

1

“Doc! You inconsiderate, unfeeling, self-centered son of a bitch, get your ass in here right now,” Pat Dacy yelled into the telephone, “and explain to this poor girl what’s going on! You ought to be ashamed of yourself. What were you thinking – keeping her in the dark like that?”

Pat was Chief Operations Officer for Scottsdale Systems Technology. Red (aka Judith McKenna) didn’t know what a Chief Operations Officer was supposed to look like, but Dr. Pat Dacy was not what she would have expected. Rather, she looked like someone’s grandmother.

Pleasant and kindly, with wise eyes, Pat had long, straight, grey hair, which she wore pulled back from her thin face, which must have been beautiful forty years ago, before ravages of time had turned it to soft, seamed leather. She looked like she’d be at home sitting in a rocking chair with an old, lazy gray cat sleeping on a braided rug at her feet, while she knitted and waited for the tea to cool. Instead, she was scolding her boss.

Sunlight streaming through the glass wall in Doc’s bedroom had wakened Red Saturday morning, cuddled with Doc like spoons in his oversize bed. While the glass-walled office building Doc had bought and condo-converted a few years earlier – keeping the top two floors for his own use – certainly wasn’t the highest in the area, it was far enough from other high rises and high enough on its own that sheer distance from prying eyes was enough to create privacy. Doc habitually left the curtains open to enjoy the view.

“It’s beautiful,” she had exclaimed when she first saw that view across what Phoenicians like to call “The Valley of the Sun,” which is an immense basin containing Phoenix and its many suburbs.

That had been Friday night, and she and Doc had been standing in the middle of the room stark naked, getting ready for bed. He had just shut the lights off so she could see the view.

Western citiscapes at night generally resemble the classic view of Los Angeles from the Hollywood Hills, which nearly everyone in the industrialized world is familiar with from motion pictures. They all look like semi-

regular arrangements of lights carpeting a more-or-less flat expanse reaching to the horizon. They nearly all look like that from any elevation high enough to provide a view.

While movies have prepared people to recognize this cityscape, even the big screen cannot convey the yawning cavernousness of the space overlying that flat expanse of flickering and moving lights. With no reflections of the darkened room, nothing appeared between her and that immensity.

When they'd first arrived at the desert in West Texas, Doc had told her: "Easterners meeting the desert for the first time either love it, or hate it. If they love it, they never want to be anywhere else. But, for some people the immensity is too much. It makes them feel small and unimportant, and they go scurrying back to someplace where they feel less exposed."

She'd hired Doc to transport her on his motorcycle to Nevada when her car broke down in Florida. She'd run away from home – the yacht her mother lived on with her step father when they weren't at one of his other residences – to search for her long-lost natural father, a geologist who'd disappeared on a field trip to Nevada ten years before.

Doc had stopped to help her get her car settled in a repair shop that he, at least, trusted. She'd quickly come to trust him enough to hire him to provide alternate transport on his motorcycle for the rest of her trip West.

In West Texas, she'd found that she was one of the people who loved the western deserts. Now, it suddenly became clear to her why. The thrill she got from looking out at this cityscape was similar to the thrill she always got standing next to the big, athletic men, like Doc, she was so physically attracted to.

Being six feet, three inches tall, and a crack athlete herself, there weren't too many men around whom she would describe as "big." Unfortunately, the ones she'd known previously had all come up short in some other way. Either they weren't smart enough to keep her brain entertained (she was earning top grades in what Doc described as "one of the most intellectually demanding universities in the most smarty-pants part of the country, with a degree in a subject that gives most people phobias"), or they were too egocentric to give her the space she needed

to be herself, or what ego they had was too fragile to take competition from a girlfriend who was bigger, tougher, and smarter than they were.

While spending nearly all her waking hours with Doc for nearly a week, she hadn't yet found anything not to like about the guy. That fact had made her decide that, come Hell or high water, she wasn't going to let *this* one get away. It was that, plus the fact that, when she'd finally decided to make love to him, he'd introduced her to the best sex she'd ever experienced.

Not that she was all *that* experienced – most of her beaus had failed to measure up before she'd gotten to the “is he any good in bed?” test. Doc was definitely the most experienced of the two or three who'd made it that far in the “husband for Judith” try-out program. The ones who'd spent their high-school years banging cheerleaders had washed out very, very early. In fact, none of them had made it past the “polite conversation” test. Red (Red was the “biker” nickname Doc had coined for her due to her flowing flame-colored hair and densely freckled complexion) felt very sorry for the poor cheerleaders!

“Doesn't it bother you how many people can look directly into your bedroom windows?” she had asked.

Living alone in a big apartment for years, she'd kept up the nudity-at-home habit she'd picked up from her freshman roommate – the last person she'd shared accommodations with before getting her own apartment across the river from the Harvard campus. Like most nudists, however, she was acutely aware that people in general are embarrassed by seeing strangers unclothed. Not only is public nudity illegal in most places, it is impolite everywhere. To her, that was even more important.

On the other hand, another thing she'd noticed while hanging around with Doc was that she had a taste for exhibitionism. Dressing provocatively to elicit furtive stares from strangers turned out to be good clean fun. Doc had encouraged her with a quote from an old movie. Quoting Jason Robard's character in *1000 Clowns*, he'd told her: “Don't be afraid to give the world a little goosing once in a while.” Then, he'd added: “Most of them need it most of the time.”

She found that she liked the attention she got by showing off that magnificent body. But, she'd also picked up enough of his Zen practice to be sensitive to the feelings of the people around her. She had fun startling them, but didn't like making them uncomfortable. Thus, she went in for lots of jewelry, tops that showed off her rather nice breasts, and anything that featured her long, shapely legs, but drew a line at anything that might make others really uncomfortable.

She'd found that line their first night in Austin, Texas. They'd walked a few blocks to find a restaurant for dinner. Red had hiked her jeans up high – to the point where the seam at her crotch rose up between her labia, making it obvious that she had no underwear on. Everyone from the hotel housekeeper to people passing on the street noticed it. The stimulation and the stares had combined to give her more than one orgasm before reaching the restaurant.

By that time, however, she'd realized she'd crossed the line. *She'd* had fun, but most of the people seeing her had looked uncomfortable, even as they involuntarily stared. Under the table, she'd loosened her belt to push the jeans back down.

She didn't want to make the same mistake by running around nude – and doing other things she intended to do – in a bedroom with glass walls.

“The only people who could possibly see us are people in high rises all the way over there,” he pointed out, “and they couldn't make anything out without a pretty serious telescope. If they want to spend thousands of dollars on optical equipment to spy on their neighbors, I figure they deserve a show. If the lights are bright enough to make it hard for you to sleep, we can draw the draperies.”

“No, it's spectacular – worth being kept awake, actually.”

“I thought you'd like it.”

Despite the fact that the glass wall in the bedroom faced West, away from the rising sun, morning in the clear desert air was bright enough to waken them. As Doc had predicted days ago, they no longer felt the compulsion to

make love every time they found themselves alone.

When, as they passed through Austin, Texas the previous Wednesday, Red had first maneuvered him into sharing a bed at the Driskill Hotel by telling the check-in clerk they'd recently been married, they found themselves keeping up the fantasy by enthusiastically copulating every time they got the chance.

Noting that they'd made love half a dozen times in the first thirty hours, and that she was looking forward to more, Red had speculated that they'd crossed into nymphomania territory. Doc, who'd had experience with *real* nymphomaniacs, said that, no, it was what he called the "Honeymoon Effect." They'd both just taken on new lovers (each other), and had little else to do right then. So, they were naturally making best use of their time and energy by exploring each other. He predicted that their libidos would calm down over the next few days.

That's exactly what happened. With other things to think about while riding cross country on Doc's big touring motorcycle, their sneaking-off-for-a-quickie rate had plummeted. They still did a lot of groping between the sheets when they stopped for the night, but when they were done, they were done, not just taking a break to recharge their batteries for the next tryst.

That Saturday morning, they were content to just sit up in bed holding each other and enjoying the view while their sleepiness wore off. Wednesday evening, they hadn't been able to do that for any length of time without coming up with a new position that they just *had* to try out *right now*.

Desertscapes with the sunrise at your back – whether you're looking out over vast stretches of open desert, vast mountain ranges glowing in the Sun, or the facades of countless buildings burning red-gold in reflected light against the azure sky – always seem alive, and inviting. "Look at me," they seem to say. "I'm full of the promise of adventure. There'll be all sorts of things going on out here all day. Get out of bed, sleepyhead, and come out to play."

One can't resist the siren song for long. Just a few minutes is all it takes for sleepy desert rats to begin to stir.

The first order of business is always to pee. Doc got there first, so Red wrapped herself up in the enormous

bedspread folded at the foot of the bed, and curled up in one of the luxurious red-leather club chairs Doc had arranged around a black marble coffee table next to the glass wall. Still not 100% awake (accounting for her losing the race to the bathroom), she smilingly resisted the desert's pull a little longer.

After taking her turn in the bathroom, she found Doc already dressed in jeans, a pair of black cowboy boots, and a light blue western-style shirt, topped off by a tan cowboy hat. He had stretched out his muscular six-foot, six-inch frame in the same chair she'd just vacated, with his feet, as usual, propped up on the coffee table.

Red walked over, and plopped onto his lap, still nude, for a kiss and a cuddle before getting dressed, herself. She would have been too big a load for an average man to hold in his lap, but was just right for Doc to cuddle up with.

One of the many traits that had caused her to decide she wanted him for exclusive property was that he was the first man who could make her forget the huge empty space in her life that had yawned like a chasm at the edge of her consciousness since her natural father disappeared.

In less than a week since he'd found her crying her eyes out in frustration when her pink 1965 Mustang convertible had given up its mechanical ghost by the side of the highway in Florida, he'd become the central figure in her life. Doc had immediately chased away all the failure and panic, making her feel like an adventurer who could conquer any obstacle.

Thinking he was just some random motorcycle bum, she'd offered to pay him \$100 a day to carry her on his big touring bike to Nevada, where the trail to her father's whereabouts had gone cold all those years ago. It wasn't until she'd fallen madly in love with him that she discovered:

1. He was a certified genius in two fields of physics – both of which were fascinating to her as well;
2. He had combined this scientific ability along with business acumen to make himself filthy rich;
3. The company he'd built had just the right technical capabilities she needed to complete her quest.

The last item meant that she'd be joined to him at the hip at least until her quest was over. The first item

meant that they were destined to be best friends (there just weren't that many math and physics fans around to play with).

The second item was something she'd never thought of as terribly important, but it sure felt nice!

All her life, what she'd wanted most was a home and a family with a husband she loved and respected. She'd always imagined that husband to be just like her father. Now, she imagined him to be just like Doc.

She felt things had started working out spectacularly well for her the minute he'd walked into her life. She never wanted him to walk out again.

That would be awful!

2

"What would you like to do today?" he asked after she'd taken her turn in the bathroom and returned to his lap.

"Would you teach me to ride your motorcycle?" she responded.

Now, this came as a mild surprise to Doc. He'd expected something like going shopping – especially since she'd left all of her luggage in Florida – or lying around the house not doing anything, or even sightseeing around town with the top down in that pretty green Jaguar convertible he'd loaned her. He'd expected anything but more motorcycle riding, and had had no hint that Red would want to drive one herself.

It being that he found himself unable to ever say no to her about anything, he suppressed his surprise and said: "Sure, I have the perfect bike for you to learn on."

"Why not yours?"

"You mean the Road Glide? It's too much bike. It's intimidating. Most people ride for years before picking

one of those up. I've an old chopper that isn't so scary. It's very light weight and built low to the ground, so it won't be intimidating. It's got all the power you could possibly need, but it's easy to control. It's a real, grown up motorcycle, so you don't have to worry about looking like a newbie, or a fool."

"What if I fall over?"

"*When* you fall over, I'll show you how to pick it up. After you've done it once, you won't have a problem again."

"How much does it weigh?"

"Three or four hundred pounds."

"I can't pick that up!"

"My touring bike weighs nine hundred pounds. I can't pick that up, either. It's a matter of proper use of leverage, which is what I'll show you."

"What if I damage it?"

"Then, I'll fix it. I'm more concerned with not damaging your lovely psyche by letting you get upset or frightened. The first motorcycle ride is always scary because it's so new and different from anything you've done before. If you have a bad experience then, it'll screw with your head thereafter. I *expect* you to scrape some chrome, or dent some sheet metal. That's why I've picked out a bike that could stand a makeover, anyway. Not to worry."

"How long will it take?"

"A few hours in a few sessions. Did you ride a bicycle growing up?"

"Yes, of course," Red acted insulted by the question. "All the time."

“Not everyone rode bicycles as kids, and I’ve learned not to take things for granted. It’s always better to ask than to be wrong,” he explained. “Riding a motorcycle is actually easier than riding a bicycle. The hardest part of bicycle riding is balancing it while getting it moving in the first place. On a motorcycle, you just have to let out the clutch, and it goes. I know you know how to drive a manual-shift car, so that should be no problem.”

“Why do you want to learn to ride a motorcycle?” he inquired.

“I dunno. It’d be a new experience. It looks like fun. And, this might be the perfect time to do it.”

“Okay. We can start this morning by teaching you how to start and stop. We’ll just go down into the parking garage, and you can practice operating the clutch and brake for about an hour this morning. Once you know you can control it, you can practice making turns. Then, maybe tomorrow, you can go out on the street. What people have to overcome is the fear that it will get out of control. As long as you know, in your heart, that you can safely bring it to a stop, the rest is easy.”

“Is that all there is to it?”

“That’s all the basics one person can teach another. Then, you have to go out, and practice on your own. If you decide to get serious, there are courses you can take that will give you a rake off on your insurance, as well as making you a better rider. To be an expert, of course, just takes years of experience, but that comes with time.”

“Do I need to wear my leathers?”

“Not unless you want to. All you really need are boots, long pants, and a long-sleeved shirt. Wear your helmet when riding around town. Arizona is a civilized state that leaves it up to you whether you want to wear a helmet, or not, but city driving is when you need it the most.”

“You said we’d practice for an hour. Why not just do it all at once?”

“You’ll be teaching your body some new moves. So, we just do a little bit, then practice, practice, practice ‘til you start to feel tired. Then, we stop and go do something else for a while to let it sink in. When you come back

to it, you'll find your body remembers, not just your mind, and that's what we want."

"It's like when we fly an airplane," he continued. "The mantra is 'aviate, navigate, communicate.' You want operating the equipment – using the controls – to be automatic. That's what keeps you safe and in control. Then, you need to know where you are, and where you want to go. That's equivalent to navigating in an airplane. Finally, you need to communicate with those around you so that you don't smack into each other."

Red didn't want to damage her long-sleeved blouse, which was the most presentable garment she had with her. Nor did she want to get into her leathers just for practicing in the garage. She ended up putting on her black cowboy boots, her blue jeans, and a tank top. She put on her leather jacket to protect her skin in the event of a fall, and her helmet.

First, however, they followed the aroma of fresh coffee out to the kitchen. There, they found Sam organizing pots and pans in preparation for breakfast.

"I thought ham and cheese omelets would be right for this morning. Maybe with toast or English muffins on the side?"

"Sounds like a plan," Doc said with enthusiasm. "Does that work for you, too, Red?"

"Yum."

"Toast, or English?" Sam asked.

"English for me," Red said.

"Same here," Doc agreed.

"How's the weather outside?" Doc asked Sam.

"Still a little chilly. Better eat in here," came the response.

Red was mildly surprised when Sam set three places at one end of the kitchen island, and joined them for breakfast. As he'd not joined them for supper the night before, she assumed Doc's preference was to separate servants' and masters' meals. That didn't sound much like a Doc thing to do, but Red knew how unpredictable Doc could be. He tended to decide things on the fly, with few pre-established rules. Servants' eating arrangements, however, were something Red thought should be pre-arranged to save uncertainty and confusion. She wisely decided to withhold judgment, however, since Sam apparently knew what to do.

In actual fact, Doc preferred company when he ate, so he and Sam normally ate together. The previous night, however, Sam hadn't known when Doc and Red would appear, or whether they would have stopped to eat on the road, so he'd gone ahead and eaten without them.

3

"Red has asked me to teach her to ride a motorcycle," Doc told Sam. "So I thought we'd go down to the garage, where we can find some space on the second level to practice. It'll probably take us a couple of hours. We'll probably do the same thing this afternoon. Do you plan to be around, or have you something to do today?"

"I have a golf date this afternoon," Sam said, "but I'll be in and out this morning."

"Red," Doc said, turning to her, "is there anything else you want to do?"

"I do need to get some work clothes," she replied. "What's appropriate office attire at your company?"

Red was obviously going to work at SST while looking for her father. Doc had gently twisted her arm to apply for a permanent position as well. The possibility of erasing the damage her running away in the middle of her last semester at Harvard had done to her career, along with the promise of educational benefits to pay for graduate school, had sold her on the idea. She still wouldn't have considered it, though, if Doc hadn't pointed out that things she'd be assigned to do would be exactly the things she wanted to do, anyway.

"It's pretty casual," he responded. "We all like to keep neat and well groomed, but other than that, pretty

much anything goes. I pay people for what they do, not for what they wear.”

“In that case, all I’ll need are a couple of new tops. I don’t think tank tops are appropriate in an office, and I have only the one blouse with me.”

Doc looked toward Sam, and asked: “Where’s her luggage?”

“In her closet,” came the reply.

“What? My stuff’s here? When did that happen?”

“We had it shipped from Florida as soon as we knew you were coming here,” Doc explained. “Sam, when did it arrive?”

“Yesterday morning,” Sam answered, then said to Red: “I put everything in your closet. I meant to tell you, but you guys seemed a little preoccupied, then disappeared after dinner. I never really got the chance.”

“Let’s see,” Red said, thinking about what she had packed. “There’s an evening dress, which doesn’t help, and a pair of slacks. There’s also another blouse. A sweater, which also doesn’t help. Doc, would my red leather jumpsuit be out of place, maybe with that scarf around the waist, and some jewelry?”

“It would fit in fine.”

“By the way,” Sam interrupted, “I’m doing a load of laundry today, so anything you want washed, please put in a hamper right after breakfast. There’s a hamper in each bathroom.”

“Why, thank you. I’ll do that before we go to play motorcycles.”

While Red had grown up poor after her father disappeared, and had lived alone in her apartment since her sophomore year, she’d had enough experience with servants in her stepfather’s house to know you don’t offer to do their jobs for them. That’s what they do for a living, and if you do it for them, you’re putting them out of a job. Very impolite. Best just to show that you appreciate what they do for you.

While Doc kept his relationship with Sam more informal than the arrangement in her stepfather's house – he generally treated Sam more like a brother than a servant – Sam had very definite duties, and Doc generally just stayed out of his way, and let him do them.

“I'd still like to get a few things to wear to work.”

“Do you want company,” Doc asked, “or would you like to get off by yourself?”

“I don't know where the stores are.”

“There's a big mall called Scottsdale Fashion Square a few miles south on Scottsdale Road,” Doc suggested. “It's mostly department stores and boutiques, so you should be able to get anything you want there. There are more places along Scottsdale Road, which is the main drag that goes past the mall.”

“In that case, if you don't mind, I would like some time to myself. I love you, Doc, but I haven't been alone outside of a bathroom since Tuesday, and I just ain't that social.”

“Neither am I,” he responded. “That's why I suggested it. The Jag has GPS, so it'll give you directions to the mall, and help you get home when you're ready. Here's my card. It's got my cell number, and I'll write in the apartment phone number, too.” He wrote some information on the back of his business card, and handed it to her. “If something evil happens, just call. I think I'll just be lazy around the house today. I've been away for a long time.”

“What about motorcycle school?” Red asked.

“Well, we'll work a little this morning,” Doc replied, “then whenever you feel like it after you get back from shopping. We don't have any buses to catch.”

4

True to his promise of a week before, Doc had arranged a spare bedroom to be her private workspace.

Realizing that Doc most certainly had arranged his bedroom to his liking, she decided to keep her things in ‘her’ room. She’d been upset when he’d told her about the arrangement – thinking that he somehow didn’t want her in his bed, anymore – but now she was grateful that he’d been thoughtful enough to make sure she had her own space.

She’d lived alone for years in her Boston apartment, just across the river from the Harvard campus in Cambridge. She hadn’t thought about it, but being cooped up with Doc for days since she’d roped him into sharing his bed with her, had made the walls start to close in. She loved him, but found she needed to be by herself, too. If she didn’t get off on her own, she’d soon start being grumpy and cross. She didn’t want to do that. It would be unfair to him, and might screw up her plan for her future.

Red took time to unpack her luggage, co-opting a few drawers in the bureau next to the spare bed for the few things that were still clean – she hadn’t been near a laundry since Wednesday. She’d then hung her dress, skirt, and the blouse from her luggage in the closet along with the heavy coat she’d brought against the cold weather she expected when she got back to Boston. The dirty laundry she dumped unceremoniously in the hamper she found in “her” bathroom.

Collecting Doc, who’d settled into reading a magazine in the living room, Red headed down with him in the elevator to the garage.

“Where does Sam live?” she asked.

“He has most of the floor below to himself. About half of it is living quarters, and there’s a utility room, a workshop, and a fair-sized storage room.”

“So you really occupy the top two floors. Who’s in the rest?”

“The building has five floors above a two-level parking garage. Each floor is broken into two good-sized apartments. Most of them have tenants right now, but that isn’t always the case. I think there are one or two units empty.”

“You *think*? You don’t know who’s renting space in your own building?”

“All that stuff is handled by the condo manager. That’s a real estate agency who manages the property. Even my two floors are just another condo. Altogether, there are six units beside mine. Four of them have been sold as condos. The other two are leased, but available for sale. I believe that at least one of the rental units is empty, but I’d have to check with the manager.”

The elevator stopped on the second parking level, where Doc had parked the touring bike. Red paid more attention to the other vehicles than she had the night before. At that time, she’d noticed the green Jag, but hadn’t actually looked at the others.

She did a double take: “That’s a Ferrari!” she exclaimed.

“Yup.”

“And there are two more motorcycles, and a Ford SUV.

“Unh, huh.”

“Who belongs to them?”

“I do. This section is reserved for my vehicles.”

“I see. R.H.I.P.”

“Huh?”

“Rank has its privileges.”

“I don’t know about ‘rank.’ *Ownership* has its privileges, certainly. This is the chopper I was telling you about.”

Red had seen lots of custom motorcycles before, but never one this radical, or this close up. It looked like

something out of an old movie, like *Easyrider*. It had a long extended front end and high handlebars. There was so much space around the frame that it looked skeletal. It had two seats that looked like oversized bicycle seats, and a high, triangular chrome piece behind the passenger's seat. She was actually pleased to see a few scratches in the chrome, and cracks in the purple ghost-flame paint job. It meant she didn't have to worry about clumsily damaging a show bike.

“*This* is what you want me to ride?”

“It's probably the easiest handling motorcycle you'll ever ride,” Doc said. He wasn't offended because he'd expected that reaction.

“To start with, the frame's been lowered by four inches below typical motorcycle height. That pushes all the weight four inches lower, which almost doubles the leverage you have to control it. The front end has been lengthened by six inches, to provide a thirty-seven degree rake, which is the most a hydraulic front end can take and still work well. Pushing the front end out increases the wheelbase, increasing the bike's stability. The handlebars are exactly at shoulder height for me, which minimizes steering effort. It *looks* radical, but that's because most motorcycles are designed with compromises. This one's primary purpose is to handle easily *sans* compromise. Sit on it, and try it.”

Red swung her leg over the seat, and found that, indeed, she had to squat very far down to reach the seat.

“Now, straighten the handlebars,” Doc instructed.

This she did, and found that the hand grips came to just a little above her shoulder height. Her arms were almost horizontal when she sat up and held both hand grips.

“The bike sits almost vertical when on the kickstand because of the kickstand's angle and length,” Doc explained. “There's just enough lean to the left to keep it from falling over unless pushed pretty darn hard. Now straighten it up.”

Red found that it took little effort to stand the bike up vertically, and practically no effort at all to keep it upright once it was there.

“Most people think that when you steer a two-wheeled vehicle, you have to push *down* on the hand grip, pushing the weight over to make it turn. That is exactly wrong. If you want to turn left, you put a little forward pressure on the left hand grip. If you want to turn right. You put a little forward pressure on the right hand grip. Gyroscopic precession takes care of everything else. When people put the hand grips low, so they’re leaning down to reach them, you need to apply more force because only the horizontal force component does anything. The downward component just tries to bend the frame, which you can’t do, anyway.”

“So how does it lean?”

“Gyroscopic precession. The front wheel is a big gyroscope. A forward force on the right hand grip puts a torque on the front wheel, with the torque vector pointing up. That tries to twist the front wheel around to the left, which you’d expect, but not what you want. But, that doesn’t actually happen. An upward torque on a gyroscope whose angular momentum points to the left causes the front axle to tip up on the left, and down on the right. That’s what makes the bike lean to the right. Now, the motorcycle’s weight starts hanging out over the right side, putting a forward-pointing torque on the front wheel. That causes the axle to turn right.”

“And you expect me to remember all that while going down the road at seventy miles per hour?”

“Of course not. It’s so complicated that it takes a master’s in physics just to figure it out. All you have to remember is ‘Push right, go right. Push left, go left.’ It’s exactly the same as riding a bicycle. Since you’ve ridden a bicycle before, your body already knows all that. So, forget about it, and just ride it like a bicycle. I went through the physics to show you why shoulder-height handlebars are best – under most conditions.”

“What do you mean ‘under most conditions?’”

“On a long trip, the blood tends to run down out of your arms. They’re not made to stay in that posture all the time. So, we put touring-bike handlebars lower. That’s the compromise most motorcycle handlebars make that

causes people think there's something wrong with high bars.”

“By the way,” Doc warned, “those high, wide handlebars make this bike very responsive. Don't expect to have to manhandle the handlebars like you do on a bicycle. Use a very light touch. I generally ride this bike with only two fingers on the right hand grip, and my left hand hanging down by my side. I only use two hands if I think I might have to do a fast maneuver soon. You'll feel more secure if you hold on with both hands, but use a light touch. I trained myself to do it right by repeating the refrain from 38 Special's *Hold on Loosely*. Do you remember it?”

“No, I don't,” Red replied, wondering who 38 Special was.

So, Doc chanted, having no confidence in his singing voice:

Just hold on loosely, but don't let go

If you cling too tightly,

you're gonna lose control.

“The song actually has nothing to do with motorcycling, but that refrain happens to be the perfect mantra for driving a bike.”

“Oh, I've heard that one,” Red said in surprise, then broke into a beautiful contralto rendition of it.

“Oh, damn,” Doc said. “Your singing voice is gorgeous, too.”

Blushing, she said: “Would you rather I croaked?” Then, she sang the same refrain in a hoarse whisper.

“No,” Doc responded, “I can do the croaking for both of us.”

Actually, Doc's natural voice was a melt-in-your-ears basso profundo. His reticence about singing was caused by a lack of training combined with the fact that most popular songs for male vocalists are scored for

baritones or tenors, which basso profundos can't reach, except as a weak falsetto. So, they can't sing along with most pop songs.

“Okay,” he changed the subject, “controls: Start with those at your hands, which are the most important. You control the throttle by twisting the right hand grip. Pull the top toward you to feed in more power. Try it. Roll the top toward you, then let go.”

Red twisted the throttle, and felt the return spring resisting her. She let go, and it snapped back with a “clack.”

“That lever over the right hand grip controls the front brake, just like on a ten-speed bicycle. Try that.”

She reached up with the fingers of her right hand to pull the front brake lever.

“On a motorcycle, seventy percent of your braking power is in the front wheel. Respect it, but love it. It's your friend when you need to stop in a hurry. But, always straighten the front wheel before pulling the front brake lever. Otherwise, the front wheel will lock up, and twist to one side. I've seen huge guys end up on their faces because they neglected to straighten the wheel in an emergency.”

“What happens?”

“All the forward momentum of the bike goes into twisting the front wheel away from straight. If it's cocked to the right, it gets twisted to the right. If cocked to the left, it twists to the left. The farther it's cocked, the harder it twists. The bike stops alright – in a hurry – but the twist rips the handlebars out of your hands, leaving you with nothing to hang onto, and no way to control the bike. Everything lands in a heap, with you on top. It's usually not dangerous, but it's embarrassing, and usually leaves scrapes and bruises. It's also scary as all getout. So, always, always, always straighten the front wheel before grabbing the front brake.”

“By the way,” Doc advised, “don't worry about the front wheel grabbing and tossing you over the handlebars. It doesn't happen.”

“Okay,” he continued, “you’ve got the major controls on the right hand grip. The only thing on the left hand grip is the clutch lever. Try that one to get a feel for the spring tension.”

Red pulled and released the lever over the left hand grip several times.

“The shift lever is on the left, just over your toes when your foot’s on the peg. We’ll get back to that in a bit. On the right is a pedal for the rear brake. When you want to stop, or slow down fast, always apply the rear brake first to stabilize the bike. You’ll feel it drag the rear end, and make it go straighter. As the rear brake takes hold, you’ll feel the bike’s weight shift forward. As that happens, start squeezing the front brake while easing off the rear brake. By the time you come to a stop, you can have the front brake clamped down hard, and the rear brake completely off. Don’t worry,” he said, seeing Red’s look of despair at remembering all this, “when you get out there, it feels like the natural thing to do.”

“What if I don’t?”

“If you keep too much rear brake on, the rear tire will stop, and skid. If you feel that happen, just keep the rear wheel locked up, and ride it all the way down to a stop. I’ll bet when you were a kid, you practiced skidding a bicycle’s rear tire in sand on the edge of the road, didn’t you.”

“Yeah. Once in a while. It was fun.”

“It’s the same thing on a motorcycle, and you drive through it the same way. The only difference is that a motorcycle can easily skid its rear tire on dry pavement if you get too enthusiastic with the rear brake.”

“Those are the major mechanical controls on a motorcycle. There are two major non-mechanical controls you need to think about, too. Can you guess what they are?”

Red thought for a moment, then said: “Your feet!”

“Very good, grasshopper,” Doc exclaimed, not for the first, or the last, time. “As you come to a stop, always lead with your left foot. That will naturally lean the bike to the left, away from the rear brake. So, you can ride the

rear brake all the way to a stop. If you lean the other way, it forces you to pull your foot off the brake too soon to keep from falling over. So, make it a habit to put your left foot out first. Any questions?”

“Yeah. Seriously, how am I supposed to remember all this right from the start?”

“*Gallia est omnis divisa in partes tres...*” Doc quoted.

“What?”

“All Gaul is divided into three parts. It’s the opening sentence in Caesar’s *Commentaries on the Gallic Wars*. It’s usually interpreted to illustrate the ‘divide and conquer’ military strategy. When you’ve got a big thing to accomplish, break it into several smaller things that are easier to do individually. We’re going to break learning to operate these controls into small parts. You’ll practice one until it becomes easy, then add a second, and so forth. At no point will you have too much to deal with.”

So, Doc backed the bike out, and maneuvered it to one end of a long row between the garage’s support columns. That row was to be Red’s practice path. “The first and most important rule is to never let a motorcycle think you’re in a hurry. Do everything slowly and deliberately, and take as much time as you need to double check what you’re doing. As you go on, especially when you start riding with others, there’s a tendency to rush, thinking others will be annoyed at waiting for you. Resist the temptation. It only causes mistakes. When you feel the urge to rush, force yourself to take extra time to be more deliberate. Otherwise, the bike will realize you’re in a hurry, and screw you up royally.”

“You make it sound as if it were alive,” she quipped.

“It’s a complex mechanism, which, as you’ve pointed out, means it tends to behave chaotically. The best strategy around any complex mechanism is to treat it as if it were alive with a perverse mind of its own. That cuts down on nasty surprises.”

Doc showed her how to put it in first gear by pressing down on the shift lever, and rocking the bike until she

felt it slip in.

“Always start by putting it in first, to make sure you know what gear it’s actually in. Then pull it up into neutral.”

He showed her how to rock the bike back and forth, using the feel of the engine compression to make sure it really was in first. Then, he had her pull gently upward on the lever, and rock the bike until the transmission dropped into neutral. Then he showed her how to roll the bike to make sure it really was in neutral.

“Most bikes have a lock out so you can’t start them in gear, but not all of them have it, and it doesn’t always work. So always check. And, always pull in the clutch when starting it.”

He showed her the ignition switch mounted near the engine, and the kill switch mounted on the handlebars.

Then, he had her pull the throttle open three times to shoot raw fuel directly into the carburetor – his chopper had a carburetor because that’s what he wanted when he built it – then close the throttle fully, then crack it open just a little bit. Finally, he had her hold the clutch lever in “just in case,” and press the starter button.

The unmuffled engine roared to life, startling Red. It ran unevenly, and died a couple of times, so Red had to restart it. Soon she figured out how far to hold the throttle open so it would keep running.

“It hasn’t been run in a while,” Doc explained. “It’ll smooth out when it warms up.”

As predicted, after a few minutes, Red was able to let the engine idle without it stalling. Doc had her practice “blipping” the throttle a few times to keep the carburetor from loading up, and because it sounded cool.

Then, he had her practice feeling the clutch pressure point, where it just started to engage, then disengaging it when it started to put power to the rear wheels. At first, he just had her move the bike forward a few inches at a time, walking it with both feet on the ground, and stopping it with the hand-operated front brake. When they reached the far wall, he had her put it back in neutral, and walk it in a wide Y turn so that it faced back the way they’d come. This time, he had her move the bike a few feet at a time, just lifting her feet off the pavement, until

they again ran out of room. The third time through, he had her drive far enough to get her feet on the foot pegs, then get them out to stop again. He had her go back the same way.

When she showed confidence that she could get her foot down in time to stabilize the bike as it stopped, and was able to drive with smooth, coordinated motions, he had her drive all the way from one end of the garage to the other, picking up a little more speed each time. Finally, he had her add foot-operated rear braking to the mix.

“That’s enough for now. Put it in neutral, stop the engine, and set it on its kickstand.”

“How’d I do,” she said, smiling broadly.

“From the look on your face, I see you know you did great. Let me show you the right way to park a motorcycle.”

Red set the chopper on its kickstand, and stepped off. Doc climbed aboard, and started wheeling it around to aim it rear-end first into its parking spot.

“Always park a motorcycle facing uphill so it can’t roll off it’s kickstand,” he explained. “Most motorcycles, especially Harleys, have a mechanism called a ‘jiffy stand’ to prevent the kickstand flipping up if there’s weight on it, but never trust a piece of machinery if you can help it. They’ll always let you down if given the chance.”

“Streets are generally crowned, so downhill is usually toward the curb. So, generally park a bike with its rear wheel against the curb, and its front wheel facing the street. The exception, which you don’t have to worry about now, is some bikes that have low rear fenders, or tailpipes extending out past the rear tire. Those you park far enough from the curb that you won’t mash the metal bits.”

Doc backed the bike into its parking spot until its rear wheel contacted the curb with a gentle bump.

“On a flat surface like this,” he added, “I usually roll the bike directly into the parking spot, rather than backing in. It’s easier, and there’s no need to worry about its rolling forward.”

“Next, we’ll have you practice this a few times to cement it in your memory, then you can start making turns at maneuvering speed.”

5

Bright and early Monday morning, Red and Doc stuffed the lunch bags Sam had put up for them into their briefcases, and headed down to the garage. Red had thought Doc’s admitting that he owned the company settled the issues between them, but it didn’t.

Doc was much happier now that they had settled the conflict of interest posed by his offering her a job while simultaneously taking her as a lover. At least they’d settled it between themselves. Red had a plan for silencing critics, and Doc knew she could make it work. In his mind, as long as the two of them were satisfied, he didn’t really care what anyone else thought.

Nonetheless, over the weekend Red sensed that something was still bothering Doc. He wouldn’t discuss their quest to find her father. Every time she brought it up, he defensively put the discussion off “until next week.” She couldn’t understand why, and it bothered her more than she let on.

Doc suggested that they take the Jag to work, and that Red drive it to give the security guard a heads up that Red and the Jag belonged together. She’d have to sign in as a visitor today, and get a badge at the reception desk, but she’d get a permanent badge later.

Scottsdale Systems Technology was located right on the Scottsdale Airport flight line because most of its business involved flight-control-system development, and they had test aircraft flying in and out constantly. The data acquisition part of the business was relatively new, and, although it was the fastest growing part, it was still small compared to the government-sponsored aerospace-research segment.

While Doc’s apartment was also purposely close to the airport – from his terrace they could watch planes touching down on the runway – the actual route to the main office was long, and torturous. To keep as low a profile

as possible, SST leased a building on the far side of the flight line, and getting there meant entering the airport property, driving past the commercial terminal, through the industrial park, then all the way around the north end of the runway, and back along the flight line to a spot as far from the commercial terminal as physically possible. It was much easier for Doc to call out directions from the passenger seat than to write them down for Red to follow.

At the front desk, the receptionist already had a visitor's badge ready for Red. She just had to sign in, and loop the lanyard over her neck.

Doc led her through a maze of corridors – SST eschewed cubicles in favor of separate offices with doors that could be locked for security – to a large office past a large conference room near the end of a corridor.

“Pat,” Doc said to the little old lady sitting at a round table surrounded by four chairs, “this is Red McKenna. Please take care of her paperwork. She'll be coming on board as a research analyst grade four. She'll be reporting directly to you, but dotted to me for technical supervision. She'll be the principal on the McKenna project. Also, please have Josh bring her up to speed on Wavelet, because she'll be in charge of application development for it, as well.”

“And, good morning to you, too, Doc,” the little old lady said, pointedly.

“Sorry, I'm a little excited about having Red come on board. Good morning, Pat.”

The office looked like an explosion in a warehouse specializing in 1960s memorabilia. The little old lady wore a pair of dark blue slacks and a tie-dyed tee shirt under a floral print shirt that she wore untucked and unbuttoned. A mass of what looked like love beads hung around her neck. Clearly, she was not only somebody's grandmother, but a grandmother who was an unreconstructed hippy.

After Doc abruptly stepped out of the door and went to the very last door on the corridor, the little old lady stood up, coming to a few inches below Red's shoulder level, and took Red's two hands in her two hands to hold Red's arms out for inspection. She turned Red around, eyeing her appraisingly. Then, she took Red gently by the chin, and turned her face to inspect each side. Finally, she looked deeply into Red's eyes.

“I can see why Doc’s got such a case on you. We’ll get to what’s bothering you in a little while,” she said.

“I’m Pat,” the lady explained, redundantly. “Supposedly, I’m in charge of making everything work around here. Actually, I do practically nothing, except make sure everyone else knows what they’re supposed to do, and has what they need to do it. We have to start you off with some forms.”

She sat Red down at the round table in front of a stack of papers, handed her a pen, and sat in the chair opposite her.

Red was initially dismayed by the size of the stack, then surprised to find that most of the spaces had already been filled in. Looking up, she saw Pat’s kindly eyes smiling pleasantly as she said: “We took the liberty of filling in what information we had. Please check it over for accuracy, and sign each page at the bottom.”

“How...?” Red started to say.

“We don’t let our most important asset go traipsing around the country with some girl, without knowing everything there is to know about her. While you guys were on a shopping spree in Daytona Beach, we did a complete background check on you.”

The first form was an NDA similar to the one she’d had to sign for Robotics Concepts when they’d met with them about their technology back in Austin. Pat made sure she read the whole thing carefully, and asked questions to make sure she understood what she was signing.

The second form was a pretty standard job application. It was filled out neatly, and exactly as she would have filled it out. Even that unfortunate cashier’s job was there, with “left for college” listed as her reason for leaving. There was no mention of the argument with a customer that had caused her to be fired in disgrace.

When Red pointed to it with a quizzical look on her face, Pat said: “I know, but it’s water over the dam that we don’t want following you later.”

Apparently, at SST, they followed the “end justifies the means” credo. Red wasn’t surprised. It seemed fit in

with Doc’s general intolerance for rules. In every situation, he seemed to carefully analyze the ramifications of every choice, and did what he believed would produce the result he wanted, no matter what conventional rules of behavior dictated.

The longest and most detailed form was an application for Top Secret security clearance. “I believe you know that most of our work is confidential,” Pat explained. “What you may not know is that the client for most of that work is the U.S. Department of Defense. In most of this building, you have to have Top Secret clearance to walk down the hall. Even the janitors have security clearance.”

“By the way,” Pat said, “pardon my indelicacy, but you see where we checked ‘heterosexual’ where it asks about sexual orientation. There is the matter of your relationship with your roommate in the Harvard freshman girls’ dorm....”

“I’m not a closet lesbian, if that’s what you’re asking. Not that I think it’s any of your business.”

“Officially,” Pat said in measured tones, “it is not my business. The Feds, however, make it *their* business when you ask for a security clearance. Personally, I’m making it *my* business because of your relationship with Doc. I’ve known Doc for ten years, since he was a pimply faced teenager in my ‘exceptional student’ program at M.I.T. He’s like a son to me. If you break his heart, I’ll tear your eyes out!”

Red did a double take at the sudden change of tone. Searching Pat’s face, she realized that Pat allowed no nonsense about certain topics, and Doc was one of those topics. This woman not only had an iron will beneath the nice-little-old-lady exterior, but she had the wherewithal to impose that iron will on those around her.

“Aha. You’re the advisor who made Doc stand in front of a classroom to get over shyness, aren’t you.”

“Yes, I see he mentioned me.”

“He did. Fair enough. Pat, I love Doc like crazy. I’m not going to break his heart if I can help it.”

So, it looked like Red was going to have an ersatz-mother-in-law relationship with Pat, as well as an

employee-to-boss relationship. That could be good, or bad, depending on how they got along. Red vowed to make it a good thing, if she possibly could.

After Red finished signing the forms, Pat called someone in to take them off for processing. Then, she and Red sat for a heart-to-heart talk about Red's life, what she'd done in the past, and what she hoped to do in the future. Red knew it was part of the job-interview process, but Pat made it feel like just-girl talk.

Red didn't know, although she suspected it, but Pat's doctorate was not in science or technology. It was in clinical psychology.

During her years as an academic, she'd set up a program to "mother" the underage geniuses that had gained places in the M.I.T. student body through superior academic ability, but were often still emotionally immature. Growing up, they'd generally had difficulty relating to their elders, and their peers, so they needed special nurturing to grow into well adjusted, emotionally mature adults.

Doc had been arguably the most successful of her "kids." When government funding for her program dried up, she'd turned to Doc for help. He threw his company's resources behind the program, so that Pat had been able to keep it going, and growing, until she reached the age for early retirement. He'd then asked her to bring her leadership skills to SST.

Because Doc had wanted to make SST a place where exceptional people could work independently, the way she ran the operation fit perfectly. If the staff weren't so heavy in self-starter personalities, it might not have worked.

Most of what Pat and Red talked about was just what Doc had quizzed her about on the road. Realizing that she was dealing with an expert psychologist, Red hoped that she wasn't just being manipulated, but she had a lot more to gain than to lose.

Pat purposely steered the conversation away from Red's relationship with Doc, and on to the more relevant topic of the job Red was actually applying for.

“What does a research analyst do, exactly?” Red asked.

“That’s hard to pin down because it depends on the project, and what its goals are. Any project starts out with some goal, or goals. Maybe it’s building a better mousetrap, or finding an answer to some question. The Research Analyst starts with those goals, gathers all the information available and identifies the resources needed to achieve those goals, and comes up with a plan for actually achieving them. It calls for self-starters who take responsibility, can think independently, and aren’t afraid to go outside the box, and it pays commensurately.”

“Can you quantify that for me?”

“Grade four starts at \$100,000 per year, and that’s where you’ll start. Doc’s made you a very well heeled young woman.”

“What is Wavelet?” Red asked, changing the subject because she didn’t want to let Pat see how flustered the pay offer made her. She’d had practice spending her step father’s money, but had been uncomfortable with it. She’d never had any of her own. If she hadn’t gotten the scholarship, she probably couldn’t have afforded college at all. “Doc said he wanted me to learn about it.”

“It’s a computational fluid dynamics software system that we’re developing under a Department of Defense contract. Most CFD systems are based on solving the Navier-Stokes differential equation that uses basic physics to model fluids in motion. Wavelet takes another approach. It assumes a wave solution, and works out the amplitude and phase parameters as a function of frequency for each position in the solution field. The key is to break the solution into acoustic and shear waves. That separates viscous effects, which only affect the shear wave, from pressure effects, which only affect the acoustic waves.”

“Doc and I talked about that on the road. He neglected to tell me that his company was doing the development work. I’ve always wanted to meet the guy who figured out the physics for it. I heard he was some M.I.T. whiz kid with a brain as big as a house.”

“You’ve been sleeping with him all week.”

“That He’s done it to me, again! I was spouting off about how I’d go about improving the user interface, and how I’d make it more user friendly, and get people outside the CFD community to use it, while all the time I was talking to the guy who’d invented it. He just sat there letting me rattle on.”

“Yes,” Pat smiled, “and now he wants you to actually do what you talked about. But, that will have to wait until tomorrow. In less than an hour, you’ve got to put your research-analyst hat on. You have to prepare for the McKenna Project kickoff meeting.”

“What, exactly, is the McKenna Project?”

“My dear, it’s *your* project. You want to find your father, right? And, in the process, you want to validate his theory about mineral deposits near Carson City, Nevada. Finally, you want to secure any rights for his heirs, meaning you and your mother. Any of this sound familiar?” she asked sarcastically.

“That’s a problem I’ve got with Doc. I no longer know what’s going on with it. Since we talked to the Robotics Concepts guys in Austin, he won’t say ‘boo’ about it. I can’t afford to pay for it – unless that’s what the salary is all about – but Doc just said not to worry. It was covered. I want to know how it’s covered, and by whom. What’s my part in it? Who’s the team? But, Doc won’t answer my questions.”

That is the point at which Pat picked up the telephone to damn Doc as an “inconsiderate, unfeeling, self-centered son of a bitch,” and told him to get his ass into her office “right now.”