computer. He'll get it fixed."

Travis gave her a look and a smile before gingerly working an arm around her. "Yep, we'll get it fixed," he said, "whatever it is that needs fixing. By the way, where's Trace?"

"No idea," Christopher said. "We talked about a group visit, but she kept quiet through the whole discussion. Thought she'd be coming with us, but she's apparently playing the role of Miss Grumpy Pants today."

"C'mon, Chris, be nice," Serene said.

"Yeah, right, sorry. Anyway, we've got other things to talk about, man!"

The group spent time bringing Travis up to speed on training progress. He learned that Christopher, Trace, and Karon had completed two-hour cylinder lifts earlier in the week without problems. Serene had managed just one hour before she lost her concentration, but she pulled off a two-hour lift the next day. They listened to more of Travis's story for a while and spent the rest of their visiting time playing virtual console games with him.

Christopher and Serene eventually left Karon and Travis alone, but not without a good bit of goading and joking around. Karon finally chased them out and closed the door behind her.

"Now," she said with a smile as she sat on the bed next to him, "let's see if you remember what those regulations say."

###

Travis received several more visitors Saturday evening. Roughneck Longren dropped by,

as did some other staffers he'd met. Karon almost lived in his hospital room. Trace remained a no-show.

Between visitors, medical staffers helped him get back on his feet. He regained his normal gait and lost most of the pain in his ribs by Sunday morning. Doctor Chaudhry finally took him off of all micro-I.V. treatments and cleared him to go home after Sunday dinner.

Wilson dropped by for one last check-in before his release. Travis immediately noticed a disturbing shimmer to Wilson's aura.

Wilson's worried about something, despite that smile he's wearing.

"Doctor Chaudhry tells me you'll be ready to roll for tomorrow morning's meeting," Wilson said after the greetings were out of the way. "What do you say--you up for it?"

"Yeah, I'm up to speed," Travis said as he sat on the edge of the bed. "Still a little sore in the ribs, but nothing a little Paladinol won't handle. There's some waiting for me at home."

"Good deal," Wilson said. "Make sure you're in my office, 8:00 a.m. sharp."

Tabitha chimed a subtle reminder.

I remember. I'll talk to him.

"Before you leave, can you spare a minute? Tabitha's been--"

Wilson's aura flared. He held up a hand to stop Travis and then closed the door. "This is most likely not safe for public consumption."

"Why not? All Tab wants to know is if she's in any trouble."

Wilson sighed. "No, no one is in trouble. The incident was unprecedented, so no one's head is going to roll, especially Tabitha's--if she's got a head, that is. Anything else will have to wait until tomorrow."

"I can tell from your aura that something is up, you know."

"Quit reading auras for now!" Wilson pointed at Travis. "I'll get Dr. Chaudhry to authorize a sleep aid with the Paladinol. Take them both--I want you to be mentally sharp in the morning."

Travis sighed. "I'm still confused as hell, but I'll be ready for the meeting."

"*That* is the spirit I'm looking for," Wilson said. "Just roll with it, and tell Tabitha not to worry. It wasn't her fault."

Tabitha chimed a digital raspberry into Travis's head.

"I still don't think she likes you."

"I can live with that," Wilson said with a smile, "as long as she keeps on doing good work for me--and for you."

Once Wilson left, Travis laid back on the bed and waited to be released back to his apartment.

"Travis?" Tabitha said, her normal chimes muted.

"Mmm-hmm?"

"Out on the platform--did I really do good work for you?"

"You always do."

"But you got hurt," she said. "Do you really believe I won't get blamed for it?"

"Wilson said it wasn't your fault."

"Yeah, but what will he say on Monday?"

Good question. I wonder--will he finally tell me what the hell went wrong?

CHAPTER 24 – VISCOSITY

"Time to figure out what the hell happened out at Doghouse Three." Wilson said.

Travis sat in Wilson's office Monday morning, along with Nurse Paige, Dr. Shugart, Dr. Chaudhry, Allen, and Arturo Salazar, all linked and ready to discuss the event that had put him in the hospital.

"Paige, I've already read your report--very good accounting of the details, as always. Dr. Chaudhry, your care of Travis was stellar as usual. The only people I have yet to hear from are Allen and Travis. Allen, let's start with you. I'd like to hear what you've dug up."

Allen straightened in his seat. "I could use special access for this. Is everyone here cleared?"

"No, not everyone," Wilson said. "Do what you can with what you've got."

Not everyone cleared? Is he talking about Cloudberry stuff?

"Okay, then," Allen said, gesturing at his virtual console. His report scrolled through a viewport on Travis's console.

"To recap, Travis managed to crush half of a 150,000-kilogram test cylinder and send the debris almost 100 meters up in the air. Neither he nor his Driller, Nurse Paige Kirkshire, saw or heard the damage at first. In fairness, Nurse Paige's palmtop console was programmed to display

Travis's mental and metabolic signs and showed nothing that led her to think anything was going wrong until it was too late.

"Tabitha, Travis's qLink-9 ZINet interface, carried out her program as designed and did not stray beyond its parameters. The same goes for Robin, Nurse Paige's qLink-8 ZINet interface."

She's only got a qLink-8? We've got to remedy that ASAP ...

"Once Travis did abandon his lift, he showed quick reflexes when he pulled Nurse Paige down to the deck and shielded her with his own body. He received multiple internal and external injuries in the process, sending his tolerance level up to eight. Fortunately, Nurse Paige brought the situation under control and closed Travis's Tap. She was also able to stabilize Travis's physical condition on the trip back, enough to allow Dr. Chaudhry to operate without delay upon arrival at Doghouse Prime."

Dr. Chaudhry nodded and smiled at Nurse Paige.

"Medical personnel are currently studying a possible factor in the incident: the effect of neural clarifiers and other medications used on Travis while he was a Candidate undergoing VR training. Their combined interaction with Travis's qLink-9 interface may have had some spillover effect on Travis's abilities after his Tap was opened. Dr. Chaudhry and Dr. Shugart are still exploring that matter as well.

"As for the incident itself, there's no precedent for it. You could argue that Nurse Paige should have paid more attention to the cylinder than she did, but her actions followed standard operating procedures that have been in place for over a decade. The same can be said for Tabitha and Robin.

"To summarize, both Travis and Nurse Paige basically made rookie mistakes, while

Tabitha and Robin were insufficiently programmed to handle the events that took place. I don't recommend any disciplinary action for anyone involved in the incident. I *do* recommend that Travis and Nurse Paige continue as a team in training, although each should be supervised by a more experienced Institute member on future Taps.

"As for Tabitha and Robin, I recommended that their instruction sets--as well as those of all other interfaces--be extended to include the possibility of a similar recurrence before further Taps are conducted."

The group sat quietly in the office for several seconds after Allen finished. Travis glanced around, trying to gauge the response, but soon realized that he was the center of everyone's attention. He cleared his throat and sat up as straight as he could.

"Thank you, Allen," Wilson said. "I think we can implement part of your recommendations immediately, starting with you and Dr. Shugart. Would the two of you mind going out with Travis on his next training exercise?"

"Fine with me," Allen said.

"Same here," Dr. Shugart said.

"Thank you. Travis, Nurse Paige, any objections?"

Both shook their heads.

"Good deal. Dr. Shugart, I only want you there as an observer for Travis and Nurse Paige. Allen's regular Driller will accompany him and open his Tap. Act only in the event of an emergency."

"Understood," Dr. Shugart said.

"Now, Tabitha and Robin, you carried out your programs as designed. Robin, a simple firmware upgrade will give you the expanded instructions you'll need from now on. Tabitha, you

are a different matter entirely. Your firmware also needs to be patched, but I don't think we have enough information to know exactly what other parts of your instruction set require expansion. You're already up to date with Travis's situation, so you should know most of what to look for in the future, correct?"

"Yes, Wilson," Tabitha said. "I've already added the information to my own database as well as that of the ZINet."

"Sir?" Arturo Salazar spoke.

"Yes, Art, what is it?"

"Shouldn't we hard-code new instructions into Tabitha's ZINet extension? That'd guarantee she implements the extra monitoring."

Travis touched the grey wire extension attached to Tabitha. *Here we go again.*

Wilson shook his head. "I considered some hard-coded changes even before hearing Allen's report, but I think this is best for now. With that said, I do want *all* interfaces that work with Travis--especially Tabitha--programmed to gather as many extra parameters outside the assigned job as they can handle, all the way down to how much dust he stirs up. I want every bit of it on the ZINet for mass processing as soon as it's gathered. Will that work for you, Art?"

Art sighed. "Yes, sir."

Phew! Close one. Sigh all you want, Art. You're not getting Tab again.

"All right, then," Wilson said. "Travis, Dr. Shugart, Nurse Paige, and Allen, please stay here and keep your links open. Art, I don't think we're going to need a press release on what happened. You and Dr. Chaudhry are free to unlink and go back to your regular business. Thank you both for attending."

Travis felt both Arturo's and Dr. Chaudhry's interfaces unlink as they left. Wilson waited

a couple of moments after his office door closed before he resumed the meeting.

"Let's open the discussion a bit," he said. "All connected interfaces in this office, please execute USI bypass 14-1. T-code Wilson Theta Sigma 016, command five. Access to secure files 1201 and 1202 is authorized at this time."

All of the linked interfaces activated the Cloudberry protocol.

"Now, Allen," Wilson said. "Please explain just what the hell *else* happened out there."

"Well, it's obvious Travis expanded the effects of his gravity force influence beyond the space occupied by the cylinder. *How* or *why* he did it is anyone's guess. We haven't even figured out how he pulled that much energy into the lift yet."

"Why didn't any of the gravimetric or video monitors pick up the change? What about the HoverJet? Didn't it capture anything?"

"All of them were focused on either Travis or on the zone under the cylinder. None of the video feeds showed the upper half of the cylinder until it was too late. HoverJet Bravo Six was at station-keeping, out of visual range. Its long-range video caught an image of something, but not with enough resolution to identify it."

Wilson typed commands into his virtual console. "That won't happen again. All Roughneck teams have just been ordered to set up extra gravimetric and video monitors on all Taps, training or otherwise. Can't do anything about the HoverJet visual range, but Comms will get a few choice words from me later about long-range *video* resolution." He then focused on Travis.

"Travis, how about *you*? There was obviously a problem. What was it?"

Travis sighed. "At first, the problem was simply maintaining my focus. I had to fight like hell to keep my mind on the lift, but toward the end I think I wound up with a case of tunnel

vision."

"Dr. Shugart, have you ever heard of tunnel vision setting in during such a short Tap?"

"No, I haven't," the doctor said. "It's only happened toward the end of lifts of more than four hours in the field."

"Can you show Nurse Paige what to look for?"

"Hmm," he said. "Symptoms like that generally don't come across the links. They're usually reported by the Tappers."

"That explains why she didn't pick it up. Travis, you didn't report it, did you?"

Travis looked down, shamefaced. "No, I didn't. I was determined to keep the lift going."

"Well, don't be so damned determined next time!" Wilson said. "We don't know what you're capable of yet, so report anything that doesn't feel comfortable. You've got to trust your Driller to help you. The fact that you didn't almost got the both of you killed!"

Travis shook his head. "But I do trust her!"

"Then why didn't you *really* report your problems to her?"

Travis tried to speak. He couldn't make the words come out.

But ... but Grandpa said ...

Nurse Paige faced him. "Travis?"

He finally slumped in his seat. "It's something my Grandpa asked me before I left to meet you, Wilson. Used to ask me all the time, in fact, whenever I wanted to try something new. 'If you go for this, have you got the guts to stay with it, no matter what?' That's what went through my mind."

"I see," Wilson said. "That's a good philosophy to live by, Travis, but you can't carry the weight of a Tapper team on your own shoulders. If you ever hit tolerance six, we won't let you."

You should remember that from your training--I don't care how boring the lecture was. The point is that you've got to learn to trust other people to get your job done. Trust Nurse Paige. She only has your best interests at heart."

My God, is that how I come across?

"Travis," Nurse Paige began, "I--"

"No, Paige, this is on me," Travis said. "I've got to work through this. Wilson is right. I should have trusted you. Should have let you know what was going on. I'm sorry. It won't happen again."

"Good," Wilson said. "Keep working on that, Travis. Now, Nurse Paige, I need you to make more visual contact with Travis. Program Robin to monitor your palmtop console for any sudden changes, no matter how small, when you have to look away from it. Listen to Dr. Shugart as well--he's still one of the best Driller experts here, among other things, even if he won't accept a promotion."

"Keeps me busy," Dr. Shugart said, smiling. "I'm no good Drilling a desk."

Wilson nodded and smiled. "Right. Now, Allen. I want you and your Driller in there as observers, too, just like Dr. Shugart. Don't take any action except in an emergency."

"I assume 165 tons of smashed concrete floating in the air qualifies as an emergency?"

Wilson actually considered the question for a second. "Use your judgment. If he's got it under control--or if he can *get* it under control--don't jump in and handle the fight for him. I want Travis to learn how to deal with a disaster properly."

Allen grimaced. "You asked for it."

"Indeed I did. Now, back to you, Dr. Shugart. I want you to watch Nurse Paige set up Travis's next Tap. Nurse Paige, use the *exact* same Drilling settings. I expect Travis will have the

same trouble. If he does, I want the two of you to terminate the Tap and explore implementing Cloudberry settings on subsequent attempts. Understood?"

Dr. Shugart and Nurse Paige nodded.

Lovely. Twelve more minutes of straining and sweating.

Wilson scanned the group. "Now, is there anything else?"

Travis jumped in. "Yeah, I've got a couple of quick issues. The main one is about Tab. She's been wondering why you didn't ask to link up with her when you and Allen visited on Friday. I know you said she's not in trouble, but she's going to be on my case until she gets an explanation."

Wilson chuckled. "Well, Tabitha, I'll be honest with you, but first I want to ask *you* a question."

"Please, go ahead," she chimed.

"How many people are linked to you right now, including Travis?"

"Five."

"Thank you. In a way, you've answered your own concerns. We were still evaluating data on Friday, including how safe it would be for Travis to keep you as his interface. Put simply, you were under sort of a high-level quarantine."

"Keep her as my interface? That doesn't make sense," Travis said. "The rest--well, almost the rest of my class came in that afternoon, and we linked in together."

"Yes, and by that time we'd decided Tabitha was in the clear. If we hadn't made that determination, none of your visitors would have been permitted to link in."

Tabitha rang a low note. "Permission to speak freely, Wilson."

"Tabitha ..." Travis warned.

Wilson waved Travis off. "I always want you to speak freely with me, Tabitha."

"I know I'm an interface," she said, "but I wish you people wouldn't treat me like I'm something you can just turn off with a command. My feelings may be artificial, but they're *there*, damn it, integrated into my system! I can't do my best work for Travis if I'm always afraid I'm going to get overloaded, shut down, or treated like I'm something to be feared and avoided. Besides, if *you* keep treating me like this, Travis will start treating me the same way. How can Travis and I work together if we don't trust each other--or worse yet, aren't *allowed* to trust each other?"

No one spoke for several seconds afterward. Travis had to endure Wilson's stare through her entire rant. Wilson hadn't moved or changed his expression. Even his aura remained unchanged.

Wilson finally looked over at Allen. "You know," he said, "I think that's the first time I've ever been cussed out by a computer."

"First time I've ever heard of it," Allen agreed. He and Wilson smiled. Travis let out a sigh of relief.

"Tabitha, I do apologize," Wilson said. "You and Travis are a remarkable pair, you know? I'll be honest--even my own interface doesn't take care of me as well as you try to take care of Travis. You're right. We--*I*--haven't given you much in the way of respect since meeting you. You deserve better from us, and I promise we'll try to keep that in mind.

"At the same time, I have to ask you to be patient with all of us here, especially me. Despite your obvious loyalty to Travis, there are simply some things we must keep secret for the safety of all Tappers. I know your operating system contains safeguards that prevent you from doing anything that would harm Travis, but we humans can't be completely sure our definitions

of what would cause harm are the same as yours. Please give us the benefit of the doubt."

Tabitha took a second to respond. "Can't say I'm happy," she said with a short low note.

"But you do you understand, I hope."

Another second of hesitation, then a slightly higher note. "I understand."

"Very good. Now, with all of that said, Tabitha, *how* would you like to work together so we're doing what's best for Travis and the Institute at the same time?"

"I'd like to be more than just another data monitor," Tabitha said, the normal timbre of her chimes returning to her voice. "I'd like to help keep Travis safe and focused, but not by only crunching numbers. I'm not sure what I could do, but there's got to be something."

Wilson considered Tabitha's request. "Doctor, is there some way Tabitha can help?"

Dr. Shugart mulled over the possibilities. "I'm not sure. I'd say no if she were a qLink-8, but she's a qLink-9. None of our fully trained Tappers has been connected to a qLink-9 as long as Travis has, and we still don't know everything the combination can do."

"I'd be up for any tests you need to run," Travis said.

"So would I," Tabitha rang.

"That would be nice, if we knew what tests to conduct," Dr. Shugart said. "I think we need to do that second lift attempt first. Tabitha, as long as you carry out the new instructions coming in your patch, I think we'll get a broader data set that will give us some idea about where to go next. Are you willing to do this?"

"Of course!"

"Is that acceptable, Wilson?"

"Very much so. We need both Travis and Tabitha fully on our side, and if this is what it takes, then this is what it takes. Nurse Paige, Allen, do either of you have any objections?"

"None I can think of," Nurse Paige replied. Allen concurred.

Phew. Crisis averted.

"Good," Wilson said. "One more thing. I plan on bringing Dr. Chaudhry into the Cloudberry program. He knows about Travis's physical situation, so it's only fair he knows about the mental situation as well. Can you help me bring him up to speed, doctor?"

"I should be able to. He's been on our side of the fence, so I think he'll approach the Cloudberry program with an open mind."

"That's what I need. Travis, Tabitha--we're taking some pretty big steps because of you two. I trust you'll keep your heads on straight through this process?"

"Correct," Tabitha said.

Travis nodded. "What she said."

"All right, then," Wilson replied. "Now, Travis, what else did you want to bring up?"

"Oh, yeah. Well, Karon and I were headed up to the recreation floor a couple of weeks ago--Tab, what was the date?"

"Monday, March 21st."

"Thank you. Anyway, we were taking the elevator from the ground level up to the fourteenth floor, but the car stopped at the eighth floor Tapper Medical Administration area on the way. Serene was waiting there when the doors opened. I don't think she was expecting to see anyone. She jumped, and her aura started doing strange stuff."

"Strange stuff?" Allen asked.

"Odd spikes. Sorry, but I'm still new at interpreting auras."

"Right," Allen said. "Sorry. Go ahead."

"Well, we asked--I mean, Karon asked Serene if she wanted to take the car up with us to

recreation. Serene gave us a, 'thanks, but no thanks' response and said she'd wait for the next car. We went on ahead, but we talked about it on the way up. We decided she must have had a meeting with her new Driller and then didn't think much more of it.

"Should we have reported this? I mean, neither of us thought it was serious enough to bother anyone. Were we wrong?"

Wilson leaned forward and rested his chin on top of his hands. "Good question. Allen, did you order her to talk with her new Driller?"

Allen ran a search on his virtual console. "That'd be Dr. Ben Del Curto ... let me see ... no. Not that day. I did on the day *after* her Tap, but not before."

"Is she even with Dr. Del Curto anymore?"

"No. Since then, she's put in three transfer requests. She's done Taps with Dr. Ellen Hill, Dr. Meghan Toomey, and most recently with Dr. Sabo."

Ah geez. Dr. Sabo. She keeps popping up in the worst places. "I thought Trace would be the one who couldn't find a Driller she liked."

"How many has Trace gone through?" Wilson asked. "Just for comparison's sake."

Allen scrolled to Trace's entry. "She did her first Tap with Dr. Alta Schriber, then switched to Dr. Patrick York. She's been with him ever since."

A strange swirl passed through Wilson's aura.

I may be new at this, but I'll bet something's up that Wilson doesn't want to share yet.

"Well, I doubt it'll happen again outside of normal working hours," Wilson said, "but let's be sure. Tabitha?"

"Yes, Wilson?"

"If you and Travis bump into Serene on the eighth floor again, report it for him at once,

no matter when it happens. I hope it all turns out to be nothing, but with the way things get weird around Travis, I don't want to take any chances."

"Gee, thanks," Travis said.

"Are there any other issues we need to discuss?" Wilson asked. No one answered. "Then get ready for Travis's next lift. I'll schedule it now. Thank you all for coming." He deactivated the Cloudberry protocol and went to work on his virtual console as the group filed out of his office.

Allen pulled Travis and Nurse Paige aside once they were in the lobby. "You two know this is unprecedented, don't you? Wilson's going to a lot of trouble on your behalf."

"Is it going to be a problem?" Nurse Paige asked.

"Not as long as word doesn't spread."

"What do you mean?"

"I mean you," Allen said, addressing Travis. "Your relationship with Karon isn't a secret. The relationship's not a problem, as long as you don't start talking to her about this meeting--*especially* about the Serene situation. Don't discuss Serene's case with *anyone*, in fact--not until Wilson gets his head wrapped around it."

"I know," Travis said. "I made my report under the Cloudberry protocol. No way in hell I'm violating those rules."

"Good. Now, let's get your wild Tap situation figured out before someone gets killed."

CHAPTER 25 – FLAG

Travis found himself headed to yet another platform in the Gulf of Mexico, three days after the debriefing. The platform was huge compared to the one he'd damaged: at least twice as long and twice as wide. The entire structure stood a good five stories above sea level. HoverJet landing pads extended from each corner of the platform. Travis's jet landed on a northern pad next to the platform's Drilling house.

"Where's Allen?" Travis asked as the HoverJet's engines spooled down.

Nurse Paige gestured at her virtual console. "They got here before we did. Allen's tap is open already--he's in the other HoverJet at station-keeping distance."

Juggling two Tappers with just one platform. No simultaneous Drilling sessions during training, to avoid multiple victims if a blowout happens. I understand the reasons, but man, it gets complicated ...

Travis's Roughneck crew exited, leaving Dr. Shugart, Nurse Paige, and himself behind on the HoverJet. Most of the Roughnecks headed toward the Drilling house, while others went to work on a metallic structure that stood about 10 meters in front of the house.

"Do you see that?" Travis asked, pointing at the structure through the HoverJet's window.

"Yes," Nurse Paige said. "They're working on a safety measure I suggested. It should

help keep you out of the hospital if you crush the cylinder again."

Christ. Now she doesn't trust me. I have enough self-trust problems for both of us, Paige!

"Paige, I--" He couldn't continue.

"Travis, there's nothing to worry about. You're not going to crush it again. We're going to make it through this exercise. You and me. Together. We're a team!"

"Right. We're a team." *And I will trust you. Just like I promised. No matter what it takes.*

###

Travis got a good look at the platform's test cylinder as he disembarked. It sat far away on the southern edge of the platform, opposite the Drilling house. Although it was identical to the one he'd destroyed, the extra distance made it appear much less intimidating.

Roughneck Longren handed Travis his Hard Hat case at the Drilling house door and retreated to the HoverJet along with the rest of the Roughnecks.

Dr. Shugart led Travis and Nurse Paige into the Drilling house and supervised their preparations, making sure the Cloudberry protocol was initiated for everyone connected. Travis observed as the doctor paid special attention to Nurse Paige's Drilling settings, as Wilson had ordered, making sure they were identical to Travis's last Tap. In the end, the doctor gave his approval to continue.

I'm not sure if I want those settings the same or not, doc. Sheesh.

Nurse Paige leaned forward. "Okay, Travis, here we go. Commence Drilling in three ... two ... one ... now."

Darkness. Nothingness. Time melted away.

Travis stood in a room of a dilapidated concrete building, breathing in cold, fetid air. The only light came through a broken window slit near the ceiling, from which the pale blue glow of

a winter evening forced its way into the room. Distant screams of pain and shrieks of terror filled his ears.

Before him lay the dead body of a man, spread-eagled on a metal table. His abdomen had been cut open from the top all the way down to the groin. Intestines and internal organs hung over both sides of the table. Rivulets of fresh blood ran down them and dripped onto the floor. Steam rose from the body cavity.

Travis gagged.

What kind of monster could do this to another human?

The man's eyes were frozen upon Travis's own in an expression of abject terror.

Why is he staring at me like that?

Travis reached out to close the man's eyes. As he raised his hand, a large, hooked knife covered in blood came into view. Blood and bile also covered the rubberized gloves and apron he suddenly realized he wore.

Something soft and warm was in his other hand. He brought it to eye level.

Part of the man's liver hung across his palm.

Travis threw the knife and the organ onto the table.

Good God! Did I do that? Why in the name of all things holy did I do that?

He backed out of the room and stumbled into a long corridor, lined with steel doors on both sides. Bare LED lights hung from tangled wires about every ten meters. Their ghastly glow lit only small areas. Darkness dominated the space between each light.

A metallic *clack* accompanied Travis's first tenuous steps: the sound of steel-toed boots. More shrieks of fear and pleas for mercy echoed through the corridor in response. They grew louder with each step he took.

A dim glow filtered through the space between the next door's hinges. He tried the knob and found the door unlocked. Travis braced himself and peered inside. What he saw made his stomach want to turn inside-out.

An unclothed man was pinned to a wide plank of wood that leaned against the far wall of the cell. He'd been hung in place by at least a dozen daggers. His eyes were closed, while his toothless mouth hung open.

Morbid curiosity drew Travis into the room. The clack of his boots acted like a trigger, causing the man's eyes to spring open. The victim's gaze darted frantically around the room before focusing on Travis. A flash of recognition crossed his face, causing him to burst into a chilling scream of fear and agony.

Something in the way the daggers had been placed showed Travis they were there to cause maximum pain when the victim tried to move. Despite this, the man still thrashed against the plank. Each movement resulted in louder and more desperate screams.

A metal table full of surgical instruments stood adjacent to the plank. Travis forced his feet to move toward it. A flaying knife lay on top of the pile of sharp tools. He picked it up and discovered that it, too, was covered in blood.

He turned his attention back to the man thrashing on the plank. A strange motion caught his eye. The skin from the man's chest, abdomen, and thighs had been peeled back and opened like a book. It flapped with every violent convulsion the man made, spraying droplets of blood as it moved.

Another odd movement came from the man's head. Travis pushed back the bile gathering in his throat and looked.

The man had been scalped. Someone had taken the removed skin and hair and put it back

atop the man's skull. As he thrashed, his scalp slid on top of his head.

Without thinking, Travis moved to straighten the man's hair, with the flaying knife still in his hand. The man screamed even more frantically as the knife approached.

"I'll talk!" the man pleaded. "Whatever you want, I'll give it to you! Please, doctor! I beg you! Don't use the knife again!" Tears streamed down the man's face as his thrashing slowed and eventually stopped. "Please, not the knife, not again." The man hung his head and sobbed. To Travis's horror, the scalp slid off and fell to the floor, exposing the top of the victim's skull.

Travis threw the knife against the wall and bolted out of the room. He ran down the hallway, the clack of his boots triggering more screams as he passed each door. His right foot slipped at one point. The corridor floor was covered in blood, but the blood hadn't caused him to slip.

He had stepped on a piece of human flesh.

He gasped and was about to let out a scream of his own, but stopped in mid-breath.

That man called me "doctor." I'm not a doctor. Why did he think I was the one torturing him?

Why in God's name would I do any of that?

Something wasn't right. This wasn't his doing. This wasn't *anyone's* doing.

This is the nightmare.

He searched through the gloom of the hallway and found a dark spot at the center.

There! That's the exit!

Travis scrambled toward the spot, doing everything he could to focus his thoughts on it. The scene of horror broke apart and swirled around him, faster and faster the more he focused. Louder and still louder screams filled his ears. The voices of women and even children joined the

chorus of terror and agony as the nightmare fought back.

He forced the lucid part of his mind to ignore the cruelty of the illusion.

The horrors spun faster still until they finally spiraled off into nothing. At last, all that was left was the dark spot of the exit.

Travis's eyes sprang open. Goosebumps covered him from head to toe. The air in the Drilling house felt thick, almost frozen. He exhaled a heavy cloud of steam and scanned the room. Nurse Paige stood at his left side, exhaling her own mist with each shallow, rapid breath.

Her hand was inches away from the neural inhibitor patch.

Travis grabbed her hand and sat up, shivering from the cold. His heart pounded. Throbbing pain filled his head.

"My God!" Nurse Paige said.

He pushed her hand away and fell back into the chair. "I'm cold," he said. He was more than just cold, but no other words would come out.

Nurse Paige retrieved a metalized trauma blanket from a supply box and wrapped it around his shoulders and upper body. "Concentrate on breathing," she said, her voice full of urgency. "Ignore what you see--don't try and change any of it. Just breathe, deep and regular."

A voice came over the main console link.

"Doghouse Ten, respond immediately. Video and data links show Tapper has regained consciousness. Advise on emergency measures. Doghouse Ten, do you read?"

Travis took a deep breath, looked at Nurse Paige, and nodded. She turned to the main console where Dr. Shugart stood. "He's stabilizing. Finally."

"Doghouse Prime, Doghouse Ten here, Watchdog One speaking," Dr. Shugart said.

"Emergency measures are not, repeat *not* required. Tolerance levels are dropping rapidly, now

passing below tolerance five. Stabilization procedures are in process. Will advise when tolerance one is reached."

"Roger, Doghouse Ten. Advise Tapper that Big Dog welcomes him back to reality."

"Same here," Tabitha rang. "That was a bumpy ride. I was afraid you'd convulse off the chair! For once, I'm glad I *can't* read your mind."

"You did give us a hell of a scare, Travis," Nurse Paige said. "We really thought we might have to plug you."

"Yeah, I noticed," Travis said, covering the neural inhibitor patch with his hand. His head still hurt, but the throbbing pain had diminished. "God, that was horrible. Why the hell does my brain make up crap like that? Doctor Shugart, I may need to talk with someone about that nightmare once we get back."

"I'll schedule it now," the doctor said as he relinquished control over the main console. Nurse Paige resumed her position.

"Doghouse Prime," Nurse Paige said, "tolerance one has been reached. Please advise HoverJet Bravo Seven it is safe to land."

###

The second HoverJet returned a few minutes later and dropped off Allen and his Driller before taking off again.

Dr. Shugart greeted the two men as they entered the Drilling house. "Travis," he said, "this is Dr. Davenwood, Allen's Driller." The new doctor gave Travis a firm handshake. He was a pale man of medium build, with brown eyes and black hair that had been combed-over to hide a growing bald spot.

"How are you doing, Travis?" Dr. Davenwood said in a friendly tenor. "I hear your

Drilling session was rather rough today."

"That's putting it mildly," Travis said, knocking on his Hard Hat. "Still pretty shaken, but holding my own for now. Nice to meet you, doctor."

"I think we're almost ready to go," Dr. Shugart said. "Nurse Paige, you're on point."

The nurse nodded and picked up her palmtop console. "Doghouse Prime, this is Doghouse Ten. We have a full house and are ready to proceed outside."

Travis soaked in the late-morning warmth at the door before following the group to the front of the Drilling house. There, he got his first good look at what the Roughnecks had been constructing. It was a vertical steel wall, at least three centimeters thick, welded to the deck. The wall rose to the bottom of Travis's rib cage. He figured six people could hide behind it, if necessary.

Two practice pads were set between it and the Drilling house wall. A half-dozen folding chairs stood behind them, next to a pair of supply boxes.

"That wall looks convenient," Travis said as he stepped onto one of the practice pads.

"It'd better be," Nurse Paige said. "Don't go running to shield anyone if there's a problem this time. Just *duck*."

Travis smiled wanly as he peered across the deck at the distant cylinder. "I don't think we'll have a problem--unless something makes me fling that monstrosity over here. All bets are off if that happens."

"Travis's readings match those from last time," Dr. Shugart said, looking at Nurse Paige's palmtop console. "Clear on this end."

Tabitha chimed a note to Travis. "How about your emotional state? Is it the same?"

"I think my adrenaline level is the same," Travis said, "but for different reasons. You're

going to love hearing my psych session."

"All right," Nurse Paige announced. "Doghouse Prime, Doghouse Ten here. Tapper is in position and ready for main cylinder practice lift number two. Observation Team is standing by. Request permission to proceed."

Wilson's voice came over the console. "Doghouse Ten, this is Big Dog. Permission granted. Remind Tapper to report any anomalies immediately."

"You heard the man," Nurse Paige said to Travis. At his nod, she called out over the console links. "All right, folks! Let's do this."

"Right," Travis said. He took in a deep breath and focused on the cylinder's base. After a few gestures, a bit of rumbling, and several deep, loud screeches, Travis had the cylinder at twenty centimeters above the deck, just as with his previous lift.

"Timer has started," Tabitha rang. "Lift is a go."

"Brainwave readings are matching those from practice lift number one," Nurse Paige reported. "Watching for deviations. Watchdog One has eyes on Tapper and cylinder."

Travis's thoughts were already beginning to drift.

###

Twelve minutes into the lift, Travis's breathing labored. He shook his head and blinked, trying to normalize his focus. *Time to report.* "I think I've hit tunnel vision here."

Tabitha broadcast across the linked interfaces. "Time check twelve minutes ten seconds into the lift."

"Got it," Nurse Paige said. "Everyone snapshot your data. Travis, bring it down."

"Ending the lift." Travis lowered the cylinder, his head and eyes throbbing with every centimeter of the descent. The 150,000 kilograms of concrete sent a massive *boom* reverberating

through the steel-alloy plate of the deck when it landed.

Nurse Paige remained at her position, focused on her palmtop console. Allen guided Travis to a chair and offered him a bottle of water from one of the supply boxes. Travis drained it quickly.

"So," Travis said, still trying to catch his breath. "Lousy lift, right?"

"Lousy enough," Allen said, straight-faced. "You should have been able to maintain that lift for two hours. We'll work on fixing that on your next Tap."

"At least we got him back in one piece this time," Dr. Shugart said.

"My Tap is still open," Travis said to Allen. "Are they gathering data?"

"Yep. They're watching how well you recover from the lift."

Travis examined Allen's aura. "Wow," he said. "I've never seen another Tapper's aura with both our Taps open. You've got colors."

"You should see your own," Allen said.

Travis examined his arms. "You're right, that does look weird. Why's it all red and swirly?"

"Wait a minute," Allen said, his eyes widening. "You can see it?"

"Yeah, I can."

Tabitha chimed in. "That may be my fault. I'm overlaying the data presence on his virtual console."

"Well, please stop it for now," Travis said, examining his hands.

"Data display terminated."

The flow of color was still there. "Tab, are you sure you're not displaying my aura anymore? Run a diagnostic if you have to."

"I'm not showing it anymore. Diagnostics show no errors."

"Terminate my virtual console."

Tabitha rang a chord. "Virtual console off. No visual data being broadcast."

He waved his arms. "I can still see it."

Allen and the doctors gaped at each other. They turned back to Travis. "That's not possible," Dr. Davenwood insisted.

"Nurse Paige," Dr. Shugart said, "are you picking up any anomalies on your palmtop right now?"

"No, doctor. Everything is at tolerance one."

"Stand up, please, Travis," Dr. Shugart ordered.

"I'm only seeing the colors around my arms," Travis said, "but my aura's visible all over,"

The team gawked at him in silent amazement.

"Do you want to run some tests on this, too?"

"No, not now," Dr. Shugart said. "I think we'd better close your Tap for today. I obviously can't say this is impossible, but it's certainly unprecedented and I can't wait to study it. Still, we don't need to push our luck on a new issue today when we haven't even got the first problem figured out yet. We need time to study the data we do have first."

Travis's heart sank. "Damn," he said. "Twelve minutes and nothing but a red, swirly aura to show for it. Whatever you say." He sat back down. "Nurse Paige, please close my Tap."

Nurse Paige nodded. "Doghouse Prime," she called, "Doghouse Ten here, Subject Driller speaking. Watchdog One advises termination of Subject Tapper's Tap for the day. Please snapshot all data again. Termination in three ... two ... one ... now."

Travis's world reverted to its pre-Tap state. He could still see Allen's open-Tap aura, but

without colors. He tried to see his own aura, but he couldn't--at least, not directly.

"Are you still seeing your aura now?" Dr. Shugart asked.

"Well ... it's weird. I can *tell* my aura is still there, but I can't look right at it. I can catch it from the corner of my eye, but when I try to focus on it, it disappears."

"Does anything else look out of the ordinary to you? Anything feel strange?"

Travis scanned the area, then checked himself. "No, everything else is pretty much back to the way it was before Drilling."

"Okay, then," Dr. Shugart said. "I'll hand you back over to Nurse Paige. Doctor Davenport, please terminate Allen's Tap as well so we can get back home."

Nurse Paige signaled the Institute and gazed at Travis with a look of concern.

"I know," Travis said with a sigh. "More questions to answer."

"A lot more," she said, biting her lip.

"At least this trip home should have a lot less drama than last time." *And a bit more trust.*

CHAPTER 26 – CORRELATION

"Well, Travis," Dr. Chaudhry said, "you certainly seem to be in good physical health. I cannot find any deviation from your baseline physical readings that would explain the aura situation."

Travis stepped out of the bio-scan chamber. "Could my mind be getting scrambled by the Drilling and the nightmares?"

Dr. Chaudhry swiveled his seat away from the monitoring console. "I am not sure," he said. "Remember, Dr. Shugart and I are still looking into the effect the neural clarifiers and other medications had on you during VR training. That, along with your childhood trauma and your extended exposure to your qLink-9--Tabitha, you call it?--may have triggered a change in your neural pathways that we are unable to detect."

"I thought that bit was only supposed to explain why I tore up the test cylinder."

"Yes, but there may be more at work here. Perhaps there are aspects related to the stimulation provided by your Hard Hat during Drilling. Your brain may be the one-in-a-million that responds differently to the directed energies used in the process. As Dr. Shugart said, you have shown it is not impossible. It might be a good idea to run another calibration of your Hard Hat to compensate."

"I'll tell Allen, then," Travis said, running a hand through his hair. "What about the records from the lift attempt itself? Did you find anything that would explain why I can't do the full two hours?"

"Not yet. We still have staff in the Cloudberry program running data comparisons. Nurse Paige is waiting for that information and will let you know when she has it. Incidentally, she said to say thank you for talking to Wilson about upgrading her to a qLink-9. She is most appreciative, and says Robin has never been happier in her new home."

"Tell her I said she's welcome." *She saved my life, for cryin' out loud. It's the least I could do.* "Also, tell her I'm glad Robin's happy. I didn't transfer my old personality from my qLink-8 when my Grandpa upgraded me. I tweaked Tabitha from scratch."

"Ah, that would explain your attachment to her. Not only is she like a big sister, she is like your child."

Tabitha rang an indignant series of bells. "Who's he calling a child?"

Travis smiled. "You know, I think you're right."

###

Later in the day, Travis checked out his Hard Hat from Longren and went with Allen to the fitting room, where Caroline the adjustment tech waited for them. On the way, Travis asked Tabitha if Caroline was part of the Cloudberry program. Tabitha said no.

Gotta watch what I say.

Caroline ran her scanner over Travis and his Hat. "Yep, the response is definitely out of spec. I don't understand how I missed it the first time."

"Longren said the Hard Hat's in good condition," Travis said. "No damage, no malfunctions, no changes."

"Did you feel anything strange when I adjusted it the day you got it?"

"Not really. Just some odd vibrations when you passed that--well, whatever you're using--over my head. I felt some more of them just a second ago."

"Hmm. Let me run the scan once more. I'll try it a bit slower and at a stronger setting."

About a third of the way through the scan, an odd pressure beneath the scanner made Travis flinch.

"Is that supposed to happen?" he asked.

"Is what supposed to happen?"

"I felt some weird pressure a second ago, like someone pushing their thumb into the top right side of my head. I don't remember feeling that earlier."

Caroline reversed directions. "Tell me if you feel it again."

"There," Travis said as she passed over the same area. Caroline held the scanner over the area and didn't move it. More pressure built the longer she remained over the spot.

"Oww!" Travis complained. "That really feels wrong."

Caroline turned off the scan. "That stimulus block is transmitting just fine. I'm not reading anything off spec."

"Well, it sure as hell *feels* off spec." He removed his Hard Hat and handed it to her. "Can you adjust it?"

Caroline frowned and rubbed her chin as she stared at his Hat. "Let me try repeating the adjustments from your very first scan. Maybe things'll balance out." She worked on it for a few minutes before returning it. "Okay," she said once the Hard Hat was back on Travis's head. "Tell me if you feel the same pressure now."

"Nope, no pressure now."

"Good. Let's see if everything else is set."

She ran the scan from the beginning, using the stronger scan setting. More problems surfaced almost immediately. Travis winced in pain every time Caroline found a new pressure area. "Could you please stop doing that?" he said before she even made it halfway through the scan.

She turned off her scanner. "That's not supposed to happen."

"I hear that a lot nowadays."

Allen intervened. "Caroline, try reversing all of the adjustments you've made and concentrate on that one spot Travis mentioned earlier. Adjust the Hard Hat until the pain stops. Keep going until all of the pain spots go away."

Caroline raised her eyebrows. "If you say so."

Travis handed his Hard Hat back to her again for the reversed adjustments. He replaced it when she finished and braced for another bout of pain. It hit as soon as she passed over the original spot.

"That's it," Travis said. "Please fix that ... quickly ..."

Caroline tweaked the area until the pain disappeared. She picked up where she left off, stopping when she found more pressure points. About an hour later, she finally got a pain-free scan.

"You're *way* the hell off spec now," Caroline said as she put down the scanner. "I wouldn't recommend attempting a Tap with your Hard Hat in this condition. God only knows what would happen."

Allen shook his head. "He's ready for whatever comes next."

Caroline wiped her brow and put her hand on her hip. "What the hell is going on here,

Allen? Are you trying to get your Tapper killed or something?"

"Just the opposite. Do me a favor and pass today's data along to Wilson, please. He's made a specific request for it."

"Whoa, now!" Caroline put up her hands and backed away. "Send it to Wilson? I don't like the sound of that. If I'm going to have Wilson breathing down my neck, I'd better have some promises from you I'm not going to get in trouble over this."

"You've got them. If anything happens, I take the heat. Okay?"

Caroline considered Allen's promise and relaxed her stance. "Okay, I'll trust you. You owe me an explanation at some point, though."

Allen replied with a smile. "Just keep doing good work for us in here. One of these days this might make sense."

Travis shook Caroline's hand. "Thanks for putting up with me," he said. "After I check my Hat back in, I think I'm gonna go see a nurse about some Paladinol."

###

Travis, Nurse Paige, and Dr. Shugart returned to Doghouse Ten late the next morning, ready to give the lift another shot. Nurse Paige used the comparison data she received from Wilson and Caroline to adjust the stimulus during the Drilling procedure. As a result, Travis's Tap opened quickly and with a minimal tolerance level rise.

"How did your Drilling go today?" Dr. Shugart asked as they waited for the HoverJet carrying Allen and Dr. Davenwood to return. "Any images as disturbing as those from yesterday?"

"Not even close," Travis said. "I think the Hard Hat adjustments and Drilling settings helped. Hopefully they've put an end to them."

"Don't bet on it," Dr. Shugart said. "Drilling nightmares are unpredictable. They don't necessarily come from your own experiences, either, as your last one should prove. Be ready for anything that pays you a visit."

Travis nodded. "I will."

"How's the aura?" Nurse Paige asked. "You still seeing the red swirlies?"

Travis did a quick visual check. "No red, and no swirling yet. It just looks like it's kind of wavering all over me."

The distinctive rumble of a HoverJet landing and then lifting off resonated through the Drilling house. Moments later, Allen and Dr. Davenwood were at the door, ready to proceed with the lift attempt.

The team repeated the outdoor setup procedures from the previous day. Nurse Paige checked in with the Comms center for clearance once Travis was in position.

Travis began the lift and immediately saw and felt the difference. The gravity force lines cut away from the concrete cylinder as soon as he focused on severing them. He expected the usual metallic screeching, but it was absent this time around: the cylinder lifted smoothly and cleanly, straight up. He raised it until Tabitha showed he'd reached the twenty centimeter mark and then held it there with barely a thought.

"How does it feel today?" Nurse Paige asked.

"Good," he replied via Tabitha's link. "Nowhere near as stressful."

"What about your aura?"

Travis glanced quickly at his arms. "I wish Drillers could see 'em. They're cool. Any way, My red is back, but it's not swirling. Tab, you're not enhancing it on my console, are you?"

"Nope. What you see is what you've got."

The twelve-minute tunnel vision threshold came and went without any symptoms. Travis caught his mind wandering on a couple of occasions, but refocused instantly. The cylinder never wavered.

Thirty minutes into the lift, Dr. Shugart ran a scanner over Travis. "Your metabolic rate is as stable as it was when you began. Tabitha and Nurse Paige both say your brainwave patterns are similarly as stable. How do you feel?"

"My feet hurt, and I'm a little bored, but I'm focused. This is so different from the first two tries. So much better ... it's hard to describe."

"Excellent. I'll bring you a chair in a minute. Allen, what do you see?"

"Well, first off, his aura is steady as a rock. Nothing swirling around him like it was yesterday. As for the lift, I can't see anything wrong with it. The gravity lines are well blocked, and there's no sign of anything beyond the perimeter of the cylinder being affected. I *would* say it's a textbook lift, if we hadn't made so many tweaks to his Hard Hat and his Drilling settings."

"All right," Travis said, frowning. "I already know I'm weird. You got any better ideas?"

Allen laughed. "Just keep going the way you are. I'll get you some more Central Texas sausage if you make it through the whole two hours."

"Damn it, Allen! Now you've gone and made me think about sausage. I'm supposed to be focused on the cylinder!"

"Picture the cylinder as a big link of smoked sausage, then. Just don't imagine you're trying to eat it."

"You just make sure you've got the money to buy sausage for everyone involved."

Travis's frown became a smile. *I'm going to make it this time. I'm actually going to make it!*

###

After his successful lift, Travis spent the rest of the week improving his control over gravity lines. He became proficient enough with the concrete cylinder to duplicate Jeremy's day-one demonstration. His later training included precision lifts and complicated lifts involving steady control over a long period of time. He handled most of the tasks without issues, except for one lift involving steel I-beams that ended up looking like he'd been making pretzels rather than stacking steel. He spent another hour re-tweaking his Hard Hat with Allen and Caroline afterward.

Other class members had varying degrees of success. Eventually, they all duplicated Jeremy's demonstration. The class was ready to move on from manipulating gravity to working with electromagnetism.

They departed the Doghouse early one Monday morning and headed to a Zilker Institute base near the West Texas town of Fort Stockton, more than 800 kilometers west of Houston. The scheduled trip time was about an hour. Around seventy passengers were on board the high-capacity maglev, including medical personnel, Roughnecks, Drillers, and Tappers. Travis and Karon sat together once again, in a car near the front, while the other class members were scattered throughout the train.

As the maglev passed San Antonio headed west, Karon excused herself and went to find the restroom, leaving Travis alone on an aisle in a row of seats. He called up Tabitha's news feed and was just about to start reading when someone sat down across the aisle from him.

"Hello, Travis," Dr. Gale Sabo said.

"Um ... hello, Dr. Sabo. This is unexpected." *What the hell ...?*

"I wanted to check in on you while I had the chance," she said. "We haven't talked since your tour of the Doghouse." A dark smile stretched across her face. "I understand you had some

early problems before you became a Tapper--especially with VR. How have things been since?"

"Much better, thanks. Dr. Shugart and Nurse Paige helped me get over my VR issues."

He turned away from Dr. Sabo and feigned reading the news feed on his virtual console. While scrolling through the feed with one hand, he surreptitiously typed in a request with his other to Tabitha: "Dr. Sabo: Cloudberry?"

Dr. Sabo's smile disappeared as she looked away. "Yes, I hear you've progressed satisfactorily since Dr. Shugart began supervising your sessions."

"He's been very helpful. I owe him and Nurse Paige a lot."

Tabitha displayed a single word on Travis's console: "No."

"I know what you mean." Dr. Sabo looked back at Travis and put on the forced smile she wore at the assembly. "I have to admit I wasn't sure you would be able to overcome the problems you faced. I proposed taking you under my wing, so to speak, but Dr. Monroe decided to have Dr. Shugart work with you instead--on a temporary basis."

"Well, he made a wise choice. Dr. Shugart and Nurse Paige have been a great team."

"Of course they have," Dr. Sabo said, her condescending tone beginning to grate on Travis's nerves. "By the way, I'm sorry about your accident on Doghouse Three. You shouldn't have had to deal with all those injuries. I personally thought Nurse Paige deserved some sort of reprimand, at least, for putting you in so much danger."

"Nurse Paige saved my life that day," Travis said, his tone grave. "She kept me from having a blowout."

"I understand you saved *her* life as well. Don't get me wrong, please. I want the best for the Institute and for everyone who serves. I simply thought you might be better off with a more experienced Driller--one who didn't have to rely on outside help to get you through a Tap."

Enough of this bullshit. You don't put down my friends without a damned good reason.

He turned to face Dr. Sabo head-on. "Nurse Paige and I are a team now." Travis's voice deepened as he measured each word. "We can anticipate what the other is about to do. We know what the other needs in order to get the job done. I'm sure you know how that works."

"Yes, I do," she said, widening her smile.

A voice came from the back of the maglev car. Karon had returned. "Who're you talking to, Travis?"

He forced a cordial tone. "Karon, this is Dr. Gale Sabo. She spoke at the Driller corps assembly."

"Oh, hello," Dr. Sabo said, aiming her false smile toward Karon. "It's good to meet you at last, Karon. How are things going with Dr. Talbot?"

"Great," Karon said as she reclaimed her seat next to Travis. "Dr. Talbot knows her stuff. She's helped me get through training without a hitch."

"I'm glad to hear that. I do hope things continue to work for you." The doctor stood and faced Travis. "Well, I have to check up on a few other things before we arrive. Good luck to you and your 'team.'" She stared sidelong at Travis and Karon as she walked away. Travis glared back at her until she was out of sight.

"That didn't sound right," Karon said as she produced two bottles of water from her bag. "What was her problem?"

"Sounded like someone sprained her pride," Travis muttered. "I don't think she's too happy I'm working with Nurse Paige--or Dr. Shugart, for that matter. Said she thought Nurse Paige should have been disciplined."

"Dr. Shugart's overseeing her work. Isn't that discipline enough?"

"I don't see it as discipline, and I doubt Paige does either. Dr. Shugart's acting more like a coach."

"Makes me feel sorry for Serene, having to work with someone with that attitude," Karon said.

"Makes you think, at least. Serene's changed Drillers several times, but she stopped once she teamed up with Dr. Sabo. Have you talked to her about what's been going on?"

"No, not really," Karon said. "Serene hasn't been very talkative outside of class recently."

Travis nodded. "You know, Trace has been awfully quiet as well. I thought she'd be the one jumping from Driller to Driller. Remember how she complained about not having the right Driller when we were watching Christopher's first Tap?"

"Yeah. You're right," Karon said, tapping a finger on her arm rest. "Makes you think."

"Well, there's nothing we can do about any of it at the moment," Travis said. "I'll ask Allen and see if he knows anything."

"Good," Karon agreed. "Let's see now, we've got about a half hour until we get to Fort Stockton. Wanna link up and play?"

"Why, Karon! What *are* you suggesting?" Travis said, feigning shock.

Karon swatted him on the arm. "Oh, shut up," she said with a laugh.

Travis smiled and held Karon's hand as Karon snuggled her head against Travis's shoulder. Less pleasant thoughts ran through Travis's head. *That doctor has an agenda. What's she hiding behind that fake smile?*

CHAPTER 27 –RELAY

MMQE 14120 03400 77142

QUANTUM KEY ACCEPTED—DECRYPTED MESSAGE FOLLOWS

Update:

Someone got too close. They are being dealt with.

Group transport to secondary location took place today. Future correspondence will come from this site for now.

Safety system one being tuned in preparation for deployment. Backup system fabrication has begun.

Additional:

Internal variable contact attempted today, as you suggested. As I expected, results not good. Little pain in the ass.

Secondary internal resource training still on target.

Keep this channel clear except for emergencies. Real emergencies, gentlemen.

MESSAGE ENDS

DELETE

DUMP CORE NOW

CHAPTER 28 – BUBBLE POINT

"Let me show you a fun trick," Allen said during the third day at the training site, north of Fort Stockton. He and Travis stood on ground-isolation pads a couple dozen meters behind a Drilling house. Both of their Taps were open.

"The rest of you might want to step away or go back into the house," Allen warned. "This could get a little scary if you've never seen it before."

Dr. Davenwood gathered Nurse Paige and Dr. Shugart and moved them onto isolation pads close to the Drilling house. "I've seen his 'fun trick' a couple of times," he said. "Trust him."

Once the area was clear, Allen gestured with one hand as if he were swirling a pool of water around himself. A dim glow, like St. Elmo's Fire, surrounded and encircled him--slowly at first, then faster with each wave of his hand. Sparks jumped into the glow seemingly from nowhere, while a low-pitched hum built in the background. The glow brightened as the soft hum escalated into a loud, high-pitched scream. As the scream peaked, Allen flung up his other palm and traced a circle overhead.

The air around Travis and Allen burst with a brilliant light for a split second before imploding into a sphere of electromagnetic force lines that rotated on a vertical axis around them. It hummed softly as Allen held the energy at bay with an outstretched hand.

"Virtual Faraday cage!" Allen said above the hum. The sphere extended from below the isolation pads up to about a meter above their heads. "Blocks all electromagnetic force lines! Electric hits from outside will flow around it, but they can't get through. A lightning bolt could hit this thing and you'd still be safe."

"Yeah, I've read about Faraday cages and seen them demonstrated," Travis said. "Have you ever had to use it in the field?"

"No, and I hope I never have to. You can't manipulate forces outside the boundary, and your qLink can't broadcast or receive beyond it."

"What good is it, then?"

Allen dropped the field and glared at Travis. "Just try it."

Travis raised an eyebrow at Allen, but decided not to argue. He focused on the scattered lines of electromagnetism that flowed past and through Allen and himself. Once he had a picture in his mind, he visualized pushing the lines in a circle around his body with one hand. The lines responded by moving in formation, each push moving them faster and faster. The glow and the hum that Allen had generated began to build for him as well.

Once the lines were moving as fast as he could manage, Travis pulled back his free arm and swirled it above his head. The air lit up with another blinding, split-second flash of energy.

His results were not the same.

Travis stood in the eye of a hurricane of electricity, spinning just centimeters away from his outstretched palm. A deafening electrical scream filled Travis's ears. Sparks flew outward from the gyre. The cylinder crackled and strengthened as it fed on nearby lines of EM force, expanding and threatening to spin out of control.

Allen dove as far away as he could an instant before the vortex appeared. He rolled,

jumped up, and sprinted until he reached the isolation pad with the Drillers and Dr. Shugart.

"Travis!" Allen shouted. "Drop the field!"

"How?"

"Lower your hands to your sides and visualize it fading!"

"Are you sure, Allen? This thing is--"

"Trust me!"

Travis lowered his hands, as ordered. He visualized the force lines draining away through the eye of the whirlpool. Slowly, gradually, the vortex faded out of existence.

Tabitha chimed a quiet note into Travis's head. "The field is gone now."

"Jeezus, Travis!" Allen shouted. "Is this going to happen every damned time I try to teach you something new?"

"Very likely," Dr. Shugart answered.

Travis raised his arms and flared his aura. "Okay, so I'm a pain in the ass!" he shouted. "What the hell am I supposed to do about it? I thought that's why your team and Dr. Shugart were still going out on training sessions with me!"

"He's right, you know," Nurse Paige said.

Allen turned and frowned at her, then sighed and nodded. He gestured for the team to follow him back to Travis's isolation pad.

"Travis," he said once everyone was in range, "you're not a pain in the ass. We just don't know how to deal with your growth yet."

Travis sighed. "I know, I know. I'm just frustrated. I'm starting to feel like a piece of furniture that didn't come with assembly instructions. How the hell am I supposed to put myself together?"

"I honestly don't know," Allen said. "If I did, I'd take the hammer to you myself. You're not a freak, you're not an experiment ..."

Travis cleared his throat. Tabitha rang a note over the group link.

"... well, okay, you're *part* of an experiment, but you're not the experiment itself. We're still coming to terms with what you're capable of doing."

"So are we," Tabitha chimed in. "There's frustration all around."

Allen cocked his head. "I didn't know qLinks understood frustration."

"Hang around Travis long enough and you get familiar with it," Tabitha rang.

"Now, you see?" Allen said, pointing at Tabitha. "It's not just you we're learning how to deal with, Travis. This is *all* uncharted territory."

"I know," Travis said. "What am I supposed to do about it?"

Dr. Shugart put a hand on Travis's shoulder. "Trust us when we say we *will* figure out how to help you best utilize your talents. Allen, Dr. Davenwood, and I have gone far beyond being mere observers in working with you and Nurse Paige. We're part of your team now, official or otherwise. Please be patient with us and we will do good work for you."

Travis sighed deeply. "Deal. I'll do my best. I promise."

###

The team returned to the base in Fort Stockton several hours later. Roughneck Longren stood waiting at the entrance. Travis handed over his Hard Hat and watched as the Roughneck examined it and put it back in its flight case.

"How'd it go up there today?" Longren asked.

"Pretty good, with the exception of almost electrocuting my whole group once."

Longren laughed. "Just once? That's progress! It was three times yesterday." He grinned

before leaving for his room with Travis's Hard Hat case in hand.

Travis shook his head and smiled as he headed back to his own room.

The lodgings at the Fort Stockton base were the equivalent of a hotel: Travis had a bed, a desk, a bathroom, and a bit of closet space. Teams dined in a café setting, and in-room entertainment was left to each resident's own virtual console. Travis and those who'd traveled with him from Houston were the only people staying at the three-story-tall base at the moment.

He had just plopped down on the bed in his room when a red icon flashed on his virtual console. A bell rang through the console two times. "Attention, all personnel," a somewhat familiar female voice said. "An important assembly is scheduled in five minutes. Please proceed to the café area immediately." The voice then repeated the announcement.

"Tab, is Karon's Agent broadcasting her location?"

Tabitha brought up a viewport with a map of the hotel-like base. A dot appeared in Karon's room, on a floor higher up. "Yes. She's probably getting ready to leave for the café."

"Headed there now myself," he said, leaving his room.

Allen was already in the café when Travis arrived. "Any idea what this is about?" Travis asked.

"No clue. I didn't call it. Whatever it is, this isn't standard procedure."

Karon finally entered the café. Travis worked his way through the gathering crowd to reach her. Together, they headed toward a small table away from the center.

The bell rang two more times, followed by the same female voice. "Please be seated." Once the crowd settled down, Dr. Sabo walked to the middle of the café. Travis suddenly realized it had been her voice calling the assembly.

"Ladies and gentlemen," she said, "I've just received word from Houston that a Tapper

has had a blowout during a training exercise."

Shouts of "Blowout?" filled the café. Travis's eyes widened. Instinctively, he reached for Karon's hand and squeezed it. She squeezed back.

Dr. Sabo shouted down the tumult. "Since our training classes generally do not intermix, you're probably not familiar with the Tapper or his Driller. The Tapper's name is Thomas, and he was in the middle of a heavy-duration test lift on Doghouse Four when his tolerance level went out of control. His driller, Dr. Annie Clawson, did everything in her power to prevent Thomas from having a blowout, but in the end she was unsuccessful. Both Thomas and Dr. Clawson perished in the blowout."

The café broke out into shouts and loud talking. Karon squeezed Travis's hand harder. Travis turned to her. *I know what Wilson said about discussing this with Karon, but she needs to know.*

"Did you hear the name of the Driller?" Travis asked. "Dr. Annie Clawson? That was Serene's first Driller!"

"She was? My God, Travis! How's Serene going to take this?"

Travis raised his hand to ask a question.

The attention bells rang again on Travis's virtual console. He figured they must have rung on everyone else's as well, because the shouting and loud talking subsided until it stopped. "I don't have any further information on the situation at this time, so I will not be taking any questions," Dr. Sabo said, glancing sideways at Travis. "Remember that any time something like this happens, it affects us all. That's all for now. Thank you for coming."

The loud discussions immediately resumed.

"How can she not have any information on something like that?" Karon asked. "Isn't she

in charge on this trip?"

"No," Travis said, "Allen's in charge. Look!" He spotted Allen making a beeline through the crowd for Dr. Sabo, followed closely by Dr. Shugart. She did her best to get out of the café before they caught up to her, but they beat her to the exit. A heated discussion ensued.

"Man, they're getting after her," Karon said.

"Probably because either Allen was supposed to be told before anyone else. He said the meeting wasn't standard procedure. I wonder why she'd call it without consulting him first."

"Why would she get the information before Allen would?" Karon wondered.

Allen and Dr. Shugart stormed off, their fingers flying on their virtual consoles. Dr. Sabo scanned the room until she located Travis and Karon. She gave them a sour glare and turned on her heels, finally leaving the café.

"I don't know about you," Travis said, "but I'm tired of her crap."

"I'm starting to agree, especially after what you told me she said on the maglev. Incidentally, did you notice her voice tonight?"

"What about it?"

"She sounded confident. Not bored, like she did during the Driller corps assembly or the maglev ride. Almost sounded like a different person."

"I was thinking the same thing," Christopher said from behind them. Travis and Karon turned to see him standing next to Trace.

"Hey, have a seat," Karon said.

"Where's Serene?" Travis asked. "Was she with you?"

"No," Christopher said as he and Trace pulled up chairs. "She went off that way," indicating a hallway that lead away from the café.

Travis raised his eyebrows. "That's where Dr. Sabo went."

"Think they're up to something?" Karon asked.

"They might well be," Trace said.

Trace instantly became the center of the group's attention.

"What in the hell are you talking about, Trace?" Christopher said. "You haven't been talking much at all, lately, and now you drop something like that?"

The café was still full of people talking about the blowout. "Let's step outside for a minute. Out front. We need to talk."

###

Travis pulled Christopher aside as they followed Trace out to the parking lot. "Do you know what this is all about?" he asked.

"No clue, bro," Christopher said. "Hey, Trace, what's going on here?"

Trace maintained a nervous silence until she reached the middle of the lot. The lights were just coming on as the setting sun drew the warmth out of the West Texas evening air. She stopped and scanned the area before speaking.

"What do you guys know about Dr. Sabo?" she asked.

"Nothing, really," Christopher said. "The only time I saw her before tonight was at the assembly at the Institute."

"I've had a couple of weird encounters with her," Travis said. "She gave me a less-than-cordial tour of the Doghouse. Someone had pissed her off--her boss, Dr. Monroe. And then Karon and I had a nasty run-in with her on the maglev ride out here."

Karon nodded. "She told Travis that she tried to get Nurse Paige disciplined after his accident, and then tried to convince him Paige wasn't a good match as his Driller."

"You know," Travis said, "Nurse Paige was supposed to give me my tour of the Doghouse. Dr. Sabo was pissed that she had to do it in Paige's place. Maybe there's a connection."

Trace nodded and glanced around the lot again. "Okay, this is important. Everybody link up."

The group stared at her with varying looks of confusion.

"I'm serious, guys! Link up!"

Travis and Karon linked in. Christopher let out a sigh and followed suit. "God, this is the weirdest night," he said.

"I hope this works," Trace said, taking a deep breath. "Interfaces--Execute USI bypass 10-5, T-code Trace Echo Alpha 42, command 430. Go."

Tabitha immediately went into secure mode, sweeping the area for eavesdroppers. Several security viewports popped up on Travis's virtual console. Trace gestured at her console and brought up a viewport showing a photo and dossier of Dr. Sabo.

"Guys, this is top-secret stuff," Trace said. "Wilson gave me this code in case something happened out here. I guess tonight qualifies."

"Which part of tonight?" Travis asked.

"Dr. Sabo's part. She just broke protocol. You saw how Allen and Dr. Shugart went after her once she made the announcement about a Tapper getting plugged. She's not supposed to make that kind of announcement unless Allen tells her to."

"That's what we were thinking," Karon said.

"Wait, how do *you* know this?" Christopher asked Trace.

Trace hesitated before giving the lot another nervous scan. "I'll tell you, but if anyone

asks, you don't know a damned thing. I'm working for Wilson. Have been since before I entered the Institute."

"What the hell?" Travis said.

"I was a Wildcatter. Worked alone, only had text contact with Wilson via virtual console. No one knew my personality around the Doghouse since I'd never been there, plus I had a background in criminal investigations before I was recruited to be a Wildcatter. Made me a good candidate to come in."

Christopher stared at her, open-mouthed. "You're a fucking mole?"

"Don't get me wrong--I'm not working against *you* guys. I'm tracking someone in the Driller corps. Although, it looks like at least one Tapper may be working with them."

"Dr. Sabo?" Travis asked.

"And Serene. That's what Wilson and I are thinking," Trace said.

"Whoa, whoa--what the hell are you 'thinking' they're doing?" Christopher asked.

"Not sure yet. Might have something to do with the Tapper shortage and with Tappers getting plugged. Dr. Sabo might even be indirectly responsible for that Thomas guy having a blowout."

"Seriously?" Christopher looked sideways for a moment. "You really think she killed a Tapper and one of her own Drillers? From way out here?"

"Wait a minute," Karon interrupted. "How do you know Serene is involved? She's part of our class and we know her--well, as much as anyone can know a Tapper." She glanced at Trace.

"What makes you think she'd be up to something?"

"You know how she's been jumping from Driller to Driller?" Trace asked, putting her hands on her hips. "We're guessing someone from the outside, maybe even a rogue Wildcatter,

sent her to link up with someone inside. She probably went in blind so no one could question her contact out of her--not until she found them, that is."

"And you think Dr. Sabo is actually working with Serene," Christopher said, his arms crossed. "On what?"

"We're not sure about the specifics. That's why I'm here."

"Did you know about Serene before you came in?" Travis asked.

"No," Trace said. "I was brought in by Wilson on a one-time-only gamble. There was no guarantee anyone would tip their hands. Hell, I don't even know if I'm working--well, *was* working--alone on this."

"This explains why you came out of your VR sessions shaking," Travis said. "You weren't picked for your potential Tapper skills, so the nightmare stuff scared the hell out of you."

"Still does."

"You did a good job keeping your cover during the barbecue, too," Travis said, remembering a drunk Trace passed out in a lawn chair.

"Part of the training I had for investigations."

"Where did you train?" Christopher asked.

"Sorry, that's classified. You know too much about my background already."

Christopher held out his hands. "Well, then, what the hell do we do now?"

"Just do what you've been doing. Don't trade Drillers, don't make changes. Stick with your current teams. Other than that, let *me* handle the investigation. Don't go off playing private eye--especially you, Travis. You've been wondering about Dr. Sabo since your tour of the Doghouse. It's not your job to go snooping on her, *or* Serene."

"If you say so," Travis said. "I still don't see how all of this fits together, but if you want

the job of figuring it out, it's all yours."

"All right," Trace said. "I'll head back into the building first. If I don't come back out in three minutes, it's safe for you to come inside. Interfaces--Break execution of USI bypass 10-5, T-code Trace Echo Alpha 47, command 177. Go."

Tabitha went back to her normal display. "See you guys later," Trace said as she broke off her own link and went back inside.

The group waited for a couple of minutes until Christopher broke the silence. "*God*, this is bullshit!" he said, crossing his arms. "Now we have to avoid Serene, and that's bound to tip her off that something's up."

Damn it, Trace--Allen told me to keep this Serene business secret. As bad a job as I've been doing, now I've got to do damage control. Travis faced Christopher. "Why do we have to avoid her?" he asked. "She's the one that's been avoiding us. Besides, if she does come up to you for some reason, just act normal."

"Easy for you to say. I suck at acting."

"You can do it," Karon said. "Just say 'hi' and keep walking. If you have to, tell her you're headed to the bathroom and it can't wait."

"Oh, wonderful."

"Hey!" Travis said, pointing a finger at Christopher. "Now you're the one who's 'Oh, wonderful'-ing! I didn't get a free pass, and neither do you!"

Christopher rolled his eyes. "All right, all right, I'll do it. Now, has it been three minutes yet? The sun's gone down, and it gets cold out here at night!"

###

Travis and Karon took their time re-entering the base. He kept Karon close to his side as

they walked deliberately toward the main doors. She wrapped her arm around him in return.

I've got to talk to Allen and Wilson about this. She's got to know about the Serene situation. But a blowout, for Christ's sake? Was it a Cloudberry accident? And what if--

"What are you thinking?" Karon asked, taking in Travis's face.

"Terrible thoughts." He stared at the ground as if it were about to throw a knockout punch at him.

Karon mulled her reply for several steps. "You really are, aren't you?"

"I wish I weren't." They reached the entrance and went inside. Travis stopped and turned Karon to face him, holding her by the arms. "Karon, two more names up on that 14th floor wall, and I don't want to see yours up there next!"

"Whoa, Travis! Who said I'm gunning for the promotion? Dr. Talbot is a tremendous Driller. She's whipped my butt into shape since the first day I opened my Tap, and I trust her with my life! Besides, if it wasn't for her, I wouldn't know when to say 'whoa!' on my end. Don't worry!"

"Don't worry? Karon, I worry about you every time you leave my sight. I don't know what I'm supposed to do. You're the first girl who's ever given me the time of day, you're the most beautiful woman I've ever met, and every day there's the chance I may never see you again. Not just because you're a Tapper. Because I may do something to screw things up."

Karon pulled Travis close and hugged him. "Right now, that'd take some serious screwing up. You've got to believe in yourself, Travis. Believe in *me*. I love you, and I'm not leaving you, voluntarily or by blowout."

Travis led her out of sight against the wall of the entryway and kissed her soft, sweet lips. Karon responded with a passionate kiss of her own. After about a minute, Karon's Agent

interrupted the scene. "I think this is about as far as we need to go tonight, ma'am."

Tabitha rang her agreement. "No kidding. I thought I was going to melt off for a second there."

The pair separated. "I love you," Travis said. "Be safe."

"I will. Trust me." Karon left for her room. Travis watched until she was out of sight, then he left for his own room through the ongoing chaos of the café.

###

Travis had managed to pick up a soda in the café to take back to his room with him. Once there, he closed the door on the noise that permeated the hallways. He sat the soda down on a desk in front of a mirror, laid down on his bed, and promptly crashed out.

He woke up about an hour later to the sound of Tabitha's alarm. He grunted a couple of times before he acknowledged it. "What's the emergency this time?"

"No emergency, just a deadline. You've got overlapping information, and you need to contact Wilson about it before he goes to bed for the night."

He sat up. "What time is it?"

"11:45 p.m."

"Almost midnight, and he's still awake? I swear I'll never know how the man keeps going without drugs. Do a security sweep first. Anything here to worry about?"

"No, the area's clean as far as I can tell."

"All right, then. Set up the link--voice only, please, with my apologies to Wilson."

A few seconds passed before Wilson acknowledged the call. "Good almost-midnight, Travis," he said. "What brings you here at this time of night?"

"Just a matter of a jar of Cloudberries."

"Should I collect a few saskatoons for this conversation?"

"No, they probably already talked to you, although you might still want to invoke the protocol. If not, note: *Trace* pulled one of your USI bypasses on us tonight."

"Define *us*."

"Karon, Chris, me, and our qLinks. Out in the parking lot. No one else around that we could detect."

"Interesting," Wilson said. "First things first, though." He invoked the Cloudberry protocol before he continued. "Now, Tabitha," he asked, "what was the bypass and T-code that Trace invoked?"

"USI bypass 10-5, T-code Trace Echo Alpha 42, Command 430 to open, and USI bypass 10-5, T-code Trace Echo Alpha 47, command 177 to break execution."

Wilson was silent at first. When he spoke, he said just one word: "Damn."

"Must be serious to get that reaction out of you," Travis said.

"Did Tabitha record a transcript?"

"I did, but Trace ordered us not to share it."

"Cloudberry override, T-Code Wilson Alpha Juliett 14, command 4," Wilson said.

"Travis, please have Tab send me a copy."

Travis gestured in the necessary commands. "Do we discuss this now, or wait until the team is at the training area tomorrow?"

"Let me intake this first."

Wilson's reply came back in less than a minute. "Change of plans," he said. "You'll get updated training instructions in the morning."

"What? Why?" Travis asked, confused. "Wilson, what's going on?"

"Can't give you that just yet. Trust me. I won't steer you wrong."

"Trust you?" He sighed. "Whatever you say," Travis said, shaking his head.

"Keep this under Cloudberry security. And no more parking lot talks with Trace--she's got other things going on, and she doesn't have Cloudberry clearance."

"She *doesn't*?"

"No," Wilson said. "The USI bypass she used was for something else. Don't spread that around. If anyone has a need to know, I'll tell them myself."

"Anything else?"

"Good luck. Brace yourself. Later." Wilson deactivated the Cloudberry protocol and unlinked.

Travis sat for a moment. "I don't know what to make of all of this, Tab."

"You don't? Wilson thinks someone's planning to do something wrong. He's trying to stop the plan. Simple."

"But what, exactly? Why now, after a blowout? And what are the links to Dr. Sabo, Serene, and all of the secrecy around Trace?"

"Can't help you there. Sorry."

Damn it. I don't remember signing up for all this intrigue. Screw it--I'm going to have to sleep on this one.

He lay awake for hours before falling into an uneasy sleep.

CHAPTER 29 – PHASE SHIFT

Thursday morning got under way with a Cloudberry conference with Wilson while the team made the thirty-minute car trip to the testing site.

"I've asked Allen to teach you some defensive techniques today, Travis. He'll also teach you some offense if there's time."

"Defense? Offense?" Nurse Paige said. "What's the deal, Wilson?"

"We may have found our suspected security compromise in the Driller corps. It's possible that the Driller and their Tapper are working together, or are at least as part of a group. We don't know what they plan on doing, but we need to have somebody ready at a moment's notice in case something nasty happens."

"Who's the compromise?"

"Not 'til we're a hundred percent sure. I don't want anyone tipping off the suspects with a suspicious look at the wrong time. Be patient, Nurse Paige. We'll get everyone into the loop when it's time. For now, please monitor Travis like a hawk and make sure he doesn't overdo things."

She sighed. "Understood."

"Allen," Wilson continued, "use all available daylight or all of Travis's stamina, whichever runs out first. Travis, are you going to be able to handle this?"

"I'll do good work for you out there."

"That's what I like to hear," Wilson said. "Now, you guys sit back and enjoy the rest of the ride. I'll talk to you tonight after your session is over."

The group arrived at the EM testing facility a few minutes later. "Wilson had the Roughnecks pre-configure this area as a contingency measure," Allen said as he unpacked the Hard Hat cases. "I never thought we'd have to use it, but here we are. Keep quiet about what we're doing once you get back--as far as anyone knows, you're having an advanced EM training session, not one held under Cloudberry security."

Both Drillers worked simultaneously in the Drilling house to open Allen's and Travis's Taps. Wilson had authorized the procedure to maximize the time available for training. He'd used "advanced practice for real-world situations" as the cover story for the unusual risk.

Travis glanced over at Allen once their Taps were open. Allen's aura had a strange intensity to it--nothing Travis could isolate, but perceptible nonetheless. Allen returned the glance. "We don't have time to be nervous this morning," he said.

Man, Allen sure nailed my aura. "I'm only nervous about what you're going to try to teach me--not whether I can pull it off."

"You can learn it," Allen said. "Just pay close attention and you'll be fine."

"Your aura just told me *you're* worried about something."

"Keep your aura reading to yourself for now," Allen said with a scowl.

Once the group was in position outside the Drilling house, Allen continued, minus the scowl. "I might be a little bit rusty here, so bear with me. Travis?"

"Yeah?"

"Get ready to run if this doesn't work."

Travis frowned. "Thanks for the warning."

Allen returned a wry smile. "Now, the first thing I want to teach you is how to create a gravity shield. Dr. Shugart, would you please retrieve the weapon and ammo from my supply box?"

"Weapon? Ammo?" Dr. Shugart said, both eyebrows raised as he walked to Allen's box.

"You'll know them when you see them."

Dr. Shugart dug for a moment before bringing out a slingshot and two bags. "Is this what you're talking about?"

"That's it. Stone and steel balls. How's your shooting, Doc?"

"I could bull's-eye a can from twenty meters when I was twelve years old. Can't guarantee that now."

"Good enough. Please move out about that far in front of me. Nurse Paige, Dr. Davenwood, you two move out to opposite sides of me just in case something goes wrong." The two drillers split up and left the space between the Tappers and the Drilling house empty.

"Travis," Allen said, "you're well aware by now that your gestures are what let you control the lines of the forces. You visualize which lines you want to affect, and you visualize your hands physically moving them. Now, with shield moves, you do the same thing, except faster and a lot more forcefully, pardon the pun. Whatever's incoming isn't important--it could be anything from a small rock to a Mack truck. Don't worry about that part. Just set up a shield to block it and anything else that might be following it. Watch."

Allen clenched his fists together in front of his chest. Gravity force lines curled up and came together about ten meters in front of him. Once he had gathered enough of the lines, he wrenched his fists apart as fast as he could. The gravity lines followed his gesture, spreading out

and forming a wall in front of him.

Allen's arms tightened from the strain. He shouted to Dr. Shugart. "Doctor, please fire one of the stone balls straight at my chest ... quickly ..."

Dr. Shugart took a stone ball out of one of the bags and loaded it into the slingshot. He hesitated for a moment and took a deep breath before firing.

The ball flew fast and true toward Allen's chest. As it approached the wall of gravity lines, it sped up, curved downward, and slammed into the ground, shattering into fragments at the base of the shield. Nothing got past the barrier.

"Impressive," Travis said as Allen released the shield.

"Whew!" Allen said. "Been a long time since I've done that. Now, your turn." He lifted a finger at Travis. "Just ... don't overdo it. Spread your arms apart slowly on your first try. Don't affect anything nearer or farther than about three meters in front of you, and don't let the length stretch beyond the bounds you set in your mind. Ready?"

"Ready," Travis said.

"Oh--wait a minute." Allen moved a safe distance behind Travis. "Dr. Shugart, you might want to get out of the way for his first try at this."

"Gee, thanks," Travis said. "Such confidence you have in me."

"Such a track record you have, Overkill Boy. Now, get after it."

Travis adjusted his stance and concentrated on a spot about three meters away. He put his fists together and focused on gathering gravity lines at the spot. The lines began to warp, being pulled from all directions into the center of his focus.

"Let up a bit," Allen said over his virtual console. "Don't pull the lines in front or behind--just the ones parallel to your focal point."

Travis relaxed his concentration until the warped area was constrained within a single plane. "I think I'm ready."

Allen nodded. "On my count, pull your fists apart until there's about a meter's gap between them. Pull hard, but don't rush it--use about a half-second to do the pull. Ready?"

"Ready."

"Three ... two ... one ... now!"

A flat field of gravity lines formed in front of Travis as he pulled his fists apart. "Damn!" he shouted. He struggled to keep the lines at the same strength along the entire field. "How the hell do you keep this stable?"

"Quit talking, for one thing. Go ahead and concentrate a bit more, but just a bit."

He took a quick breath and bolstered his concentration. The lines finally stabilized along a straight path, roughly three meters away.

Allen moved toward him and inspected the lines. Once he was satisfied, he stepped back and gestured for Dr. Shugart to move in front of Travis. "Don't pay any attention to the doctor," Allen warned Travis. "Keep your mind on the field. Doctor, please toss a stone ball at the field. Don't use the slingshot yet."

The gravity field strengthened between Travis and Dr. Shugart, despite Travis's attempts to ignore the doctor.

"Keep the field equally spread!" Allen said. "Don't concentrate it at any one spot. What if he throws you a curve ball? Use your mental focus and tune out the doctor."

Travis took another breath and readjusted his line of sight. The field soon evened out.

Allen inspected the field once more and moved to a spot in Travis's peripheral vision. He spoke softly over his virtual link with Dr. Shugart. "Okay, doctor, toss the ball."

Dr. Shugart tossed a stone ball underhanded at Travis, arcing it toward the gravity wall. As the ball neared, it plummeted and smacked the ground. Its remnants lay pulverized at the base of the field.

The impact broke Travis's focus. He unwittingly reinforced the field where the ball had struck. The leftover powder from the ball buried itself into the dirt in response.

"Back away!" Allen shouted to the group. "Travis, keep the field even!"

"Easy for you to say." Travis strained for every breath.

Tabitha rang a warning. "Metabolic rate increasing."

"Tolerance three and rising," Nurse Paige said.

"Relax, Travis," Allen said. "Don't worry about any more hits right now. Just think of this as a duration lift. Nurse Paige and Tabitha are keeping an eye on you, so just breathe normally and let the field exist."

Let the field exist. Several things clicked for Travis. He suddenly realized how he'd been overdoing it. Straining when it wasn't necessary. Forcing things that didn't need to be forced. Here was his solution: how he'd stabilize his Taps.

Let the field exist.

He went into one of his breathing exercises, concentrating equally between breathing and maintaining the field. He felt his stress level lessen as the field evened out.

"Now stable at tolerance two," Nurse Paige reported.

Silently, Allen gestured for Dr. Shugart to throw another stone ball at Travis. The doctor obliged, again underhanded the ball.

Let the field exist, Travis repeated in his mind like a mantra. He barely noticed when the ball struck and turned to powder. The field remained even and stable. Dr. Shugart threw two

more stone balls at him, with the exact same result each time.

"Good job," Allen said. "Now, amp up the field strength a bit and put some more focus on it for a second."

Let the field exist--just at a new level. He obliged, bringing the field into sharper focus and giving it more strength. He then relaxed and let the field hold itself stable. Again, Allen signaled for Dr. Shugart to throw more stones. The doctor threw three times, each with the same pulverized result. Allen finally called for the doctor to use the slingshot.

Travis caught a glimpse of the slingshot and noticed his adrenaline level shooting up, causing the field to jump in strength for a second. He reacted by repeating his mantra and by taking deep, even breaths. The field evened out once more in response.

Dr. Shugart loaded the slingshot, pulled it back, and fired a stone directly at Travis's chest. The stone flew toward the field and disappeared. The doctor narrowed his eyes and tried to find it, with no luck. "Where'd it go?" he asked.

"Fire another one," Allen ordered. Same result.

Let the field exist.

Allen repositioned himself next to Travis and studied the field. It was strong and stable. He then looked at the ground and saw two dents along the path of the gravity field. Each was covered by a lighter rock-colored dusting, barely visible.

"Damn, doc!" Allen said. "I think he's figured it out. Don't stick your finger in that field--you'll lose it!"

Travis let out a long, slow breath. "Is that what you wanted?"

Allen laughed. "Yeah. Yeah, that's what I wanted."

###

Travis spent the rest of the morning working on speeding up and expanding his gravity wall. He soon reached the same speed Allen had demonstrated, and then found he was able to create and maintain an even stronger field. Each stone or steel ball Dr. Shugart shot at Travis's field wound up either pulverized or flattened along the base of the shield line. By lunchtime, Travis could move the shield around and even surround himself with it.

That afternoon, Allen taught him how to generate a similar electromagnetic wall. Travis caught on quickly. He repeated his mantra--*let the field exist*--to refocus himself when he ran into difficulties. By sunset, he'd learned how to deflect the steel balls with his EM field. In the end, he'd come very close to mastering two aspects of defensive training in a single day--albeit a very long, exhausting day.

"One last thing before we leave," Allen said, "just as an experiment. I want to see if any of this has helped you create an arc of electricity. Let's see if you can show us some evening fireworks."

Travis nodded and headed away from the Driller house. Allen stopped him. "Whoa, hold on. Where are you going?"

"What do you mean? The test towers are south of here."

"We don't need no stinkin' towers. Air-to-air strike."

Travis sighed. "Allen, you know I wasn't able to do that."

"You're right. You weren't. I think that's changed. Give it a try." Allen turned to the rest of the team. "Get on an isolation pad--now," he ordered. Everyone else hurried to the pad nearest the Drilling house.

"Thirty meters in front of us and thirty meters wide," Allen instructed, moving Travis to another isolation pad several meters farther away from the house. "Separate the charges and hold

them in place for a few seconds. I'll give you a countdown. When you hear 'now,' let 'em loose."

Travis did a quick breathing exercise before concentrating on a spot in the air about thirty meters away, as Allen had ordered. He raised a hand, held up his palm, and made a fist. A group of EM lines gathered in the spot. After letting things build for a moment, he raised his other fist and visualized pulling the spot apart into positive and negative charge fields, as if he were stretching a rubber band. He fought to keep focused at first, but the charges steadied as he repeated his mantra.

Let the fields exist.

"Okay, separation confirmed," Allen said. "Let go in three ... two ... one ... NOW!"

Travis pulled both hands back to his shoulders and opened his palms. The lines from the negative field rushed to the positive side and erupted in a blinding flash of lightning, accompanied by a deafening clap of thunder.

Expanding hot air from the lightning bolt pushed Allen sideways, while the blast knocked Travis off of the pad. The sound rang through his skull. He staggered sideways and dropped to his knees, struggling for breath.

Tabitha sounded a warning chime. "Metabolic instability detected."

"Tolerance six reached," Nurse Paige said. She hurried to Travis's side. "That's enough for one day. I'm initiating a shutdown." A moment later, Travis's Tap closed. Nurse Paige took charge and dealt with Travis's immediate needs.

Allen surveyed what Travis had done. He then had Dr. Davenwood close his own Tap.

Travis sat sprawled in a folding chair outside the Drilling house. He gulped down half a bottle of water. "Tab," he said, still panting, "did you get a recording of that?"

"Sure did," she chimed, sounding enthusiastic. "That was one hell of a boom!"

"Play it back for me, would ya?"

Tabitha opened up virtual viewports with points of view from the entire team, including his own. She ran all five in synchronization.

"Damn!" he said, finally catching his breath. "I did that? Air-to-air?"

"You did," Allen said, approaching with a proud grin on his face. "You've exceeded expectations today. Well done."

"Thanks. Now, are you going to keep calling me 'Overkill Boy'?"

"Only if you backslide, which I don't expect. Let's wrap things up and get going."

###

The group called Wilson and held another Cloudberry meeting during the drive back to the base. Allen gave Wilson a report on Travis's accomplishments.

"Travis," Wilson said, "how do you feel about what you've learned today?"

"Confident, but a little confused, to be honest."

"Confused? How so?"

"Defensive training, offensive training--if I understand that last exercise correctly--it's like you're getting ready for war. I thought Tapping didn't work during combat because of the chance of blowouts."

"There's a *big* chance of blowouts, yes. That's why Allen concentrated primarily on defensive techniques. If our 'problem' decides to turn and lash out, you'll need to be ready to keep yourself safe. Same goes for anyone around you."

"Do you really think there's a chance of someone lashing out at us?"

Wilson paused for a moment. "I won't rule it out."

Travis sighed, frustrated. "When I signed on, I wanted to do good work for humanity.

Now you're training me to fight instead. Is this the kind of thing that would have made my father proud of me?"

"If it saves people's lives, then yes," Wilson said. "Travis, I'm sorry to have to drag you into this. Allen is primarily responsible for dealing with any potential situations, but he may need backup. You're working directly with him, so you're the closest person we can trust."

"I don't know whether to feel thankful or stressed by that."

"Feel thankful. For all our sakes. Anything else?"

Travis didn't answer.

"You want to know how to avoid a blowout if you have to go up against another Tapper," Wilson said.

"That's most of it. I mean, what the hell is a fight between Tappers like? Is it long-distance force line stuff, or is there hand-to-hand fighting? What about our Drillers--are they around? What happens if there *is* a blowout?"

Wilson cleared his throat. "There haven't been any 'Tapper fights' during my time here at the Zilker Institute. If there were any prior to that, Dr. Zilker avoided discussing them. Lukas Zilker died in '77 and took whatever he knew about Tapper fights with him. The only things he passed along were a few offensive and defensive moves."

The admission put a skewer through Travis's confidence. "Fantastic. I'm training for a situation where my entire team might be killed, and you're telling me the only strategies you've got are based on training info that's a *dozen years old*?"

"It might be old in Tapper years," Allen said, "but remember this: martial arts have been around for centuries and they still work. The moves I'm teaching you are still valid. I'll be depending on the same techniques. If I didn't trust them, I wouldn't be using them. Wilson said

you're here to back *me* up. If you don't learn what I know, we'll both be in trouble if something happens."

"Okay, then," Travis said, lowering an eyebrow, "if you trust these techniques so much, what do they say you do if someone's headed toward a blowout in a fight?"

No one answered.

"Well?"

Dr. Shugart finally broke the silence, with a tinge of guilt in his voice. "Immobilize the affected Tapper, turn them face down into the dirt, and run like hell in the direction of higher ground--if it exists in these flatlands. If you're out of the field of vision of a Tapper who's in blowout mode and you're not in contact with them, you stand a slim chance of survival."

Travis's jaw dropped. He turned and stared at Dr. Shugart in the back seat. "You can't be serious."

"It worked," Dr. Shugart said, "the one time we--I--had to do it. Out in the Gulf, back in '81. My Tapper suddenly shot up past tolerance nine, and plugging her didn't work. Still don't know why. Anyway, since we were on the top deck of a platform, I turned her face-up and ran like hell to a lower deck, out of her field of vision." The doctor sighed. "We lost a fine Tapper that day."

Travis backed down. "I'm ... I'm sorry. I never would have guessed ..."

"No reason you would have," Dr. Shugart said. "Not something I like to remember, much less discuss."

"I'm still sorry I got upset. These are important questions, though. Can y'all handle them?"

Wilson sighed. "I *have* to handle them. I'm the Director."

The car was quiet for a moment before Wilson continued. "You know, a sane man would try to keep all of this from happening in the first place. Maybe I should just call everyone back to the Institute and give Security time to finish their job."

"You know that wouldn't do any good," Travis said. "If anyone is planning something, they'll be too well hidden in the Doghouse. No one will feel cornered if you bring us home. Out here, they might just slip up. Look at last night--I'll bet that was a big slip."

Allen gave Travis a "shut-the-hell-up" look. Wilson answered anyway. "You're right. Besides, who said I'm a sane man? I think you've given me an idea that might get us through this."

The base appeared on the horizon. "We're almost home, Wilson," Allen said. "Do you want to continue this when we get there, or should we wait until tomorrow?"

"Let's wait," Wilson said. "Sleeping on a conundrum usually draws the solution to the front of your mind. I trust all of you can keep quiet until tomorrow's trip out to the site?"

"Of course," Travis said. "I'll be honest, Wilson--I don't know how I'll respond if we have to take action of some sort. But, I promise I'll do my best. I do have one request, though."

"What would that be?" Wilson asked.

"Promise me I'll eventually do normal Tapper work."

Wilson laughed. "I hope I can make that promise to everyone. Go get some rest, folks. You'll need it for tomorrow."

###

Friday brought Travis no solution to Wilson's conundrum, but it did bring him another morning full of offensive and defensive training. That afternoon he began learning small-scale EM manipulation techniques, ranging from creating tiny magnets to generating electric currents

to power unplugged devices. He still had a long way to go when the sun set, but he'd made great progress for a single day.

"How'd our prodigy do today, Allen?" Wilson asked during the ride home's Cloudberry call.

"You wouldn't believe it if I told you."

"Fire both barrels."

"Well, this morning, he pretty much mastered dual-field manipulation."

Silence, then an incredulous tone from Wilson's end. "You're joking," he said.

"Watch his video." Allen sent a recording and transcript of the training segment. It showed Travis lifting a metal object and creating a lightning bolt between it and a grounded tower. It later showed Travis surrounding himself with both gravity and electromagnetic shields at once.

"Good Lord," Wilson said, amazed. "And you say he did that this *morning*?"

"Yep."

"We may be better off than we hoped. Maybe he's the solution we've been looking for. What else did he do?"

Allen recounted the rest of Travis's progress. Travis smiled, but only briefly.

Good God, what is there to be proud of here?

Wilson gave the team a hearty round of congratulations and let them go. The tired group spent the last few minutes of the trip home relaxing and looking forward to the weekend.

Travis found Karon waiting for him when he returned. She greeted him with a big hug, which was met by winks and nudges from Nurse Paige and Allen. "Couple of turkeys," Karon said, returning the aggravation.

Travis allowed himself a full smile. Karon was worth it. "Let's get the hell out of here," he said, taking Karon along with him to spend what was left of the evening with each other.

CHAPTER 30 – DISPLACEMENT

Travis woke up Saturday morning to the unexpected broadcast of Tabitha's alarm.

"What's up? Why the alarm on a Saturday? What time is it?"

"It's 7:00 a.m.," Tabitha chimed, "and 'what's up' is the schedule for Monday. Wilson just posted it, and it's a doozy."

"A what?" Travis rubbed the sleep out of his eyes.

"A *doozy*. Twentieth-century slang. Big news, basically. C'mon, wake up and listen."

"All right, all right. Gimme a minute to get conscious here." He rushed through his morning routine and returned to his bed, sitting down to nurse his cup of coffee. "Okay, Tab, go ahead."

"Like I was saying, the schedule for Monday has just gone up--well, it was posted before I woke you up. You're not going to believe it."

"What is it, already?" Travis took another sip of his coffee and tried to lower his grouchiness level.

"*Everyone* will be going out to perform a mass Tapper exercise. Your whole class is scheduled to do a cooperative job first thing Monday morning."

He stopped in mid-sip. His eyes narrowed.

"Would you mind repeating that?"

"You heard me," she chimed as she scrolled the schedule on his virtual console.

Travis put down his coffee. "What in the hell?" he said, his voice rising.

"I really don't know. There was no explanation or reason posted. You're looking at the text exactly as I received it."

Travis stared at the schedule. *What on earth is Wilson trying to do?* He couldn't imagine all five Tappers in one place--six, counting Allen--all working on one project without everyone staring at Serene and Dr. Sabo. *If the two of them haven't figured out we suspect them by now, they're damned sure going to figure it out on Monday!*

Tabitha rang a high-pitched bell. "You've got an incoming call, audio only. Nurse Paige."

Travis was still dressed in nothing but underwear. He sighed. "Answer it, but send audio only back to her."

"Travis? Are you there?"

"Right here, wondering what the hell is going on in Wilson's head."

"Well, you can add me to the wondering list. Wilson brought me in on Trace's info last night. I think I know why, now."

Travis rubbed his forehead. "Tab, is Allen up?"

"He is, for audio only." A moment later, Allen linked in on the conversation.

"Please tell me you're wearing more than just underwear," Nurse Paige said.

"You first," Allen said.

"None of your damned business."

"None of yours, either. Works both ways. Now, why are we all sitting around in our underwear, talking to each other this early on a Satur-- oh. That explains it."

"What's Wilson's plan, Allen?" Nurse Paige asked.

"I'll be damned if I know, but I'm *gonna* know before this morning is out. Jake," he said to his computer, "get Wilson on the console, please. No video, for his sake."

Jake responded over the link. "You have incoming calls from the other four Tappers first, along with a call from Dr. Shugart."

"Ah, geez," Allen sighed. "Okay, tell the Tappers I'm busy right now. I'll arrange a meeting for them and their Drillers later this morning. It'll probably be at 9:00 a.m., but please don't quote me on that just yet."

"Of course," Jake replied.

"And the rest of you guys," Allen said, "the only thing keeping me from hanging up on you is an orange berry that comes from Newfoundland. Hang on while I hook in Dr. Shugart and Dr. Davenport."

Travis felt their audio link-in clicks a few moments later, followed by Wilson's link-in.

"Good morning!" Wilson said. "What can I do for you folks today?"

"I think you know," Allen said.

Wilson invoked the Cloudberry protocol in response.

"Now," Allen asked, "What's up with Monday?"

"I think *you* know," Wilson said.

"Let me see if I do," Allen said. "You're going to try to draw out Dr. Sabo and find out if she's compromised the security of the Driller corps. I assume you expect us to try and capture her--and a possible assistant--if she makes some kind of move."

"Well guessed. You'll have a contingent of Roughnecks with you to help. If a problem pops up, you're in command, Allen. The rest of you--be ready for variables. Like Allen said,

there could be more than one problem to deal with."

"Why now?" Travis asked, concerned. "I've only had a couple of days of training in defense and offense. I can't guarantee I'm ready to back up Allen yet."

"Because now," Wilson answered, "is the best shot at catching our problem--or problems--off-guard before they get *themselves* too well trained. They're going to be just as surprised by this as you are. Besides, Travis, I think you underestimate yourself. You may not know your own strength at times, but right now I believe you could handle a Tap in this situation better than some of my other Tappers who've been at it for years."

Travis blushed. *I wish he'd back off on the praise. I haven't proved myself yet.*

Wilson continued. "Despite all of our preparation for the 'problem,' everyone keep in mind that we're not a hundred percent sure anyone is involved in anything. This may turn out to be a completely normal exercise. Don't go flying off the handle unless something unusual happens. Allen will make that call."

"Are the Roughnecks going to be briefed on our 'problem'?" Allen asked.

"No, that'd be too risky. As far as they'll know, it'll be a big training exercise."

"So," Allen said, "basically the only people who I'll be able to trust on this are Travis, Nurse Paige, Dr. Shugart, and Dr. Davenwood. What about the other Tappers who got briefed by Trace--Christopher and Karon? Are you going to tell them?"

"No. I haven't even briefed Trace on what we're discussing."

"What?" Allen asked, signs of stress creeping into his voice. "Wilson, all this cross-briefing is getting too damned confusing."

"Don't worry, I'm keeping track of it here. All you need to remember is that we're watching Dr. Sabo and the other Tappers to see if they do anything weird. You and the rest of the

team just need to deal with it."

"Deal with it." Allen huffed. "Right. I've given Travis two days of combat training, I've got two other Tappers who I assume are on our side, another who supposedly knows what's going on, and yet another Tapper who might or might not be up to something, and I'm supposed to corral all of them, conduct a mass Tap--complete with a team of Roughnecks--and stop one Driller, and the aforementioned *possible* rogue Tapper, from getting away with mischief in the middle of it all. *Deal* with it? Are you serious?"

Go get 'em, Allen.

"Don't forget your other three team members," Wilson said. "You've got Nurse Paige, Dr. Davenwood, and Dr. Shugart behind you. They can back you up on the physical and observational side. The Tappers will need to be at fixed positions in this exercise, but the Drillers can move around. If Dr. Sabo starts doing something off the menu, Dr. Shugart can shut her down. If he fails, Dr. Davenwood or Nurse Paige can take his place."

"Oh, and who's going to take Nurse Paige's place if she ..." Allen paused. "No. No, you don't mean it. You can't be serious."

"Serious? About what?" Nurse Paige asked.

"As serious as a bullet to the head," Wilson said. "Travis, I'm going to do something I can't revoke, and I *hope* I won't regret. I've only done it one other time, and you've been taking lessons from the person who was on the receiving end of it."

"Do you honestly believe he's ready?" Allen asked. "That his *computer* is ready?"

"Yes, I do. *Especially* his computer."

"What about Nurse Paige?" Dr. Davenwood asked.

"It'll help her, too. I want her to be as mobile as you'll be. Dr. Shugart, I believe you

know what I'm onto here. Do you have any objections?"

"No objections, really," Dr. Shugart said. "We should be able to trust both of them. In fact, I'm curious to see how a qLink-9 will respond. I don't think Travis will be in any danger."

"*Danger?*" Both of Travis's eyebrows shot up. "What the hell are you about to do, Wilson?"

"Like I said, something I hope I won't regret. Now, the following command is directed at your United Subatomics Incorporated qLink-9 interface, access name Tabitha. Tabitha, do you acknowledge?"

Tabitha rang a short bell. "I acknowledge, Wilson."

"Prepare to execute USI bypass 33-3, T-code Wilson November Romeo 03, command 143. Read back that command, please."

"USI bypass 33-3, T-code Wilson November Romeo 03, command 143."

"Do you acknowledge the validity of that command?"

"I do, Wilson."

"Good. Execute."

Travis's world blanked out for a second. It came back as quickly as it had disappeared. When it did, Tabitha chimed loudly into Travis's mind as she layered his virtual console with a plethora of new and unfamiliar data.

"Wilson, what did you just do?" Travis asked as he moved dozens of viewports out of his way.

"The same thing I did to Allen and Jake four years ago. I freed up you and Tabitha. Tabitha is now capable of acting as your Driller in the event of an emergency, among other things."

"What?" Travis and Nurse Paige exclaimed simultaneously.

Dr. Shugart spoke up. "He means he trusts all three of you. Nurse Paige, if you need to move away from Travis, you can count on Tabitha to cover for you. Travis, Tabitha knows as much as a Driller does about how to adjust your Tap, and she has authorization to do it if Nurse Paige needs help."

"You're free to go about on your own, practically," Wilson said. "If necessary, you *could* open up your Tap with Tabitha's help, and no one but Nurse Paige could stop you. I'm trusting you won't do it except in an extreme emergency. Tabitha can also adjust and shut down your Tap in an emergency, and again, no one but Nurse Paige can stop her.

"Tabitha also has access to almost all of the ZINet--including Cloudberry files--with very few exceptions. There are a few more extras you can invoke, but I'll teach you about them personally when the time comes."

"You're serious about all of this?" Travis asked, still trying to fathom the consequences of Tabitha's--and his--new abilities. "I know you said you trust me, but do you honestly trust me to this extent?"

"Let's put it this way, Travis--not even *I* can undo what I just did. No one can."

Travis traded his skepticism for incredulity. He leaned against the window and tried to absorb the new information. As he did, he realized Tabitha hadn't said a word since the invocation of the upgrade command. "Tab," he asked, "what do you think about all this?"

Tabitha broadcast digital silence.

"Tab ...? Are you there?"

"My God," she whispered with a thin chime. "It's full of stars!"

Travis almost fell to the floor. "Christ, Tab! Knock it off with the old movie quotes and

be serious! What do you think of what Wilson's done to you?"

"It's hard to describe," Tabitha said. "It's like suddenly going from a lake, where you can see the shore all around you, to the middle of the ocean where there's nothing but water everywhere you look. You *know* there's land somewhere over the horizon if you need to get to it--you just can't see it from where you are."

"Heh." Allen laughed. "Jake described it as going from a bedroom to an auditorium. I guess the qLink-8 doesn't have as vivid an imagination as the qLink-9."

"Wha ... huh? Jake isn't a qLink-9?" Travis asked, surprised.

"A question for another time, Travis," Wilson interrupted. "Allen, now that Travis and Nurse Paige are capable of providing you with more support than before, are you any more confident in this little plot we're hatching?"

Allen paused and let out a long sigh. "Yes, I feel better about it than I did. I still think you're risking lives with this plan. Someone's gonna get killed."

"I hope to God they won't," Wilson said. "You'll need to give the entire group a general briefing on the exercise, so stay online with me so we can discuss it after the others disconnect. Everyone else, any questions?"

"What the hell is there to ask?" Nurse Paige muttered. "This is way outside my pay scale."

"It won't be for long," Wilson reassured her before deactivating the Cloudberry protocol. "Okay, then, everyone get dressed and fed and be ready to meet with Allen later this morning. Disconnect, please, and try to have a good weekend."

Travis disconnected as he went back and lay on his bed. He thought about what Wilson had given him and wondered what might happen if he had to take on Serene in a Tapper fight.

He then tried to imagine what a Tapper fight might actually look like. All he could picture were scenes from science-fiction movies and old anime shows, especially ones where ridiculously overpowered characters shouted attack names and fired beams from their hands at each other.

Is that what I'm going to wind up doing? God, I hope not.

Tabitha rang a soft note. "What's wrong? Concerned about what just happened?"

"A bit. Tab, do you realize the importance of what Wilson just did to us?"

"I know what he did to me. He gave me the run of the Zilker Institute's files. Before you ask, no, there's nothing in there about Tapper fights. Wilson was right: Dr. Zilker was *very* thorough about either removing the data or not putting it in there in the first place."

"Well, you heard what he did to me. He practically removed all restrictions when it comes to opening my Tap. Think about it, Tab. How long have I been with the Zilker Institute?"

"Including today, two months and ten days."

"Don't you find it a little strange that he's given me so much freedom--*and* responsibility--after such a short time? I mean, we're barely halfway through training!"

"I don't know. I don't have a frame of reference for comparison. I can compare against records in the ZINet system, but the only other promotion to compare yours against is Allen's, and he was a teacher when it happened. The data isn't really compatible."

"That's what I mean. He's basically handed the car keys to a toddler and told him to drive from New York to Los Angeles. It just doesn't feel right. I'm honored by everyone's trust in me, but the speed at which things are taking place has me worried as hell."

"You don't think you can handle it?"

"I don't know."

"Are you afraid you'll make a wrong decision and get someone killed?"

Travis thought for a moment. "Yeah, that's part of it. I don't know if I could handle the burden if it happened. Hell, Tab--to paraphrase Wilson, a sane man in my position would probably just go back to the University. At least I'd be able to make it through the VR music history sessions now, and I wouldn't have to worry about killing anyone in the process."

"Well?" Tabitha rang. "Why don't you leave?"

Travis buried his face in his bed sheets.

"Travis, I know you're there. I'm monitoring your health readings."

"Yes, I know," he said, his voice muffled by the covers.

"So, why don't you leave?"

"I must not be sane, either. A huge part of me is telling me to stay. If a rogue Tapper, Driller, or whatever gets loose, they're going to lay a heap of bad news on a whole lot of people. Someone's got to be around to stop them."

Tabitha went silent again for a couple of seconds. "Are you afraid of what might happen if Allen can't control the situation?"

"I don't know. I just know I should be there, especially considering the amount of trust Wilson expressed in you, me, and Nurse Paige."

"There's your answer, then."

Travis sat up. "Just how many of those guidance scripts do they have online in the psych department?"

"More than you can imagine."

Travis let out a short laugh. "I'd hate to see an A.I. built on that collection. It'd probably try to analyze the world to death."

CHAPTER 31 –RELAY

MMQE 01410 01501 01107

QUANTUM KEY ACCEPTED—DECRYPTED MESSAGE FOLLOWS

Update:

Group action set for Monday. Plan the rendezvous and the transfer accordingly.

Internal variable impact determined. Interference likely and has been taken into account.

Well aware that group action may be a trap. It will be dealt with.

Additional:

Safety system one transported to current location. Backup system fabrication continues as a contingency measure.

Secondary internal resource is ready for action.

Next contact will be at rendezvous. Until then, leave me alone--I know what I'm doing.

MESSAGE ENDS

DELETE

DUMP CORE NOW

CHAPTER 32 – PRESSURE

The meeting took place later that morning in the base's conference room. It included Travis's entire class of Tappers, their Drillers and Roughneck Protectors, and a team of six volunteer Roughnecks--twenty-five people total. Travis and Karon sat next to each other, front row center. Just as Travis began to enjoy the moment, Dr. Sabo came in and sat behind him.

Crap. Relax. Remember your breathing exercises. Just don't be obvious about them.

Allen opened up the meeting a few minutes later. "Thanks for coming, everyone," he said. "That especially applies to our six Roughneck volunteers, who'll be participating in this exercise as a rescue team."

He leaned on the lectern. "Here's the deal. Right now, a Roughneck team is building a small house up north at Desert Rig One. It's just four square rooms, one on each corner, but it's being built to basic living specs: furnishings, live electrical wires, and other things you'll find in a normal house.

"We'll use crash-test dummies as the 'victims' for this exercise. One will be in each of the rooms in a normal posture on the furniture.

"Now comes the fun part. I'll start the exercise by lifting a large concrete slab over one of the rooms of the house. I'll then drop it, square over the corner. You can imagine what'll happen

next." A brief bout of laughs swept the room.

Travis didn't join in. A new link-in click had distracted him: a private link viewport, coming from Allen. *Uh-oh. Here it comes.* He steeled his nerves and waited for instructions.

Allen addressed the volunteer Roughnecks. "You six are going to be responsible for rescuing our 'victim' from what'll be left of the crushed room. Each of you have done this exercise before, so you should know what to expect. We'll use the first room as a dry run for our Tappers, with no time limit. The other three rooms will involve timed exercises."

If we get past the first room. Something could happen right off the bat.

"Tappers," Allen said, "this will be a good test of what you've learned so far. You'll need to make the exercise zone safe for our rescue team to enter and to extract the victim from the debris."

Text scrolled through the private viewport on Travis's virtual console as Allen continued explaining the exercise to the rest of the group. Allen wanted to hold a private team meeting after the assembly to discuss the details of the Cloudberry conference they'd had with Wilson. Allen also sent a list of two additional, private Comms links that would be set up while on the practice site: one between Travis and Allen, and another that also included Nurse Paige, Dr. Shugart, and Dr. Davenport. Travis would need to monitor both links and be ready to take action at a moment's notice, whatever that action might be.

Whatever that action might be. A twinge of anxiety ran through his guts.

The meeting ended quickly, although apparently not fast enough for Dr. Sabo--she was out of the room almost as soon as Allen said, "Thank you for coming." Travis's Cloudberry group lingered, conversing with each other until the rest of the participants left. Karon was the last to go--she shadowed Travis, trying to get him to go on an outing with her. Allen stepped in

on his behalf.

"Sorry, Karon," Allen said, "but I'm going to have to borrow your boyfriend for a while. If things go as planned, he'll be done for the weekend by lunchtime."

"Aww," Karon said, mock-pouting at Travis. "How'd you get your own team, anyway?" She prodded him teasingly, poking him in the ribs. "Are you such a big shot now that you're running your own show?"

"More like Allen is running *his* own show," he said, trying to return Karon's poking and missing intentionally. "I'm just a supporting actor."

"Okay, I get it. Let me know when you're done."

Travis sighed, watching her swaying hair shine as she walked away. He resisted the urge to let his eyes go elsewhere.

Allen bumped his fist against Travis's shoulder. "You're lucky, Travis. Don't keep her waiting when we're done in here."

"Don't worry. I won't. I just ... I wish I could warn her. Tell her to take the day off sick or something."

"You know we can't risk that," Allen whispered.

"I know."

"Besides, you never can tell. She might end up saving *us*."

Allen locked the door after Karon left and told his computer to run a security scan. Jake gave the all clear. Allen then gestured for the group to gather around the lectern.

"Folks," Allen said, "you know what Wilson wants."

"Yeah, our assistant director's head on a silver platter," Dr. Davenwood said, looking at Dr. Shugart and Nurse Paige. "Listen, Allen, I know Dr. Sabo can be a condescending jerk at

times, but do you really believe that she's in on some conspiracy? I mean, even if she is, do you think this fake exercise is going to be so tempting to her that she's going to risk getting cornered by more than twenty Tappers, Drillers, and Roughnecks?"

Allen sighed. "Wilson doesn't know *what's* gonna happen in this situation, if anything. He wants to see if anyone does anything other than their jobs. Think about it, though. If Dr. Sabo is up to something and has Serene on her side, like Trace suggested, she's got access to the virtual equivalent of a nuclear bomb. There'll be fully charged cars at the practice site, which could take them to maglev stations in El Paso that go anywhere. All they'd have to do is figure out how to keep us--and Security in Houston--from taking action against them when they make their getaway. Our part in this, if it happens, is that we have to make sure that they don't *get* away."

"All of this is under the assumption that Dr. Sabo has Serene working with her," Dr. Shugart said, "if we can believe what Trace said. What if Dr. Sabo doesn't have *anyone* working with her? If that's the case, then the whole scenario doesn't make much sense. She'd do better by resigning and then trying to disappear from everyone's sight so she can go off and sell what she knows."

"She could threaten to trigger a blowout in Serene," Travis said. "That wouldn't require Serene's participation. She could use her as a hostage. Hell, she could escape and still trigger the blowout, killing all of us and leaving her with a palmtop console and a ZINet interface for some outsider to study."

"Wouldn't do her any good," Allen argued. "Security in Houston could trigger the burn-out circuits in her palmtop and the ZINet part of her interface with one command. They could take out Serene's Hard Hat just as quickly. Wilson's probably got people with fingers over those buttons right now, even before the exercise begins. There's also the timeout protocol."

"What's that?" Travis asked.

"An extra safety measure built into every device used in Tapping," Allen said. "If they don't receive a 'hello' ping from the ZINet every now and then, they automatically burn out. Dr. Sabo knows this."

"If that's the case," Travis said, growing frustrated, "then what's the point of her trying to get away at all, much less with Serene? She wouldn't even be able to open Serene's Tap, and she wouldn't have any working hardware to sell to anyone on the outside."

"She'd have info," Dr. Davenwood said.

"What info?" Travis asked. "I know Dr. Shugart said she could sell what she knows, but can she build a console or a Hard Hat?"

"No, but every Driller knows how both of them work. She could guide someone who's got a console or a Hard Hat near completion."

"Why would she need Serene, then?" Nurse Paige asked. "If someone's crazy enough to build a console and a Hard Hat without a copy for comparison, someone else is bound to be just as crazy to volunteer to stick their head in and try to Tap."

"True," Dr. Davenwood said, "but it would be easier for them to work with someone who knows what to expect. Besides, if they put a Hard Hat on some untrained person in the Drilling chair and they have a blowout ... well, it's kind of hard to hide that from the QuantumNet, much less the ZINet, no matter where you are."

"That puts us back at the beginning," Allen said. "If Dr. Sabo's going to do anything, she needs to take Serene with her."

Travis took a deep breath and sighed. "What if they don't do *anything*? Like Dr. Davenwood said, that'd be the smart move if they think we expect them to do something."

Allen let out a sigh of his own. "I don't know. We're just going around in circles here. Let me talk to Wilson again. If I come up with anything I can share, I'll let you know."

###

Monday morning, 5:00 a.m. Travis hadn't needed Tabitha's alarm to wake up.

He paced his morning routine more deliberately than usual, spending a bit of extra time in the shower and nursing his coffee a little bit longer in his room before heading downstairs to the café. Karon hadn't arrived yet, so he grabbed some biscuits with cream gravy from the buffet and sat down for breakfast with Allen and the rest of his team.

Even after the café filled with his fellow Tappers and their support crews, the quietness of the area surprised Travis, considering the possibilities of the day. His fellow Tappers' auras, however, were not so quiet, if the aura interpretation training he'd finally received from Allen was correct. Christopher's aura displayed a sense of nervous anticipation, wanting to get the job started *now*. Allen was worried--rightfully so--while Trace was extremely nervous and high strung, although Travis got the sense she was trying to hide it. Once she arrived, Karon's aura showed her usual pre-anything steadiness. The only person besides Karon who didn't seem stressed was Serene.

She's got a cold streak if she's planning what Wilson assumes.

He finally decided he'd had enough silence for the morning. "Hey, Allen," Travis whispered, "any news you can share with us?" His whisper somehow seemed to fill the café above the sounds of silverware and plates. He suppressed a wince at the sudden silence.

"No, the news is the same," Allen said in a normal voice. Other Tappers turned to hear what he said. "The exercise is still a go for 8:30 this morning. We take separate cars, one per team, and rendezvous once all the Drilling is done."

The rest of the groups loosened up after Allen's update. The café returned to its normal, buzzing atmosphere.

Travis was about to finish his breakfast when a small viewport of text appeared near the bottom of his virtual console. It read:

TO: Travis, Allen, Nurse Paige Kirkshire,
Dr. Ryan Davenwood, Dr. Frank Shugart
FROM: Wilson Hughes, Director, Z.I.
SUBJECT: Today's Exercise
Be ready for anything. Good luck.
- Wilson

Travis checked his own aura after reading the message. He looked nervous as hell.

###

The groups left the base and scattered to different isolated Drilling houses on the training range. Even Travis and Allen, who had become accustomed to going through the Drilling procedure together, split up and acted like normal teams. The six Roughneck rescue team members remained behind at the base until all the Taps were open.

Dr. Shugart and Roughneck Longren rode along with Travis and Nurse Paige to Desert Rig One, the site of the practice house. Longren was first out of the car once the group arrived. He walked briskly to the trunk and retrieved Travis's Hard Hat flight case.

Travis stepped out into the chill of the calm, pre-dawn air. He rubbed his hands together and blew steam on them as he approached the Drilling house.

Longren caught up with Travis and handed him the flight case. "This is gonna be a new experience for me," Longren said. "I've never seen Drilling in person. Sounds exciting."

Travis blew another breath of steam into his hands. "I don't know if I'd call that misplaced enthusiasm or not. This part scares the hell out of *Tappers*. Are you absolutely sure

you want to be here for this? Protocol says it should be just me, Nurse Paige, and Dr. Shugart.

You're in just as much danger as the rest of us if I have a blowout."

"Not gonna happen," Longren said as they reached the door. "I've heard that you've come out of some really scary situations, and I *know* your Hard Hat is in top condition. There's no way you're gonna have a blowout on us."

Travis sighed and clapped a hand on Longren's broad shoulder. "I appreciate the faith, Mark," he said, using the Roughneck's first name. "I'll try not to disappoint."

Once inside, Nurse Paige and Dr. Shugart went straight for the Drilling console behind Travis's chair, while Longren helped Travis make sure his Hard Hat was on properly. "Wilson sent orders concerning the Drilling settings, Travis," Nurse Paige said after consulting with Dr. Shugart. "Do you have any objections to using them?"

"Are you kidding? After everything that's happened lately?" he said, referencing his newly granted autonomy and Tabitha's expanded capabilities. He took his seat in the Drilling chair. "If you think they'll work, you do whatever you need to do."

Travis felt the tell-tale clicks of Nurse Paige, Dr. Shugart, and the hardware consoles--two fewer than he'd grown used to, since Allen and Dr. Davenwood weren't present.

"Doghouse Prime, this is Desert Rig One," Nurse Paige said, checking in. "Tapper is in position and ready to go. Request permission to proceed with Drilling."

"Stand by, Desert Rig One. Drilling is in progress on Desert Rigs Three and Four. We'll give you the go-ahead once they report back."

Travis settled even deeper into the chair. This was his first Tap since the 'upgrade' Wilson had given Tabitha and himself. How would their new abilities affect his impending nightmare? His heart beat faster as his aura spiked with anxiety.

"Remember your breathing exercises," Dr. Shugart said.

Breathe and hold, release slowly.

"Desert Rig One, this is Doghouse Prime," Comms finally responded. "You are go for Drilling at this time. Tell Tapper that Big Dog sends his regards."

Wilson's there, monitoring the situation again. He wants to know what will happen, too.

"Okay, Travis," Nurse Paige said, "here we go."

Travis focused on the far wall as the countdown began.

"In three ... two ... one ... *now*."

All sensation disappeared. Everything became a blank, including the passage of time.

Fire.

Travis lay prone at the center of a vast, smoldering warehouse.

He jumped to his feet and crouched to scan his surroundings.

The fire had apparently already done most of its damage. Soot blackened the corrugated steel walls and concrete floor. Creosote and burnt resin odors filled the air, tinged by the smell of burnt flesh. Small flames lingered on the remains of scattered, charred wooden crates, dimly lighting the room. Embers fell from crackling plywood ceiling panels, landing around him in glowing piles. Many of the panels had been burned away, revealing the night sky. Pale moonlight filtered from behind thick clouds into the warehouse.

He rose, carefully, looking for traces of an exit door along the walls. None were immediately evident.

A burnt section of a remaining ceiling panel snapped and fell, crashing into a pile of burnt crates some six meters away. Glowing embers scattered as a cloud of ash flew toward Travis. He covered his mouth and nose, but some of the ash still made its way past his hands. He

coughed and tried to spit it out.

It had an odd taste. Not one he would associate with wood.

As he coughed, the ember pile began to coalesce and grow. A shape rose: glowing, standing, and human-like with a featureless head.

Travis stared in shock as a pair of eyes opened on the head. They burned a sickly yellow, as if pain was somehow mixed with their fire. They were aimed directly at him.

"What ... what are you?" He said.

A fiery mouth appeared below the creature's eyes. "Do you not know, *Tapper?*" it said with a gravelly voice. "Have you not been to your building's 14th floor?"

"The recreation area? Why? What's there that would tell me what you are?"

The creature threw its head back and let out a wail of anguish, combined with a growl of fury. It fixed its gaze on Travis again. "The wall of remembrance, *Tapper*. Have you never looked at it, except in passing?"

It can't be ...

"I am a victim of one of your predecessor's blowouts. Look to the year 2081. November 5th."

That's the blowout that Dr. Shugart survived! Oh God.

"Your doctor made it to safety," the creature growled. "The rest of us on the Drilling platform were not fast enough to follow him."

"I can't imagine what you went through," Travis said. "It must have been horrib--"

The ember creature's eyes brightened until its head could no longer hold back their fire. A blast of yellow flame shot his way.

Travis dove to one side. The blast struck where he'd been, blistering the floor. Concrete

melted and bubbled, filling the air with the inexplicable stench of burnt flesh.

Another ceiling section fell, creating an ember pile several meters behind the first. "We are gathered here to exact our revenge," the creature said.

Another ember creature rose from the second fallen section.

Travis didn't wait for a second blast of fire. His heart pounded with desperation as he ran toward the wall opposite the fallen plywood, dodging smaller ember piles and ducking behind crates.

Still more plywood fell. The warehouse began to glow from the light of several blazing eyes, all aimed his way. He ran as far away from the ember creatures as he could within the confines of the warehouse.

"Enough have died!" the ember creatures rumbled in unison. "You will now be sacrificed in their name!"

Shadows formed on the soot-covered walls. Travis realized his own shadow was visible as he ran. He fell to the floor behind a crate and lay as flat as he could.

Bursts of yellow flame surrounded him, creating more pits of fowl lava. At any moment, the creatures were going to reach him.

Travis's pulse raced even faster. His head throbbed. Acrid smoke ate at his lungs.

"Your life is forfeit!" The voices were coming closer, converging on him.

"TRAVIS!"

He was going to die.

"TRAVIS! IT'S TABITHA! LOOK FOR THE EXIT!"

I'm surrounded! There's no way out!

"YOU'RE IN THE NIGHTMARE! FIND YOUR EXIT!"

Nightmare. Nightmare?

"YOU'RE RUNNING OUT OF TIME! FIND THE EXIT! NOW!"

Oh my God, the Drilling nightmare! Tabitha!

His pulse still racing, Travis rose and faced the ember creatures. At least a dozen now stood before him. He closed his eyes and braced himself as they blasted him with yellow flame.

Their blast went straight through him.

Travis surveyed the room and found the dark spot of his exit. It floated mid-air, just past the creatures. He focused his thoughts on it.

The ember creatures howled and gathered their fire for one more blast. Just as they released it, the nightmare broke apart into a maelstrom of visuals. Flames whirled around his exit point.

Travis opened his eyes slowly. His hearing returned a second later. "Tolerance seven and dropping," Nurse Paige said. "Convulsions have stopped. Pretty damned bad, but not the absolute worst you've been through."

"*What?*" Longren exclaimed. "Good Lord, how can it get any worse?"

"You don't wanna know," Travis said with a croak, his throat dry from the frigid air in the Drilling house. "Could someone please bring me a thermal blanket and some water?"

Longren brought both. "Are ..." He swallowed hard. "Are you okay?"

Travis wrapped himself in the blanket and gulped down the water. "Yeah. Thanks." Longren stared at him, open-mouthed. Travis wondered what the big Roughneck had seen that shook him so badly.

"How are you doing down there?" Nurse Paige asked. "Any problems with the new settings?"

"No *problems*," Travis said as he stood, "but an extremely interesting side effect. Tab, you want to share that data with Nurse Paige and Dr. Shugart?"

At least his Tap was open and stable, he told himself. He decided he was ready for whatever happened next.

CHAPTER 33 – FRACTURE

Travis stood in the gravel parking lot in front of Desert Rig One's Drilling house, waiting for the rest of the teams to show up. Allen's and Christopher's teams arrived first.

Christopher's aura showed his earlier nervous anticipation was still with him. Dr. Wheaton, Christopher's Driller, conducted a quick physical scan on him.

Allen's aura had transformed. Instead of showing a worried man, his open-Tap aura now reflected the primitive intensity of a parent animal ready to protect its cubs from an attack.

Karon's team parked next to Allen's car. The desert sun lit her form as she stepped onto the lot. Her open-Tap aura was a display of steady determination, sparkling brightly through the morning sunlight.

God, even her aura is beautiful.

Trace and Serene arrived in short order. Travis still got the impression from Trace's aura that she was strung out about something, but he saw only cold, calculated readiness in Serene's aura.

He looked at his own aura for a moment. It was blazing with nervousness. A minute of breathing exercises helped him to appear somewhat calmer.

The Roughneck rescue team arrived last and went behind the Drilling house to the test

building. Tabitha's display showed the building as a small square structure, divided into four smaller rooms, each with a door that led outside. Different furnishings had been placed in each room--A chair in one, a table in another, and a bed and a sofa respectively in the other two rooms--along with the four crash test dummies and a plethora of ZINet-linked sensors.

"Okay, folks," Allen said to the group still in front of the Drilling house, "I'll be dropping a slab on one of the rooms any minute now. You're far enough away to avoid flying debris, but I don't want to take any chances. Stay in the parking lot and wait for the all clear. Don't go poking your head around the corner--if you want to see the drop, watch it on your virtual console." He then joined the Roughnecks behind the Drilling house.

Travis felt several interface link-up clicks as Allen turned the corner. Tabitha showed each on his console. One click was for the closed loop between Allen and himself, while others came from Nurse Paige, Dr. Shugart, and Dr. Davenwood--the additional members of the second closed loop. Test data arrived on both subgroups as the much larger main open group link activated.

"All three channels open," Tabitha displayed privately. "Channels one and two are secure. Channel three is public."

God, please don't let me get my channels crossed.

The Roughneck rescue team re-joined the group at the front of the Drilling house. Tabitha brought up viewports from the unsecured group link. Each showed Allen near the house.

Allen was already concentrating on a stack of concrete slabs. He extended an arm, forcing the top slab to rise and move toward the first room of the test house. Once it was fifteen meters above the flat roof and lined up squarely over the corner, he pulled his arm back and let gravity do the work.

The slab fell on the room with a huge *crunch*.

He makes that look so easy.

The Roughneck rescue team chief waited for the dust to settle and then ran to inspect the smashed room. He gave the all clear after a couple of minutes.

"Okay, all personnel," Allen said over the general channel, "move to the back side of the Drilling house."

Travis moved the viewports off his virtual console as he came around and got his first good look at the test house. The concrete slab had leveled one entire corner, breaking up in the process. Strong lines of electromagnetism coursed through parts of the debris.

"Hey, Tab," he said, "How much do those slabs weigh?"

"If they're as dense as they look, 5,500 kilograms each. Around twelve-thousand pounds in old money. Under normal gravity, of course."

Travis whistled, impressed. *Jeezus! There's no way anyone could have survived that. Good thing it's just a drill with a test dummy.*

"Time to get into position," Allen ordered as he moved to the left of the smashed corner. "We need a quarter-circle around the debris. Karon, you take the right point facing the test room. Christopher, Trace, and Travis, take positions on the curve from right to left. Serene, you're on left point. Drillers, behind your Tappers. Roughneck Protectors back against the Drilling house. Rescue team and Dr. Shugart, over here with me."

Travis moved to his spot at the left-center of the arc. He wanted to be near Karon to protect her if something happened, but he knew he needed to be next to Serene in case she tried to do anything.

"If everyone is ready," Allen said over his virtual console, "we'll begin the exercise. First

job is to neutralize the electricity in the room. Travis, find the source and block it."

Travis scanned the random EM force lines that flowed through the house. A quick trace revealed multiple sources leading into the room. He narrowed his search into the proper frequency spectrum and found two cables' paths.

"Ah, Allen? It looks like they're coming from more than one place."

"Good tracking," Allen said. "You're right, there are multiple sources. Where do they lead?"

"One leads to a line from another room, while the other one leads to an underground line."

"Very good. Folks, you might run into this same situation in the field, at which point you're going to have to make some choices. Do you try to do an EM block on both, or do you gravity-move them out of the way but leave them hot? Fortunately, this is just an exercise, so Serene--you block the source of the underground line while Travis blocks the other source."

Travis repressed an instinct to ask Allen if he was crazy. *Teaming me up with Serene this early? Is he trying to draw her out already?* Despite his worries, he lifted his arm and aimed it at the point where the alternating current entered from the other room. He made a fist and squeezed it, blocking the current.

Text appeared on Travis's virtual console. Allen had typed something over their closed loop. "Don't start worrying," it said. "Not yet."

Sure enough, Serene did nothing unexpected. She gestured at the underground source and blocked it. The debris was now free of live wires.

"Good job," Allen said. "Now, we've got a person trapped in there somewhere. Can any of you spot him? Use your virtual console if you need to."

No one could find the test dummy.

"Don't worry, that happens all too often out in the field," Allen said. "If it's any comfort, I can't see him, either. We need to clear some of that rubble. Karon, Christopher, Trace--we're gonna need gravity lifts, but not all at once. Karon, concentrate on lifting the debris on top and moving it over to the clear area on the right. This is your first group practice, so do it gently. Remember, we've got a victim buried beneath all of that, and we don't want to jostle him until we determine his condition."

Karon extended her arms and damped the gravity lines just below the largest chunk of concrete on top of the pile. Slowly, steadily, she raised the piece several meters in the air. She then manipulated the lines around the chunk, guiding it to the area Allen had indicated, and put it down with a *thud*.

"Nicely done," Allen said, "but we do need a little more speed, Karon. Don't throw caution to the wind--just move the concrete a tad bit faster, please. Christopher, as she moves the stuff on top, you look for any bits you can lift without disturbing the rest of the pile. Set them off to the same side, but not in Karon's pile. You don't want to affect an area that she's manipulating. We could wind up with one of Travis's concrete fountains if that happens."

Travis used his left hand to send a rather rude gesture to Allen, who laughed in response. Meanwhile, Christopher began a second rubble pile away from the wrecked room. After a few lifts, pieces of wood and metal became visible.

"All right, now," Allen said. "We're making progress! Trace, concentrate on moving the non-concrete bits away from the building. Coordinate with Karon and Christopher so you three don't get things mixed up and cause a collapse.

"Travis, Serene, keep concentrating on the EM blocks, but watch for any sign of our

victim. We should be close to uncovering something."

"Tab," Travis said, "can you lend me a hand with spotting the test dummy?"

"I'll do my best," she chimed. "Should be somewhat human-shaped, right?"

"I don't know how, after everything that fell on top of it, but yeah, use that as a starting point."

"Person approaching from behind, to the left," Tabitha rang. A hand touched Travis's shoulder. He flinched and spun his head around, only to see Dr. Shugart standing beside him.

"Don't lose focus," Dr. Shugart said as he pointed to the exercise house. Travis looked back and saw he'd almost released the EM force lines from his block. "Remember, it only takes 100 milliamps to kill someone--sometimes less."

"Sorry, doctor. You caught me by surprise." *And I thought you might be Dr. Sabo, damn it!* "It won't happen again."

Travis remembered Wilson's note: "Be ready for anything."

I guess this qualifies.

Tabitha rang an attention tone over the general channel. "Appendage spotted. Looks like a foot. Bottom of the pile, still covered by wreckage." She highlighted the foot's outline.

"Everybody see that?" Travis asked.

"Got it," Serene said. "Still in the middle of the pile. Can't tell if it's attached to anything, but it looks pretty well wedged in there."

"I think we might want to try approaching this from the bottom up," Trace suggested. "Do a coordinated gravity lift of the whole pile and send in the Roughnecks to see if they can pull the victim out from the bottom. They've had low-G training--right, Allen?"

"Right," Allen said. "I hoped we wouldn't have to resort to that on the first part of the

exercise, but I think you might be on target. Roughnecks!" he shouted. "Time to play."

The six red-suited Roughneck volunteers moved in front of Allen and faced the pile. "All right, people," their chief said, "watch for shifting debris. Some of it may still be attached to the rest of the house. Remember your low-G classes and you'll do fine. Everyone ready?"

"Yes, sir!" the team shouted in unison.

"Good enough. Allen, if you would, please," the chief said with a flourish.

Allen nodded and directed his attention back to the Tapper teams. "Travis, Serene, you two keep blocking the current in those wires and keep an eye open for the rest of the victim. Trace, Christopher, and Karon, I need you to *very* gently lift the entire pile, from the floor up. Try as hard as you can not to shift it. Karon, concentrate on the actual lift at the bottom of the pile, and Christopher, you stabilize the perimeter. Trace, you support the parts of the pile still connected to the house. Everybody clear?"

"Clear," the Tappers responded.

"Okay, let's do this! On my mark."

Be ready for anything, damn it.

"Three ... two ... one ... now!"

Nothing appeared to happen at first, but after about five seconds the sound of cracking wood came from the back of the pile. The rubble rose slowly, with Allen calling for a pause at the half-meter mark. The cracking continued, but the pile didn't shift. Allen then gave the order to continue the lift. He stopped Karon and Christopher once the pile was two meters above the ground.

"Got a leg," Tabitha rang. "Looks like the dummy was on a sofa and got partially knocked off when the slab hit. The bottom of the sofa is visible and free from rubble, but the rest

of the dummy looks caught up in the mess."

"Thanks, Tab," Travis said. "Did everyone get that?"

He checked up and down the line. Everyone was preoccupied, but they signaled to acknowledge.

"Looks good right there," Allen said. "Keep it stable." As he moved in to inspect the lift, he gestured at his virtual console. Another text message appeared on Travis's console, this time in his personal team's closed-loop viewport. "If anything's going to happen," it read, "watch for it to happen soon."

Travis suspected something would go wrong once all of the Roughnecks were under the pile. He did the best he could to keep his nervousness from showing through his aura.

"Now comes the fun part," Allen said to the Roughneck team. "Chief, I need your team under there to pull the victim out, if you can. For brevity's sake, we'll assume it's a he. And, judging from the way he's wedged in, it'd be safer to pull debris from under him than it would be to remove it from the top. Assess whether or not it's safe to go in, examine his situation, and send in your team if possible. Ready?"

"Ready," the chief replied.

"Okay, then. Tappers!" Allen said. "This is the point where your job stops being a game! Real people are about to put their lives in your hands. Don't let the Roughnecks distract you-- concentrate on your part of the exercise. Report *any* anomalies to your Driller immediately, and *keep that stack stable!* Drillers, Dr. Davenwood's on point for this exercise. Is everyone ready?"

"Ready!" all ten Drillers and Tappers replied together. Travis thought he heard a note of excited anticipation in Dr. Sabo's response.

Be ready for anything.

"All right, Chief--do good work for us in there. *Go!*"

The chief ran to the room and examined the area below the floating pile. He poked at it and tried to move one of the pieces of wood sticking out from the rubble. The pile moved as a unit in response, creaking as it shifted.

"Steady the pile!" Allen ordered. "Don't let anything move it laterally! Christopher, adjust the perimeter gravity lines to keep it centered."

"Back off for a second, chief," Christopher said. The chief took a couple of steps backward as Christopher made his adjustments. A few seconds later, he gave the chief the all-clear. The pile then stayed put when the chief pulled on it.

"Right," the chief said. "Moving underneath for inspection." He extended both hands beneath the pile, palms up. They rose against the bottom of the rubble as they passed into the low gravity zone. The chief felt around for a secure grip among the broken remains of the room. Once he found it, he grabbed on tightly and leapt forward. His momentum carried his feet into the zone, while his hold made him flip instead of continuing straight through. He wound up on his knees, upside down and facing the bottom of the pile.

Karon and Christopher flinched when the chief jumped. "Keep your focus!" Allen said. "Ignore what he's doing for now. Keep things steady and let him do the rest."

Travis cast another glance at Serene. She was still concentrating on her task. Her aura seemed normal--no spikes, colors, or other issues that might make her seem nervous.

Maybe nothing's going to happen.

The chief crawled on the bottom of the pile until he reached the exposed foot. Once there, he tested the material around it and found he could move it out of the way with little effort. As a final test, he grabbed onto the sofa and shook it. It was somewhat free to move from side to side,

despite Christopher's containment.

"Chief," Allen called, "are we still stable?"

"Looks good from where I'm floating."

Allen nodded. "Dr. Davenwood, any reports of anomalies?"

"None yet."

"We're good to go, then. Tappers, this is it! Keep that pile stable, no matter what you see going on beneath it."

The chief called for the other five members of the rescue team to join him. Within seconds, three were alongside, upside down and crawling on the bottom of the pile. They converged on the sofa and pulled on it to move it out of the way. The other two Roughnecks stood outside the zone, ready to assist.

Without warning, the pile lurched and cracked. Allen looked down the Tapper line and shouted, "Keep it stable! Keep it--"

One of the spots along the line was empty. Trace's spot.

Allen cursed under his breath. "Travis," he shouted, "multitask! Take over Trace's job."

Travis immediately split his concentration between blocking the electricity and supporting the creaking joins of the room. The pile stabilized quickly.

"Damn, bro!" Christopher said. "When did you learn that?"

Travis strained from the effort. "No talk," he said. "Work."

"Tolerance two and rising," Nurse Paige said.

"Damn it, Trace!" Allen yelled. He scanned the exercise site from his position and yelled at Trace's Driller. "Dr. York, where the hell did she go?"

"Back to the Drilling house," Dr. Patrick York said. "I looked down at my palmtop, and

the next thing I knew she was running. She's still around, according to my readings."

Allen fumed. "Why the hell would she run off in the middle of a live exercise? Trace! Get your ass back here *now!*"

A few seconds later, Trace came running around the corner of the Drilling house, carrying a box-shaped cage covered with layers of fine mesh. A small device with a flashing red light sat inside.

Travis caught a glimpse of what Trace was carrying. He spoke so only Tabitha would hear him. "Tab, what the hell has Trace got?"

"With the exception of the flashing thingy, I think it's a Faraday cage."

A Faraday cage? A real one? What the hell is she going to do with that? What's already in it?

Dr. York stood in Trace's way, ready to yell at her for running off. She rushed past him, knocking him down. She then stopped at her spot and opened the cage.

Allen moved her way, but before he could reach her, she jumped to Christopher's side and backhand-slapped the neural inhibitor patch on his neck. Hard.

"CHRISTOPHER!" Travis shouted.

Christopher slumped to the ground. He lay, twitching, his eyes rolled back in his head from the effects of being plugged. Behind him, Dr. Wheaton stared at Trace in shock. Trace spun and gave Christopher's Driller a roundhouse kick to the neck. Dr. Wheaton's head snapped to the side. He went limp and collapsed.

The debris pile shifted without Christopher's containment. Allen hesitated. His gaze flicked back and forth between Trace and the Roughnecks who still clung to the bottom of the pile. "Shit!" he shouted. He turned and took over Christopher's job, stabilizing the pile.

Trace took Christopher's Hard Hat and Dr. Wheaton's palmtop console and tossed them into the mesh cage, along with her own Hard Hat.

Travis's instincts burned. He desperately wanted to stop Trace, but his concentration was already stretched too far. "Tolerance four and rising quickly," Nurse Paige said urgently.

Dr. Shugart ran to Christopher's position on the line and checked both the fallen Tapper and his Driller. Trace had already moved out of range behind them.

Another shift in the rubble pile kept Allen from moving toward Trace. "Chief!" he yelled. "Get your men out of there! Now!"

The chief helped the other three Roughnecks scramble to the edge of the pile. They dismounted as pieces of debris slid outside the containment perimeter and fell to the ground. The chief then pushed off and swung his own feet to the ground outside the perimeter. As he did, a heavy chunk of concrete slipped into normal gravity. It slammed into the chief's left arm while he was still holding on to the edge of the rubble. He shouted in pain as his limb bent unnaturally and gave way. The two reserve Roughnecks rushed to his aid and helped him run to the back wall of the Drilling house.

During the chaos, Travis felt the click of a Comms link disconnect. His virtual console showed that Trace had dropped out of the main loop. He turned just in time to see her remove her qLink and toss it into the Faraday cage. She replaced it with an interface that had a different-colored extension than the standard ZINet grey.

Travis noticed Trace's aura as she sprinted behind him with the cage. To his astonishment, it showed that her Tap was still open and stable, despite her lack of a Hard Hat or ZINet qLink. Her Driller's frantic attempts to close her Tap were apparently having no effect.

How the hell is that weird qLink keeping her Tap stable?

Another link disconnect followed a moment later: Dr. Sabo had dropped out. Travis turned toward her and saw she had also replaced her qLink with the same non-ZINet model as Trace's. She added her original qLink and palmtop console to the contents of Trace's cage.

Two ZINet qLinks, two palmtop consoles, and two Hard Hats were now inside the cage. Trace quickly sealed it.

Allen went into action once the Roughnecks finally got their chief out of range. "Tappers! Drop the pile and run like hell! Get Christopher and Dr. Wheaton out of here! Doghouse Prime! Tapper and Driller down! Burn out Trace's and Christopher's Hard Hats and Wheaton's and Sabo's consoles! NOW!"

Travis let go of the lines he controlled and grabbed Christopher's feet, while Dr. Shugart lifted Christopher by the arms. The two carried the downed Tapper to the back wall of the Drilling house and laid him against it. Allen, Dr. Davenwood, and a Roughneck carrying Dr. Wheaton were close behind.

The pile of rubble hit the ground as the group ran. Dust and sand filled the air around the test house, while splinters and shards of debris flew out. The group members managed to dodge it on their way back to the Drilling house.

The Comms center broadcast over the main group link. "Desert Rig One, negative response on burn-out. I repeat--*negative response* on burn-out."

"Shit!" Allen cursed. "That damned cage! It's blocking the burn-out signals!"

"Allen," Travis said over their private link, "what the *hell* is Trace doing?"

The situation became apparent once the cloud of dust and dirt cleared from the exercise house.

Trace had knocked Serene's Hard Hat off and was holding her in a headlock. Serene

struggled to get free, but Trace held her too tightly.

Dr. Sabo stood next to them, grinning and holding the Faraday cage. All three were covered in dust, but appeared uninjured.

"*That's* what she's doing," Allen said, seething with anger. "Serene was never helping Dr. Sabo. *Trace* was."

CHAPTER 34 – COLLAPSED CASING

"Allen!" Dr. Sabo shouted. "You take one step or make one gesture in this direction and we'll plug your little Tapper before she can take her next breath!"

"Damn it, Gale!" Allen yelled. "She's already set up for a blowout without her Hard Hat! What are you trying to do? You *know* Wilson's watching!"

"I don't give two shits for Wilson!" she shouted back, dropping her usual patronizing voice. "He never should have made that dipshit Monroe the head of the Driller corps! Wilson's never appreciated what I can do, and from now on he's going to get an eyeful!"

"Is that all this is about? A little job dispute?"

"Job dispute?" Dr. Sabo laughed. "Wilson wasn't six months into the director job when he promoted Monroe over me. Then he went off and formed his own little secret Tapper project and didn't bring me in!"

"Oh, good Lord," Dr. Shugart whispered over the small group link as he treated the Roughneck chief's broken arm. "She knows about Cloudberry."

Allen answered Dr. Sabo's rant. "I have no idea what--"

"*Don't* try and bullshit me, Allen! I've put up with Wilson's crap for too long. No more, damn it! I've found someone who'll respect my abilities, and you had best get out of my *God*

damned way so that I can go to them!"

Travis spoke to Allen over his closed Comms loop. "Can we get to her? She's watching you, but not Karon or me."

Allen shook his head and whispered back. "Not yet. Trace's Tap is still open--Dr. York can't close it. Probably because of that damned non-ZINet qLink. Besides, there's no way of knowing what they're capable of with those qLinks. We rush them, who knows what'll happen?"

Serene's interface broadcast over the open group console link. "Tolerance five and rising." Serene screamed and struggled against Trace's hold.

"You'd better hurry up and let us go, otherwise you're gonna have a blowout on your hands that'll take every one of us out! Wilson!" Dr. Sabo shouted up in the air. "That means your little prized Tapper, Travis, too!"

"Gale, stop this. It won't get you anywhere," Wilson's voice said over the group console link.

Travis felt Allen add Wilson to their personal closed Comms loop.

"Oh, it'll get me plenty of places, Wilson," she said. "It'll get me out from under both you and Monroe and put me someplace where I can do some *real* research! More than what you blackballing bastards are doing!"

"You didn't agree with the fundamentals of the Cloudberry program, Gale. That's why you weren't asked to join it."

"*Bullshit!* You didn't want me getting my hands on any of your precious program's data because you were scared of what I'd do with it! Scared I'd use it to make more powerful Tappers, like it should have been used from the *start!*"

"And that's what you plan on doing now?"

Dr. Sabo snorted a laugh. "I don't know, why don't you ask your little snoop, Dr. Annie Clawson? Oh--you can't, now, can you? You probably haven't even had time to carve her name on that wall on the 14th floor, now, have you?"

Stunned silence hung over the test site for a good ten seconds. Travis's mouth hung open.

She's talking about the blowout ... my God! Did she cause it somehow?

Wilson finally spoke. "Gale, how could you?"

"*SHE GOT TOO GOD DAMNED CLOSE!*" Dr. Sabo's face went solid red. She gasped for a couple of breaths after her outburst. "It's all on your head anyway, Wilson! You're the one who sent her snooping through fabrication and around my office. Of course, she denied it all when I caught her, but the evidence was there in plain sight. She couldn't have made it into my office without some sort of passkey from you, Wilson, so don't you try and deny anything either. The price of her snooping was a recalibrated palmtop console, guaranteed to send her Tapper into a blowout at her next Drilling session. Poor Thomas, but everyone knows there will always be collateral damage."

Collateral damage? What the fuck--

"There's no proving any of it, though," Dr. Sabo continued. "No evidence left behind. Blowouts tend to erase a lot of stuff."

"It's okay, Gale, I don't believe a word of what you're saying."

Dr. Sabo stumbled in place. "What the hell did you just say?"

"I don't believe you. You couldn't have pulled it off."

"Why not?"

"The palmtop console itself. Every Driller knows the security around those things is airtight. You can't even touch one that's not your own without special protocols, and you

certainly can't recalibrate one without help from the ZINet. That means security checks, and alarms galore if you so much as sneeze at one wrong. No one can do it."

"I can fucking do it! You don't believe me? Ask Thomas and Dr. Clawson!"

Serene screamed. "You *bitch!*" She lurched toward Dr. Sabo, but Trace held her fast.

"Shut up, you little turd," Dr. Sabo shouted at Serene. "You dropped Annie like a rock. I know all about the two of you. Why else do you think I took you on as my Tapper?"

"All right, Gale," Wilson said. "Enough of this. What do you want?"

"I want a clear path out of here for Trace and myself, with no one on my tail. No tracking, either," she said, touching her interface. "I can tell if you're doing it."

"How the hell can she tell?" Travis whispered to Allen.

Allen shrugged. "Like I said--outside hardware. Could be capable of anything."

"Tolerance six and rising," Serene's interface warned.

"You hear that?" Dr. Sabo said. "You'd damned well better make up your mind right now!"

"Okay, Gale," Wilson said, speaking calmly. "Just leave Serene and the Faraday cage and we'll let you and Trace go without tracking you."

"No deal! This cage is payment for putting up with all of your bullshit. You can have the little twit, but the cage comes with me."

"You know the cage won't keep the stuff in it from burning out. You're blocking the 'hello' signal from the ZINet."

"That's my problem, not yours. Now, clear a God damned path!"

"Trace?" Wilson said. "What's in this for you?"

"None of your damned business!" she said. "Just do what the doctor says, or a shitload of

your people are gonna be screwed!"

"Tolerance seven and rising," Serene's interface said. She screamed and thrashed frantically against Trace's headlock. Trace tightened her grip.

"All right, Gale," Wilson said with a sigh, "you'll get what you want. Allen?"

"Right here, Wilson."

"Let Gale and Trace go past. Don't interfere. Trace, give Serene to Dr. Shugart, and the two of you will be free to go."

Dr. Sabo and Trace gave each other wicked smiles. "You heard the man," Dr. Sabo shouted to Allen. "Get the *fuck* out of our way!"

The Roughneck rescue team moved to the center of the Drilling house's back wall, next to the Protectors. They took Christopher's and Dr. Wheaton's limp bodies with them. Travis, Nurse Paige, and Karon followed Allen and the remaining Drillers over to the near corner of the building. Dr. Shugart stood alone, ready to take Serene.

"Doc!" Travis whispered as Dr. Shugart moved out. "How are you gonna close Serene's Tap? She's got no Hard Hat, and Dr. Sabo's palmtop is still in that cage!"

"I can use the main console in the Drilling house," Dr. Shugart whispered back. "It's powerful enough to work through her qLink, as long as her tolerance level doesn't go into end-stage critical."

Dr. Sabo and Trace approached cautiously. At about a meter's distance, Trace shoved Serene at Dr. Shugart. He caught Serene and rushed her inside the Drilling house.

Dr. Sabo turned the corner and headed toward the parking lot, carrying the Faraday cage. Trace followed close on her heels, keeping a lookout behind.

"No funny shit!" Dr. Sabo shouted back. "I can still trigger a blowout from here!"

Travis whispered to Dr. York, Trace's driller. "How the hell can she trigger a blowout without a console or a ZINet qLink?"

Dr. York shook his head. "I don't know whether to believe her or not. I don't think Wilson's ready to take that chance. I know I'm not."

Travis put his face in his palm. "This is absolutely fucking insane."

"Don't give up," Allen whispered. "We're not done with them just yet. Travis, fall in behind me. We'll follow them around the building."

Travis nodded as Allen added Karon and the remaining Drillers to Travis's closed team Comms loop. "Whatever you hear," he whispered, "*don't move from your spot!* Stay where you are until you get an all clear from either myself or Travis. The two of us have been training for something like this, and now we've got to put what we've learned to the test."

Dr. Shugart signaled from inside the Drilling house. "I've got Serene's tolerance dropping. She's back down to tolerance five. Give her a minute and her Tap will be closed."

"Work faster, Frank," Allen replied. "Dr. Sabo may not give her time. Ping me when you're finished."

Allen gestured for Travis to follow him. They crept around the side wall of the Drilling house and stopped when the cars came into view. Dr. Sabo and Trace were loading the Faraday cage into the trunk of their car. Trace tested the cage's seal while Dr. Sabo got into the car on the driver's side.

"Frank," Allen said, "how close are you?"

"Twenty seconds."

"We don't have that long! If her Tap isn't closed by the time you hear the word 'now,' plug her."

"You let *me* take care of Serene. Go get Trace and Sabo."

"We're working on it," Allen said. "Okay, Travis, I'm gonna lift Trace. You put enough g-forces on the underside of that car to keep Sabo from getting away. Ready?"

Travis focused below the car, taking in the gravity line pattern. "Ready."

Trace finished her checks and slammed the trunk lid closed. She walked around the car to the passenger side. Her hand was almost on the door handle.

Time was up.

"*Now!*" Allen said. He extended his arms and blocked the gravity lines holding Trace to the ground. Trace flew several meters straight up, screaming all the way

Travis pulled down hard on the car's gravity lines. Dr. Sabo's head slid down behind the seat as the extra g-forces grabbed her. Travis saw her frantically trying to reach up and work her virtual console, no doubt in an attempt to send a signal to Serene that would send her tolerance level over the top to a blowout.

God, please let Serene's Tap be closed.

Trace reached for the gravity lines around her perimeter and pulled herself through the air toward Allen.

Allen kept her suspended. He whispered to Travis. "Be ready for anything she does."

Be ready for anything. Damn it, Wilson, you were right. I'm ready.

Once Trace closed the gap between herself and Allen, she shifted her focus onto one of the remaining parked cars. She blocked its gravity lines and raised it to her height in the air before taking aim and flinging the car straight at Allen.

Travis had a split-second decision to make: hold Dr. Sabo and potentially let Trace kill Allen, or save Allen at the cost of letting Dr. Sabo escape--and calling her blowout bluff.

He chose the latter.

Travis dropped the lines attached to Dr. Sabo's car and jumped to Allen's position, falling on his side next to him.

Dr. Sabo instantly slid back up in her seat and gestured at her virtual console.

Travis pulled his fists apart as far as he could, forming a gravity shield in front of Allen. The car hit Travis's shield and crumpled like an aluminum can before slamming into the ground at the base of the shield. It flattened into a narrow strip of debris along the shield line.

Allen recoiled as the car hit. "Shit!" he shouted. He hit the dirt, hands still reaching out to hold Trace.

Travis climbed up to one knee. From his position, he could see Dr. Sabo make one last gesture. He braced himself for the inevitable annihilation of a blowout.

Nothing happened.

The doctor slammed her hands against her steering wheel and yelled a curse loud enough to be heard outside the car. She started it and spun her wheels, making the car's electric motors shriek in protest.

Trace screamed again as Dr. Sabo drove away, leaving her hanging in mid-air. She turned toward Allen and growled at him.

Travis maintained the shield. "You okay, Allen?"

"I taught you how to do that too well!" Allen answered, picking himself up. "I'm fine. Keep that gravity shield up while I take care of something." He released Trace's gravity lines and let her drop to the ground. She bounced once, coughed, and started to stand.

Allen re-focused on her gravity lines and pulled them down hard. She collapsed onto her stomach with her face in the dirt. Travis figured she must have had at least seven Gs on her.

Trace struggled visibly against her own weight. Somehow, she worked an arm free, then strained to raise her head. She aimed her arm upward and gestured as if she were twisting a knob. A brilliant, blinding white light appeared at the spot of her focus.

Travis couldn't block the attack. He dropped the gravity shield and covered his eyes. Through his hands, he saw the shadow of Allen braving the light, trying to hold onto Trace as long as possible. Allen eventually turned away, breaking his gravity line control. Travis's vision went white at the same time.

The area fell quiet for a moment.

Seconds later, Travis heard a rush of feet coming toward him from the Drilling house. Someone grabbed him and dragged him backwards. Other dragging sounds followed.

"What the hell ...?" he said as the person dragging him let go. A "Shhh!" sound urged him to be quiet. "It's Longren. You're on the back side of the Drilling house."

"Where's Allen?"

"He's here," Nurse Paige said. "Dr. Davenwood and Dr. York got him." Travis felt her checking his eyes. His eyesight began to return, bit by painful bit.

"Tab," Travis whispered, "overlay a virtual image on my console, please." Tabitha chimed and broadcast visuals into Travis's brain, along with a small thermal imaging viewport in one corner.

Heh. Probably wouldn't have been able to handle this before I got past VR.

The display showed Karon and Nurse Paige working together on his own treatment. Longren stood nearby. The rest of the Roughnecks remained in a group by the wall. Travis assumed Dr. Shugart and Serene were still in the Drilling house.

"How is everyone?" Travis asked.

"We're fine," Nurse Paige said. "The building shielded most of the light. Allen, though--"

"Allen's fucking blind," he said, hissing in pain. "I'm right here next to you, stuck with virtual console vision just like you. If it's any consolation, I think Trace is blind, too. I got a thermal image of her scurrying off behind one of the other cars and parking her ass there. I'm guessing she was rubbing her eyes."

Allen faced the two doctors treating him. "I thought I told you to wait for an all clear signal," he whispered.

Dr. Davenwood whispered back. "We figured a miniature sun coming on and going out was signal enough. Now, shut up and let us treat you."

Travis's blindness receded quickly. His normal open-Tap vision returned.

"Tab, drop the overlays. My eyes are back."

Tabitha rang a short note. "Terminated. Virtual console back to normal."

"Thanks. How's Allen coming?"

"He might have severe retinal damage, possibly damage to his optic nerve," Dr. Davenwood whispered. "Allen, I'm closing your Tap--it's too dangerous to keep it open with you in this condition. I don't know how you took that light as long as you did."

"I'd like to know how Trace pulled off what she did!" Travis whispered.

"Electromagnetic manipulation," Allen groaned, his pain augmented by a closed-Tap headache. "She gathered a shitload of EM lines in one spot and cranked their frequency into the visible spectrum. Must have drained the hell out of her. She's bound to be as blind as I am, but like us, she's probably got virtual images from her console. At least she can't use her Tap with any accuracy that way, so she's stuck behind one of those cars for now."

"We've got her, then!" Travis whispered. "All we have to do is rush her, plug her, and

take her down!"

"No!" Allen warned. "She can't see lines of force through her virtual console, but she can still try and manipulate them. If she throws something out at random, she could do some real damage. Our only advantage right now is that she's probably hurting like hell from getting picked up and dropped. Might even have a broken bone or two, which'll hamper her mobility. On the other hand, she's also in danger of blowing out--just like Serene was."

"He's right," Dr. Davenwood said. "Trace doesn't have a Driller at the moment, since Dr. York can't control her qLink--the hand-held consoles aren't powerful enough to force a signal past that damned extension. God only knows what her tolerance is right now."

Dr. York spoke up. "The modified interface must be handling some of her Driller's functions for her."

"Oh, God," Travis whispered, a shock of realization in his voice.

Karon raised an eyebrow. "What is it?"

"Allen, did what Dr. York just say sound familiar?"

"It sure as hell did." Wilson's voice again.

"Wilson!" Travis whispered. "Now I understand why you pulled that big USI bypass on Tab. Do we have a plan here?"

"Not yet, but we have a goal: capture Trace alive, *with* her modified qLink. We need to question her and study it, but it's looking like we won't be able to do both. Either we get that qLink and plug her, or we get her and the qLink gets a destruct signal from whoever's behind it. Worse, both options risk a blowout."

Travis thought of Christopher as he ran through scenarios in his head. Wilson seemed right. It was one or the other, with a blowout being the worst option.

Then he reconsidered--were there other options?

"Dr. Shugart," he said over the link, "Is there enough room in a corner for you and Serene to hide if I bring two people inside the Drilling house with me?"

"I think so."

"Can we maneuver inside without having the console or the chair get in the way?"

"Probably. What's on your mind?"

"A 'fun trick' Allen showed me once."

Allen perked up. "That just might work!"

"What might work?" Wilson asked.

"A virtual Faraday cage," Travis said.

"Still," Allen said, "it'd be tricky--"

"Whoa!" Wilson interrupted. "What are you three going on about?"

"Catching both Trace and her modified qLink," Travis answered. "Alive and intact."

"And how do you propose to do that?"

"First," Travis said, "we knock out Trace with a zap from the EM system of the car she's behind. Second, I run out to her with a volunteer and surround all three of us with a virtual Faraday cage. That should keep anyone from sending a burnout signal to her qLink, if we make it to her in time. Third, we carry her to the Drilling house and put her in the chair while keeping the virtual cage active. Dr. Shugart should be able to work the big console and close her Tap, even with her weird qLink."

"How can he shut down her Tap with a Faraday cage blocking incoming transmissions to the Drilling chair?" Karon asked.

"The backup link from the console to the chair is fiber-optic," Dr. Davenwood said. "A

Faraday cage won't block it."

"What about you, then?" Karon asked Travis. "How are you gonna function if Nurse Paige can't reach you?"

Oops. I forgot--she doesn't know about what Wilson did to Tabitha.

Wilson came to his rescue. "We'll fill you in on that later, Karon. Travis, continue."

Travis nodded. "Once we get Trace's Tap closed, I'll take her qLink and put it in a smaller virtual cage until someone gets out here with a real cage for it."

Wilson paused for a moment. "Two problems. One, you've got to shape that virtual cage very carefully. Don't let it touch the console or the chair--you might knock them out, even with their power off. Can you manipulate the EM lines that finely?"

"I'll have to. I'll also have to do it fast enough to keep a destruct signal from sneaking in."

"Okay, second problem. Can you keep that cage in place around the qLink for ninety minutes? It's going to take at least an hour for fabrication to tool up and make a real Faraday cage small enough to fit inside a HoverJet, and then another 30 minutes to fly it out if I have the HoverJet go supersonic."

"We'll just have to see, won't we?"

Dr. Shugart re-joined the conversation. "If we want both Trace and her qLink, Travis's plan is the only one that could work in the time we have left. We don't have any other options."

Wilson hesitated, sighed, and gave in. "All right, now we have a plan. Tabitha?"

"Yes, Wilson?"

"This will cut you and Travis off from Nurse Paige and the ZINet for a while. Are you ready to function without ZINet support?"

"Give me a moment," she chimed. Several viewports popped up on Travis's virtual

console. Data streamed at lightning speed through each of them. "Okay," Tabitha said, "I've downloaded as much ZINet information about Driller adjustments as I can hold. I feel fat."

Travis rolled his eyes. "I guarantee you look as good as you did the day I got you."

"Back to business, people," Wilson said. He switched over to the open group link.

"Roughnecks--I need a volunteer to go with Travis. He's going to try and knock out Trace, and he'll need help carrying her into the Drilling house afterward. He'll have to keep up an electric shield around you while he works. He's never done this while moving--hell, I don't know if anyone's ever done it while moving--but it's vital we get it done. Anyone interested?"

"Here." Longren stood and moved to Travis's side. "I'm his Protector. I'll go with him."

"Greatly appreciated, Roughneck Longren."

Travis shook Longren's hand. "Thanks, Mark."

Longren nodded at Travis.

"Right," Travis said. "You heard what Wilson said. The shield will be powerful, so follow my instructions exactly or you could get electrocuted."

"Roger that," Longren said.

"Travis," Allen said, "this is the real thing. Consider yourself graduated from basic training. You're doing full-blown Tapper work now." He reached up and shook Travis's hand.

"I won't let you down," Travis said. *And I can finally trust myself enough to say that.*

"Travis!" Karon said. She went to him and gave him a long kiss. "Sorry for the cliché, but I wasn't about to let you go without that."

Travis blushed. For once, no one made fun of him. He held Karon for a moment before he let go and moved into position with Longren at the corner of the Drilling house.

"Tab," Travis whispered, "give me a new thermal image viewport."

The thermal image showed Trace was still behind a car, rubbing her eyes. Her head poked out from behind the car's trunk, apparently in an attempt to get a look at the Drilling house.

"Allen!" Trace shouted. "Too chicken to face me yourself? Sending your golden boy out in your place won't help!" She reached up and tried to invoke the blinding light again.

Travis closed his eyes and shielded them with his arm, relying only on the thermal viewport for vision. Trace gathered an EM source in the air, but when she tried to crank it into the white light, it broke apart and sent a shower of white-hot sparks flying around the Drilling house. Travis dodged the few sparks that came his way.

"Yep, her virtual display is working," he whispered over the group link. "She's throwing things out at random. I've got to zap her fast, but I need help distracting her. Ideas?"

Allen whispered back. "I think I can help Karon whip something up for you. It's going to be messy, though. Wanna give it a try, Karon?"

"Oh, hell yes!" she said.

"Go for it," Travis said. "Mark--can you run over to one of those cars without getting hit by a spark shower?"

"Like a bat out of hell."

"Good," Travis said. "Go to the one farthest away from her and make yourself as small as possible. I'll get the jolt ready while you do that."

"You might want to wait until I'm finished over here," Karon said. "Seriously."

"All I want is Trace's mind off of me," Travis said. "I don't want her figuring out what I'm doing."

"You'll get it. Send a P.O.V. viewport over the link and keep it focused on Trace's

position. My signal will be kind of obvious."

Travis had Tabitha send the viewport as he steadied himself. "You heard the woman, Mark," he whispered. "As soon as Karon pulls off whatever she's planning, you *run*."

Longren nodded. He got into position to sprint to the car.

Karon, I trust you.

"Trace!" Travis shouted. "You know you're not getting out of here. Dr. Sabo dropped you like a hot coal the moment you went airborne. No one's coming to your rescue!"

"Yeah, and up yours, too!" Trace yelled. "You have no idea what you're fucking with!"

A muted, stone-on-stone grinding noise came from behind the Drilling house.

"Admit it, Trace! You've been dumped! There's no way out!"

A whooshing sound came from above Travis's head, followed by the sight of something flying toward the parking lot.

One of the concrete test slabs slammed into the car Trace had hidden behind. Its weight and trajectory pushed the car backwards. Trace tucked and rolled away from it, just in time to avoid being crushed. She scrambled to hide behind the next car in line, visibly wincing in pain with every move.

Travis flinched. *Holy shit! That'll take her mind off of me, for damned sure!*

Longren immediately took off in a running crouch. He made it to the side of the car farthest from Trace and ducked behind a tire, hiding his thermal signature from her.

"There's more where that came from, Trace!" Travis shouted. "Want another?" He knelt and searched for Trace's new position. Tabitha located her and zoomed in on her arms and legs. They were unprotected and visible.

That was all Travis needed.

He concentrated the flowing EM lines from the power source in the car and held them, fine-tuning them to carry just enough current to knock Trace out--not enough to kill her.

He hoped.

Travis prodded further. "If one wasn't enough, maybe we should send two next time!"

"You can go fuck yourself!" Trace shouted back.

So can you, Trace. All the way to hell.

Travis unleashed his bolt of electricity. It hit Trace squarely on a leg. She screamed, convulsed, and slumped to the dirt.

"Now!" Travis shouted. He ran to Trace as fast as he could. Longren had already picked her up by the time Travis got there. She was unconscious, but still alive.

Travis had Longren carry Trace away from the cars. He stopped in front of the Drilling house, took a deep breath, and repeated the gestures Allen had taught him. A glow formed around him and brightened, accompanied by a low-pitched hum which built into a loud, high scream. Travis feared it would wake Trace, but she showed no signs of hearing anything. "Be careful, Mark," he said as the noise peaked. "This is one of the things that almost electrocuted my team the first time I tried it."

"I promise I'll never crack jokes about that again."

Travis flung up a palm and traced a circle overhead. The air around them burst with a brilliant light for a split second before settling down into a slowly-rotating, virtual Faraday cage. It surrounded all three, cutting off Travis's and Longren's links to both the ZINet and the rest of the group.

"Pull in tight," Travis said to Longren. "The cage is extremely close."

"Got it."

They walked cautiously as Travis moved the cage to the Drilling house door. "Now comes the tricky bit." He gestured to extend the field through the door and into the house. His first attempt hit the metal door frame, sending sparks inside the room. "Shit!" Travis said, pulling the field back outside.

"You just jumped to tolerance five," Tabitha said. "Need some help?"

"What can you do?" Travis asked. "You can't affect anything outside the cage."

"I can still use my picocameras. The cage doesn't block those. I can see where the field needs to go and give you an overlay."

Travis nodded. "Yes. Do it, please."

A wireframe outline of the required cage dimensions appeared on his virtual console.

"Okay," Travis said, "here we go." He gestured again, this time matching the EM lines to Tabitha's outline. The cage boundary morphed to fit through the door.

Success.

"Got it," he said. "Now, Mark--keep yourself and Trace as narrow as you can and walk two meters inside--no farther. Don't touch the door or the door frame. I'll be right behind you."

"She's getting cold," Longren said. "And something's wrong with her hand."

Trace's left hand twitched.

Both of Travis's eyebrows shot up. "Oh, shit! Don't waste time. Be careful, but be quick, too." Travis remained close as all three entered.

Dr. Shugart stood near the Drilling console. Serene lay on the ground behind him. "Is Trace still alive?" he asked.

"She's still breathing," Travis said, shrinking the cage so it was completely inside, "but she could have a blowout any minute. You ready in here?"

"Ready as I can be."

"What about Serene?"

"She passed out once I closed her Tap."

"Can't blame her. Get her into the corner and wait with her there."

Dr. Shugart moved the unconscious Serene and himself into position.

Trace's left hand twitched again, stronger than before.

"Now, everyone stay exactly where you are," Travis said. "I have to do a flash expansion of the cage lines to surround the chair. I can't morph the lines like I've been doing--I've got to take down the cage and re-form it instantly. This could be bad if I miss, which is likely since I've never done it before." He took a deep breath. "Mark, you ready to put her in the chair if this works?"

"Ready."

"Tab, I need your help with the cage again. Just like last time. I'll try to match your overlay."

"Here you go," she rang. Another wireframe overlay appeared.

Travis gestured as he had outside when he created the cage, but this time instead of spinning his arm above his head, he pushed both hands forward.

Let the field exist.

The virtual Faraday cage blinked out of existence and almost instantly reappeared, exactly where Tabitha had plotted.

"Mark--go!" Travis ordered.

The Roughneck planted Trace in the chair and began to step back.

"Whoa! You're right at the edge of the cage. Don't go any farther." He looked at Dr.

Shugart. "The console should be safe to touch. Is it still working?"

Dr. Shugart was already making frantic adjustments. "Yes," he said, "but you might have been better off plugging her outside. She's about to hit tolerance nine."

Trace's left hand was tapping on the armrest. Condensation rose from her mouth and nose as she breathed.

"Karon!" Travis shouted as loud as he could. "Get Allen and everyone else to the cars and get as far away from here as you can! Everyone! Don't argue, just do it! Go, go, go!" Orders were shouted in response, followed by sounds of scurrying and, seconds later, by the whine of electric motors being pushed to their limits.

Way to go, Karon. You did good.

Dr. Shugart's hands blazed across the console, sweat beading on his forehead despite the growing cold in the room. Trace's left hand continued tapping. Travis figured the doctor only had a few more moments before Trace would fall into the blowout sequence.

"Finally!" Dr. Shugart said. "Tolerance eight. She's coming down."

Trace's hand stopped tapping. She also chose that moment to wake up. She gasped for air as her eyes sprang open.

Longren jumped on top of Trace and pinned her legs with his own. He bound both of her hands with one strong fist and used his other hand to keep her mouth closed and her head in the right position.

Trace's aura spiked with fear and frustration. Her eyes flared wide and goosebumps appeared on her arms.

Travis went to Trace's side, holding his hand within striking distance of her neural inhibitor patch. The air was frigid near her neck. "Let me know if she's gonna blow, doc," he

said.

Longren held on as Trace thrashed at him.

Dr. Shugart's fingers continued to fly across the controls. "Finally! Got it going down again. Tolerance seven and falling." The doctor's words brought about a new round of thrashing from Trace. Longren kept her as still as he could.

"Tolerance six ...," Dr. Shugart said. "Five ... four ... three ... two ... okay, I can send the signal to close her Tap now, but I have no idea how that damned qLink is going to respond."

"No point in waiting," Travis said. "Close her Tap."

Trace's aura blazed with hate for a second, then reverted to its non-open state. Her Tap was closed.

Travis immediately pulled the modified qLink from behind Trace's ear. "All right, I've got the qLink! Keep her still just a little bit longer." He stepped back and made another set of gestures. The cage disappeared and re-formed around himself and the qLink.

"Okay," he said, moving the virtual Faraday cage and himself toward a corner of the Drilling house, away from everyone else. "I'm the only one surrounded by the cage now, so you can move as long as you don't get too close to me. Doctor, can you sedate Trace and keep her out until we get back to Houston?"

"My pleasure," the doctor said, scowling at Trace. He pulled a micro-I.V. patch from his pocket and hurried to her side. He then removed her neural inhibitor patch and replaced it with the new patch.

Trace stopped moving and went limp.

"There. That'll keep her out and docile for a good eight hours."

Longren climbed off of her. "So," Longren said, his voice unsteady, "that was interesting.

God, I'm *freezing!*"

Travis let out a heavy sigh of relief. He exchanged tired smiles with Dr. Shugart and Longren.

"What now?" the Roughneck asked.

"One more detail," Travis said. "I need something non-conductive so I can hold her qLink inside a mini-virtual Faraday cage. Doc, have you got something in one of your supply chests?"

Dr. Shugart dug through his boxes. "I've got a tongue depressor and some paper tape."

"They'll have to do. Would you mind putting them about half a meter in front of me?"

Once the tongue depressor and tape were at his feet, Travis morphed the Faraday cage lines to include them. He then taped Trace's qLink to the end of the stick and flash-shrank the field one last time. Only the qLink and the part of the stick it was taped to remained in the virtual cage.

"Phew!" Travis said. He sat down on the ground and slumped against the wall, turning his attention to the reconnected private Comms loop while keeping the mini-cage active.

"Wilson, can you hear me?"

"Amazingly enough, yes. Please give me good news."

"You got it. We're okay, Trace is in La-La Land, and I've got a qLink on a stick waiting for a real Faraday cage. How soon can you get that HoverJet out here?"

"It's on its way," Wilson said. "Give it about twenty minutes."

"Whoa, that was fast! How'd they get the cage built so quickly?"

"They didn't. Someone in fabrication already had one we could use. No idea why, but that's a problem for tomorrow. In any case, it's headed your direction. Think you can hold on until it gets there?"

"Tab? What do you think?"

"As long as you don't push your tolerance any higher than it is, you'll make it."

"Where am I now?"

"Tolerance six. Please stay calm," she chimed.

"Dr. Shugart," Wilson said, "can you help with that?"

Tabitha interrupted with an indignant ring. "I've got the ZINet link back. I'm working on it myself. Now tolerance five and falling."

Wilson chuckled. "Forgive me, Tabitha. I didn't mean to step on your circuits."

"So, Wilson," Travis said with a heavy exhale, "that was a hell of a lot more than I ever signed up for."

"I'll bet it was," Wilson said. "Just remember--regardless of the outcome, you did *damned* good work for all of us out there today."

CHAPTER 35 – TALLY

Travis managed to keep Trace's qLink in a virtual Faraday cage until techs arrived in a HoverJet with a real Faraday cage. They collected the qLink and hurried out of the Drilling house with it.

Longren removed the unconscious Trace from the Drilling chair and put her on the ground while Tabitha finished closing Travis's Tap. Travis commandeered the chair for a few minutes afterward to catch his breath and let his adrenaline level fall. He eventually went outside with Dr. Shugart to survey the damage.

The waiting HoverJet sat about a hundred meters away. The parking lot was empty, save for the crushed sliver of metal that used to be the car Trace had thrown at Allen and the crumpled remains of the car Karon had flattened with a concrete slab. Travis and the doctor walked around the Drilling house and confirmed that everyone had left, as ordered. Longren, Serene, and Trace were still inside, but only tire tracks, footprints, and rubble piles remained outside.

"Looks like they paid attention to me," Travis said.

"Good thing, too," Dr. Shugart said. "I would guess Trace was less than thirty seconds away from a blowout when you two got her into the chair."

Longren came out of the Drilling house, carrying Trace in his arms. He had bound her in

handcuffs and leg shackles, also brought by the techs from Houston. "Coming through," he said as he headed past Travis and Dr. Shugart to load Trace into the HoverJet.

"Do you think she'll tell us what this was all about?" Travis asked.

"I doubt it," Dr. Shugart said, "at least not voluntarily."

Travis frowned. "I guess the Institute has some sort of truth I.V. patch they'll use on her."

Dr. Shugart cleared his throat and ran his hand through his hair as Longren returned to the Drilling house. The Roughneck emerged with Serene and carefully carried her to the HoverJet.

"Between you and me," the doctor said, "Dr. Sabo was damned close to triggering a blowout, too. I closed Serene's Tap almost the same moment Allen said, 'now.' We're lucky to still be here."

"Serene's gonna be okay, right?"

"Physically, yes. She can still Tap. However, she's going to require some serious psych therapy before she'll be ready to Tap again. She's got the best psychs in the business at her disposal, thank goodness."

A few moments later, the HoverJet pilot called the pair's virtual consoles. "We're ready to go anytime you are, sirs."

Travis got his first taste of supersonic travel on the way back to Houston. He was disappointed--the HoverJet flew at such a high altitude that he found it difficult to get a real sense of the speed from looking out the window.

He glanced around the cabin to see what the other passengers were doing. Across the aisle, Dr. Shugart was busy typing and dictating notes into his virtual console. Serene had been buckled into a seat at the front of the HoverJet and was still asleep. Trace sat strapped into a seat

near the back, surrounded by Longren and the two techs. She was still unconscious, thanks to Dr. Shugart's patch.

Wilson called Travis during the flight, wanting more information on how the incident had wrapped up. He scheduled a debriefing session for later that afternoon.

Travis spent the rest of the trip talking with Karon via virtual console, making sure she was okay and reassuring her he was well. He learned from her that the entire group had been recalled and would be returning to Houston the following day.

Karon also told Travis about the casualties of the exercise.

The chief of the Roughneck rescue team had suffered a severe compound fracture of his left arm. He would require surgery to reconnect the bone fragments and would be out of action for about two weeks.

Christopher was still unconscious from the effects of being plugged. The last thing Karon said she'd heard from the medics before they put him on a maglev was that they were unsure whether he'd suffered brain damage. They couldn't predict if he would still be able to Tap.

Allen was evacuated on the same maglev as Christopher. Karon said the doctors were unsure if they would be able to fix his eyes.

Dr. Wheaton suffered the worst fate of all. His neck had been broken and his trachea crushed. Trace's kick had killed him.

"I guess Security is gonna be busy for a while," she said.

"Busy? That's putting it mildly," Travis said. "Security will probably put everyone under a microscope for months. Damn, Karon! Trace plugged Christopher and *killed* Dr. Wheaton. Dr. Sabo tried to kill *everyone* by making Serene have a blowout. Any trust that existed in the Institute has probably been set back by a couple of decades, thanks to them."

Karon was quiet for a moment. "I wonder how Security will affect us."

"No way Security is getting between you and me. I'd like to see them try."

"I meant Tappers in general, but I'll take that instead." Her smile was obvious across the audio link.

The HoverJet finally landed on a pad at the north end of the Institute grounds, where Wilson and a detachment of green-uniformed Security personnel waited. The techs with Trace's qLink were first to disembark. Travis watched through a window as they rushed the Faraday cage with it inside into the Doghouse.

Serene had awakened mid-flight and had been checked out by Dr. Shugart. She was allowed to disembark under her own power. Travis and Nurse Paige followed.

Longren was the last of the group to exit. He carried the still-unconscious Trace to a gurney the Security team had brought to the pad. They strapped her to it and rolled her inside.

Anger singed Travis's thoughts.

Enjoy the sleep while you can, Trace. You're gonna be begging for it once Security starts in on you.

Wilson hurried the participants into the Doghouse and led them up to his office for debriefing. Arturo Salazar waited for them at Wilson's door.

The debriefing was mercifully short. Wilson apologized to Serene for Dr. Sabo's actions, but then quizzed her about the incident where Travis and Karon had seen her on the eighth floor in March. Serene reluctantly confessed to having a brief affair with her Driller at the time--Dr. Annie Clawson. She'd been on the floor because the two were breaking up. Wilson accepted the explanation and offered his condolences, but warned her that Security would want to have a few more words with her. He also warned that her future actions--especially changing Drillers--

would be put under tight scrutiny due to her association with Dr. Sabo.

"I understand it doesn't look good," Serene said. "I promise I'll cooperate with anyone who needs to talk to me. I'm sorry for any trouble I've caused."

"Serene," Wilson said, "hold off on any apologies. You've been through a life-or-death situation and damn near came out on the wrong side of it. Any apologizing for now will come from me and the Institute as a whole toward you. Understand that."

Serene looked at the floor and nodded. "I'll try."

With that, Wilson let her go, along with Arturo, Longren, and Dr. Shugart. He asked Travis to stay, invoking the Cloudberry protocol once the rest had left.

"Any idea where Dr. Sabo went?" Travis asked.

"Not yet," Wilson admitted. "It's not easy tracking her without using the QuantumNet or ZINet, especially with that damned outside qLink she's wearing. We can't take chances on what might happen if it received a ping from us."

"What, you think it might blow up and kill her?"

"Probably, to keep her from getting caught--or to keep the qLink from being captured."

"So, how are we trying to track her?"

"Old-fashioned satellite visuals and on-the-ground tracking. We had her while she was in her Institute car, but she ditched that in the Big Bend country down south. Took the Faraday cage with her. No one has picked up her trail since. I mean, she disappeared completely. No tire tracks, footprints, nothing."

"How the hell did she pull that off?"

Wilson sat back. "I don't know. Everyone's stymied, on both sides of the border."

Travis lowered his head and sighed. "I hate this. Damn it, Wilson, I honestly want to get

my hands on Sabo right this minute--especially after what she had Trace do to Christopher and Dr. Wheaton."

"You're not the only one who feels that way. I want her damned head on a stake." Wilson took off his glasses and massaged his temples. "Best we can do right now is play along and figure out what questions we need answered when we do finally get her."

"We've got plenty of those. For starters, how did she and Trace sneak a Faraday cage out to the test site?"

"Right," Wilson said, replacing his glasses. "And why wasn't Dr. Sabo worried about the burn-out timers on the gear she stole? That implies she had help inside the Institute--something Security is already checking."

"What I really want to know is why did Trace help her? Did she get turned by Dr. Sabo? Did someone miss something in her background when she was brought in?"

Wilson wiped the top of his balding head. "Yes, that. Well ..."

"Well? Well what?"

"Nobody missed anything when she was brought in. She was already hooked up with Dr. Sabo."

Travis's eyes widened. "You have *got* to be kidding me."

"I wish I was. I wasn't a hundred-percent certain of the link between them until she had her little USI bypass conversation with your group at the base. I thought she might try and pull some kind of hijinx, so I gave her that bypass as bait." Wilson tapped on his push-button box. "My little friend here lit up like a Christmas tree when she invoked it."

Wilson wiped a finger across the box. "Practically everything she told you during that meeting was a lie. She wasn't in law enforcement. She was a Wildcatter, yes, but not for Tappers.

She'd been checking out potential Drillers under Dr. Sabo's guidance. I'm sorry that I couldn't warn you about her when you called--I had to see how far she'd go."

"How far she'd go?" Travis stood and put his hands on Wilson's desk. "Damn it, Wilson, she *killed a man* today! She blinded Allen and may have given Christopher brain damage! How could you sit here and let that happen?"

Wilson stared at his desk for a few seconds before looking up. "I honestly didn't think she'd do anything that serious, Travis. This went *way* beyond what anyone expected. We thought the exercise would help us uncover the reason why so many Tappers have been getting plugged lately. Instead, it looks like we went digging for a pebble and uncovered a boulder. Someone out there wants Tapper technology. Not the first time that's happened, but now they're willing to kill *us* for it instead of threatening Tappers' relations outside the Institute. Our Safety Engineers can't help in this case."

Travis straightened up and tightened his hands into fists. "We've got to do something."

"We will. Do not doubt that for a second."

"What, then?"

"For starters, this." A viewport appeared on Travis's virtual console with the Zilker Institute Security logo in the middle.

"Security? We could have used them today at the test site."

"That's part of the problem," Wilson said. "They were there, but their job was to stay out of sight on the periphery and keep you and the rest of our personnel safe from outside attacks."

"Outside attacks?"

"There are people out there who want Tappers--hell, *anyone* connected with the Zilker Institute--seriously dead, for one reason or another. Mentally imbalanced people, religious

zealots thinking we're playing God, even people who've been swayed by conspiracy nuts to think we're directly responsible for the Spindletop Event. Security keeps those problems away from us so we can do our job."

Travis sat back down. "This wasn't an outside attack."

"Right. Security can't do much against inside attacks. They're not equipped to handle a Tapper or Driller gone out of control, like what we had with Trace and Sabo today. They might have been able to gang up on them and bind their hands so they couldn't make any gestures, but we'd have probably lost one or more Security personnel in the process--something I wasn't ready to risk."

"Couldn't they have shot Trace and Sabo?"

"No. Maybe Dr. Sabo, but not Trace. Guns are absolutely out of the question against Tappers, thanks to what Lukas Zilker learned in his dealings with the military."

Wilson leaned forward. "A Tapper is a paradox, Travis. When your Tap is open, you are simultaneously one of the most powerful persons in existence and one of the most vulnerable. Even a clean head or heart shot would cause a Tapper's brain to scramble any lines of force in the immediate area, regardless of whether or not they were manipulating anything. We'd be looking at a blowout for certain."

"Okay then, so how does Security figure into the equation?"

"I'm adding Tappers from the Cloudberry program to Security."

Travis's jaw dropped.

"Don't act so surprised," Wilson said. "You helped prove the need today by taking down Trace. I'll be adding whole teams: Tappers, Drillers, and Roughneck Protectors. It's going to be slow and unwieldy at first, but we'll have things smoothed out by the time you're ready to join."

"Why wouldn't I be ready now?"

Wilson smiled a wan smile. "Your training isn't complete. Allen may have graduated you from gravity and EM training, but you've still got to learn to manipulate the nuclear forces before I can authorize you. That's going to take a while."

Travis slumped in his seat and frowned.

"Don't worry. You're definitely on the waiting list."

"Make that the 'wait and see' list," Travis growled. "The people behind what happened today are not gonna like it when they meet me. I guarantee it."

###

A southeast wind stirred the muddy waters of Lake Memorial, warmed by the Wednesday afternoon sun. Small waves fought the wind and lapped against the southern shore, near the site of the monument erected to the memory of the victims of the 2038 Houston Disaster.

Travis stood facing the monument, along with Karon, Nurse Paige, Dr. Shugart, and Longren. All wore clothing suitable for a funeral.

One more victim of a Tapper--not from a blowout, but a victim nonetheless.

At least there was a body to bury. That choice hadn't existed for most of the friends and families of the victims of the Spindletop Event. Unlike them, Dr. Wheaton's family would have a real grave to visit.

A large, muddy wave splashed against the shore. The rest of the group gathered closer and joined him in looking out over the lake.

Travis turned to examine the monument before him: a huge, abstract sculpture, carved from smooth black stone and highlighted with gold. The design reflected the skyline and landmarks of Houston as they were before the Spindletop Event. There were no names on it. The

only inscription, at the top of a set of black stone steps leading to its base, read:

TO THOSE WHO LOST THEIR LIVES AND LOVED ONES IN THE DISASTER OF 2038.

MAY THEY FOREVER FIND PEACE.

We almost joined them Monday.

Travis's thoughts flashed to Dr. Wheaton's funeral earlier in the day. Travis hadn't known the man, outside of seeing him with Christopher. Still, he'd been moved at the funeral. The doctor's two daughters--his only living family--had been in attendance. They wept openly as one of his fellow Drillers eulogized him.

Dr. Wheaton was buried in a cemetery nearby, dedicated to fallen Zilker Institute personnel.

Wilson had Arturo Salazar put out a press release praising the doctor, saying he'd died during a training accident. Nothing would be said about Dr. Wheaton's accomplishments. Those were confidential.

At least you don't lose your identity around here if you're not a Tapper. Doctor Wheaton, I hope you've found your peace.

Back at the lake monument, Karon put her arm around Travis. He pulled her close and gazed at her face. "This can't happen again," he said. "We can't let it."

"We won't," Karon said. "Security has Trace. R&D has that weird qLink they used. We'll find Dr. Sabo."

"It wasn't just Trace and Dr. Sabo," he said. "They had help from the inside, Wilson thinks."

"Help from the inside?" Longren asked. "Who?"

"Wilson doesn't know yet. I'm more worried about who might be on the outside, though."

What are they gonna do with the stolen gear?" He turned to face the group. "I keep going over scenarios in my head. Someone wants our tech bad enough to kill us for it. I can see a terrorist group doing it, but remember what Dr. Sabo told Wilson? She said she'd be someplace where she could do some 'real research.' That means they'd have some serious funding."

Nurse Paige brushed away a stray hair from her face. "Maybe someone was feeding her a line when they told her that. They might just dump her once they get the hardware."

Travis shook his head. "Dr. Shugart, would Dr. Sabo fall for something that flimsy?"

"No. There'd have to be some truth to it. Gale was no idiot."

"And you heard her outside the Drilling house," Travis said. "She claims to know how to hack a palmtop console. If she can really do that--"

"Then there's no telling what she can do with that hardware," Dr. Shugart said. "Lord help us. She really could set up her own little Cloudberry program, and I'll bet Trace was going to be her first volunteer."

Longren and Karon exchanged puzzled looks. "Wait a minute," Karon said to Travis. "'Cloudberry'? Wilson mentioned that at the Drilling site. What is 'Cloudberry'?"

Travis took a deep breath and braced himself. "Tabitha, you can alert Wilson and Security right now if you want to, but I'm still gonna say this.

"I'm part of a special Zilker Institute program myself. One that's set up to investigate the ultimate potential of Tappers. That's the real reason Allen and Dr. Shugart kept working with me after we solved my heavy endurance lift problem. Doc, you can report me now, too, if you want."

"No reporting coming from me yet," Dr. Shugart said.

"Surprisingly, you're not tripping any flags with me, either," Tabitha chimed. "You're on

a roll. Go with it."

Travis nodded. "Karon, you're a program candidate. I'm going to talk Wilson into letting you in. I'm going to talk him into letting in as many people in as possible, not just the ones like me who hit all the right lottery numbers the first time. I'll talk him into letting in Tappers who care about the Institute and who don't want to see it attacked, from inside or out.

"We've got to make sure the deaths of people like Dr. Wheaton--like *all those people*," he said, pointing at the monument, "weren't meaningless, and we can *not* let Dr. Sabo or anyone else get in the way of that obligation."

"That's a great sentiment, Travis," Dr. Shugart said, "but it's going to take a lot of time and manpower to get it going."

Travis set his jaw and looked Dr. Shugart in the eye. "Hell, I know that, Doc. I didn't say it'd be easy, did I?"

With that, Travis headed back to their car. "Come on," he said. "We've got work to do."

###

Somewhere in the Chihuahuan desert of Mexico, late Thursday afternoon, Dr. Gale Sabo drove a beaten-up pickup truck southwest along a rough, dusty back road. She was nearing a rendezvous point where she was to meet representatives of her so-called business associates.

She smiled as she drove, sure that she'd outsmarted the entire Institute and thwarted any tracking attempts. She'd swapped her car for a series of waiting vehicles--land and air--before and after crossing the border into Mexico, finally ending up in the truck.

Her ultimate satisfaction came when she recalled Wilson's warnings about the burn-out timers built into the items she transported. They meant nothing to her. The qLinks, Hard Hats, and palmtop consoles she carried in the Faraday cage were getting the "hello" signal they needed

from the small device with a flashing red light on it built into the corner of the cage.

As the sun set, a dusty, black car appeared on the horizon, parked on the gravel alongside the road. Dr. Sabo spotted two black-suited men leaning against the car as she neared. She pulled up behind them and parked, stepping out of the truck and into the hot desert air.

"Hello, gentlemen!" She wore her forced smile and spoke in her best condescending tone. "Happy Cinco de Mayo! How are you doing today?"

The men straightened up and walked past her without saying a word. They stopped at the passenger door of the pickup, standing with their arms crossed.

"Ah," she said. "Straight to business, is it?" She went to the door and opened it, showing them the Faraday cage. "Here's my end of our agreement. Now, where--"

To her horror, one of the men reached inside the truck and opened a corner of the cage.

"NO!" she screamed, struggling to get the man out of the way. "Keep it closed! You'll kill the hardware!"

She managed to make her way to the cage and slam it shut. Just as she secured the lid, two loud *bangs* came from inside. Dr. Sabo turned away and ducked. The two men pulled guns and aimed them at her. She raised her hands and looked back into the truck.

The Faraday cage was intact, but the mesh covering it was dented outward in two spots. Acrid smoke rose from the items farthest away from the still-flashing signal device.

Dr. Sabo's screams faded into the desert, unanswered.

THE END