

Control Loop Stability

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A work of fiction, meant for adults. Read something else if you are not an adult, or are offended by stories with sexual content. Then again, if all you're looking for is in-out, in-out, in-out, you should probably read something else. I welcome constructive comments. Enjoy.

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Loss

Paul looked out the large windows, down to the busy street three floors below. The morning rain had cleared to no more than a mist, pedestrians furling their umbrellas again. His hands clasped behind his back, he glanced at the clock on the mantle: nine twenty five. He looked down on the little people on the sidewalks. She should be ... ah, there she was, that distinctive stride... He smiled. She would be right on time. As always -- she couldn't help it.

She walked along the street, tears rolling down her face past her sunglasses. She hated herself, what she was doing, and him most of all. Yet she couldn't help it. She couldn't turn away. She had to keep going ... back to him. And even in the rage, the hatred, the coldness, she felt her body betraying her, knowing the ecstasy he would fill her with, with a touch, a word...

He looked down as she turned and approached the curb, mid-block, almost directly across the street from the entrance to his building. He thought he saw her look up at him as she removed her sunglasses. She stepped off the curb.

She took another breath, calming the rage. It was her only option. Him and his chair, she thought to herself. He'd fucked with her mind so much that she didn't know which thoughts were hers and which his. And try as she might, she couldn't let on to anyone what he'd done to her. All she could do was to obey -- in obedience there was bliss, oh what bliss! But within that obedience, she still had some leeway. She glanced up the street, exhaling and taking a deep, slow breath.

She turned to the curb. Her document case was under her left arm with the latest contracts she'd prepared for his company. She still did her best for him -- she had to. She squeezed the case one last time, thinking of the leather, a gift from her parents when she'd graduated law school. Best not to think about them now... With her right hand, she took off her sunglasses. She looked up to his window. Was he standing there, watching? She hoped so.

With another breath, she stepped off the curb, in front of the parked delivery truck. She was surprised at how calm she felt now. The fear and the anger had all disappeared. She took two more steps.

He watched her walk in front of the delivery truck. He frowned, then gasped softly.

She stepped from behind the delivery truck, and with three more quick steps, directly into the path of a speeding express bus.

He watched from his window, astonished, as the bus struck her. The impact propelled her through the air and into oncoming traffic where she was hit by a car moving the other direction. The bus skidded and swerved on the wet street, hitting other vehicles. Her body flew over the top of the car as it too skidded and swerved, hitting other vehicles. He could tell from the way her body flew limply in seeming slow motion that she was already dead -- her spine, a leg, and her neck all at unnatural angles.

As the carnage on the street below coagulated, he turned from the window.

What a loss, he thought. What a loss. He shook his head slowly.

All that time and effort on her, gone. Thank God he hadn't had her pick up his shirts from the cleaners -- that would have been a mess! Now he'd have to pick them up himself. All his plans for the morning shot. He'd even planned on taking her to lunch afterwards.

He got his coat from the hall closet. What a loss -- all that time wasted. Where had he gone wrong?

Downstairs in his office about ten minutes later, he pulled a thin unlabeled black binder from a shelf. He phoned her office, asking politely if they knew where she was -- she was usually so punctual. They didn't know, but would inquire.

He sighed again as he walked to the window. His secretary, Becky, was out for the week. What was he going to do? Actually, it was perhaps best Becky was gone -- she would probably have reacted quite strongly. That would have taken a while to correct. Ah well, there was Gina - - she didn't arrive until ten in the morning. Perhaps he should give her a call, set something up for this afternoon or evening.

How disappointing, how inconvenient -- he'd have to do better next time. Where had he gone wrong?

He looked out the front window. The street below was filling with flashing lights and emergency equipment. With Becky gone, he might as well go out for coffee. Best to use the rear entrance and avoid the mess.

What a loss. He'd have to pick up his own shirts.

Opportunity

Carol sighed and gazed into her coffee cup. Habits die slowly -- she'd gotten used to stopping for coffee on the way to work. She took another sip and looked at her wireless Palm sitting on the table. No e-mail, not yet. She'd sent out another batch of résumés, even one to her old thesis advisor. That thought sent a shudder through her. After living in San Francisco for only seven months, she couldn't see going back to Pittsburgh.

Still, Pittsburgh with a job, and a much lower cost of living, could be better than San Francisco with no job. "Dot-bombs," she'd called them laughingly only a few weeks ago. She smiled ruefully, swirling her coffee. Now she was one, another casualty on the information superhighway. The clean-up work she was doing would be completed in another week or so, with a bonus attached, but after that...

She glanced around the coffee shop. Things had definitely thinned out in the last few weeks. She glanced over to the table near the wall. A man sat there, mid to late thirties, wearing neat linen trousers, dress shirt and sport coat. He was looking at a three-ring binder...

Paul sat in the coffee shop, reviewing the history of his latest problem. He'd used the same training model. Phase 1 had gone very well. He looked up and to his left. A young woman, late twenties perhaps, nice figure, casually dressed, wireless PDA and cell phone on her table. He looked into her eyes. Would she turn away?

Carol held his gaze. Why not? She gathered her palm and her phone and moved to the table next to his.

"Good morning," she said. She broke eye contact to look down at the notebook pages. She'd been right; she smiled.

"Good morning," replied Paul. He followed her gaze down to the open pages. They showed the control equations for phase one conditioning -- a simple but still challenging model. Did the look on her face imply some familiarity with the subject?

"You're familiar with closed-loop control systems?" he asked.

Carol gave him a closer inspection: clean shaven, straight white teeth, brown eyes, neatly trimmed hair. All in all, somewhat particular looking. The notebook pages had been done in a meticulous hand -- here was someone who paid attention to detail.

"You familiar with Gallway's book?" she asked.

He nodded. He'd used it; it was a standard reference on control systems.

Carol smiled. "I wrote the second edition. I did my Ph.D. in control systems at CMU."

Paul raised an eyebrow. Attractive and intelligent... Things always work out for the better, he thought. “Really?” he asked.

Carol leaned back a bit. She was used to that reaction, especially from men. “Yes, really. If you look at the ‘Introduction to the Second Edition,’ at the end it credits Carol, ‘for her assistance preparing the manuscript.’ Makes me sound like a damn copy editor, but I put two years of my life into that book.”

Her bitterness and sensitivity was understandable. Paul quickly said, “Oh, I understand. I’ve been through that mill myself as a grad student. Teach the bastard’s classes, write his papers, and hope to get out alive.”

Carol smiled a little and nodded, sipping her coffee.

“Are you still interested in complex control systems?” Paul asked, waving a hand at his notebook.

Carol nodded. “Yes. That looks like a variation on a standard P-I-D controller. What’s going on here?” she pointed to a set of equations.

Paul smiled. “Ah, that’s the interesting part. Yes, it looks like a standard closed-loop controller, but what do you do if you want to work hidden variables?”

Carol furrowed her brow. “Depends. Bayesian approaches perhaps. Looks like you’re using a neural net, or something similar? Control loop stability would be an issue in such a system. Have you had that problem?”

Paul nodded -- control loop stability indeed. “Yes, that’s one of the interesting aspects. Standard approaches lose their meaning. What does ‘impulse response’ mean in such a system?” He thought of the incident earlier in the morning. “How can you be sure you’ve identified all the degrees of freedom in the system?” Anna, Miss MacDonald, had certainly identified a path he hadn’t considered.

Carol nodded with a smile. “You have a lot of heuristic information on the system?”

Paul nodded. She was bright. He also liked her blue eyes, full lips, and the way she filled out her top. Anna had been lacking in that department. “Yes, that’s a good way to put it -- heuristic information. Do you work in the area?”

“Geographically or technically?” Carol responded.

“Both, actually, if I may pry.”

Carol smiled a little more. “I live nearby, over a few blocks. I used to work nearby as well, for a startup, but aside for some cleanup work, I’m afraid that’s over.”

Control Loop Stability

Paul frowned, trying to express sympathy. This could work out quite well, he thought -- similar to Becky. "I'm sorry to hear that. A company in control systems?"

Carol shook her head. "Nope, digital rights management -- watermarking, that kind of thing, if you're familiar with the field."

Paul was indeed. "Somewhat. That field is quite politicized, if I recall, with some interesting players."

Carol nodded, taking another sip. "You've got that right. People are finally figuring out that the V-folks techniques are worthless, and the SDMI house of cards is crumbling. We thought we had a good run at it -- there are still relatively small companies making big contributions to the area. In a sense, that was one of our problems."

"Oh?" Paul asked.

Carol felt relieved -- she finally had someone to talk to about what had been going on. "I thought we had a set of good techniques. They are good techniques. It's just that someone had patented a few of them already. I came up with improvements and workarounds, but the vulture, I mean venture, people were scared off, and pulled the plug. Sorry, the official line is 'The Board of Directors on recommendation of management voted to voluntarily dissolve the company due in large part to the recent downturn in the private equity marketplace.' God, that makes me want to barf. They fucking bailed on us."

Paul was extremely curious. He thought of surf, calming surf, breathing slowly. "Who was the one with the patents?"

Carol looked at her Palm. No e-mails. Well, what did she expect? There were a lot of people on the job market. "A small outfit called Waltech. Very good patents, from the ones I read. I didn't think anyone else had thought of that approach, but this guy had, coming from the digital noise reduction area. I came at it from stochastic control theory, and got to about the same place, but I think my twists on it are a lot better. We'll never know, I guess."

Paul nodded. His patents -- his company -- he knew there were others working in the area, but wasn't aware of this one. Time to throw out the bait.

"Would you be interested in working in similar areas? Control systems, and rights management? I must confess, while I've gotten this process to more or less work, I could use some help. There are some portions of your book that are difficult for me."

Carol sat up a bit. This was taking a most interesting turn! "Yes, I would. What are you suggesting?"

Paul took out his pocket watch, checking the time. "Would you join me for lunch? I've reservations for two, and I'm afraid I've been stood up. We could discuss this further. If you have the time, of course."

Carol nodded. "I'd be very interested. Are those limit lines on that graph, the one in the middle of the page?"

Paul glanced down. "Yes, a safe-operating limit. As you suggested, heuristically determined, and control loop stability is an issue." Which one had that been, that had gone into convulsions? Barbara? Or was it Wendy? One of the early ones, anyway. He'd had a lot of setbacks in those early experiments -- seizures, convulsions, strokes, coronary failures. But they'd been relatively minor, and had led to successes.

"Let's start with a basic model, and the approach I developed. We have forty minutes before we should leave for lunch."

Carol squinted a little as she stepped from the darkness of the restaurant back to the sun lit street. She shook Paul's hand, thanking him for a very pleasant lunch. She'd given him one of her old business cards, and promised to meet him in the morning at the same coffee shop with an updated résumé. She looked up at the sky, now blue and clear, a substantial change from the gray dreariness of the morning. After he walked around the corner, she turned around, laughing and hugging herself. Things were looking up, inside and outside!

Paul headed to the BART station. He needed more than ever to drop by the law office. He flicked Carol's card with his fingers. Not only was he interested in her, but also in the remnants of her company. He needed someone working on that, now.

He chuckled as he headed down the stairs. It had been a very good day. Things were looking up!

As he rode the elevator up to the law offices, he put on a more somber face.

The receptionist recognized him as he walked into the lobby. She looked shocked -- the news must have hit. Her hand danced over the phone, and she whispered something into her headset.

"Mr. Walters, Mr. Weiss will be right with you," she said, emotion in her voice.

"Is something wrong?" Paul asked, putting on a concerned air.

The receptionist caught her breath, unable to speak.

The attorney came hurriedly into the lobby. He held out his hand, a concerned look on his face.

"Paul, I take it you've not heard?" he said as they shook hands in a perfunctory manner.

Paul replied, "What?"

“Come back to my office, please. A tragedy for the firm -- Miss MacDonald was struck by a bus on her way to your office this morning. She died at the scene.”

“Good God,” said Paul, hoping he’d put enough inflection in his voice.

They stepped into the office. Weiss closed the door as he waved Paul to a chair.

“It’s quite traumatic. She was a stellar performer, as you know -- a very strong-willed, creative, and intelligent woman.”

Paul nodded -- that was it, strong-willed, and quite creative. “Yes, indeed. What next?”

Weiss looked out the window onto the perpetual Market Street chaos, his hands clasped behind his back. “We’re still trying to contact her parents on the East Coast about services. We’ll let you know if you’d like.”

“Certainly,” said Paul. He figured he could afford the time.

“We’ll transition your work to another attorney. I have two candidates in mind. This has been a terrible shock to the firm, to all of us.” He turned to Paul. “I’m sorry -- she was in the midst of some work for you, wasn’t she?”

Paul nodded. “That’s not important right now. We were supposed to review contract drafts. That can wait a few days. But I do have a pressing matter.”

The attorney took a breath, then said, “Oh? What do you need?”

Paul handed him a note with the information Carol had provided.

“This company, from what I understand, is folding. I’m interested in evaluating and possibly acquiring some of their intellectual property. Someone needs to contact this person as soon as possible. Time is of the essence on this, circumstances notwithstanding.”

The attorney nodded. “Yes. Well, it will get people focused once again on the practice of law. I’ve got just the man to handle this. Would you care to meet him?”

Paul stood, shaking his head. “That won’t be necessary. I’m headed back to my office. He can reach me if need be. I’d like the initial contact to be in confidence, not revealing my identity. I’d like my patent attorney to evaluate existing patent applications and disclosures.”

“Of course; I understand. We’ll get on it right away. Thank you for your consideration, Mister Walters.”

Paul shook the man’s hand. “That’s quite all right. I’m terribly sorry to hear the news. It’s quite a loss. I shall miss her.”

“As will many of us,” the attorney said, his face settling into a grim firmness.

As Paul walked back onto the street, headed for the BART station, he rolled his shoulders a bit. He stopped, pulling out his phone and calling Gina.

“Hello?” she answered.

“Gina, this is Paul. Would you have time for me late this afternoon or this evening?”

He heard her sigh over the phone. He added, “I’ll let you use the chair...”

She sighed again, then said, “Oh... Let me call you back with a time.”

Paul smiled. “That would make me very happy. I need your touch, Gina.”

He heard a soft whimper as her deep conditioning responded to trigger phrases.

“I... I’ll do what I can and get right back to you.”

“Thank you, Gina... You make me very happy,” Paul said, knowing what that last phrase did to her. He hung up the phone, not waiting for a reply.

He laughed, and headed back to his office.

He walked to the building’s main entrance, stopping at the cleaners to pick up his laundry.

As he walked in, he noticed two men talking to the proprietor, Mrs. Chan. She noticed Paul, and threw up her hands at the men at the counter, turning away. She went into the back and returned with Paul’s laundry. Paul stepped to the counter, giving the two men a stern frown.

“May I be of assistance, Mrs. Chan?” he asked, picking up his laundry and eyeing the men suspiciously.

One of the men reached inside his coat pocket, displaying a badge.

“I’m Detective Hastings. This is my partner, Detective Ross. Who are you?”

Paul nodded. He’d expected police. “I am Paul Walters,” he said formally.

Hastings smiled a bit. “We’ve been hoping to talk to you, Mister Walters. It’s about the accident this morning. Do you have someplace we could talk for a few minutes?”

Paul nodded again. Mrs. Chan must have had a ringside seat. He could still see chalk marks on the street and some areas still taped off, snarling traffic further.

Control Loop Stability

“We could use my office upstairs for a few minutes, but I do have appointments this afternoon.”

Hastings nodded. “Any information you could provide us would be most useful, sir.”

At least they were taking the proper attitude. “Follow me, then,” he said.

As he left the cleaners, he looked out over the street. Debris from the accident was still visible. He shook his head -- what a loss, what a loss.

He turned to his entrance to the building, next to the cleaner’s, turning to place the access card in his pocket within range of the reader. The doors unlocked with a satisfying “thunk.” He used his access card once more to open the elevator door, and pushed 2.

Passing through the office’s reception area, he said, “My office is this way, gentlemen.”

As he walked back, he smiled a bit. If things worked out, Carol would be in the office next to his, and soon. This could work out quite well.

Paul sat down behind his desk. His office was on the other side of the building from the accident, its windows facing the next street over, facing out over San Francisco Bay.

The other detective said, “Impressive security.”

Paul said, “I value my privacy.”

Hastings said, “Mister Walters, I take it you’ve heard about the accident this morning?”

Paul steepled his hands in front of his face. “Just recently -- Miss MacDonald -- quite a tragedy. She was such a professional, punctual young woman, always coming promptly.” Paul suppressed a smile.

“How did you learn of the incident?” Ross asked.

Paul nodded. “I stopped by the law firm after lunch. One of the partners, Mister Weiss, informed me. She was struck by a bus?”

“You didn’t see the accident, then?”

Paul glanced out the window. “No. Traffic on that street is always a mess.”

“What was your relationship to the deceased? We understand she was on her way here?”

Paul kept looking out the window. “I was her client. I employ her firm to handle legal matters for my company. We had an appointment this morning to review some contracts.”

“Did you become concerned when she didn’t arrive on time?”

“As I told you once before, she was always most punctual. But the matters we were to discuss were not urgent. She has rescheduled with me in the past when more urgent matters arose. I called her office to inquire, expecting that such an event had occurred.”

“What did you do after that?”

Paul frowned at the two policemen. “After a while, I went out for coffee.”

“So you saw the accident at that time?”

Paul shook his head, frowning more. “I abhor traffic and congestion. I thought I’d heard sirens and such, so I left through the rear entrance, just below us, avoiding the area. Do you have further questions for me?”

The two detectives exchanged glances. With no further questions, Paul showed them to the door.

As he was about to go upstairs to the lab, the phone rang. Caller ID identified it as Gina. With a smile, he picked up the phone.

“Hello dear,” he said.

With a sigh, Gina said, “Four thirty to six? Will that work?”

“That would be very nice, dear. I’ll have the chair ready for you.”

“Ohhh... Thank you... I’ll see you at four thirty then.”

“I’m looking forward to it.”

He hung up the phone, and with a chuckle, left the room.

Rather than heading upstairs to his development lab, he walked down the hall to another door. He swung his hip pocket with the access card in it closer to the card reader. The reader beeped, and the door clicked open.

He stepped into the office’s rec room. Windows covered by translucent blinds filled one wall. The other walls had heavy carpet on them, quieting the room. Paul had spent quite a bit of money soundproofing the entire facility. A massage table occupied part of the room. A large futon was in another area, currently set up as a couch. Paul smiled -- he’d leave that decision up to Gina, or to her libido.

He stepped over to the chair, and its control panel.

Control Loop Stability

The chair itself seemed to be a 1970's throwback -- a large white fiberglass egg-shaped object sitting on a complex base. The front of the egg was open, showing a comfortable looking seat, complete with headrest, armrests, and a footrest currently folded up into the chair. A large bundle of cables exited the rear of the egg, descending into its base. From there, the cables disappeared under the raised flooring of the room to the control panel.

Paul thought for a moment as he approached the control panel. Which program should he run Gina through? It might be a good idea to reinforce basic conditioning, given what had happened. Losing someone else wouldn't be good, especially someone with Gina's talents.

He activated the chair's control console, the large liquid crystal display flashing to life. He typed in a password, unlocked the controls. He switched on the chillers for the superconducting coils in the headrest. The display predicted 37 minutes to operating temperature. That was fine -- he had the time. He'd have to check -- the new coils should be arriving soon, reducing both the time required to cool down to operating temperature, and the power required to cool them.

He brought up Gina's profile, and selected program elements. Deep trance reconditioning, get her aroused, but no relief -- not in the chair, at least. Hmmm -- interesting thought -- she, like the others, was deeply conditioned not to harm him in any way, or to reveal her programming. But Gina also had additional conditioning not to harm herself. Paul had added that after she'd seriously strained a muscle while pleasing him during an extended massage session. Control loop stability -- that instruction, that constraint, might have preserved his substantial investment in Miss MacDonald. Hmmm -- have to consider that fully.

He looked at the chair and sighed. He could run his own half-hour deep-trance relaxation program -- it didn't need the coils, even though they were nice.

No, he decided -- he still had a business to run, and a prototype to debug. He checked the chair controls once more, then headed up to the lab.

On the way, he pulled his copy of Gallway's book, the second edition, off the hallway bookshelf. Yes, there was the note in the introduction, just as she'd said. He replaced the book with a chuckle. He knew how that system of slavery worked. He hadn't liked it either, but then he'd found a better system -- and control loop stability was the key.

END of part 1

Gina

Paul glanced up from his signal analyzer, responding to a chime sounding through the lab annunciator system. Oh, four fifteen -- time to get ready for Gina. He completed his notes, tidied up the lab a bit, and headed downstairs.

He stuck his head in the rec room -- the chair's control panel showed all green, everything set to go.

He stopped by the washroom to clean up. He'd just walked into the reception area when the office annunciator let him know Gina was coming up the elevator.

With a smile, Paul walked to the main office door.

Gina was stepping to the door as he opened it. She was about five foot four, with olive colored skin, brown hair and brown eyes. She was of medium build, a nice figure under her simple dress. She had fingers of steel, steel in velvet, talented fingers which were so good at finding and releasing tension.

He saw the look of adoration fill her face.

"Thank you for making time for me today," he said with a smile.

She stepped forward and he touched the middle of her back, leading her into the office and closing the door.

His touch moving up to her neck elicited a sigh and a shiver from her.

"Shall we?" he said, leading them through the reception area to the rec room.

"Oh, Becky is still out, so it will be just me on Friday afternoon," he told her. Paul had Gina booked every Friday afternoon for massages for himself and the staff, usually just Becky. Hopefully, Carol would be added to that. "But we may be adding another person to the group soon. It would make me happy if you could work that into your schedule."

Gina sighed, almost moaned. Paul smiled, knowing she'd move heaven and earth to comply, to satisfy her conditioning, to keep the control loop stable.

Paul could see her eagerness as they entered the rec room and she walked to the chair. He could see her hands shaking slightly, her pace and breathing quickening. He thought he could smell her arousal as well.

"Dear Gina," he said, triggering a slight moan from her, touching the back of her neck as he spoke, "make yourself comfortable in the chair."

He watched her settle in. The chair automatically repositioned the headrest with its superconducting coils and extended the footrest as the chair tilted back. He heard her sigh, and saw two more indicators on the display go green as she secured the headband with its electrodes across her forehead, and then slipped her fingers into the sensor clips.

“Ready, Gina?” he asked, speaking into the microphone relaying his voice to the chair’s speakers. A window on the control display showed her face as picked up by a camera.

He watched her eyes close, her mouth forming a slight “O” as she sighed. He took that as “yes” and started the sequence.

The actuators hissed slightly, tilting the chair back further. Paul knew the sound of surf was playing through the chair’s speakers. He watched Gina’s biometric responses on the screen. The adaptive part of the program started, sound and motion at first pacing, then slightly leading her. Audio and kinesthetic cues would ease her into a relaxed trance, then the superconducting coils would take her deeper, directly stimulating specific areas deep in her brain.

Not today -- Paul overrode the program, triggering direct electromagnetic stimulation. He watched her face on the monitor window. He barely heard the chime sound through the speakers, coincident with the first pulse of the superconducting coils, sending precise stimulation to her brain. He saw her tense momentarily then relax, her eyes unfocusing.

He smiled -- her response was good, indicating a medium trance state on the first pulse.

He gave her two more pulses, deepening her trance, before letting the program resume. Paul keyed the monitor speaker momentarily, and heard Gina’s recorded voice say, “Relax...” His shoulders slumped and his eyes closed at the sound, one of the cues he used to place himself in trance. His finger slipped off the monitor switch, silencing the speaker. Paul took a deep breath and opened his eyes. Her voice in this room worked magic on him.

Ah well, he thought, I’ll get to relax soon enough. He turned, leaving the chair systems to take her through reconditioning and kindle her arousal. Twenty-eight minutes, the timer said - - enough time to get some work done.

In his office, he checked the transcript for Gina’s conditioning -- yes, it did have self-preservation suggestions. He bookmarked that portion -- he’d edit that in as standard from now on. Have to re-run Becky on that, although he felt pretty secure about her. On the other hand, he’d felt pretty secure about Miss MacDonald. That was the problem -- knowing what to constrain in a complex system.

Gina opened her eyes, blinking and taking a deep breath. The chair rocked her slightly still, the soothing surf sounds tapering off into silence. She slipped her fingers out of the clips and undid the forehead strap. She moved her head from side to side, letting her eyes close as she did. She felt so relaxed, so tranquil after a chair session, so filled with energy.

The chair sensed the shift in weight distribution as she leaned forward, retracting the footrest and returning to an upright position. She stood, stretching as she did. She turned, and took a sharp breath.

She saw her Master, her Paul, naked and face down on the massage table. The sight sent an erotic charge through her. With a lusty, hungry smile, she stepped quickly to him. She touched his back gently. Oh how she wanted him, wanted to please him. She was so lucky...

She quickly shed her clothes. Her panties and pants were soaked; they usually were after the chair. She glanced at the futon, but decided to leave it in place -- today she would take him on the massage table.

She stepped around to the cabinet by the massage table. She picked up the bottle of massage oil with one hand and pressed the illuminated green button with the other. She spread some of the lightly scented oil in her hands as the sound of surf filled the room.

Paul felt Gina's touch, and thought he heard her shedding clothes. He was feeling quite relaxed already, just being face-down on the massage table. Then he heard the surf recording start. He took a deep breath, and let it out.

Her hands touched his back, smoothing on the massage oil.

"Good," she said, "another deep breath, and... Relax for me." As she spoke, she pressed into his back, hearing him sigh, feeling him relax.

Paul exhaled, listening to Gina tell him to relax, slipping into trance. It was so good to relax and let her work her magic on him. He followed her voice, and her strong hands, drifting into a pleasant trance.

Gina took pleasure in relaxing her Master with her hands, and with her voice. She gave him the massage he needed, working the tension out of his body. Every sigh from him sent an erotic tingle through her.

By the time she turned him over, she was trembling with arousal and anticipation -- how much she needed to please him, to have him filling her! But she knew she had to complete his massage first. She told herself she was making love to his whole body, and that helped a little.

Paul was still in a light trance as he felt fingers move to his groin and cock, and felt himself responding to her caress and voice.

Gina inflamed him with her hands and her voice, finally climbing on the massage table and straddling him. She moaned as she took him inside her, coming strongly for the first time after a few delicious strokes.

Control Loop Stability

She worked both of them into a frenzy, using her hands, her voice, and her body. His orgasm erupting inside her pushed her over the edge again, crying out and rocking, rocking, milking every last drop from him, until she collapsed onto his chest, kissing him.

When her breathing had returned to normal, she kissed her Master once more, got up, cleaning him up and placing the towel between her legs. She went to the head of the massage table and massaged his head and neck, soothing and relaxing him.

A few minutes later, she gathered her clothes. She kissed her Master's forehead once more, and let herself out of the room to shower and dress.

She sighed as she let herself out of the office and got into the elevator. By the time the elevator door opened at the ground floor, all she could remember was how relaxing the chair had been, and how wonderful it was to help Paul relax. She looked forward to their next session on Friday. She looked at her watch as she stepped out the door. She had time to get a bite to eat before her last physical therapy client of the day. She smiled and sighed as she walked out on to the street -- the work with Paul and his company wasn't that financially rewarding, but it satisfied her still. Her future was with her Master, her Paul; she knew that.

Paul roused himself slowly from the massage table. He sat up and wiped some of the oil off his chest. Damn, Gina was good. Still, Carol would be an interesting addition. He checked the chair's control panel -- it had given her another four pulses during the conditioning phase. He glanced at the clock as he shut things down. He had time for a leisurely shower before his business dinner. The Sony people always picked well.

Interview

Carol hurried down the street, hoping her hair looked okay. She'd thought the world had taken an interesting turn yesterday morning, meeting Paul, talking with him over lunch, which he'd insisted on paying for, but then things went wild. Greg, the CEO and the only remaining employee of her old company, called around three. Someone was interested in their technology! She insisted she couldn't meet in the morning, and finally after a number of phone calls, agreed to meet Greg at a law firm on Market Street at two in the afternoon.

He'd called her later for more information. What with pulling together things for Greg, preparing for the meeting, and updating her résumé for Paul, it had been a long night. Of course she hadn't slept well as a result.

She arrived at the coffee shop before Paul. Funny, with all they'd talked, she didn't remember his last name, the company name, or where he worked. She ordered her usual and sat at the same table they'd used the day before. She reviewed her stack of papers, making sure she had everything lined up for the day.

"Good morning."

She looked up. Paul nodded and sat down with his coffee. She had to sweep things off the table as he started to put his cup down.

"Résumé?" he asked after taking a sip of coffee.

A little flushed at his brusqueness, Carol dug through her stack and handed him her latest version. Paul took it with a nod, and looked it over.

Without looking up, Paul asked, "How was Gallway to work for?"

Carol nodded. "Okay. He supported my thesis. Still, I expected more recognition for all the work I did on the book."

Paul took a sip of his coffee. "About par for the course. I wrote a series of papers, and was only listed on the last one when another member of the department squealed to the chairman. Do any teaching?"

Carol smiled. "The early morning classes someone didn't want to get up to do."

Paul nodded. "Why did you come out to the West Coast? You must have had other opportunities."

Carol shrugged. "My try for the brass ring -- I don't know. After one winter here though, it would be hard to go back."

Paul gave her a serious look. Carol wasn't sure she liked it.

“PC or Mac?” he asked.

Carol gave him a tight smile. “I can work with both, but prefer Macs.”

“Conference presentations? Public speaking? Negotiating?”

She shook her head. “Besides teaching, and I won awards two years in a row, I did conferences. I handled the negotiations for the book, and got him a far better deal than he would have gotten. I think that’s why I got such a glowing reference in it,” she said with some bitterness. “I’ve also helped deal with vulture capitalists and customers.”

Paul nodded.

“I need to check references. What was your salary?”

Carol told him. She didn’t mention the stock options, since they were worthless.

Paul nodded. “I run a small company -- technology development and licensing. I’m not sure I can match your present salary, but I can give you a percentage of profits, health coverage, and some interesting fringe benefits. I’ve been thinking about bringing in someone else for a while, and I think you’re a good match. Interested?”

Carol wasn’t sure if she was stunned or not. Still... “I’m interested, but I need more information. I’ve also got a meeting this afternoon.”

Paul nodded. “I understand. My office is a couple of blocks from here. I could show you around, and answer your questions.”

Carol gulped down the rest of her coffee and gathered her papers. “Let’s do it.”

Paul stood up, smiling. “I like decisiveness.” He started walking to the door.

Carol caught up with him. “How long have you been in business?” she asked.

“Coming up on seven years now, on my own.”

“How many other employees do you have?”

“Only one full-time, and she’s off this week. Part-timers for IT infrastructure, lab techs, cleaning. I use a handful of consultants, depending on the project -- DSP wizards, coders, patent people. You’d fill in gaps in my skill set. Let’s cross here. Traffic on this street can be deadly.”

They walked up to a nondescript door between a dry cleaners and a sandwich shop. Carol wasn’t sure what he did to open the door. The door had street numbers on it, and that was

all. As they went into a small foyer with an elevator, she saw what he did -- waved a hip near a badge reader set in the wall. The elevator doors opened.

They got out on the second floor, another small foyer, and...

Carol read the company name on the other door, and laughed nervously.

“You’re Paul Walters? You’re Waltech?” she asked.

Paul nodded with a slight smile, and opened the door, inviting her in.

Carol shook her head, trying to remember what she’d said yesterday at lunch. She knew she’d talked about the Waltech patents -- they’d been responsible for cratering her company. Well, it couldn’t have been that bad -- he was offering her a job.

“This is the reception area. Normally, Becky would be here to greet us. You can put your things on the desk if you want. This floor is offices. The lab is on the third floor.”

“Mister Walters, Paul, I hope I didn’t give you the wrong impression yesterday,” she said.

Paul gave her a curious look. “Not at all -- you gave me a very honest assessment.”

He headed down the hallway. “Conference room next to reception. We usually eat lunch there; Becky organizes it. Bathrooms on this side, with shower, then the support rooms -- refrigerator, microwave, sink in this one; the next has copier, fax, servers and such. I have a wizard who takes care of networks, computer configuration, major upgrades, and the like. We’re all Mac, by the way, with redundant fiber connections from our firewall to the net, and 1000Base T switched to all systems. On this side, these are the offices for the consultants. This one is the rec room -- we’ll come back later. At the end is my office, and next door is the one you’d use. Across from the offices are closets and supplies. Want to look at your office?”

Carol nodded. They went in. The office was pretty bare, but the furniture nice. There were file folders stacked on the desk. An Apple Cinema Display sat on top of one of the desk surfaces. The office looked out onto San Francisco Bay. “Nice view,” she said.

Paul smiled. “One of the fringes. I also have parking underneath us on this side of the building -- a reserved parking space is included as well, available 24 by 7.”

Carol took a breath. The parking space alone was worth a fortune -- she lived four short blocks away -- she could leave her car here, rather than fight for space on the street.

“My office?” Paul suggested.

Carol followed Paul to his corner office. His view was even better. The office was full of books and high-tech goodies, but all in all, the office had a meticulous order to it. A Cinema

display graced the desk, with a smaller LCD display next to it. Paul sat in a chair next to the round table near one window and invited Carol to take the other.

“Let me tell you some more about the company.” He filled her in on major aspects: video and image noise reduction, digital rights management, and watermarking. He mentioned major customers.

Carol was impressed. “All those seems to be watermarking, DRM related,” Carol started out when he asked her if she had questions. “What are the control systems projects?”

Paul smiled. “Ah, that gets us into fringes. Let’s take a walk.”

Carol followed him to the rec room. That door seemed to be card-keyed as well.

The lights inside were dim, and the room sparse, with a massage table, a futon, a strange looking egg-shaped thing, and thin drapes on the windows. Carpeting covered the walls. The room was very quiet, with a cool, relaxed feeling. The entire office complex was very quiet -- she hadn’t heard any traffic noise at all, unlike her fifth-floor apartment a few blocks away.

“One of the fringe benefits,” Paul said, letting the door close and walking to the massage table, “is a massage every Friday afternoon. One hour, by a very talented woman.”

Carol raised an eyebrow, smiling. “You’ve got my attention. What’s that?” She pointed to the large white egg.

She followed Paul over. Near the egg was an equipment cabinet with an LCD control panel on top. She saw an opening in the egg facing the windows -- it was a chair of some kind.

“How familiar are you with biofeedback?” he asked.

Carol shrugged as she looked inside the egg. “Not very.”

Paul nodded. “This is one of my pet projects. We all get to use it. This is a relaxation chair -- it uses biofeedback techniques, aural and physiological cues, to help you relax. That’s the hidden variable part of the problem -- relaxation is a fuzzy concept. Ready for a test drive?”

Carol was wearing business attire -- a simple business suit. “Why not?” she said. She certainly could use a chance to relax.

Paul smiled and held out a hand. “Hand me your jacket, then, and slip off your shoes. We’ll do a short run, say fifteen minutes, okay?”

Carol slipped off her shoes and jacket. “Okay. I have a meeting this afternoon.”

Paul nodded, placing her jacket on the massage table. “Don’t worry -- I’ll get you there. Lower yourself into the chair.”

Carol sat back in the chair. The interior was black, and covered in soft cloth. It cut the light, and surprisingly, made things even quieter.

Paul's voice came from the speakers behind her head. "Things are going to move as the chair adjusts itself to your body and starts reclining. I'll help tweak things to make sure you're comfortable."

The footrest extended, and the chair tilted back a bit. Carol felt sections of it moving along her back and behind her head. Paul asked some questions, and made more adjustments, fine tuning the chair.

"Now reach up with your left hand to near your head. You'll feel a strap there, with a Velcro end. Place that strap across your forehead, snug but not tight, so the center electrode is in the middle of your forehead. Those electrodes monitor brain activity."

Carol found the strap and placed it over her forehead, centering the middle electrode. Things moved a little more.

"Check the right electrode -- you have something between it and your skin."

Carol fished a lock of hair out from under the strap.

"Much better. At the ends of the armrests you'll find little holes for your index and middle fingers. They're sensors, and also serve as an interlock -- if you decide you don't like the process, just pull one or more fingers out, and things will stop, okay?"

"Okay," Carol said. She could barely hear her own voice, the sound deadening of the chair was so effective. She slid in the fingers on her left hand, then the right. The chair was quite comfortable.

"Very good," said Paul's voice in her ears. "Now we'll turn it loose. You'll hear the sound of surf, and maybe some other sounds and voices. Close your eyes, relax, and enjoy. Pull your fingers out if you want to stop, otherwise, the ride will last fifteen minutes."

Carol tried to nod, but the combination of the strap and the headrest held her head, and quite comfortably. She closed her eyes and sighed.

Gentle surf sounds started, with something like a humming sound below the surf. Was she rocking? It felt as if she was rocking. She felt herself smiling. It was quite nice.

She felt herself relaxing, muscles loosening, and the chair repositioning slightly -- yes, it was rocking her. It leaned back a little further, and she took a deep breath, letting out a long sigh. Small vibrations started up along her spine from little massage motors.

She drifted, random thoughts flicking through her mind. Parking, massage, this chair? An office with a view, interesting work... But then she also thought about how she was going to afford the rent on her apartment, what with her roommate out of work and moving back to the East Coast if she didn't find a job soon.

The chair seemed to respond to that, cradling her more. Then a chime sounded, melting her body and her mind. It almost felt as if the chime was ringing inside her, something striking her head. It sounded again, dissolving her mind, melting her muscles...

She became aware of light in her eyes, and the sound of the surf again. The rocking was more subtle now.

"Good," sounded Paul's voice in the speakers. She sighed at his voice -- he had such a nice voice. She was going to enjoy working here.

"Open your eyes now," he said. Her eyes popped open. The rocking stopped, and the footrest started to retract as the chair shifted to a more upright position.

"Slowly, use your left hand to undo the electrode strap, replacing it."

She did as he said.

"Now your right hand. No, don't try and stand. I'll come around and help you. Hold out your hands."

Carol extended her hands and let Paul help her out of the chair. She sighed.

"Better?" he asked.

She sighed. "Wow -- some fringe benefit! That's included?"

Paul chuckled. "Yes, but you're limited to once a day. That's seven days a week, though, and your card key will get you in any time you want. If you take the job, that is."

She leaned against the stool next to the dark control panel next to the chair.

"That was amazing," she said. Then with a frown, she said, "What needs improving?"

Paul chuckled a little more. "As you said, control loop stability. It has to be manually fine-tuned at first -- if things aren't adjusted properly, it tends to create cramps, things like that. And that was your first run; you can relax a lot more than that, but it will take a number of sessions to get you there. We should be able to do better, and all automatically."

Carol's mind started running over the graphs and control flows she'd seen. "What a fascinating problem!" she said out loud.

Paul smiled. “Glad you think so. Let’s look at the lab, and then get lunch.”

Carol sighed, slipping into her shoes again. “I need to be downtown, Market Street, by two. We’ve got someone interested in the company’s intellectual property.”

Paul nodded, looking at her intensely. “I know.”

Carol gave him a surprised look.

Paul held out her jacket. “I’m the one interested in the I. P. -- and you.”

Carol sighed again, a thrill running through her for some reason. “Really?”

Paul motioned to the door. “Really. As I said, you gave me a most forthright assessment yesterday. That’s the kind of input I need. Let’s see the lab, then head downtown for lunch.”

Carol shook her head, and followed.

They went upstairs to a very well equipped electronics lab. Paul showed her prototypes of different projects, including equipment from an amazing number of manufacturers. He also asked her questions about some of the test equipment, having her make some measurements. Carol hoped she demonstrated her proficiency.

She was relieved when Paul told her they had a tech who helped out, especially with prototyping and breadboarding. She admitted to still liking to do some of her own lab work, and his smile in response sent another curious thrill through her.

Paul nodded, and looked at his pocket watch. “We should go. We’ll be better off catching a cab -- we’ve a reservation for twelve fifteen.”

Shaking her head, a little bewildered but still quite relaxed, Carol followed Paul out.

END of part 2

Acquisition

Paul ran his fingers through his sandy brown hair as he stepped back onto the street. It had been an intense afternoon. The critical issues had been resolved. Carol coming in with him, and being supportive, had surprised Greg. The scriveners would scriven, producing legalese which had better resemble the agreement he'd worked out with Greg. Things would have gone far easier if he could have gotten some of those people in the chair first...

Paul let his gaze go out to the horizon for a moment. After Carol had another few sessions in the chair, it would be time to discuss her salary. And he'd better get things set up -- he'd offered her another session in the morning if she wanted it, and he knew she would.

Would he have enough time to get her ready for a session with Gina on Friday? No -- slow and easy with Carol; he'd been in somewhat of a hurry with the attorney, and that had cost him. Slow and easy, slow and easy. Tomorrow afternoon would be with the attorneys, and part of Friday as well. He could have Carol take Becky's slot with Gina on Friday -- no, slow and steady. He needed to schedule her medical exam.

That was his first of phone call. He managed to get her in Friday morning at 8:30, and sent her e-mail with where and when, along with Doctor Foster's instructions.

He saw the e-mail from Doug, his computer/network guru, saying that accounts for Carol had been added on the servers and gateways, a card key initialized, and the Mac next door set up for her. Good -- Doug earned an extra chair session for getting that done promptly.

E-mail taken care of, it was on to more pleasurable tasks, like Carol's conditioning program. Hmmm ... Becky flew back in on Saturday morning. He chuckled -- after a week, the office and the chair would probably be her first stop.

He brought up Becky's program. Let's give her a good welcome back, he thought. He set up an hour-long program to reinforce her conditioning, adding the self-preservation from Gina's program, then taking her through a few fantasy orgasms, leaving her aroused and open for him.

Carol's program would start with the usual trance conditioning, conditioning her to his and Gina's voices, associating the sound of the chime to pulses from the coils. She'd gotten a brief introduction to both voices already, and the coils. In a separate window, he brought up Carol's first run in the chair. She'd done well, unwinding quite nicely. Hmmm -- she'd started to tighten up, and the chair hit her with a pulse. She responded well to that. Two more pulses and she was in a medium trance. He moved the pulses up earlier in her program. The coils had to be chilled to a quite low temperature to operate. He set the chair controls to leave the coil chillers on standby, and to bring the coils to operating temperature whenever the chair was activated, or someone entered the rec room.

He set up a series of programs for Carol to sequence through, adding the usual controls and commands. He remembered Weiss's comment about "strong willed." That had been part of

his problem -- not only had the late Miss MacDonald been strong willed, but he'd confronted that strong will, challenged her, and she'd found a way out -- loop stability again.

Becky and Gina were certainly bright, although not as intellectual as the attorney had been, or as bright as he judged Carol to be. He'd never challenged them with their conditioning, instead letting it become a part of them, a part of their personality and their drives. Let it sneak up on Carol. He could satisfy himself with Becky and Gina for a week or so. That would allow Carol's conditioning to merge in better. He coded in a trial for her third session. That would give him more feedback as to how the process was going.

He closed out the programming windows and updated the chair system. He got up with a satisfied smile. That had only taken an hour. He went upstairs for his regular piano practice.

He practiced, had a light supper, then practiced some more. The pieces by de Severac were short, but challenging; he liked them.

As he cleaned up, he thought about redoing his own program for the chair -- starting out right away with a pulse from the coils, rather than waiting for the progressive relaxation sequence. He liked that sudden surge, that pulse, taking control, wresting control. He liked doing that to people. He thought about doing that to Gina, and Becky, and especially Carol...

The next morning he'd showered, dressed, and was having a cup of coffee when the phone rang at about eight. The system announced it was Carol.

"Good morning Carol," he said, answering the phone.

"Paul, I hope I didn't wake you," Carol said.

He could hear distress in her voice. This could be quite useful. "No, what's the matter?"

"Other than a lot of work and not much sleep? Could I come over early?"

"And use the chair? Why certainly, my dear, please," he told her.

She sighed over the phone. "Oh, thank you. I'll be over in ten minutes."

Paul started to say, "Bring your..." but realized she'd hung up.

He frowned at the phone. He headed down to the rec room. He powered up the chair and quickly altered her program, stretching it out to forty-five minutes, hitting her with the coils earlier and more often.

He buzzed her into the office. She came in wearing business casual clothing, slacks and a top, and carrying a backpack.

"You look quite harried," Paul told her.

She sighed, putting down her bag. “You guessed.”

Paul nodded with a frown. “I was going to suggest you bring your clothes over, so you could shower and change after you relaxed in the chair, but you hung up on me.”

Carol gave him a sheepish grin. “Sorry. Yesterday was so wild. I was up late writing, then didn’t sleep well, up early...”

Paul nodded. He knew how to handle this. “You should have called. If the work was too much, you should have told them, or me. None of this is so time-critical that you need to stay up late. I don’t expect that to happen again -- if we’re going to work together, you need to let me know when things are overwhelming you. We’ll have time-critical projects, but this isn’t one of them. Understood?”

Even more sheepishly, Carol nodded and said, “Yes, thank you.”

“I met a very intelligent and assertive person. That’s who I expect to have working for me,” Paul told her.

She nodded.

“Okay. Let’s get your picture. I assume you’re still interested in working for me?”

“Oh yeah.”

“I hoped so. I’ll get a picture for your card key. You’re able to make the appointment tomorrow morning for your physical?”

“Oh, thanks for reminding me. I’ll be there. I haven’t had a physical in while.”

Paul had his digital camera. They went into the rec room.

“Stand with your toes on the line in the carpet and look at me...”

Carol found the line he’d indicated, and looked at him with a smirk.

Paul took her picture. “That’s going to be great!” he said with a chuckle.

Carol laughed as well.

“I suppose you’d like to spend some time in the chair?” he asked with a smile.

Carol sighed. “God yes...”

“Okay then, shoes off, and relax. A question...”

“Yes?” Carol replied as she eagerly slipped off her shoes.

“Yesterday, you did quite well. Did you find the sound of the chime relaxing?”

Carol sighed and felt herself relaxing. “I melt just thinking about it.”

Paul nodded. “You tensed up just before that. Do you remember why?”

Carol nodded. “All too well -- the place I’m living -- they’ve jacked up the rent three times in the last year. They refuse to give leases, keeping people month-to-month, but insisting on 90-day notice to quit. My roomie lost her job, and if she doesn’t find something, she’s going back East. I’m not sure what I’m going to do. Working here will certainly help, and the completion bonus for the patent work, but... But that’s my problem.”

Paul nodded. “Why don’t you get in the chair. I set this one for a bit longer, forty-five minutes. That ok?”

Carol relaxed back into the chair, fastening the headstrap and slipping her fingers into the sensors. “That sounds like a good start to me,” she said with a sigh.

Paul smiled and started the program. He brought up the pulse override on the control panel. “Comfortable? How is the pressure distribution on your shoulders?” he asked into the microphone, his thumb over the pulse button.

As Carol started to reply, he hit the button. He watched her twitch slightly with a soft grunting sound, speech and voluntary movement cut off suddenly, her eyes unfocusing as she melted back into the chair.

She started to regain focus, so he gave her another pulse. Her face relaxed into a half smile, her eyes wavering then drifting closed.

Paul nodded, and resumed the program. He had time to put together her card key. He could have the law firm lean on her landlord... Or, he could let it play out -- this could be good, tension in her life driving her to the comfort and relaxation of the chair.

Carol blinked her eyes. She didn’t want to move, feeling so relaxed, so rested, so

“Ready to get up?” Paul’s voice sounded in her ears.

Oh, his voice sounded so good. Still, she knew she had to get up. She undid the forehead strap, then extended her hands to him.

She had to stop herself from hugging him, grabbing him, as he helped her from the chair. She felt herself turning red from embarrassment, and turned to find her shoes. She felt damp, aroused. Her whole body felt alive and rested, refreshed, tingling and ready to...

“I should visit the ladies’ room,” she said, turning away from him and heading to the door.

“Okay. We have a while. I want to show you some things in the office before we go.”

Carol hurried to the bathroom, not really hearing him. She closed the door once inside, leaning against it, eyes closed. What was going on? She was so confused. She pulled her top up and one of her hands shot down into her slacks and pantyhose. She was so wet. Her hand moved on its own, and the first touch to her clit was electric. With the other hand kneading a breast, she came suddenly, and with an intensity that surprised her and weakened her knees.

She folded over at the hips, leaning against the sink, panting. Oh, that had been good... She made it over to one of the stalls and managed to pee.

A few minutes later as she cleaned up at the sink, touching up her makeup, she had to admit that her color had improved. And she did feel relaxed, refreshed, and quite alive.

And she wasn’t going to take any shit from lawyers today, or from Greg either -- she and everyone else had been terminated, thrown out, and their net access cut off. Hell, they’d even auctioned off the furniture, and she’d had to argue and fight to get her personal shit out before they carted things away. She needed to look forward, to her future -- and that was with Paul.

She looked at herself in the mirror. What a day, and it was just starting! She opened the door marked “Shower” and looked around. The two bathrooms shared a shower area with its own sink, and a supply of fluffy towels. The shower was bigger, and the fixtures better, than the one in her apartment. Tomorrow morning for sure, she told herself.

Paul flipped the card key between his fingers. He could imagine what Carol was going through. He admired her strength of character. Who had it been, the one who dragged him to the futon and practically ripped his clothes off at that stage? Was that the one who’d gone into seizures a few hours after a session, while driving on the freeway? He wasn’t sure. It wasn’t important -- he was going to take it slow and easy with Carol. Every step she took would be her own doing -- or so it would seem to her. He wasn’t going to force anything.

Paul smiled when she came out of the bathroom a few minutes later. She did seem to have more color in her face.

Carol smiled and shook her head. “I’ll be sure and bring some clothes over next time -- that’s a really nice shower.”

“It’s here to be used,” Paul said. He handed her the card key, touching her hand with his fingers as he did, looking her in the eye, checking for her reaction. Her eyes seemed to react a bit, and he thought he saw her shoulders relax. Good.

“Here’s your card key. It only needs to get within about six inches of a reader -- contact isn’t required, so you can leave it in a pocket, or your purse, or wallet, or whatever. If you lose it, call me immediately so I can deactivate it, okay?”

Carol nodded. “Got it. I’ve carried similar things in the past. I’ll bury it in my wallet.”

“Good. The front door downstairs, elevator, parking entrance, and outside office door are all activated by it. The ones downstairs don’t give any audible feedback, except for a click of the door unlocking. The ones up here beep. Try the rec room door.”

Paul watched closely as Carol walked over to the door. She held the card a ways from the reader mounted on the wall. A small light in the reader lit up green, a beep sounded, and Carol pushed the door open, her hand shaking slightly. Paul smiled -- things were going well.

“If you decide you need to crash for a while,” Paul said following her into the room, “feel free to use the futon, as long as it’s unoccupied...” Paul noted Carol’s nervous laughter.

He stepped over to the control console for the chair.

“If you’re here to use the chair, its reader is up here. Wave your card key at it, and if it lights up green and beeps, you’re all set -- it will run your preprogrammed session. If it lights up red, you’re locked out. Normally, it’s one session every 24 hours -- with a minimum of three hours between sessions, so eleven at night, then a minute after midnight won’t work.”

Carol gave him a smirk, but he could see the anticipation in her.

“When things are really rough, we can split sessions, though, a little time in the morning, and a little in the evening. Occasionally it’s nice to crash on the futon for an hour or so after a session. If you want, you can also spend the night in the chair -- the program will only go for a while, but after that it will still rock you. It’s a nice way to spend the night, and good preparation for long international flights. Do you have a valid passport?”

He watched her carefully as she took a moment before she spoke. She looked quite aroused again.

“Y... Yes. Will there be much travel involved?”

Paul nodded. “If things work out, I expect you’ll be accompanying me to Japan, as well as Europe occasionally. Would you like that?”

“Oh, very much!” she said.

Paul could see that her breathing was still rapid, and she was gripping her card key tightly. The drape of her clothing didn’t allow him to observe her nipples.

“Okay, let’s go over a few more things, then go see how the lawyers did.”

Paul smiled and chuckled to himself as he walked back into his office late that afternoon. The allegiance Carol had shown to him in the meeting had been surprising. Well, not so surprising considering the conditioning she was undergoing, but still, the ferocity with which she'd supported Paul and turned on Greg had been something. She'd even spouted phrases from her conditioning -- he remembered her glaring at Greg and saying, "Paul is my future."

But as Paul went through voicemail, dealing with calls he'd missed, he frowned. One call was from those damn detectives, insisting on talking to him again. He called and left a terse message he could be available Friday morning at his office. Then he called Weiss at the law firm and vented.

After practicing the piano for a while and having a light supper, Paul went downstairs and tweaked the programs for Carol and Becky. Carol would get an hour-long session in the morning. He'd been quite pleased with her performance so far. Hmmm -- two women in the office -- don't want any jealousy developing. He quickly added suggestions for both of them to feel completely comfortable with each other. Becky would treat Carol as a technical superior, yet Carol would look to Becky as an older sister. Paul cleared his throat and recorded the additional phrases needed, weaving them into both programs.

END of part 3

Responses

Friday started well. Paul woke with a feeling the day would be a good one. He looked forward to his session with Gina in the afternoon. It would be good to have Becky back, and Carol in the fold. Checking his schedule, he was to meet the Sony people at the ball park for a seven fifteen baseball game. That would be good as well.

But things started to unravel as soon as he got down to his office. The damn cops would be over around nine thirty -- why had he done that, let them pick a time? He wanted to observe Carol as she started Phase 2.

Carol arrived around nine fifteen.

Paul met her in the hallway. This morning she was all smiles. She was wearing casual clothes, with a clothing bag slung over her shoulder.

“Good morning!” she said enthusiastically.

“I see you found your way in. How was your physical?”

She raised an eyebrow. “Most thorough! But very efficient.”

“What are your plans for the day?” Paul asked.

Carol paused, a little jarred at his brusqueness. “I thought I’d ... relax in the chair for a while, then shower and change. After that, put in a couple of hours here working on patent applications, before meeting with the patent attorney this afternoon at his place.”

Paul nodded, forcing a smile. “That sounds good. Why don’t we get you settled in the chair?”

Carol sighed as she smiled, feeling a tingle run through her. “Why not?”

He led her into the rec room. She put her clothes on the massage table and slipped off her shoes. She stood next to the chair with a look of anticipation on her face.

Paul stood back a bit, smiling. “Go ahead, use your card key -- it’s all set.”

Carol blinked, then retrieved her purse from the massage table. She waved it over the reader on the control console. Hearing the beep and seeing the green light blink, she turned to Paul, smiled and waved, and got into the chair.

“Enjoy the ride,” Paul said as he left the room.

Carol found her hands trembling as she reached for the head strap. Oh, how she was looking forward to this... She attached the strap, and once she slipped her fingers into the

sensors, the chair leaned back, surf sounded from the speakers, and the gentle rocking motion started.

She tried to relax, to let go, but she felt the tenseness, the anticipation, waiting for that chime, that magic chime to melt her away...

Paul hurried back to his office. He brought up chair status in one portion of his large display, and the camera trained on Carol's face in the smaller display.

His upper lip curled in an animal smile as he interpreted the display data -- she wanted it - she wanted it bad. Her breathing and heartbeat had quickened in anticipation. He glanced at the countdown timer for the first pulse.

Carol tried to relax, tried to regain control of her breath -- she was almost panting. She giggled momentarily, trying to consciously relax her muscles, imagining the sound of the chime... It was almost as bad as that slow ascent up the first hill in a roller coaster -- that anticipation, waiting for the thrill of that first release. Or, the feeling she had when she really needed to use her vibrator -- that trembling anticipation before the first ecstatic touch. She giggled again, taking a deliberate, slow breath, letting go into the chair.

Paul watched the display. Here it comes.

Carol felt and heard the chime, the sound almost feeling like something tapping on her head, telling her to let go. A soft moan escaped her lips as she let go to the chime, letting it take her to that soft, relaxed place.

Paul nodded -- her response to the first pulse had been superb. Another one was coming up in thirty seconds. Then the voices would kick in, deepening and conditioning, before the next set of pulses.

As he looked up smiling, the phone gave the distinctive ring of the intercom box on the door at the street.

He frowned and picked up the phone. "Yes?"

"Detectives Ross and Hastings to see you, Mister Walters," said the scratchy voice filled with background noise from the street.

Paul glanced at the displays. As much as he wanted to monitor her progress, there wasn't much he could or should do for a while. Still, it was a damned nuisance.

He pressed the series of keys on the phone to unlock the door downstairs and activate the elevator. "Come up to the office then," he said flatly, and hung up the phone.

He switched the small LCD display briefly to the camera in the elevator. When he saw the two men get in, he switched the display back to Carol, then blanked it with a quick click of the mouse. He walked to the reception area and the front office door.

He opened the door and said, “Come in,” adding, “please,” after a moment.

Hastings stepped in, followed by Ross. “Thank you for meeting with us,” Hastings said, extending a hand.

Paul frowned at the extended hand. He shook it in a perfunctory manner and said, “Let’s go back to my office. This needs to be brief -- I have a lot to do today.”

“We won’t take any more of your time than necessary, Doctor Walters,” said Ross.

Paul nodded as he walked back. So, they’d done some checking, and were letting him know. They wanted to play games, did they? He might even enjoy this.

Showing them into his office, he said, “I’m just a Ph.D. -- I find that title pretentious.”

Ross and Hastings smiled, seeming to relax a little.

Paul sat down behind his desk, turning the displays so only he could see them. He brought up the chair camera again. Carol had a relaxed smile on her face. The other display showed she was still going through the deepening sequence, and doing well.

“Should we refer to you as Mister Walters, then?” asked Hastings.

“That would be fine,” Paul said with a smile.

Carol drifted through a serene grotto, rocking in a small boat, relaxing more and more with each breath she took, with each beat of her heart, drifting to a place of serenity and safety, a place where she would be so relaxed, so open.

Ross took out a small notepad. “There are a few things we’d like to clear up.”

Paul nodded, glancing at the display. Four minutes until something more interesting started.

Ross took out a pen. “You told us Miss MacDonald was an attorney working on matters for you. That was confirmed by her employer. But we also understand the two of you ate lunch and dinner at restaurants in the area. Could you shed some light on that for us?”

Paul had anticipated that question. “Yes, we went to lunch on occasion, and some times to dinner. We’ve even gone to baseball games together. She was an attractive and intelligent young lady, and I enjoyed her company. If you’d checked a little further, you would have learned that I do exactly the same with my patent attorney, my tax attorney, the geek who

maintains my networks, and others who work for me. It's a simple matter of showing my appreciation for their work and skill. Next question."

"So, there wasn't anything more to your relationship?"

"With whom?" Paul asked.

"Miss MacDonald?"

"No."

"Did you know a Karen Blakeley?" Ross asked.

Paul furrowed his brow, glancing up momentarily. "No," he said, shaking his head. "I don't recognize the name."

"How about Wei-Ming Chan?"

Paul glanced up again. "Do you mean Wendy Chan, daughter of the laundry people downstairs?"

Ross nodded. "Yes, that's her."

Paul furrowed his brow, shaking his head slowly from side to side, glancing at the control screen. Carol was about to begin a conditioning sequence. "Very sad, very sad," Paul said softly.

"What do you remember?" Hastings asked.

Paul sighed. He looked at the two. What were they fishing for? "I assume you've just reviewed the reports, so you are probably more familiar with that sad day than I am. Let's see -- five, or was it six years ago? Wendy used to open the family's cleaning business a number of mornings a week, letting her parents rest, and picking up early-bird business. I still do all my cleaning business with the family, you know, helping them however I can. One morning, she dropped off some cleaning with me, and later that day, from what I heard, with her parents standing by, she had a seizure or something and died. Very sad."

Carol drifted peacefully, voices filling her, helping her relax. Every time she heard the voices tell her to relax, every time she heard the chime sound, she melted. The voices brought her up, oh so far up, oh so hard to come up, opening her eyes slightly, and the magic words and the chime sent her back down again, back to softness, openness, to peace.

"Do you remember the outcome of that event?" Ross asked.

Paul shook his head. "I'm not sure what you mean. I talked to her brother, who was in medical school at the time, and convinced him to continue his schooling. I arranged assistance for the family, counseling."

Paul glanced at the control screen. Carol's response to the fractionation exercise was quite good. The system showed a decision point -- it would move on to the next sequence unless he intervened. He clicked the mouse to continue the fractionation exercise for a while.

"Do you see the coroner's report?"

Paul shook his head. "I'm afraid I didn't, gentlemen."

As he looked at them, he remembered that morning -- she'd come up with his laundry, and for a session in his experimental chair. He hadn't completely damped out feedback in the control system, and she'd had a problem. She'd regained consciousness with no memory of the session, as usual, and left under her own power, cheery and seemingly quite well. The severity of her problem didn't become clear until some hours later when she'd gone into seizures and died.

Ross nodded. "Okay, how about Jennifer Dumont?"

Paul shook his head. Not one of his.

"James Hanson?"

Was that one of his? He couldn't remember. Was that the one who went into coronary arrest from overstimulation? Or was that the dementia-limbic stimulation problem? He shook his head again. "Doesn't ring a bell."

"Katryn Wells?"

Paul nodded on that one. Seizures and ventricular fibrillation, he remembered. "Yes -- there was a period of about ten months..." He looked to the control display.

Carol was more used to it now; it was easier to do what the voices told her. When they told her to wake up, she did, opening her eyes, and then the chime, or the voices, or a combination, sent her back down again -- it was so nice to go back down again, back to being so relaxed, so open, so obedient, so safe.

Hastings picked things up. "Wells, Connors, Chiang, Luong..."

Paul interrupted. The control display showed the interesting part was starting.

"Yes, citywide at that time, quite a few unfortunate people died from various narcotics related misadventures -- a few of them choosing to do so in my then open lobby downstairs."

Paul let his displeasure show. “And if I were to go back to my records, or call my attorneys, I could tell you how many times I complained to the police and the city about the use of my lobby downstairs by junkies, gangs, and whores. Were either of you in this district at the time?”

Both detectives shook their heads in the negative.

Paul nodded. It figured. “Then you may want to review a few more of your files, and contact the city attorney’s office. I finally filed suit against the city for permission to enclose my own lobby to prevent these people from using the area as a public lavatory, congregating and threatening myself, my staff, and passers by. I think it was a shooting, a stabbing, and a violent rape all in a two week period that finally convinced the city to let me enclose and lock that area.”

Paul glanced over to the control screen as an indicator flashed, showing another actuator moving into position.

Carol floated again, enjoying being so deep. In response to the voices, she spread her legs open a bit. Something pressed against her as the voices started in again. Now she was floating in the arms of her lover, being embraced, kissed, stroked, stimulated. Her breathing and her heartbeat accelerated, and she moaned in pleasure.

Paul glanced to the smaller screen, and saw Carol’s face contorted in pleasure. The probe between her legs was moving slowly still, the vibrator in its tip not due to kick on for another thirty seconds.

“Can you tell me, gentlemen, how many people died in that epidemic -- I believe it was black tar heroin? That and the accompanying gang battles? Quite a few died in other parts of the city as well.” Paul glared at the two.

Hastings, the older of the two, nodded. “Yes, I was working the Castro at the time. It was ugly. Drugs usually are.”

Paul continued to glare. It had been a difficult time for him as well, learning the hard way about feedback paths, the necessity for limits. The limbic stimulation one had been a shocker -- what was the man’s name? Everything had looked nominal, but he’d come back late at night, dragged a woman into the lobby area and raped her, almost killing her. He’d been diagnosed as incurably insane, going into convulsions and dropping dead a few weeks later. Still, the cops had taken the heat for that one, as he’d died while in custody.

Paul glanced to the control screen. Just a few seconds now; Carol was quite aroused, heartbeat and respiration both elevated. “I seem to remember reports of quite a variety of contaminants in street drugs, contaminants with disastrous properties.”

Hastings nodded.

Ross picked things up. “Don’t you think it’s unusual, though, Mister Walters, that you have been associated so closely with so many dead people?”

Carol was filled with fire -- she’d never been so aroused before. Still her phantom lover teased her more, the voices teased her more and more ... until a word was spoken, a sound filled her, and she came with an intensity she’d never experienced before in her life.

Paul looked at the control screen. Good -- her first one had been satisfactory. Now, deep conditioning and the buildup to her second. He looked at the two detectives. “I’d have to say, gentlemen, that you two are undoubtedly associated with far, far more.”

Carol collapsed into bliss, letting the chair hold her, rock her, as the voices filled her, speaking directly to her soul.

Paul continued. “Have either of you two bothered to look at the history of this area over the last thirty to forty years?”

Again, both policemen shook their heads no.

Paul frowned. “I didn’t think so. Taking a historical perspective, the area now is about as safe and quiet as the inner garden of a convent. In one year alone, there were seventeen homicides on this block -- in 1967, I believe. Oh, I hadn’t been born yet, Mister Ross. Two years before I moved into this building, there were seven or eight bodies dumped in the area over a short period -- a minor disagreement between rival business groups, I seem to recall. But thanks to you gentlemen, and to those of us trying to revive the area, things seem to have turned around recently.”

Carol started breathing faster again, moaning -- it was happening again. She was filling with fire, with desire, with lust. Something in her tried to resist -- she tried to move, to get away.

Paul flicked a glance at the control display in response to a flickering orange display. She was resisting. He suppressed a smile, watching the coils charge again.

Carol struggled, trying to ignore the voices. She had to move -- she tried to move, to pull her fingers loose. The chime sounded and melted her. The voices returned, caressing, comforting, relaxing, and yet stimulating.

Paul deliberately turned from them, looking at the displays. She tried to pull out her fingers, triggering the pulse, which hit her hard, taking her down, switching her to a reconditioning track in the program. He thought he saw her eyes roll up as her mouth formed a small “O.”

Another orgasm crashed through her, the voices and the chair holding her, comforting her. It was all right. This was where she belonged. This was what she needed. She let go.

Hastings cleared his throat and took a somewhat apologetic tone. “Mister Walters, we’re not implying...”

“Oh?” Paul interrupted loudly. He looked again at the displays. The reconditioning sequence had worked quite well. He glared back at the detectives. “Then perhaps you’d best stop wasting my time and return to the point of this visit, which I was led to believe was Miss MacDonald.”

The two policemen exchanged glances.

The caressing and stimulating started again. This time Carol gave herself over, opening up and receiving, responding with enthusiasm and desire as the voices spoke to her and she was filled again with bliss.

“Mister Walters,” Ross said in somewhat of a conciliatory tone, “we’re just following up. When our investigation showed that you had been seen at various restaurants with the deceased...”

Paul shook his head and interrupted again. “Yes, yes, yes. And if you’d investigated just a little further, you would have found that I do that with all the people who work for me, as I’ve already told you.”

Carol was floating in almost continual state of bliss as the voices continued to speak to her soul. She moaned and twitched occasionally.

“Thank you for that clarification, Mister Walters,” Hastings said. “That does help. I think you can appreciate our curiosity and concern in this matter.”

Paul shook his head, glancing at the displays again. “I can understand your curiosity,” Paul replied, suppressing a sneer, “but not your haphazard actions. I understand from the press, as well as people at the law firm, that the driver of the bus has a number of driving citations, and was indeed speeding on a wet street?”

Ross said, “We can’t comment on that.”

Carol wasn’t sure what the voices were saying, what they were asking, but she was shouting out, “Yes! Yes! Yes!” as bliss engulfed her once more.

Glancing at the displays, Paul saw that Carol had passed her first test extremely well. He glared at the detectives again, spreading his hands on his desk. “You can’t comment on information in the press, but you can drag up random events from the past? Oh, I sincerely hope you haven’t been bothering the Chan family about their daughter -- it took them years to recover from that shock, and if you’ve opened up that mess again, I can assure you, there will be hell to pay.”

Paul saw Ross glance down.

Hastings took the offensive. “Mister Walters, our duty is to investigate...”

“Then by all means investigate why on Earth that bus driver was speeding on a wet street! There are accidents on that street every few days -- did you bother to check with your traffic people at all?” Another glance told him the chair was working her up to a final orgasm as preparation for taking her deeper into trance for more conditioning.

“Mister Walters, we’re just trying to tie up loose ends,” Ross said, raising his head.

“That’s fine, gentlemen -- if that’s your interest, I can give you the name of a senior partner at the law firm -- he’s a member of E Clampus Vitus, and has been investigating deaths in this locale from the Barbary Coast era. I’m sure he’d appreciate your assistance; I think I’ll be talking to him quite soon. From what I can tell, we’re dealing with the disastrous consequences of someone in a hurry and crossing in the middle of a busy street, and a bus driver trying to keep to a schedule on crowded and wet streets.”

The detectives glanced at each other again, Ross tapping his notebook with his pen.

Carol moved as much as she could, rocking her hips with enthusiasm, letting herself be carried to bliss once more. “Oh, yes!” she cried again and again as the sensations built.

Hastings looked at Paul, sighing with seeming resignation. “Mister Walters, that’s exactly the way I see it.” He turned and gave his companion a cross look.

Ross shook his head. “We’re concerned, that’s all...”

Paul nodded. Carol was close -- another few seconds, from the rate at which her heart was racing. How many times had he had that problem, before he set an upper limit on heart rate during this phase? Three or four? “Then you’ll show your concern by being at the memorial service for Miss MacDonald on Monday morning?”

Carol screamed as she came, filled once again with sound and sensation, dropping down, down, down.

Ross and Hastings looked at each other, then back to Paul, without uttering a word.

Paul glanced at the displays just in time to see Carol with her mouth open, the microphone display indicating she was making quite a bit of noise. He nodded -- good soundproofing. He read off details for Monday’s memorial service. Hastings elbowed Ross, and he wrote on his notepad.

Paul waited a moment, watching Carol’s respiration and heart rate slow. Her muscles relaxed once more as she sank deep into trance for the final conditioning sequence of this run. That would take another half hour.

He looked back to the police detectives. “If there’s nothing further then, gentlemen...”

The detectives exchanged another glance. Hastings stood up. Ross followed, capping his pen and putting his notepad back in his pocket.

Paul hit a key to blank both screens, then stood and led the men back to the reception area. The rec room door was closed, as always.

Ross asked, “You have a receptionist?”

Paul frowned, as did Hastings.

“Yes,” Paul replied. “She’s out this week -- on the East Coast. She left last Sunday and will be back in the office Monday morning.”

Paul shook their hands and showed them out the door.

In the elevator, Hastings said, “Still want to bug the Chan woman?”

Carol sighed, letting the rocking and the voices take her deeper.

Ross sighed and shook his head. “Nope, but...”

Hastings clapped his partner on the shoulder as the elevator door opened. “Hey, look at the bright side -- this might cut down on jaywalking for a week or two. Let’s close this turkey and get back to work on the stabbing case.”

Ross grunted. “Yeah.”

Carol floated mindlessly in bliss, surrounded in comfort.

Paul stopped in the restroom and scrubbed his hands, his upper lip in a snarl.

Back in his office, he brought up the displays again. Things had gone well. A few questions for her, possibly another test, and he’d see which program to run next.

He turned and looked out onto San Francisco Bay. How many people over that development period -- a dozen, maybe fourteen? He shook his head. There were a few inconclusives; who could tell what actually killed those druggies? Eight or nine were his, to be sure, maybe a dozen.

Carol started drifted back up, enjoying the rocking motion and the sounds of the surf fading away.

Ross -- he was determined. He might be a problem. Then Paul had a thought: those failures ... what about deliberately *inducing* a failure, a delayed reaction such as the one that took

Wendy? Or like the other one, the one who died while driving somewhere? Interesting question... He turned and clicked the mouse so the chair would let him know when Carol got up.

Carol rested in silence in the chair, the rocking eventually stopping. She could see spending the night in the chair -- it could be quite nice, actually.

She moved a little. She felt confused. What had gone on? Her clothes felt wet, as if she'd been sweating. And her pants... Taking a breath, she undid the head strap and returned it to its place. She grasped the ends of the armrests and pulled herself from the chair.

She stood momentarily, then turned and leaned against the chair. She felt ... relaxed, refreshed, yet as if she'd run a long race. God, her panties and pants were soaked! She glanced around, then slid a hand into her pants, withdrawing it and bringing fingers to her nose.

Paul looked over to the display as the annunciator informed him that Carol was getting out of the chair. He had his audio cues set up and ready to go. He switched to the overhead room camera and watched her get out of the chair, a little unsteady, leaning against the chair.

He wasn't paying attention -- he missed her putting her hand into her pants, and by the time his hand was on the mouse, her hand had moved. He shook his head. He'd wait.

Carol took a whiff -- she'd been concerned she'd peed her pants. No, just her own juice, and plenty of it! She sighed; she didn't remember much about the session, just the chimes, being so relaxed, floating. It was so good!

She shook her head and walked over to pick up her clothes and things. A good shower would help.

Paul watched her pick up her things, switching cameras and following her into the shower. He smiled as she undressed -- she was in fine shape, and much better endowed than the attorney had been. He'd wait until she was in the shower to test her.

Carol put her soap and shampoo in the shower and turned on the water. She almost laughed -- the shower head delivered a full spray. No "low flow" here! She stepped in and luxuriated in the full water flow.

She'd washed and rinsed her hair, and was starting to soap her body, when she thought she heard something. A chime of some kind?

It didn't matter; her hands running over her body felt so good. She let her hands roam and soon she was moaning, her head back as one hand worked between her legs, and the other teased her breasts.

When she came, she came with a moan, her knees giving way as she slid down the side of the shower enclosure. She sat in the shower for a bit, regaining her senses, her hands continuing

to move automatically, bringing her to a second orgasm. She grabbed the hand rail and managed to pull herself up.

She giggled -- that had been good! She should do that more often. She giggled again as she rinsed away the lather she'd worked up. She was good and clean at least. She should have brought her razor so she could shave her legs.

Her head went back and she moaned again. Maybe now she could find a boyfriend. How good it would feel to have someone between her legs, someone filling her.

She shook her head and turned the water temperature to cold, squealing a little as the temperature dropped and the cold water hit her chest and belly. She turned off the water and laughed to herself as she got the towel and started drying off. She would take better care of herself on this job, she thought. She owed that to Paul. Her future was with Paul.

Paul smiled and nodded. Carol responded well, then showed remarkable self-control. The second time he'd given her the arousal stimulus, she'd doused herself with cold water! Oh, how he looked forward to tasting those perky nipples!

He got up and opened his office door, then sat back down at his desk and went back to writing. She'd stop by, he was sure of it.

Carol dressed and did her hair. She'd been thinking of cutting it, but reconsidered as she looked in the mirror. Should she ask Paul? She thought he might like it long. She felt comfortable dressed as she was, but it might be nice to wear things that showed off her figure a little more.

She gathered her things and went down to "her" office. That thought put a smile on her face. She was so lucky: finding a new job so quickly, in such a good place, and for such a wonderful person. Paul was her future -- she'd do anything for Paul.

She put her things down, then walked back to his office. She knew she would never, ever disturb him when his door was closed, but since it was open, she knocked on the door and stuck her head in.

Paul looked up, responding to the knock, and saw Carol standing in the doorway, smiling.

He stood up and waved her in. "Please come in! How are you doing?"

Carol sat down in one of the chairs. It was good to see him, to be near him. "I'm doing great!"

Paul smiled. "A good shower?"

Carol sighed. "Much better than my place -- low-flow shower heads are a real pain."

Paul nodded. "I know -- the low-flow shower head lasted about ten minutes after the building inspector signed off on the place."

Carol chuckled.

"And how was your session in the chair? Relaxing?"

Carol sighed. "God, yes... I think so, at least... I don't remember much at all, other than floating, rocking, being so safe and relaxed."

Paul smiled. "That's okay -- it means you were relaxed, which is the goal, after all. Anything else?"

Carol squirmed a bit. She knew she could tell Paul anything, she just wasn't sure how to do it. "Well, I did get a bit ... hot, it seems."

Paul glanced down at the desk. Things were indeed working well.

"Oh, I'm sorry," Carol said, "I didn't mean to embarrass you..."

Paul smiled. "That's okay. You might talk to Becky about that -- she might be able to help."

Carol tingled a little at the name. "I'm looking forward to meeting her. I think we're going to get along really well."

Paul nodded, noting the slightly spaced look on Carol's face. "I certainly hope so -- I want you to get along."

Carol sighed and nodded. "I'm sure we will."

Paul asked, "What now?"

Carol shook her head a little, clearing it. "Wow... I should get some writing done. I like your patent attorney -- he's a lot better than the fools I've been dealing with."

Paul nodded. "That's why I use him." He glanced at the clock. "Would you join me for lunch? Normally Becky arranges it, and we eat in the conference room, going out once a week or so."

Carol smiled. "Lunch is included? This is great!"

Paul laughed. "Glad you think so. Like Japanese?"

Carol nodded. "You bet. You know, I really feel my future is here."

Paul nodded. “That’s good to hear. Off to work then, we’ve an hour and a half to lunch.”

Carol stood up. “Yes, sir!” She giggled, then looked at Paul and sighed. She turned and left the room.

Carol sighed as she left the restaurant. She’d agreed to 75% of her old salary -- that was fair, with all the fringe benefits. She’d wanted more, but Paul was right. The memory of how he smiled at her sent chills down her spine. How she wanted to please him.. Her future was with him, after all. Another shiver went through her as she thought of being in that chair again. She was going to move things into the office over the weekend, before starting “for real” on Monday morning. But now, it was off to meet with the patent geek.

Paul faxed copies of Carol’s signed employment agreement to the law firm, then filed the originals. The salary thing had gone easily; she’d started out firm in her demands, but all he’d had to do was smile and whisper a simple phrase, and she’d sighed and agreed. He smiled at the memory, then frowned. There would be times when he’d want her independent input, the clash of wills. That was going to be an interesting balancing act. But aside from the detectives, things were moving along quite well once more.

Quite well indeed. Paul was impressed as he looked over the details of the new coil assemblies being sent him by the East Coast fabricator: less than half the diameter, taking a tenth of the cooling power, and the sensors built into them were of exquisite sensitivity. He’d have the first pair by the middle of the next week. Rebuild the chair? Portable operation? The computational power the chair currently used would now fit on a single chip. He looked at the guest chairs in his office. The headrests in those could easily hold the new coils. Were the sensors sensitive enough though? How would he handle positioning? Positioning was so critical -- that had been the source of some messy failures. The new sensors should let him do away with the electrode strap, but would he still need it to maintain alignment? So many questions!

Paul took out a pad of green engineering paper and started sketching out new designs. He had a while before Gina would arrive.

END of Part 4

Transitions 1

Paul woke early. He rolled out of bed, dressed quickly, and headed down to the lab. His mind was full of ideas on redoing the chair. He should be able to host everything in a single digital signal processor.

In the lab, he brought up a display and set the office systems to alert him when anyone came in. He returned to his design work.

Paul glanced up from his work in response to an alert sounding. He nodded; Carol was pulling into the parking area.

After a sequence of alerts telling him of her movement through the building, Paul reached over and told the system to alert him when she got in the chair. He smiled, betting silently to himself she'd be in the chair within twenty minutes.

Carol wiped the tears from her eyes as she sat the last box down in her new office. She wasn't sure how she was going to make it, but she knew she would -- Paul was her future, she knew that.

She'd gotten home Friday night after working late with the patent attorney. When she arrived, her roomie Patty was frantically packing stuff into boxes, bags, and suitcases.

And in spite of the talking, the begging, the hugging, the crying, Patty had taken off first thing in the morning, all her possessions loaded into her Volvo wagon. She was driving back to Carbondale to live with friends and return to grad school in the fall.

Carol had tried -- but she knew her future was with Paul, even though she wasn't sure how she was going to do it. A while after Patty left, Carol found the envelope she'd left with money for the next month's rent. Carol figured she could make the next two, maybe three months on her own, but after that...

She put things away in her new office. It was quite nice, with more room than she'd had before. She put some of the clothes she'd brought in into file drawers, hanging the rest on the back of the door -- she had an office with a door again, not a cubicle!

Carol laughed at herself as she moved things from one place in the office to another. Her car was safely parked in the garage downstairs, her things were unpacked... She knew she was stalling. She knew what she wanted to do, needed to do. She grabbed her little key case with her cardkey and headed down the hall, stopping at the restroom before heading to the chair.

The chair -- she knew it would help. She felt so tight, so wound up. Last night in bed, she imagined that magic chime sounding, melting her body and soul. She'd cried herself to sleep.

She slipped off her running shoes. She was wearing sweats today, and didn't care how hot she got. She felt her pulse race in anticipation as she waved the card key over the chair console's reader.

Her heart caught in her throat when nothing happened. She moved it over the reader again, closer and slower, her hand shaking. Her breath escaped with an audible sigh as the light turned green and the reader chirped. She slipped her key case back into her pants pocket, and got into the chair.

She relaxed a little as she fastened the headband, yet she knew she was keyed up. Oh, how she needed it now, needed to unwind... She slipped her fingers into the sensors and sighed, closing her eyes. The surf started and she took a long, deep breath, waiting for that chime. It sounded and she exhaled, releasing her breath, her tension, letting the sound carry her away.

Paul decided to use the evaluation board provided by a DSP vendor; it provided the basic support circuitry and greatly simplified his efforts. He could even build his software into the framework they provided.

He looked up when another alert sounded. He raised an eyebrow; it had taken Carol almost forty minutes to get into the chair. He set another alert for when she got out, then brought up the rec room camera and set up the audio cues he'd play through the speakers in the rec room ceiling.

When Carol woke again, she felt much better. The chair was rocking her slightly still. She felt so safe, so secure. She felt rested and full of energy.

As she got out of the chair, she didn't feel as agitated as she had the day before. She had that full-of-energy feeling, but not the hunger. She felt quite good. Her future was here, with Paul.

Paul put down his pencil as the alert sounded, letting him know Carol was getting out of the chair. He moved his hand to the mouse, positioning the cursor over a button on the screen. He watched her get out of the chair and stretch, then clicked the mouse to play her arousal stimulus through the rec room speakers. He smiled as he watched, clicking the mouse again.

Carol moved over to the futon, letting herself fall back on it. She closed her eyes, remembering the surf sounds, the sensation of rocking. One hand found its way into her sweat pants, the other found its way up her sweat shirt, loosening her bra. Soon she was crying out, eyes closed and head arched back, floating again.

When she opened her eyes and sat up, she noticed there wasn't a clock in the room. She shook her head and got up. The chair had powered itself down. She spent a few minutes looking at the cables coming out of it, and the rack of equipment supporting it. A lot of the equipment was for motion control, rocking and positioning, she guessed -- the computer part looked to be about five years old. Well, she thought, we should be able to improve things quite a bit.

As she stepped into the hallway, she patted her pocket, being sure she had her card key. That would be *very* bad form, she thought, to lose that, or lock it in the rec room. She *really* didn't want to disappoint Paul. The clock on the wall by the reception area told her she'd been in the rec room about two hours. How long in the chair, and how long on the futon, she had no idea. It didn't matter, and that was the great thing.

She got a change of clothes, showered, moved some files onto her iBook, and headed out for the day -- time for a late lunch or early dinner, and do some more writing.

Becky opened the office door, stepping inside with a sigh. She was back. Her future was here, with Paul. She, and her aunt and uncle, had gotten back from the airport only an hour or so earlier. As they unpacked, she told them she needed to check on the office -- she was worried about Paul being alone for a week, and what trouble he could cause.

But things didn't look so bad. The mail was more-or-less sorted into stacks. She redid those and took care of some things. As she reached for the power button on her computer, she paused, looked down the hall, and sighed. E-mail and schedules could wait.

The chair -- she needed the chair. She missed the chair. Especially after that miserable cross-country flight, after her dad's funeral, after all of it, she needed the chair.

She went to the rec room and waved her card key at the chair console. It gave her a beep and a green light. She slipped off her shoes, and then with a grin stripped down to her panties and bra, and made herself comfortable in the chair.

Had it only been a week she'd been gone? It felt like it had been so much longer. Oh, it felt so good to be back. She deliberately held the fingers of her left hand out of the sensors for a moment, feeling the chair supporting her body.

Then with a sigh, she closed her eyes and jammed her fingers into the sensors. She almost moaned as the chair started reclining back. She let go, relaxing and waiting for the chime...

Paul cleaned up after his lunch, putting the two bottles of Sake, gifts from the Sony people, in his kitchen cupboard. The Giants baseball game last night with them had been good -- an opportunity to develop important contacts. At least the Japanese part of the company was going to license his technology. He anticipated a trip to Japan in five or six weeks. He felt the rumbling in his loins; Carol should be quite well trained by then. That was a big challenge with her program, another difference between her and Becky and Gina -- he couldn't do anything to dull her intellect, her creativity. Hmmm... If anything, he needed to bring those qualities out, make them more accessible.

As he was practicing the piano a while later, the annunciators let him know Becky had entered the building. He paused momentarily, then returned to Mendelssohn's *Rondo Capriccioso*.

Another annunciator sounded later, informing him she'd activated the chair. He glanced at the clock -- he could practice another forty-five minutes before heading downstairs.

As his practice time drew to a close, Paul got up from the piano, straightening out his music. He visited his bathroom, washed his hands and face, and ran the shaver over his face. He headed downstairs after putting on some after-shave.

In the rec room, he could smell her. He brought up the chair displays -- she had six minutes to go. He smiled -- she'd had a very, very good ride. This should be quite good.

He pulled out the futon, took off his clothes, and sat down to wait.

Becky opened her eyes and laughed softly. She was home. She felt great. She left her hands where they were -- she knew the chair would rock her for another few minutes, so she closed her eyes. She wiggled her bottom a bit, feeling the dampness. She'd have to change the cover on the cushion soon. Oh, but that had been good! It was so good to be back where she belonged!

The lights were off in the room as she got out of the chair. She turned in the early afternoon light.

She saw her Paul sitting naked on the futon. She whimpered, undoing her bra and letting it fall to the floor. She slipped off her panties as she walked dreamily over to the futon, pushing him to his back, sliding her body over his, closing her eyes and taking in the sensation, his scent.

Paul smiled at the noise she made, relaxing back as she adored him. Gradually he rolled her to her back and plunged into her.

The effect on her was immediate and intense. Her head arched back and she started to moan and quiver as he slid in and out of her, taking his pleasure.

He looked down on her with an animal grin, watching and feeling her body under his. He felt orgasm approaching, and gripped her shoulders tightly.

She moaned and thrashed as he pumped into her, and then with a guttural noise and a twitching shudder, she went limp.

Paul moved his hips slowly, savoring the sensation. He squeezed one of her breasts, causing her to moan and her head to move slightly. He lifted one of her eyelids, and watched her eye move jerkily for a few seconds, then roll up.

He thrust his hips into her again, moving and savoring. It was good to have her back.

An interesting side effect, he thought as he got up. She'd had mild seizures as the result of an early experiment with the chair years ago. The effects only seemed noticeable during sex

Control Loop Stability

right after she got out of the chair. More to think about... He picked up his clothes and left the room.

Becky found herself in the shower. She held the handrail for a moment, feeling a little light headed. She stuck her face into the spray. It was great to be back!

New Development

Paul wore a dark suit to the memorial service for Miss MacDonald. He met the grieving parents and a sister. He nodded to Detective Hastings, but didn't see Ross. Most of the partners from the law firm were in attendance, along with attorneys and support staff. Paul sat next to Weiss, the partner he usually worked with. The service got underway.

An interminable time later, Paul filed out slowly with the others, milling around as was called for socially, exchanging appropriate phrases.

"Mister Walters," said one of the other senior attorneys, "Would you be able to join us for lunch?"

Paul noticed Detective Hastings within earshot. "Yes, thank you," he said, walking off with the attorneys.

Paul sat at a table with three senior members of the law firm. Weiss turned to him and asked, "How is our Mr. Marsh doing for you?"

Paul considered, sipping his iced tea. "He seems eager enough, and competent..."

"But..." one of the other partners said.

Paul smiled and nodded. "Yes... Let me put it this way... If you had to spend an afternoon working with someone, would you rather spend it with Mr. Marsh, or someone else, such as, say, Miss Cathcart?" Paul had been close to getting her into his chair when she resigned from the firm and went to work for the District Attorney's office. She had been quite attractive.

One of the other partners nodded and smiled. "Indeed..."

Weiss asked, "Do you have a suggestion, Paul?"

Paul sat back a bit. "Yes, I do. When I look at my business, and where I expect to be in two years, I can justify a full-time attorney in-house. I want to pick someone from your staff, a second-year associate say, and funnel all my work through her. She won't be capable of handling it all, especially at the start, and especially in specialty areas. I expect her to work with others in your firm. But she would be my primary contact. In a year and a half to two years, when I'm ready to bring her on board, she would have developed the requisite skills."

The other men at the table nodded. One of them raised an eyebrow. Weiss looked to him and asked, "Carl, you have a suggestion?"

Carl said, "Miss Pomeroy, Laura Pomeroy."

One of the other men nodded and added, "I have to agree. She's top notch, but the, ah, political reality is that she'll never make partner at our firm. I think this would be a superb opportunity for us all."

The others murmured their agreement.

Weiss said, "We can go back to the office and you can meet her this afternoon. We can start her on your work, and if she performs acceptably over the next few weeks, your decision of course, we can approach her with the arrangement. Satisfactory?"

Paul nodded. "Quite."

Paul got out of his elevator and walked to the office door a little before two. Miss Pomeroy was quite a catch -- a dark-skinned beauty. She seemed quite eager, quite eager indeed.

He chuckled to himself; "political reality" indeed -- those bastards wouldn't allow a black woman to make partner at their firm. But he knew how to make use of her talents -- all of them.

Becky was at her desk when he walked in. It was good to have her back.

"Good afternoon, Mister Walters," she said with a smile.

Paul nodded, stepping to her desk. She hadn't called him "Master," which meant someone else was in the office -- probably Carol.

"It's good to have you back, Becky. Anything for me?"

She handed him a few message slips. "Nothing urgent. The Texas Instruments people called to reconfirm their presentation here tomorrow afternoon."

Paul looked at the slips. "Good." He looked at Betty again. Miss Pomeroy and her well endowed bustline were affecting him. "I may need you later on, Becky. Will you be ready for me?"

Becky's face smoothed. She sighed and smiled. "Oh yes, I'll be ready," she whispered.

Paul nodded, noting the blush spreading up her neck. Her conditioning was very much intact.

"Very well. Back to work!"

Becky blinked, looking alert again.

Paul smiled and went back to his office.

Becky blinked, feeling a little flushed, as she watched Paul walk away from her desk. It was so good to be back.

Carol's office door was open. Paul stepped in. She was wearing headphones, typing and concentrating on her computer. She looked up, smiled, and took off her headphones.

"Hello!" she said with a smile.

Paul nodded. "Have a few minutes?"

Carol nodded. "Of course!" She stood, and followed Paul next door to his office.

Paul ushered her in, closing the door behind her, then sitting behind his desk.

"I take it you've met Becky," he said as he brought up his computer.

Carol smiled and sighed. "Oh yes -- she's such a help. It's almost like having an older sister working here. She showed me around, helped me move clothes into a closet. She also told me you live upstairs here."

Paul brought up one of his sound control panels as he nodded. "Yes, I do," he said as he positioned the mouse. He looked up at Carol as he clicked the mouse.

A chime sounded softly in the room. Carol's face went blank and her eyes drifted closed as she fell into trance.

"Carol, do you like Becky?" he asked.

"Oh yes, Master," Carol replied.

Paul's smile broadened. Her conditioning was going quite well.

"Good. It's important to me that you get along. Will you do that for me?"

Carol sighed, "Oh yes, Master!"

"Drift deeper for me now," Paul said, clicking the mouse button once more.

He connected to the file server and moved files to a new project folder, giving Carol access.

"Carol, I have a project I want you to work on for me. You're going to move some code to a new DSP for me. It's an important project, and a very confidential project. Do you understand?"

"Yes, Master," she said softly.

Paul nodded, sending an e-mail to her computer pointing to the project folder.

“If you think of better ways to do things, or don’t understand some things, you should ask me. Do you understand?”

“Yes, Master.”

Paul smiled. He closed one window and went back to the sound control window.

“Good, Carol. That makes me very happy.”

She moaned slightly, her head going back, leaning against the chair’s headrest.

He clicked the mouse. As another chime sounded in the room, he said, “Come for me, Carol.”

Paul watched with satisfaction as Carol moaned and writhed in the chair.

Carol blinked, looking around. Had she spaced out or something? She looked at Paul, who was smiling at her. His smile sent warm feelings through her. She shook her head slowly, sighing.

“Any questions?” he asked.

Carol said, “I’m so lucky. Can’t think of any right now.”

She stood up and let herself out of Paul’s office. She started walking to hers, but decided to go to the ladies’ room first -- some times being in the same room with him made her wet.

Paul handled some business matters, but his mind kept drifting. He sighed and picked up the phone, pressing the button for Becky.

“I need you,” he said into the phone, then hung up.

Becky stepped into his office a few minutes later, closing the door behind her.

“You wanted to see me?” she said.

Paul nodded, waving to a chair. “Yes, have a seat.”

As Becky sat down, Paul asked, “What do you think of Carol?”

Becky smiled, adjusting her skirt. “She’s so smart! But it’s also like having a little sister again, with so many things to show her.”

Paul nodded. “You’ll take good care of her, then?”

Becky said, “Oh yes, I’m taking very good care of her.”

“That makes me very happy, Becky,” Paul said with a smile bordering on a leer.

Becky sighed, almost moaned as the phrase sent a jolt of pleasure through her.

Paul reached over to the mouse and clicked it. A chime sounded in the room.

“I need you, Becky,” he said.

Becky moaned and stood up, her eyes glassy, her face relaxing into a blissful smile.

As Paul stood and dropped his pants, Becky stepped around to his side of the desk. She pulled up her long skirt and bent over, putting her elbows on the desk. She’d taken off her panties already, in response to his earlier commands.

Paul stepped up to her, running his hands over her broad behind, sliding them up her back and down her sides to cup her breasts. She moaned as he squeezed her, and that put more fire into him.

He slid into her easily; she was already wet. Becky moaned as he slid in and out of her, holding on to her small breasts. After a while, he closed his eyes; his mind filled with images of breasts, Carol’s in the shower the other day, Laura Pomeroy’s bouncing as she laughed. With the image of those breasts and her full lips filling his mind, Paul thrust in strongly, coming with a sudden intensity.

Paul held on, his knees wobbling. He collapsed forward onto Becky, feeling her breathing rapidly underneath him. For a moment, he imagined Carol, or Laura on top of him, holding him to a full, warm breast, holding him ... he breathed in sharply and straightened up, sudden feelings of aversion filling him, aversion to being held close.

He felt himself slipping, and pushed against Becky.

“Clean us up, Becky,” he said.

Becky raised her head a little, and reached for the box of tissues on her Master’s desk. Placing a couple between her legs, they pulled apart. She cleaned up her Master and pulled up his shorts and pants, helping him sit down.

Becky smiled and sighed as she sat at her desk, seeing Paul walk to the Men’s room. It was so good to be back where she belonged.

“Good! I’m glad I caught you! Do you have time for some questions?” Carol asked, catching Paul in the lab later in the afternoon.

Paul looked up from the cable assembly he'd just completed.

"Oh, is this the demo board?" Carol asked, stepping over to him.

"Yes, it is. I just finished the third of five interface cables," he said in a somewhat irritated voice.

Carol nodded, smiling. "I'll probably have some code for you tomorrow night or Wednesday."

Paul raised an eyebrow. "So soon?"

Carol pulled up a chair. "Moving those sections was easy, even with the compiler we've got. I'd guess the new DSP gives us a factor of 40 performance increase, at least, without any tweaks to the code."

Paul nodded, reconsidering. "That sounds good. What don't you understand?"

Carol spread out some papers on the workbench. "I'm not sure what's going on here," she said, tapping on a section of code. "You're looking at sensor inputs, tweaking positioners until you see a specific waveform, then triggering pulse generators. What's going on? I need a bigger picture -- it feels like it can be done differently."

Paul nodded. He started explaining the code, in a somewhat oblique manner.

Over the next half hour, he went into greater detail, surprised and impressed with Carol's ability to take it all in.

At one point he went to a cabinet and took out one of his prized tools, the field sensor he'd used in developing the coil systems used in the chair.

He held it in one hand, a sphere about half an inch in diameter on the end of a ten inch or so rod, the other end of the rod going into a small metal box a couple of inches on a side, with a switch and three light emitting diodes.

"The probe end," Paul said, "has both sense and generating coils. The generating coils, driven by the drivers in the controller, produce the same waveform we're looking for. It also has two sets of sense coils -- one covering a small target area, the other with broader coverage. The trick is to only stimulate the inner coils, not the broad ones."

Carol smiled and nodded. "Okay, I think I've got it. First step, though, is to just move things as-is. Once we have something working, then we can optimize it."

Paul raised an eyebrow. "But you've got ideas on how to improve things?"

Carol nodded again. “Oh, yeah -- but it’s always better to get something working before you work on making it better.”

Paul was impressed. “Very true -- one step at a time, and replicating functionality is the first step. It should take me about half an hour to complete the rest of the cables.”

“Okay -- I’ll get back to work on the code.”

They ran the new board and code in a simulator Wednesday morning. After identifying one timing glitch, the new board performed flawlessly.

Paul looked at the simulator display. “Very impressive, Carol -- how much of the CPU are we using?”

Carol looked over at a monitor screen. “About eight percent, which gives us plenty of cycles for the rest of the code I did.”

“And what does that code do?” Paul asked.

Carol smiled. “I need to work with actual parts. When are they supposed to get here?”

“I think I’ve got a FedEx tracking number downstairs.” He looked to a clock. “It’s about lunch time anyway. Shall we go downstairs and see what Becky has arranged for us?”

Carol shut down the simulator. She carefully touched the heat sink on the DSP. “Not even warm. Let’s go.”

As they walked to the lab door, Carol took Paul’s arm in hers. “This is so much fun!” she said.

Paul wasn’t sure what he felt -- her contact raised conflicting feelings. Still, it would only be a day or so. “Happy to be here?” he asked as they went down the stairs.

Carol paused on the stairs, looking Paul in the eyes. She sighed, “My future is here, with you.” She closed her eyes slightly and moved a little closer to him.

And was surprised and disappointed when he pulled away and continued down the stairs.

Her spirits improved later that afternoon when they went back up to the lab with a package containing a pair of the new transducers. Still, she had the feeling Paul was distant.

Paul got up early Thursday morning. With a smile, he checked the office systems to see how late Carol had been up. He’d worked with her in the lab until about nine the night before, hooking up the new transducers and checking out basic operation. They were breathtaking in comparison to the old ones -- so much smaller, more efficient, and more powerful.

He chuckled a little. The lights in the lab hadn't gone off until almost three in the morning. On a hunch, he brought up the rec room camera. Carol was on the futon asleep. Hmmm -- Becky was in the chair. He knew Becky had been coming in early, going right to the chair. Carol came in a while later, using the chair. Both women were at their desks by the time he came down to the office around a quarter to nine. He chuckled again -- it made for an efficient office.

He left that camera up on his display as he puttered; Becky was almost at the end of her session. He watched as Becky got out of the chair and stretched. He smiled as he watched her help Carol into the chair. His programming of the two women to treat each other as sisters was working out quite well.

Becky got out of the chair. Poor Carol -- Becky found her naked and asleep on the futon, the comforter wrapped all around her, when she came in. She helped the poor dear to the chair, waving Carol's card key over the chair's reader. Once things started up, Becky got her things and went off to shower. Checking the chair's timer, she had half an hour.

Carol woke partially to Becky helping her get into the chair. She'd slept fitfully on the futon, design details still running through her mind. She settled in, moaning as the chair started rocking her gently. She moaned in anticipation, waiting for the chime, waiting for it to take her away.

Becky reentered the rec room a couple of minutes before Carol's session completed. She sat on the edge of the futon and waited.

Upstairs eating breakfast, Paul put down his spoon and stared at the monitor in front of him. What the hell was going on? It took him a moment to figure out why the way Becky was sitting on the futon looked so familiar. Then it hit him -- that's how *he* sat on the futon when he was waiting for *her*.

As the footrest pulled back and the chair righted itself, Becky stood and stepped closer to the chair.

Carol moved her feet and hands, stretching as the chair helped her sit up. She felt so invigorated, so alive.

Paul reached over the monitor and turned up the sound all the way. He stopped chewing, watching and listening.

As Carol stepped from the chair, Becky smiled and reached out for her. Becky slid one hand behind Carol's head and the other hand to one of Carol's breasts as she said, "Relax -- deep trance for me."

Paul watched astounded as Becky led Carol back to the futon, repeating what he'd done to her countless times.

Carol was floating in her wonderful dreamworld again, floating onto her back, feeling passions flaring up yearning for release.

Becky took Carol to the futon and after easing her to her back, started speaking softly as she stroked Carol's body.

Paul nodded, watching intently, recognizing now the pattern Gina used with Becky as she ended up her Friday massage. How had Becky recalled all that? He frowned. Had she consciously recalled that? Somehow, he didn't think so.

Becky was half in a dreamworld as well as she brought Carol to a crashing orgasm. She loved Carol so much. It was so nice to have someone to take care of. She was so looking forward to moving in with her.

Paul watched as Carol climaxed. He watched as Becky took her deeper into trance, giving Carol the same instructions Gina had given Becky every week for so, so, long. Somehow he didn't think Gina suckled at Becky's breasts the way Becky did with Carol, though.

Becky covered Carol with the comforter, kissed the dear girl on the forehead, and left the rec room. She was so smart, but she needed so much help, and Becky was glad she was there.

Carol woke, feeling wonderful. She stretched, gathered her clothes, and headed to the shower to clean up.

Paul picked up his toast. It was cold. He frowned, then smiled. Always unintended consequences -- complex systems could demonstrate such interesting behavior. He quickly cleaned up the kitchen and headed downstairs.

Walking to Becky's desk, he said, "Becky, could you join me in my office, please?"

Seeing her smile and start to stand, he turned and walked back down the hallway.

In his office, he turned away from the window as he heard his door closing.

He turned in time to see the last of Becky's clothes hit the floor.

"I need you, Master," she pleaded.

Paul stepped to her, dropping his pants and briefs. Together they almost tore off his shirt. He took her on her back on the floor. She shook as he slid into her, and he came quickly and intensely.

Paul was shaken at how intense that had been, and how quick. He got up, scooping up his clothes and stepping to his desk, leaving Becky moaning slightly on the floor. He reached for the mouse, his hand shaking a little. "Deep trance, Becky," he said, clicking the mouse to play her trance cue.

After watching Becky sink into trance, he dressed and started questioning her on what he'd witnessed in the rec room. He was intrigued to learn she'd been "helping" Carol in that way since Monday morning. He was pretty sure neither Carol nor Becky were consciously aware of it, though. His early experiments involving Becky seemed to have produced a "leak" between her conscious and unconscious...

With a sigh he had her dress, and sent her away. She'd stop and clean up in the washroom, then waken on the way back to her desk.

Paul pondered for a moment, looking out the window. His programming had worked very well. When would he get the results from Carol's medical? Her conditioning was pretty much complete.

But of more importance, if the new coils and the new driver board were indeed ready, how was he going to test them? Who? Not Carol, and not Becky -- the risks of failure were too great. Hmmm... He was sure an opportunity would present itself.

He turned to the computer and flicked through monitor cameras. Becky was at her desk. The rec room was empty, as was the bathroom. Ah -- Carol was in the lab, working away.

He pushed the intercom button on the phone. "Becky, I'll be up in the lab with Carol."

"Thanks. I'll call you for lunch," she replied with a laugh.

Tests

Paul headed upstairs to the lab.

But when he stuck his head in the door, Carol turned to him and called out, “Not yet! I need another hour! I’ll call you!” She waved him away with her arms.

Paul smiled. “Okay, I’ll be in my office.”

Paul headed back downstairs.

Carol called him on the intercom about an hour and a half later. “Ready, if you have the time,” she said.

Paul headed back upstairs.

Last night they’d mounted the transducers in a headrest containing a pair of high quality electrostatic speakers. The DSP board and the drivers were piggybacked on the enclosure containing the speaker electronics.

Carol was sitting in one of the lab chairs, smiling and sipping on a can of Dr. Pepper.

“Well?” Paul asked.

“Have a seat,” Carol said, waving him to another lab chair.

Paul sat down.

Carol stretched as she stood. She picked up the little probe and turned on the power. She hit a couple of keys on the keyboard connected to the DSP.

“Okay, here’s the old code. Constraint-based, you watched for a particular signature before you started pulse generation. Driving the coils in quadrature gives you some steering ability.”

She moved the probe between the transducers, slowing as she got to a particular area. A sensor on the DSP board chirped, and the green LED on the probe started flashing.

“Okay, the old code sensed lock and started pulse generation. But if I move it slightly...”

She moved the probe a fraction of an inch, and the green light on the probe went out.

“Here’s an intermediate level of the code, using the steering ability of the transducers. We still have lock criticality, but once we’ve gotten that, we have more leeway.”

She tapped a few keys on the keyboard, then moved the sensor back to the sweet spot. The DSP started making a tone as the green LED on the probe started blinking.

“I can move the probe within a sphere about two inches in diameter and still maintain lock.” She moved the probe around. The green light stayed on.

“Now let’s look at the new code. It’s a motion estimation approach, so the lock characteristics are much more dynamic. This is fun. Watch.”

She tapped a few more keys on the keyboard, then turned once again to the transducers mounted in the headrest. She had the probe hanging from a loop of string. She held it about six inches away from what had been the sweet spot and let the probe swing.

As the probe swung back and forth, it passed through the sweet spot. The DSP chirped and the green LED on the probe lit up.

“That’s the beauty of motion estimation. The code detects when we’re moving into or out of the area we can cover with the coils. I made some guesses on maximum velocities and accelerations. We can refine those later.”

Carol put the probe down on the workbench. “Oh, and we’re up to 28 percent CPU utilization now.”

Paul stood up and smiled. “I’m very impressed.” He thought for a minute. He’d given her the relaxation signal and pulses to work with. “How long does it take to switch sense and generated waveforms?”

Carol shrugged her shoulders. “Milliseconds. I built the tracker as a synthesized four-channel receiver, so we can look for four waveforms in parallel, and lock and generate whichever we want. The generator only handles one waveform at a time of course, so you prioritize the sense waveforms.”

Paul smiled and held out his arms. Carol moved closer.

“You make me very happy,” he whispered as he held her.

Carol shuddered in his arms as pleasure coursed through her.

Paul felt his hunger for her grow. This was so much better than he’d hoped for. He knew what the first three waveforms would be -- trance, relaxation, arousal. That left the fourth one open. He knew what it would be. He’d have to dig into an archive file for that one.

He gave Carol another squeeze. She moaned softly.

“Awake and alert again,” he whispered, letting go of her and stepping back.

Carol shook her head a little and blinked. She took a deep breath, looking at Paul.

“I’ll send you four sets of waveforms. How about that?”

Carol sighed. “Easy. We’ve got plenty of room left.”

“Okay. I’ll go get the files and send them up. Good work, Carol.”

She sighed as he touched her arm.

The first three waveforms were easy. Paul had to go through a number of 3-ring binders before he found the fourth one. He pulled out a CDROM, dumped files from it into a directory on the server, gave Carol access, and sent her an e-mail with the pathname.

He was about to head back upstairs when Becky called him. Yes, he had time to speak with a client.

When he walked back into the lab half an hour later, his heart caught in his throat as he walked in the door.

Carol was sitting in one of the lab chairs, working at one of the lab computers, the transducer assembly raised up near her head.

As Paul approached, he could hear music coming from the transducer assembly.

“Oh, hi -- I got the files and was integrating them in,” Carol said with a smile.

Paul was relieved to see that the power supplies for the coils and their chillers were turned off. Still -- if she’d triggered that fourth waveform...

Still looking at the display screen, she said, “The first three waveforms are really close to each other -- almost spatially shifted. The fourth one is quite a bit different. So I went back to the same kind of selector scheme you used in the earlier code -- I understand why now. For now, they’re hooked to these four switches. I also added in the audio generation. These are great little speakers!”

Paul forced a smile. “Yes, they are. Show me what you’ve done.”

They spent some time going over the code, making some revisions. Paul was listening to Carol explain how she’d implemented one section when they were interrupted by the intercom.

“Mister Walters?” came Becky’s voice from the speaker.

Paul frowned and went to the phone. She wouldn’t use that tone of voice unless something was the matter.

“What is it, Becky?” he answered.

“Mister Walters, there are two policemen here, named Hastings and Ross. They are asking a lot of questions, and would like to speak with you.”

Paul’s initial frown turned into a smile. “It’s okay, Becky. I’ll send Carol down to get them. Once they’ve left the area I want you to write down what they asked you, as best you can, okay?”

“I understand, Mister Walters. Most of their questions I can’t answer anyway.”

“That’s okay, Becky. Do your best. Carol will be right down.”

Paul hung up the phone. Carol was standing near him.

“What’s happening?” she asked, concern in her voice and showing on her face.

“Carol, there are two policemen downstairs. I’d like you to go down and show them up here to the lab. Okay? I’ll explain more later. If they have questions for you, you can either answer them as best you can, or if you’re not comfortable, tell them so. Don’t let them push you around, okay?”

Carol looked concerned and a little confused. “Okay, I guess. I’ll go get them.”

She headed out the lab door.

As soon as she was out the door, Paul flipped on power to the coils and their transducers and activated the tracking software. He selected the first trigger, relaxation. Then he selected the fourth one, the one he’d abandoned as a dead end.

Years ago, in his early researches, it seemed to be a promising avenue -- he’d identified the areas of the brain to stimulate for relaxation, inducing trance, inducing arousal. He thought he’d identified an area that when stimulated would release inhibitions. It was deep in the old reptile brain, and he was sure it would elicit a strong response. In a sense he was right, except that it released deep-seated inhibitions leading to extremely violent behavior. The behavior came in cycles, starting with a brief period of half an hour or so, followed by hours of tranquility, then a longer agitated period followed by a shorter tranquil period, with the agitation becoming more frequent and severe. After two deaths, he abandoned that approach.

But now it might be quite useful. His smile turned almost to a sneer. He glanced at the debugging screen; the coils would be chilled to operating temperature in less than a minute.

He turned to the other computer and brought up a group of demonstration files. He hoped the two officers would enjoy the show. How nice of them to volunteer to help check out the new system.

He heard them approaching. Carol opened the door and stepped in, followed by the two police.

“Paul,” she said, concern evident in her voice.

He smiled. This was going to be fun. “Carol, thank you. Why don’t you go back downstairs. We’ll be down after a while.”

Hastings turned to her with a smile and said, “Thank you for your help.”

Ross had a critical look on his face and nodded curtly.

Hastings turned to Paul. “Thank you for your time, Doctor, I mean Mister Walters.”

“What can I do for you today, gentlemen?” Paul said calmly, not rising to the bait.

Hastings shook his head, glanced at his partner for a moment, then said, “My partner still has a few questions. I think we’ve just about concluded this investigation. It’s still confidential, but the bus driver has admitted to driving too fast for conditions, and to being distracted by riders on the bus.”

Paul nodded. “Thank you. I appreciate the information, and will keep it confidential.”

Paul turned to Ross, who was obviously unconvinced. That could change.

“Well, Detective Ross, what can I do for you?”

“Do you do any medical work here?” Ross asked sharply.

Paul was surprised, but then thought he understood where Ross was going with the question.

“No, I don’t, but I’m not sure I understand your question.”

Ross fired back, “When I look at your background, you’ve done a lot of work, brain work, a lot of it quite invasive.”

Paul nodded. “I did some neurobiology work early in my grad school days, yes, but my work has turned to psychoacoustics for the last dozen years or more.”

“And just what is that work?” Ross demanded.

Paul could smile again. “Are either of you familiar with the term watermarking?”

Ross frowned. Hastings tilted his head a bit, as if considering, then answered, “It’s a technique used to authenticate paper money.”

Paul nodded. “Yes, a way of indicating or authenticating the source, such as in bank notes, stocks, and so on. My work is in developing similar techniques for music and sound. Mister Ross, have you heard of Napster?”

Ross nodded. “The music thing on the net, yeah. What’s that got to do with it?”

“Ah, everything, especially if you’re a music studio, and you want consumers buying your product rather than stealing it. I develop techniques for watermarking music -- adding an authenticator that studios can analyze and trace.”

“Why?” Hastings asked.

Paul nodded. “If you’re a studio, or a distributor, how do you tell which of the zillions of files out there on the internet are yours?”

Hastings nodded. “Look for the watermark?”

“Exactly -- and one of the advantages of a watermark is that a computer can recognize it, if it’s done properly of course, so a human doesn’t have to actually listen to the file. So computers can search and examine thousands of music files per minute.”

Paul turned to Ross. “But where does that tie into psychoacoustics, eh Mister Ross? Would one of you like to have a seat? I can give you a demonstration.” Paul motioned to the chair with the transducers mounted at head level.

Hastings looked to Ross, then sat in the chair.

“Thank you, sir,” Paul said.

“The trick in watermarking music, just as in watermarking paper, is to produce a mark that can be identified when you look for it, but which otherwise isn’t visible, or audible. You don’t want people to be able to tell the difference between watermarked and non-watermarked music.”

Paul put a finger on the relaxation trigger switch, then clicked the mouse button. Music started playing through the speakers.

“You’ll hear the same sequence played a number of times. I selected a somewhat relaxing piece for you, Detective. See if you can hear the difference. You might want to move your head around a little.”

Paul clicked the switch. He watched Hastings, also watching a light emitting diode on the DSP at the same time. Ross was standing a little in front of the board, and couldn’t see it.

Hastings moved his head slightly. Paul saw a green light flash once on the DSP board. Hastings sighed a little. With the second flash, some of the lines had melted from his face, and his shoulders seemed to drop a bit. Paul clicked the switch off -- it worked!

“Hear any difference?” Paul asked.

Hastings was smiling. “Not a damn bit, but I could sit here for quite a while trying.”

Paul chuckled. Ross still looked to be carved out of stone.

“The study of psychoacoustics lets us understand what the human ear can and cannot hear. I can produce watermarks which computers can spot, but people cannot. Let’s try one where there is an audible difference. Like to try, Mister Ross?”

Hastings stood up, smiling and shaking his head. “Those little things are about the best I’ve ever heard. Who makes them?”

Paul chuckled again. “A company called B & K in the Netherlands. They’re not too common, but they work extremely well. Mister Ross? Like to take a seat?”

Ross nodded through a hostile glare and sat down.

Paul clicked another selection, but didn’t start it playing. He stepped to the chair and loosened the adjustment on the transducer pole.

“Let’s raise this a little so you can get the most out of it,” Paul told Ross.

Stepping back to the keyboard and control switches, Paul placed his fingers on switches one and four.

“You’ll hear a selection from a Euro-pop tune; you might recognize it. As it repeats, listen for differences around the low bass notes. Compare what they sound like from one version to the other. Ready?”

Ross nodded tersely.

Paul clicked the mouse and threw switch four.

Ross tilted his head a little, listening intently.

The green LED flashed; Ross seemed to grimace.

Paul switched four off and one on. The green LED flashed and Ross seemed to relax a bit.

Paul switched one off and four on. Another flash. Reverse the switches. Another flash. Reverse. Flash. Reverse. Flash. Reverse. Flash. Reverse to one. Flash. Flash. Flash. One off.

“Hear the difference?” Paul asked.

Ross turned his head quickly. Paul almost hit switch one again, the look on Ross’s face was so ... animal.

But Ross took a breath and said, “Yes, the low bass notes seemed to wobble. It sounded strange.”

Paul nodded. “And that’s what tens of thousands of customers thought. Luckily, that was a competitor’s product.” He clicked the mouse, ending the demo. He powered off the system, coil support first.

Ross stood up from the chair. Paul thought he looked a bit different, a bit more on edge perhaps. Throwing in the relaxation pulses had been the right thing to do.

“If you have more questions, we could go downstairs,” Paul suggested.

Ross almost snarled. “Yes.”

Hastings gave a surprised look at his partner. He looked to Paul and said, “We’ll only be a few minutes.”

Paul said, “Follow me then -- we’ll use the conference room.”

Going down the stairs, Paul asked, “Would either of you like something to drink? Coffee? Soft drink?”

Hastings said, “A Pepsi would be great, if it’s no trouble.”

“Not at all. Mister Ross?”

Ross growled, then said, “Yeah. Pepsi.”

Paul showed the two into the conference room. Becky gave him a questioning look.

Paul smiled. “Becky, Pepsis for the officers, and a Sprite for me please?”

Becky stood with a sigh and smiled a little. “Right away.”

As he walked into the conference room, Hastings was talking to Ross, in hushed but not friendly tones.

“I’ll give you a minute if you’d like,” Paul said from the doorway.

Hastings gave Ross a very cross look, then said, “No, that won’t be necessary.”

As Paul was sitting down, Becky brought in their drinks.

Paul picked up a notepad and a pen. “Very well, where should we start.”

Ross took out his pad, opened it up and said, “I want...”

Hastings interrupted him, placing a hand on Ross’s arm and taking his pad and pen from him.

“We’d like to know more about Miss MacDonald’s visits to your office over the last month or so.”

Paul wrote down the question, then looked up. “She visited me on business. Details are a matter of attorney-client privilege.”

Ross bristled at the answer.

Hastings merely nodded, adding, “We’re not interested in any details, merely dates and durations.”

Paul wrote that down after sketching out his response to the first question. “I’ll see what I can do about that.”

“Access records,” Ross practically barked out.

Paul wrote that down and looked up, not responding.

Hastings explained. “We’ve noticed your extensive security system. We’d be interested in logs corresponding to Miss MacDonald’s visits. The same goes for phone logs. No content, of course, just times and durations.”

Paul wrote down the question, then capped his pen and folded his hands on the desk.

“Gentlemen. On the security system, Miss MacDonald did not have card-key access to the building. Second, the security system only keeps information on the last four days. No permanent records are kept of that activity.”

“Why are all your employees women?” Ross demanded.

As Hastings put a hand on Ross’s arm again, Paul uncapped his pen and wrote down the question.

“My two full-time employees are women, Mister Ross, but most of my part-time employees are men.”

Ross said, “I want...”

Hastings gripped Ross’s arm. Ross shut up.

Paul allowed himself a tight smile.

“Gentlemen, I think it’s time to end this. If you have any further questions for me, or any of my employees, you will deliver those questions to me in writing, and my attorneys and I will consider how or if we will respond to them. I will be speaking to my attorneys as soon as you leave here, which will be momentarily. I suggest you do the same. Good day, gentlemen.”

Paul stood up.

Ross stood quickly, startling Paul and Hastings. Hastings grabbed Ross by the shoulder, as Ross seemed as if he was going to leap over the table.

“Thank you for your time, Mister Walters,” Hastings said, almost using a restraint hold on his partner.

Paul maintained a good distance as he showed them out the door.

When the door closed, Paul called to Becky, “Get Laura on the phone for me -- I’ll be in my office.”

Paul sensed Carol coming out of her office, but he closed his office door quickly.

His hands were shaking slightly as he stepped to his desk. It worked! Oh, how it worked! He glanced at his watch. If it followed past history, Ross would be calm and collected again in another few minutes. And Hastings had been so relaxed! It worked!

“Your attorney on line two,” came Becky’s voice through the intercom.

Paul picked up the phone and filled Miss Pomeroy in on what had happened. He learned that they had visited the law firm asking similar questions and were politely told to piss off unless they had a subpoena. Yes, they’d asked his employees questions as well. What had they asked?

Paul put Laura on hold and called Carol and Becky into his office, then switching to the speakerphone.

The two women looked concerned. On the other end of the phone, Laura brought in an attorney with criminal law experience. Together they reviewed what had happened. They agreed that any further questions would be handled by the attorneys.

Paul clicked off the phone, looking at the two women. With a click of the mouse on his computer, the sound of a chime filled the room. Both women sighed, their eyes closing. The chime sounded again.

Paul told them that everything was under control, and they didn't need to worry. They didn't have to answer any more questions to the police unless he told them they should. It was all an unfortunate incident, and it was over. Then he woke them

As they blinked their eyes, Paul asked, "Any questions? I think we're through that."

Both women were now smiling.

"I'm glad it's over," Carol said.

"Me too," Becky added with a sigh.

Paul nodded. "Now we can get back to work. Tomorrow is Friday."

Becky rolled her shoulders. "Oh, I need Gina! Those guys were creepy!"

Carol smiled. "I'm looking forward to it as well, from all Becky has told me. Can I get back to work upstairs?"

Paul stood. "Sure. Let's go. But no late night for you tonight!"

Carol and Becky both laughed.

"Not tonight -- I've got other things to do," Carol answered.

Paul and Carol worked in the lab for another hour or so, until Becky came up.

"Is it time already?" Carol asked.

Becky said, "Your plan. I can hardly wait."

Paul looked up from the DSP board, glancing at Becky, then Carol.

Carol smiled. "I've solved my roomie problem -- Becky is moving in with me. Her aunt and uncle are helping us move stuff tonight."

Becky chimed in. "That makes room for my mom to come out from back East. My aunt is flying back next week to help."

Paul nodded. "I'm glad you've both managed to work things out."

Becky and Carol looked at each other, smiling.

“Our future is here, that’s the best part,” Carol said with a sigh.

“Let’s get going,” Becky said.

“See you in the morning, Paul,” Carol said, brushing his arm with a hand. “Thanks so much for making all this possible.”

Paul nodded, watching the two leave.

He sighed and shook his head. Unexpected, that. But still, quite in line with the programming he’d given them.

He returned to the now-proven system. He ripped out the fourth file, replacing it with a duplicate of the relaxation data.

The whole thing lacked portability in its present form -- the DSP board, another board with coil drivers and preamps, the power supplies, all cabled up to the B&K platform.

Hmmm... He had another B&K mount -- that made sense. He smiled -- time for some rework.

But first, a small test was in order. He brought up another directory from the server downstairs, loading in a tone to play with the relaxation pulse. He powered things up, waiting in anticipation for the transducers to reach operating temperature again.

He shook his head as he watched the display -- these took a third the time and less than a tenth of the energy to cool, yet it still felt like a very long time.

He configured the system to provide pulses every five seconds automatically, once lock was obtained.

It was ready. He took a breath, hands shaking a little in anticipation. He remembered the first time he’d used the prototype of the chair downstairs.

He sat in the lab chair, holding on to the arms as he moved his head back into position.

He was surprised by the chime sounding out, the pulse hitting him, melting him as he moved his head.

He opened his eyes and laughed, his head back, resting against the transducer assembly. He’d moved through the sweet spot, and it had gotten him -- so quick, so good! He closed his eyes and lifted his head slowly, determined to hold it in place this time, moving a little more, a little...

Control Loop Stability

The chime sounded again, and he tried to balance himself, holding in position. He felt his whole body waver slightly, so hard to hold still so that... The chime sounded again and he sighed, feeling the tension melt away. It sounded again, and his head rolled forward.

He opened his eyes, leaning forward in the chair. Oh, it worked! He reached forward, disabling the system, then got out of the chair slowly.

What now? He looked up and laughed. Integrate the preamps and drivers, produce a single printed circuit board with everything on it. He laughed again. Should he install them in the conference room chairs, or in Carol and Becky's desk chairs? The chairs in his office? The passenger seat headrest in his car? That would be just the thing for meetings with those people down in Silicon Valley -- what had Carol called them? "Vulture capitalists?" A short drive to lunch would change their views significantly.

He thought about Carol again, her figure, her aroma as they'd worked closely in the lab. He should call the doctor's office. He was getting impatient. Perhaps something had turned up? All the more reason to wait for full clearance. She was quite the woman. He chuckled; her technical skills were very good.

He remounted the coils in the B&K frame without the speakers. Maybe a custom foam pillow for his bed?

He sighed as he moved the newly mounted equipment over to a different spot in the lab. He needed some time in the chair as well -- the day had been quite trying.

A short while later he was downstairs in the chair, sighing as his relaxation program started in.

Friday

Paul woke feeling refreshed. He started to turn on the monitor to see what was happening downstairs, but didn't bother. He wanted his breakfast in peace this morning.

He stopped in the lab on the way downstairs.

"I see you found things," he said to Carol.

She smiled, a rosy glow on her face. He almost chuckled.

"Yes, I like how it's packaged up. What's next?"

"Well, I think that's about it for the software side. Why don't you start marking up schematics. I'd like to see everything but the power supplies on a single board. Give Carl a call and see what he wants in order to do the board layout."

Carol smiled. "That sounds like fun! I had an idea on simplifying the code I wanted to try out, though, seeing as how we don't need the overhead of a parallel receiver."

Paul considered for a moment. "Archive what we've got, then have a whack at it. Remember, we've got a short day today, with Gina coming in. You're in for a treat, and I, like Becky, need it."

"Late nights with a logic analyzer catch up with you," Carol agreed. "Have you talked to Becky yet this morning?"

Paul shook his head, "No."

Carol shook hers. "You'd better -- a call from the attorneys. Something is up. I wanted to call you, but Becky said you weren't to be disturbed."

Paul smiled; Becky was well conditioned. "I'll head right down, then," and headed down the stairs.

Carol started to boot up the development machine, but when she touched the mouse, the screen lit up. She made a face -- perhaps her boss was human after all, forgetting to shut things down. She frowned -- he was all too human. She and Becky had talked about him for an hour or more last night after moving in Becky's things. She sighed and archived all the files.

As Paul walked to Becky's desk, she called out, "Call Laura, right away!"

"Good morning to you too!" Paul called back.

"You called?" Paul said when Laura came on the phone.

“Paul, get over here right away.”

“What’s wrong?”

“It’s Ross,” she said.

Paul frowned. “I’ll be over as soon as I can. This time of morning, about twenty minutes.”

“That will have to do,” Laura replied.

Paul hung up the phone. He grabbed his coat, pausing at Becky’s desk.

“I’m headed to the law offices, not sure when I’ll be back. Don’t wait lunch for me.”

Becky nodded somberly, but then broke a smile. “But have Gina wait?”

Paul smiled as well. “Yes.”

He headed out the door, and started walking to the subway station. Hopefully everything would be running on time.

When Paul walked into the law firm lobby, the receptionist gestured to one hallway and said, “Conference Room B, Mister Walters -- they’re waiting for you.”

Paul entered the room to find Laura and three other attorneys he recognized. Hastings was there. Paul guessed the two suits next to him were also cops.

“What’s going on?” Paul asked.

One of the senior partners motioned to a chair. “Paul, please have a seat. This is difficult to explain.”

One of the suits he didn’t recognize spoke up. “Doctor Walters, I’m Captain Brown from Internal Affairs. This is Travis from the District Attorney’s office.”

Paul barely stifled a snarl.

Brown continued. “First off, we’ve closed out the investigation on Miss MacDonald. The DA is still deciding whether or not to press charges against the bus driver. But you and your employees will not be bothered again.”

Paul nodded. “But?”

Brown, Travis, and Hastings exchanged glances. Paul shot a glance at Laura. She made a gesture with her hand as if to tell him it was okay.

Brown asked, "Doctor Walters, how would you describe Detective Ross?"

Paul sighed and shook his head. "Aggressive, impatient -- especially yesterday. Why?"

Brown continued, "Could you tell us what happened yesterday, in as much detail as you can recall?"

Paul explained what had transpired, allowing himself to be interrupted for questions on Ross's demeanor.

"Would you mind if we took a look at your lab?" Travis asked at one point.

Before Paul could speak, one of the senior attorneys said, "I don't see what relevance that would have."

Travis sat back. "It was just a suggestion. We would like to interview the two others though."

The attorney nodded and said, "We can probably arrange that."

"Would someone mind telling me what the hell is going on here?" Paul said loudly.

The senior attorney turned to Paul. "Paul, it's nothing to do with you."

Paul interrupted, growling, "That's what Ross has been saying..."

Brown jumped in. "Would you say that Detective Ross was agitated yesterday?"

Paul huffed. "I already did. He was on a razor's edge when he got there. He scared both Carol and Becky -- both of them told my attorneys that yesterday afternoon. I think if Hastings hadn't been there... Well, I don't know what would have happened. That man scared me; he scared all of us."

Brown turned to Hastings. "Yet you say he was calm and collected when you got back to the office?"

Hastings frowned. "Yes, somewhat. As I told you, he's been, I don't know, hard to get along with the last month or so. I didn't realize it was so serious."

Paul was getting close to his limit. "What the hell is going on?"

Travis looked at his colleagues again, then to Paul. The other two lowered their heads.

"Late last night, about two this morning, Detective Ross... As best we can piece together, he stumbled on an undercover drug bust. He shot and killed an undercover police officer, a

suspect, and didn't cease fire when uniformed officers arrived on scene. He exchanged fire with them, wounding one seriously, before he was shot and killed."

Paul sighed, suppressing a smile. "I'm sorry. He pursued what he believed in very aggressively."

Silence filled the room.

One of the senior partners asked, "Did he have family?"

Hastings said softly, "He was single."

Paul said, "You'll notify us of the services?"

Brown said, "Of course." He looked to his colleagues.

Travis said, "Doctor Walters, thank you for your cooperation this morning. We may be in further touch with you, but from what I've heard, I don't think that will be necessary." Travis looked to his colleagues, who shook their heads in the negative. He looked to the senior attorney.

The attorney stood up. "Very well, then. Thank you, all, for attending on such short notice."

Paul spoke up. "A question about my lab?"

Brown said, "Yes?"

"We're in the middle of a number of projects. Is there anything I need to do? It's usually in quite a state of flux. The demo I did yesterday was quite impromptu."

The senior attorney frowned at Paul.

Brown looked to Travis, who shook his head. Brown turned back to Paul. "We don't need to see your lab, thanks."

As they filed out of the conference room, Laura caught Paul's eye. He followed her down the hallway towards her office.

"Thank you for coming over so quickly. I'm sorry I didn't fill you in more, but I was told not to," she told Paul apologetically.

He smiled. "That's quite all right. I understand. I'm happy this episode is over."

Laura smiled. "But I wouldn't mind seeing your lab..."

Paul laughed. "I'm sure something could be arranged."

With a twinkle in his eye, he asked, "Are you free for lunch?"

Laura sighed. "I know I shouldn't turn down a client, but the chaos this morning has set us all back a bit."

"But in loss, there's always opportunity," Paul said softly, looking at her.

Laura smiled, returning his gaze.

"Could you join me for the baseball game tomorrow night? You might have heard I've got season tickets, and for better seats than your firm has."

"Oh, I've heard..." Laura said suggestively.

"You can bring a chaperone if you want, I've got four tickets."

Laura laughed, her head going back, exposing a delicious neck. "How about your two ladies, Carol and Becky? I should meet them face to face; we're going to be working together quite a bit. Your patent attorney has told me quite a bit about Carol -- she sounds to be quite a catch."

"Yes, she is. And that's a superb idea," Paul said. "Meet me at the office at six thirty, and we'll walk over."

"Done. Until tomorrow night then." Laura said, walking to the door.

"That's fine -- I know my way out -- see you tomorrow."

On the street, Paul stretched and took a deep breath. The sun was bright and the day beautiful. He pulled his phone from his pocket and dialed a number.

"Doctor Foster, please -- this is Paul Walters. I sent an employee over for a physical last week, and we haven't heard any results. Oh? All clear? Yes, please fax over the confirmations so I can send them on to the insurance carrier. No, no problem, I understand; we all get backed up from time to time. Yes, thanks again."

Putting the phone back in his pocket, Paul laughed loud and long. It was a great day. He could hardly wait to get back to the office.

End of Part 5
2/15/2003

Control Loop Stability
By silli_artie@hotmail.com
<http://www.asstr.org/~artie>