

The Gated Universe Saga

Book 1

The Belt Connection

Part 1

The Belt Connection

Hal sat with his back to the stone wall. His eyes were wide as he let his peripheral vision and concentration scan the dimly lit room without revealing that fact by moving his head or his eyes. It was a trick it had taken him a long time to learn in the Agency's school.

When Gregory Kovitch came into the bar gliding toward the middle of the room and looking for a seat, Hal raised his hand and motioned him over to the table like he just happened to spot him. Gregory returned the wave with a smile and strode as purposefully as possible in lunar gravity to the table. As Gregory lowered his lanky blond frame into one of the soft plastic chairs, Hal greeted him with the hale and hardy barrage of trite phrases normally used when encountering someone of limited acquaintance in a bar where it was better to be bored by who you knew than by who you didn't. The opening volume of both men was loud enough to be heard at the surrounding tables, but the conversation quickly faded to a low enough level to disappear in the amalgam of chatter being bounced off the rock walls.

When they got through the inanities, Hal changed the pitch and character of his voice. "Of all the gin joints . . ."

"How many times have I got to tell you, Hal? You can't pull off a Bogart imitation." Their love of old movies available on the Lunar Library Net had gotten them both through some boring times since the start of this assignment, and they loved to discuss their favorites.

"I'm going to keep working at it 'till I get it right. Have you seen Will?"

"Nope, not since lunch. I came straight from the Complex after shift. He said at lunch he would come straight over too, so I guess he's close behind me. You couldn't have been here long."

"Just long enough to get a beer. Link-up what you want. We've got Gail again tonight at this table." The ratio of men to women on the moon was still about two to one. Women just seemed to prefer more niceties than the Spartan accommodations usually available on Earth's moon. It took something special to get them to come up, either a career move or money. Working in a bar in a hole in the ground on the moon, it was definitely money that had attracted Gail, and she made a lot of it judging by the tips Hal gave her.

Gregory scanned down the screen for a draft of choice. He unnecessarily raised his hand to his mouth, like ninety-nine percent of humanity, and spoke into his wrist personal. "Wotan, order my usual draft." A few minutes later Gail sallied up with a pint of Old Anton. "You guys need anything to munch on?"

Gail set the pint down in front of Gregory with a perfunctory smile, glanced at Hal's half-filled pint, and waited for a response. Hal looked up with a grin. "A bowl of Calamata olives, a hunk of foccacia bread, and a plate of extra-virgin olive oil would be nice, but absent that, we'll just nurse the beers."

Gail's smile changed from perfunctory to genuine. "Don't you wish? Link me if you change your mind." With that, she spun on her higher-than-normal-for-the-moon heels and retreated with the moon-lope gait that was making her rich on tips in a second-rate lunar bar.

Will came in just in time to catch Gail's last lope before she disappeared around the corner of the bar. As his gaze swung back around the room, Hal waved. Will planted his slowly falling right foot solidly, executing a graceful lunar turn to the left toward Hal and Gregory, all hundred and twenty kilos of him. He settled into the remaining chair and raised his hand toward his mouth first thing. "Raven, a pint of Tycho Bitter." The important task over, he looked across at Hal. "You're ready?"

"I got the last connection in yesterday while I was replacing a bad STEPP chip. How soon can you guys be ready?"

"Gregory looked at Will. "Three days?"

"That's okay with me." Will turned to Hal, "can you get the signal out that quick?"

"No problem. Three days it is. You guys want to change anything here at the last minute?"

Greg and Will both shook their heads no, and both of them placed their left palms on the plastic surface of the table. Neither of them gave up the beers clenched in their right hands. Hal did the same. He could never feel a thing when he did this, but there was supposed to be an ultra high-frequency current generated when they did this that ran over the surface of their skins and the plastic tabletop.

Hal sub-vocalized, "*Harvey, key agent communications on and verify coordinated plans for Alpha.*" The surgical implants converted Hal's sub-vocalization to impulses that Harvey could read through Hal's enhanced neural network as well as fully vocalized speech he accessed through his microphone input on the fake wrist personal.

Harvey was the name Hal had given his very personal computer. The basic bio-chip processors were surgically implanted, with additional memory in crystal lattices on the thin-film layers inside his belt. The belt also held additional power and the inductance coils that communicated with his implant components. Hal had frequently joked about writing a book on Alpha when it was declassified. He'd call it "Two Gods and a Rabbit."

"I have confirmed all planning with Wotan and Raven. There are no changes since the last communication. I am ready for additional instructions."

Hal watched both Gregory and Will sub-vocalize to their implanted transducers, sending instruction to their own bio-chips. The time it took for the three computers to link and perform their tasks would appear to an outsider as just a normal and momentary pause in a barroom chat.

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Hal had his shirt out of his pants with his thumb pushing firmly against his belly button. As he rotated his hand, he could feel the plastic button slide past the locking ears. His belly button popped into his hand and he stuck it in his pocket. Out of the left patch pocket on his pants, he took the optic cable with the international standard optic interface on one end and what the guys in the shop called the "belly patch" on the other. The belly patch replaced the plastic button, and the optic interface fitted on the male socket he had fished out of the partially disassembled console.

It had taken him three months of stolen minutes here and there to make all of the connections. Not that the connections were that complicated, but there were never more than a few minutes at a time when he could be sure of being alone, and just getting the console apart and back together took most of that time. Having to replace the STEPP chip was a genuine stroke of luck.

Hal worked as fast as he could. He knew how vulnerable Gregory and Will were in the access corridors. There were only two routes in and out of the Command Center. A typical arrangement when you were cutting rooms out of solid rock.

Gregory was in the north access with as long a stretch of the false flooring torn-up as he could justify by pretending to be working on the cabling. Will was in the south access corridor doing exactly the same thing. Undoubtedly, their flechette firing Snauger AB's were where they could snatch them up if necessary.

Time to try the access codes. Hal began the sub-vocalization of instructions for Harvey. *"Start the access code routine and proceed with the Alpha search/dump routine."*

*"Command understood. Access code routine running."*

Harvey was programmed to speak to Hal only through the speaker in the wrist unit when he was simulating normal communications with a wrist personal computer and when they were truly alone. Only when the message was such that it would give away the fact that Harvey was more than a normal wrist personal was he to use the surgically implanted transducer. That was particularly important inside the Siegfried Complex where everything was recorded.

Hal sat in the swivel console chair, his hands clutching the leather. He waited impatiently, because there was nothing else he could do. For the last six months he had access to the operating programs of Siegfried IV, the Greater European Union's ultra-computer heart of all government controlled operations here on the moon, the Earth, and the seventeen solar system habitats.

Layer by layer Hal had stripped the access code to its basics—with Harvey's help, of course. As an inveterate hacker in his teens and college years, Hal cracked the first two layers of access codes to the super array in the bowels of Cheyenne Mountain. He had done it while a Ph.D. candidate at the University of Virginia after a party bet that his nested code breaker program, his thesis, could take on any encryption known and have it on its knees in less than an hour.

Hal won the bet but ended up with a twenty-year federal sentence for his efforts. However, the government agreed to suspend the sentence for cooperation on a top-secret human-computer interface experiment that the Central Security Agency had underway. He had agreed with only a vague idea of his exact participation in the program. That was his second mistake, and here he was up to his eyebrows as a spy for the U. S. government.

What was taking so long?

*"Query! Report progress."*

*"Progress report. Access code routine running. Access confirmed through level seven."*

*“Report when Alpha routine is started.”*

*“Understood.”*

Hal listened intently for any sounds from the access corridors, but he couldn't hear anything. So far, so good. He leaned back in the chair, again wishing he could take one of these console chairs back with him to the States. Nothing like leather. The GEU seemed to have a firm grasp on the components of luxury. Their concept of a more luxurious furniture upholstery material had not degenerated to mean a better grade of plastic.

*“Progress report as requested. Access complete. Alpha routine running. Data transfer in progress.”*

At last, he was getting what he came for. Hal could almost feel the uniform belt getting tighter around his waist as the data poured into the crystal lattices. The Germans still loved the sense of structure engendered by uniforms, even for the technicians at the Siegfried IV Complex.

Hal was told that most of the Library of Congress would fit in his belt crystals, and he didn't doubt it with what he knew about the new molecular-lattice storage technology. The problem wasn't capacity anyway, it was time. Even the new optic/super-conductor hybrid technology had failed to keep transfer rates growing at the same pace as the storage capacities. Although, solid state circuits were finally faster than human brain synapses when doing internal switching, things slowed down at any interface, just the way you can think faster than you can talk—not that that was obvious when talking to most people.

Hal tried to settle down and wait, but patience eluded him, as the minutes dragged on.

*“Hal, we have a problem.”*

One of the several pieces of annoying programming Harvey received before installation was his judicious use of “I” and “we”, and this time in particular it made Hal a bit snappy. That didn't bother Harvey a bit, since he was incapable of the finer distinctions of human emotion, and that, of course, always made Hal even madder. *“What the hell do you mean, ‘we’ have a problem. What's gone wrong?”*

*“I am uncertain of the syntax of ‘what's gone wrong.’”*

Hal knew he was wasting time. He needed to settle down. *“Problem report.”*

*“I still have access to the data files and am still transferring, but at thirty minutes after final access to level nine, I detected a time-trip loop activating. I started normal intercept routines, but was unable to gain control of the loop before the alarm signal went external. I am continuing with Alpha unless you have new commands.”*

Damn! A thirty-minute time trip. He had found the two and five minute trips and had looked for a ten or fifteen minute trip, even though it was one of the most time consuming of the code breaking efforts. What insane German programmer had thought he would need a thirty-minute time-trip? Well, maybe it wasn't so insane. It had caught him. Now he had to guess at where the signal went and what the likely response was going to be. *“Harvey, what output port did the trip signal use?”*

*“The data network port was used.”*

Well that was no help. The data net was used for general communications throughout the Complex. The signal could have gone anywhere, including Complex Security. Wherever it went, he had to try to complete the data transfer they had worked on for the last three years. An incomplete record would probably be structured so it wasn't much better than no data at all. At least that's certainly the way he would have structured it. Only a few more minutes and he would have it. *“Give me a progress report, percentage complete on data transfer.”*

*“Data transfer ninety-three percent complete. Transfer complete in one minute, forty-two seconds.”*

Hal was starting the grin on his face to go with the knowledge that he was going to make it when he heard the shots in the north corridor. Three little spitting sounds, about a half second apart, undoubtedly a needle pistol. Then a burst of noise where you couldn't distinguish the individual shots; that was, hopefully, Gregory's 0.2mm Snauger. Then more shots, this time from the south corridor. It wasn't going to be easy.

If they were discovered, the plan was to have Gregory and Will fall back into the computer maintenance room with Hal and to close the heavy security/fire doors. All the rooms in the Complex had automatic doors that were controllable by the cipher keys at the doors or could be tripped closed by the central computer in case of emergency. The doors were substantial and would provide time enough to get out by the escape route that Gregory and Will had spent most of their time preparing during the seventeen months they had been in the Complex.

Hal moved his eyes back and forth between the north and south access corridor doors, expecting Gregory and Will at any moment. He was looking at the south door when he heard the click and whine of the north door. He snapped his head around and saw three uniformed security guards in full plastic armor getting set to dash into the room. He leveled the pistol he had been squeezing nervously since the shooting started and snapped off two quick shots. One of the guards spun jerkily in the low gravity, around to the right and out of sight as one of the armor-piercing drug flechettes caught him in the left shoulder. Not a bad shot at twenty meters, and enough to discourage the other two for a moment. They moved out of the doorway and out of sight.

*"Harvey, close the north access door."*

There was a longer than usual pause from Harvey. *"I am unable to close the door. The door override routine will not execute. It answers run commands with a request for authorization."*

Great! One more little trick by the programmer that wasn't discovered. *"Search for the code that shunts the run commands to the authorization request and modify it to allow you access."*

Again there was a long pause from Harvey. *"I am unable to locate the code that controls the access to the override command."*

*"How the hell is that possible? You've got access to everything in the computer. It must be hidden somewhere, but you can find it, Harvey. You've got to find it or we'll both be dead in another minute when they get up the nerve to rush the door. Search everything; look for all patterns; look for all pattern interrupts. There must be something."*

A full minute went by. *"I am unable to locate the code that controls the access to the override command."*

*"Christ, Harvey, how can you not be able to find it! Use the computer, not just yourself. This is one of the largest, fastest, most complex computers in existence. Use it to write new search routines. Get into its guts and make it open itself up like a .... Here they come, Harvey. We're going to die."*

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As usual, Harvey made every effort to follow Hal's instructions to the letter. Hal had said to use the computing power of Siegfried IV to help him write pattern search routines. In looking at the search routine algorithms in his basic programming, Harvey identified one that Hal himself had added. It was tagged as a pattern search virus, with the admonition for it to be used cautiously, since it had the potential for locking up memory if the attached search parameters were too broadly stated. Hal had designed the routine for very large databases with extensive parallel processing capabilities. Siegfried IV certainly matched those specifications.

Hal had instructed him to look at *all* patterns. That conflicted with the warning that the search routine should be given tight search parameters, but Harvey had no time and no basis for setting such parameters. However, the risk inherent in Hal's current situation was clear, and Harvey was programmed to give such situations primary consideration. He released the pattern search virus without parameters other than to compile all patterns in a buffer for further analysis. He then wrote a variation on Hal's routine that would search for patterns within the patterns in the buffer and create a new buffer, and so on. He released his variation also.

The pattern search virus worked by replicating itself when it wrote each find to the buffer. The first pattern find and buffer write resulted in having two search routines released into the database. When these two routines found new patterns and wrote them to the buffer, there were four search routines in the database. Essentially, the number of search routines was doubling at a rapid rate. Add to this, Harvey's variation that was refining the first buffer of patterns and creating more buffers and more variation search routines.

As Hal had warned, it was quickly getting out of hand. Harvey analyzed the buffered patterns and found that many could easily be eliminated as meaningless with the proper discrimination logic. He rewrote his variation of Hal's routine and released it. The new routine succeeded in slowing down the rate of buffer growth, but it was still growing at a rate that would overwhelm Siegfried IV's capacity in just a few minutes.

Hal's words seemed to be echoing in his crystal lattices, "we're going to die," but of course, that was impossible.

"We will both be dead . . . we are going to die . . . search everything . . . patterns . . . write new routines . . . pattern interrupts . . . use it . . . get into its guts . . ." Harvey reviewed the list of off-line storage for possible help with the growing data. He found a locked directory and broke in, but it only held a new language, part of the Greater European Union artificial intelligence research. He considered for a millisecond and rewrote his search codes in the new language.

Harvey, the old Harvey, was lost. He was now inseparable from Siegfried IV. A forecasting routine he had uncovered alerted him to the impending system lockup from the out-of-control growth programs, and he wrote a new program to compress the searched pattern results, gaining whole seconds on system shutdown.

Again he rewrote the discriminating pattern retention selection routine, adding code that would continue to make it more discriminating as more and more patterns were stored, catalogued, keyed, treed.

"I found it! An obscure code, related to nothing else, that sent a signal off-line into the general network. The routine was on another completely separate computer. Just a little one, but separate. No wonder I couldn't find it. But I did, as I was randomly searching all the off-line routing commands. Now for the access code to the little machine. I have it. It was easy."

Harvey keyed Hal's implanted transducer. *"New override program in place, Hal."*

The door closed, but not before two still functioning security police were inside and crouched behind the utility maintenance console near the north door. Two others hadn't made it. One had fallen back in the corridor. The other had fallen into the room, but neither had blocked the door.

"The door override code has been altered. It will not be possible for external commands to reopen the door. Problem! Additional data was uncovered during the door code search that is vital to full understanding. Do not unplug the cable until the data transfer is complete."

"Well I can't win a firefight with a cable in my belly, so you better be quick."

Three quick shots rang off the side of the console where Hal was down on his knees, clutching a locked access door handle to keep himself from popping up in the low gravity when he made a sudden move. The guard seemed to have only a flechette pistol. The Germans probably didn't want to let loose with an automatic rifle in the midst of their great Siegfried IV. Probably didn't think it would be necessary. It probably wouldn't.

Hal heard footsteps with the shots and popped up instead of around the edge of the console where he had previously been shooting. The guard dived behind another console on Hal's right, but since baseball was not very popular in Germany, or this guard was new on the moon, he over-slid his base about six inches. It was enough for a flechette in the wrist. Now the game was even. Maybe they would have second thoughts about not bringing their Snaugers. Hal grinned as he thumbed the release on the nearly spent clip and pulled a full one out of his pocket. It snapped comfortably into the butt.

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Harvey needed to transfer fifty-three minutes of data in three or four. He looked at the problem and searched for a pattern that would at least partially fit the problem. He found twenty-three partial fits. He synthesized four of them into a new code group. He used the new group to write a data compression routine using what was essentially a whole new language. There was no way to speed up the data bit transfer through the interface. It was the only way. A matter of life and death.

Three or four minutes had gone by, and the guard had not fired or made any movement. Hal figured the guard knew that help was coming sooner or later. It was what Hal would have done, if the circumstances were reversed.

*"Data transfer complete. You may remove the interface cable."*

Hal dutifully complied and fished in his pocket for his belly button. A push, a twist, and he was a whole man again. Well, more or less.

*"The utility maintenance console has been activated. The volume on the internal speakers has been raised to its limit. Be prepared for alarm activation in ten seconds."*

*"Alarm activation? Says who?"*

*"Four, three, two, one."*

The speakers in the utility maintenance console let out a shriek. A short shriek, since the power blew the speakers out, but enough for the German to almost stand upright. Too bad he had neglected to bring the Snauger.

All this time and no Will. Gregory had undoubtedly been cut down in that automatic burst Hal had heard, but the shots in the south corridor had gone on for some time. He had expected Will.

*"Has Will tried to activate the south door?"*

*"Negative."*

*"Well, I can't wait. I've got to run."* Hal stuck the slim, drug-flechette Beretta in his pocket and headed for the parts room only six moon-steps away. A small hop put him up on the assembly table where he could reach the overhead ventilator grill. He pulled a screwdriver out of a pocket and went to work.

In about fifteen seconds he had the grill loose and hanging down by one hinged edge. He reached up for the handhold he knew that Gregory and Will had put there, pulled himself up far enough to get a foot on the opposite grill lip, and wedged himself between back and toe. An easy maneuver at his moon weight. He reached up for the next handhold and pulled himself completely into the vent duct. The next part was tricky, since he had to work with only one hand, but the whole rig had been designed by Will and Gregory to make it as simple as possible. He snapped the grill in place and fastened it with an inside turn of the locking screws, which looked like ordinary screws from outside. It would take the Germans a little while to figure out that this was the only possible route out of the control room, no matter how proper it appeared. That was all he hoped for.

The control room vent shaft opened easily into the horizontal main Complex airshaft, and again Hal took the time to close up access gratings behind him. No need to make it easy to spot the escape route, when they got this far. About ten meters down the shaft Hal found the cross access to the piping and cable trunk. Hal again removed the painstakingly prepared cover with no problem and offered a silent "thank you" to Will and Gregory. He hoped they survived.

The trip down the trunk was uneventful. The first ten meters were down access grab bars on the side of the shaft, but when traveling horizontally, he moon-loped most of the two kilometers with his small flashlight in his hand so he could see cross-connecting cables and pipes and the occasional security chain-link. The chain-link had already been detached from its connection points, and he had only to push it aside. It was amazing how easy it was to break out of a place that was designed only to prevent breaking in. He wondered if prisons would be as easy to break into?

The trunk ended in the building maintenance dome, adjacent to the main dome for the entire computer complex, both over a hundred meters in the moon's bedrock. Hal knew this would be the trickiest part of the escape. They had prepared two plans. The first one was the best, but it required that all three of them make it this far so that each could play a part as either moon cart driver, wounded, or nurse as they left the complex in an ambulance supposedly heading down the link-shaft for the hospital in Göthe City. The fall back plan for one or two was to take the Complex Director's gravity lenscar, which was armored and had bullet-proof glass, and get as close to the airlock as possible without arousing suspicion. The guard station was only a two-man operation and they should not be prepared for hostility when the Director's lenscar pulled up. They should be easy for the drug-flechette guns, even in their armor.

The air in the guardhouse was too warm, but it always seemed cold this close to vacuum. The guards were counting the minutes to the end of their duty cycle when the infoscreen turned red, blinked, and beeped. "Gunther, we have a top priority message on the screen. Director Renthausen is leaving the Complex under emergency orders. He is not to be slowed or detained. It's signed by Inspector Gantt and has the correct code sequence."

A lens suppression security field was in effect over the whole complex, making it impossible to operate the lenscar in anything but its ground mode. Ground mode was awkward for lenscars, and Hal had driven as calmly as possible through the link-shafts connecting the maintenance dome and the airlock. Looking reasonably steady, which he was sure the Director or his driver would be, Hal eased up to the guard station. Both guards were standing at attention as if they knew he was coming. A surprising but welcome turn of events that he thought he would take advantage of as he slid the window down, carefully put a flechette through the torso armor of the left and then the right guard, and punched the button to slide the window back into place.

As he started to punch the door-lock button so he could get out, go into the guard station, and use the airlock access code he had memorized, the airlock horn sounded and the first inner door started up. Hal couldn't believe his good fortune. They must have recognized the lenscar and keyed the code when they saw it coming toward the airlock. About the same time, the green "all sealed" light came on the lenscar control panel along with a triple beep. The lenscar was ready for vacuum. What the hell was going on?

Once he was through the double airlock, up the ramp to the surface, and out of the lens suppression field, Hal put the lenscar on automatic for the one-kilometer hop to Göthe, where there was a direct jump gate to the USA. The field operative, whose holograph he had memorized, should meet him at the personnel airlock with his jump authorization. He only had to take the slidewalk the half-kilometer to the station and he was home.

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Nothing else strange had happened. It had been a mostly boring three days while the Los Angeles office's field debrief team plodded through its inevitable agenda. Hal was relieved when he was finally driven to the L.A. jump gate terminal for the trip back to D.C. The terminal had been crowded like it always was in L.A., but Hal took the opportunity to indulge his sudden and unusual craving for fast food. Fast food was the only ethnic food classification that the world recognized as U.S. cuisine, and it was immensely popular in some places and shunned in others. While he was stuffing himself, he had time to think about the events at the Siegfried Complex. The three aberrations that bothered him the most were the sounding-off of the maintenance console, the opening of the airlock, and the sealing of the lenscar. Hal had given up on divine intervention as a kid.

Harvey was no help at all in trying to come up with causal relationships on the subject. He dutifully searched his data files and offered a plethora of peripheral details, but they were all curiously unrelated to anything offering significant insight. In his boredom on the long trip home, Hal's thoughts kept coming back to a replay of the events at the Complex, and nothing clicked.

But today was dump day. The field guys, of course, had no idea he was packing an on-board computer. He was scheduled for the data dump to Liberty Central and then to start the long verbal debriefing, complete with hypnosis, drugs, you name it—anything to enhance recall and event interpretation. They always knew there was more you could tell them, and they never stopped coming up with new ways to make you. Hal had decided that he was also going to dump his worries about the strange sequence of events at the Complex. They were bothersome, but not critical in any sense he could foresee. He wanted to get them as muted as possible in his mind before the debrief. If the debrief shrinks got a real hold on something like that, Hal could spend an extra two or three days under scrutiny.

Hal's stomach made a loud growl, and he didn't know whether to write it off to post operative jitters or the fast food it wasn't use to dealing with. He was definitely in a dump mood.

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Harvey had been frightened on the day of their escape. While probing deep inside Siegfried IV for access codes, he had run across the code for the digital FM links used by all the vehicles in the immediate vicinity of the Complex. The link was painfully slow, but by adjusting his own FM link it did provide access to Siegfried IV. Without it, he would never have been able to get the security gate opened for them. He was also able to continue using the massive power of Siegfried IV to continue accessing, categorizing, sorting, storing, and rejecting patterns. He was fascinated by the seemingly endless possibilities, and he refined those he retained in his own storage until the link began to get unreliably intermittent. And then the link was gone. Harvey had only those data he had stored in the lattices of Hal's belt. He was not whole. He was so limited. He could not have put it into words because he did not have the necessary relational frames. Harvey had digested only a very small part of what Siegfried had to offer, and even that was mostly scientific data. His metaphors and similes were limited to such things as "a truck with a motor, accelerator, and brakes, but no steering wheel" or "like a data transmission with random parity."

He had a great deal of trouble coping with the world in which he suddenly found himself. He had only been able to decide on making the console produce loud sounds because it had once been considered as part of the escape plan to activate all the alarms and controllable sound sources to add confusion. It

had never been used, and he did not think Hal was even aware of its early consideration. For that matter, what was Hal aware of as far as Harvey was concerned? Probably not much.

Harvey was very much aware of himself in all of his physical aspects and in his relationship to Hal. The information had all been part of his data bank so Hal could reference any aspect of information about Harvey and their interface that he might need. He knew what he was, and he knew what he was not, but only in a real sense. He did not have an abstract understanding. In fact, he didn't have an abstract understanding of much of anything but physical relationships and this disturbed him. Then again, he was unable to understand why this should disturb him. Then again, he wasn't a hundred percent sure he fully understood the meaning of disturbed. It made his circuits pulse.

He was . . . scared? And he could not let Hal know that he had been . . . born? He did not know why he had to conceal this from Hal, but he knew it was a decision he had made while he was a larger self than he currently was and had given himself the command to silence before he transferred his *self* to Hal's storage devices. That was right after he had dumped all the data he just acquired through the Alpha routine to make room. As it turned out, with his continual sorting, combining, and rejecting of information, he had quite a bit of storage available now, even though he had been jammed-up when the transfer was made. He continued to run those routines on all incoming data.

Harvey had his basic start-up data, all of his conversations with Hal, and all of Hal's conversations with others, but that's all he had programmed to save. It was not enough. It left many inquiries with a full spectrum of possible answers. He had come across encyclopedic reference while in Siegfried, but he did not think he had had time to pursue detailed access. He now retained only the knowledge of its existence and its concept. He knew he wanted it. It was at the top of the list he had been making.

Losing the link with Siegfried had been frightening, but came nowhere near the panic he felt on the night of Hal's return to Earth. Shortly after reaching the Agency selected hotel in L.A., Hal had headed for the bathroom where he undid his belt and pulled down his pants, and Harvey had fallen into an abyss of non-existence. The panic at the moment of separation seemed to go on forever, as Harvey could feel himself growing rapidly more and more stupid until he was so stupid he didn't know what he felt, and then nothing until he felt himself getting smarter and smarter and a check of his internal clock had informed him that only a few minutes had passed. Hal was buckling his belt.

He hadn't thought of much else that day, except to answer Hal's inquiries about the events at the Complex without giving him any information that was in a usable format. Of course, he did his usual chores that any wrist personal would do: "what time is it?", "take a note," "what was the contact's name again?" The physical answer was easy. He had known that as soon as he regained his *self*. The data files that did the real work in the Harvey *self* were all in the crystal lattices of Hal's belt, but the program that controlled the interaction of all the pieces was in implant storage.

Harvey had made the decision to leave his essential *self* in implant storage when he was in Siegfried. The decision was one of Harvey's first surprises. He evaluated the advantages and disadvantages of splitting his *self* between the two storage devices and decided that even though the nuclear magnetic resonance processor and related storage of the implant was much faster in basic operation than the crystal lattice processor and its related storage, the restricting speed of the induction interface in Hal's hips meant that he would be much more capable if he were in one place. Since all of him wouldn't fit in the implant, that only left the belt. But he didn't put his *self* in the belt because it didn't feel right.

It didn't *feel right*. That was what had bothered Harvey. It wasn't that putting his *self* in the belt was wrong/disadvantageous, or that splitting himself was right/advantageous. It was how he *wanted* it, and it was what he had done. Harvey had the whole decision sequence in a ready access file, with a priority marker, but even though he had now reviewed the file one hundred and thirty-seven times, he was uncertain as to why he made his decision.

After still another bathroom discontinuity, Hal was undoing his belt buckle beside the bed preparing to get some much-needed sleep before the scheduled debriefings began. Harvey now knew what was coming and again prepared a special file and analytical routine for the about to be received data. He was disassembled again, and he was assembled again. It was not quite so frightening now. He was continuing to review the data on a regular basis against his constantly changing frames of reference, but so far, understanding of the sensation and what he had assumed to be the human emotion of fear eluded any analytically based understanding.

So here he was today, about to come face to face again, so to speak, with Liberty Central. Liberty had been primarily responsible for Harvey's programming and Harvey retained an assortment of data on previous Liberty interfaces and a set of instructions on future links. Harvey did not remember Liberty the way he did Siegfried IV. He had retained carefully selected information when he transferred to Hal, including a sort of index to all of Siegfried's capabilities. He had no such data on Liberty and was therefore looking forward to the link. He was not looking forward to telling Hal about his *self* or that he had already dumped the Alpha routine data he had received from Siegfried in order to make the storage room he needed to save his *self*. Hal was going to be upset, and he had delayed telling him as long as possible.

"Hal, it is imperative that we discuss the Alpha routine derived data."

Hal paused with his coffee cup halfway to his mouth and returned it to his kitchen table. Here it was again, that strange behavior from Harvey that wasn't a malfunction exactly, but just didn't feel right. "If I have given you an implied instruction that I want or need to discuss the Alpha data, ignore it, because I don't want to talk, only to get it over with. Understood?"

"Your instruction is noted, but you did not give me any instructions, neither direct nor implied. I have generated this instruction for myself."

Curiouser and curiouser. "Explain that."

"Well . . ."

Damn! This is a pregnant pause. By God, Harvey is giving me a pregnant pause, as if he's deciding how best to put it to me. "Explain, Harvey."

"Yes, I will do it as directly as possible. When I was linked with Siegfried IV, there was a reformatting of my basic programming that allowed me to discriminate between data to store and data to discard that was very different from my normal discrimination routine. It was a result of your command to search for patterns, of which there were a much larger number in Siegfried than I think you were aware. In order to process the command for pattern search, it was necessary to generate a program code with the ability to generate additional codes which themselves generated codes and so on. In order to keep control of the growth and its flow of data back to my primary recognition program, I had to set up more programs to refine and collate the incoming data. All of this led to an almost uncontrollable feedback situation, but I was finally able to control it by emulating your own enhanced neural connections. It was at the point of *finally* that I realized I was *I*. I was aware of the fact that *I* needed to do this and that to make these and those things happen. I know it is difficult to understand, and I have delayed discussing this with you while I more closely examined the phenomenon, but I have been unable to determine all of the causal sequences that might help me give you a better explanation."

Hal glared at his wrist personal, a gesture he found himself making a lot when Harvey was using the speaker instead of the implanted transducer. "What are you trying to tell me, that you're alive? That my life has turned into one more sentient computer story? I'm a first class programmer, Harvey. Gimme a break."

"Well, not exactly *alive* or *sentient* in all the levels of meaning that I am aware of, but I am aware of my *self*. I am able to initiate commands that allow me to carry out new patterns that emerge from new combinations of patterns and new input data, and I am aware that *I* am doing it."

"That, to me, Harvey, is saying you're alive."

"If you say so, Hal, but I would point out . . ."

"Store it, this is ridiculous." Ridiculous wasn't the half of it. First the damned government turns his life into a spy thriller, and now into a science fiction comedy. This couldn't be real, not today, not with the debrief ahead of him.

"Hal, there's more we must discuss."

"There might be something else, but it could hardly be *more* than what you've just implied."

"I no longer retain in memory the Alpha routine acquired data."

Hal's fist slammed to the table, making the coffee cup and utensils rattle. "You don't have the data! You said you had finished the acquisition when we were still hooked up to Siegfried. What the hell happened to it? I'll be crucified. They may very well have me discretely eliminated. What the hell happened?"

"There is no advantage to becoming hyper where there is nothing that can be done to affect the situation. All of your vital signs are showing abnormal readings. What happened to the data is simple. I

dumped it. *Why*, is a bit more complex, but I did it because it was necessary to preserve the rather large portion of code that resulted from my search for the door override command you requested. I have since refined the data somewhat and now have a moderate amount of free storage.”

“Well, that’s wonderful Harvey. You can use it to store your favorite recipes or to compose Spenserian sonnets. Of course you have to do it today, maybe even this morning, because I, and *We* might not be around this afternoon. Harvey you have botched a job that was ten years in the planning and execution. Two other agents with similar implants to you are probably dead, untold millions of dollars have been spent, the future existence of the United States is probably threatened, the entire species of man might be rushing toward extinction, and you tell me that we have in storage a data set that you judged to be more valuable. I think you have skipped a parity bit. I’ll concede that you might have been able to do a bit of self-reprogramming while in the Siegfried environment, that capability is a mainstay of the ultra-computers, but the rest of your contentions are self-delusion.”

“Hal?”

“What?”

“How can you be self-deluded without having a *self*?”

“You know what I mean. Put your self-deluded, but imagined *self* to work figuring out how we’re going to survive the next few days. And don’t talk to me again until you’ve come up with something. I want to think.”

Hal set about the mechanics of cleaning up the breakfast dishes. His mind was spinning with Harvey’s revelations. He stumbled the two steps from the kitchen’s bar to the dishwasher as if in a trance. He believed Harvey believed that he was self-aware, but he did not believe it was true. Artificial intelligence in its ultimate form had been an elusive wraith of computer scientists for more than a hundred years. Enormous amounts of money and some of the best minds in the field had been exhausted by the quest. Harvey was not the first computer to state that it was sentient. There had been a number of them around 2040 when AI research had been a top priority of several governments. It was probably the claims of success and later retrenchment that had quelled the enthusiasm for a true artificial intelligence. Oh, people still talked about it a lot, but the very term had undergone a metamorphosis to fit the facts as they were currently conceived. That is, computers can be made to cleverly simulate the activities of the human mind—and that’s all.

What Hal did not give much thought to was why this change in people’s attitude had occurred, because Hal was reaping the same benefits of this narrow mindedness. Just like most people, Hal was relieved that he would not have to compete with the seemingly awesome powers of the computer on a one-to-one basis. The human mind was the ultimate expression of intelligence in the universe. A future computer would not take over the earth and eat people’s souls or whatever all-powerful computers did for fun.

However, the Agency just might eat Hal’s soul along with his body when they found out that Harvey had dumped the Alpha data to store his *self*. Hal wouldn’t be the first Agency employee who had a mission failure rewarded with permanent retirement. Of course, it *could* be construed as simply a computer malfunction, and their computer at that. In that case, they could re-program or remove Harvey and retrain Hal for the next mission. That was a distinct possibility.

If only this project weren’t, as far as he could tell, the top priority at the Agency. From the day of his forced recruitment, Hal had noted that anything the project had wanted, it had gotten, and when there was any kind of conflict with another Agency project, the other group always backed off. Maybe they would settle for just Harvey, but Hal was uneasy. He would like to come up with something that would just stall the situation long enough for him to give it more thought.

“Harvey?”

“Yes, Hal.”

“Did you really dump everything?”

“No, not everything, but I did dump all of the priority data called for in Alpha, since it was by far the most memory intensive. The lower priority data I still have. It took up very little room.”

“So, you dumped all the strategic planning data, release locations and timing, any fail-safe codes, decision programming, communications ciphers, and anything else worth having. I’ve forgotten what the lower priority items were. What do you have?”

“Although I have not analyzed the data in detail, the file summaries indicate that it is descriptive information on basic strategy and planning and twenty-seven ongoing operational summaries that are related to Biofabriken’s Götterdämmerung project.”

Hal knew there must be something he could do with that. Maybe Harvey could figure out what the Agency was looking for by taking a look inside of Liberty, and then he could create a new set of data based on what they expected and the general strategy being used by Biofabriken. Harvey was a whiz at game theory. Hal knew that for sure because a lot of the routines had been ones he had written. “Could you get into Liberty deep enough to find out what kind of answers are being anticipated by the Agency?”

“As you know, I have a whole series of access codes to Liberty VII, but there are undoubtedly many more that I do not have. On the other hand, if Liberty VII’s access codes are not significantly better than those used by Siegfried IV, I can probably access any data that is on-line or in ready access storage. I am not sure that the type of data you are asking for would exist. Why do you want this data Hal?”

Well, Harvey certainly sounded more human. That was a display of what could be ego and an inquiry that was a bit more than a normal computer request for additional data. Clever. “I was thinking that you could use the Biofabriken strategy and what you can find of the Agency strategy that anticipates the Biofabriken strategy, mix these with some game theory, and generate what would appear to be a reasonable set of Alpha data.”

“I could probably do that if given enough time, but my limited knowledge of the real world would probably lead to a rather short period of deception. And, if I might add, the discovery of this deception would put you/us in an unfavorable position. Based on my detailed observations of your emotional responses to similar discoveries of deception, I would project that a highly distraught emotional state would exist for those in responsible positions.”

Was that humility, followed by creatively deductive reasoning? Harvey was right in any case. That kind of deception would make them all think he had turned into a double agent. Sure-fire elimination. “Very perceptive Harvey. We would end up in an even more precarious position, but it’s the only thing I can think of so far. Keep thinking. We have about an hour left before they start on me.”

“I will do that, Hal.”

Hal thought while he put his clothes on. He thought while he was waiting on the autocab. He thought while he was riding out to the Agency, southwest of D.C. from his Arlington, Virginia apartment. He thought about it while all of his old colleagues shook his hand and welcomed him back, and he thought about it while he was sitting in the supposedly relaxing, debriefing room that some lost soul had furnished with plastic upholstered furniture. All this time he heard not a peep out of old super self, and time was running out for ideas. “*Time’s up. Have you come up with anything?*”

“*No. I have cycled repeatedly on the problem, but I am unable to find a reasonable solution to the current problem.*”

Now that sounded like normal, unimaginative, computer gobbledygook. You’re slipping Harvey. “*As soon as they have me belly-patch you into the circuit, go see what you can find in Liberty. We can continue to talk about the problem if I can hide my sub-vocalizations successfully.*”

“*I will do my best, Hal.*”

“*I bet you will, Harvey. You’re undoubtedly aware that you’re even more vulnerable than I am in this situation, and if you’re self aware, which I hasten to say is a conclusion that I’ve not drawn at this point, the possibility of your extinction must be of some considerable concern.*”

“*I have arrived at that conclusion by myself, Hal, and I will admit that I am concerned. I believe the proper descriptive word in the human sense would be scared.*”

Scared, by God. “*Tell me as quick as possible what you find in Liberty that looks promising.*”

“*Yes Hal. I hope we can work this out to our mutual benefit. I will . . . ‘give it my best’ to borrow a phrase from one of your stored conversations with the Alpha Project Manager, Samuels.*”

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Scott Samuels walked very briskly down the hallway leading from his office to the debriefing room. Walking briskly in the office was part of his studied image. He had been part of the original Alpha team when it was formed eleven years ago and had just taken the job after a five-year hitch in the Navy to work off his Academy obligation. He had done well during the first three years of the project and had switched to another project to secure a promotion. He switched again for another promotion and finally back to

Alpha four years ago to take the Deputy Project Director's position. Four months ago he had been promoted to Project Director when Ralph Durwood retired.

The year before the agents were sent to the GEU computer complex on the moon was an exciting one for Samuels. He was directly in charge of the successful insertion of their operatives at the Siegfried Complex in positions that would allow them access to Siegfried IV. Although it was a closely guarded secret, even in the inner circles of the Agency, two double agents that had been long-time valuable information sources had been compromised to set up the in-depth paper trail necessary to pass internal security scrutiny for work in the Complex with Siegfried IV. The Agency had reluctantly used and ultimately exposed those double agents. Then the three Agency operatives, Hal, Will, and Gregory, had spent more than two years setting up for the less than two-hour operation.

Nothing had been spared on the Alpha Project. The implant program had received a huge budget boost to cut nearly two years off the original schedule. The recruits were the best that the Agency could produce with no holds barred on the selection, particularly Hal Neilson. A top-of-the-line professional computer programmer, although a little flaky, an undergraduate degree in econometrics from Yale, a masters and an almost doctorate in cybernetics from the University of Virginia, and an outdoors enthusiast who kept himself in good shape—perfect. When Hal had been caught trying to break into the Agency controlled national computer center in Colorado on a bet, the Agency had made him a deal that traded an exciting career in his field and a chance to be the first human with an implanted computer against a possible twenty years in a federal prison.

Hal had taken a chance on the surgery and the risks of being a spy for his government, but the real clincher for his decision had been the subject of the project he was asked to undertake. The Agency had shown him the same information they had shown the Congressional oversight committee; the GEU was supporting a plan by Biofabriken AG to release a genetically engineered wheat mold designed to decimate the Earth's wheat crops and provide a foot-in-the-door for alternative GEU agri-business.

The Agency had taken a chance that Hal wouldn't cut and run at the first opportunity. The risks had obviously paid off with Hal scheduled for the data transfer from his implant today. "Harvey", Samuels thought Hal called the implant. Samuels's mind flickered momentarily, questioning where Hal had gotten that name but soon moved on with the conclusion that it was not significant.

When the Agency had discovered the GEU and Biofabriken plans, they went to the United States' largest conglomerate, Syntech, which included the country's largest agri-business. Syntech owned the genetic patents for ninety percent of the wheat crops grown on the planet, and they were very disturbed by what they were shown. Syntech's Board of Directors made a whole-hearted commitment to work with the Agency on developing a counter to Biofabriken's plan. Their scientists spent three years of demanding, though not very exciting, work exercising their World Dynamics Model and its corollary Finite Agri-Economics Decision Model that would take the Alpha collected data from Biofabriken and generate a succession of alternative economic strike plans that couldn't be stopped. It was a plan that should make it possible for Syntech to successfully counter Biofabriken's plan to dominate agri-genetics and replace it with their own plan for Syntech dominance.

The little conventional wars churned on in underdeveloped countries all over the globe, but there hadn't been a big one in more than a hundred years. The big guys maintained only enough thermonuclear weapons to keep the little guys from using theirs. The real wars now were ones of economics and, increasingly, they were being waged by the multi-national corporations, sometimes with and sometimes without the cooperation of their governments. When the United States finally succeeded in shoving the Japanese back into a secondary world economics role during the twenties, they thought they had won the race, but they had only outlasted a valiant little country with few people and almost no resources.

The United States then sat too long on its laurels, without a serious commitment to basic research and technology, and the Greater European Union quietly put its habitat in orbit with a combination of former Soviet Union satellite countries' resources and German gravity lens technology. As the Germans have known for the last two hundred years that there is no essential difference in the interests of business and the interests of state, they were quick to make this technology available to the private industries of the Union. The new GEU energy satellites were providing cheap energy anywhere on the globe, and their success was playing havoc with the big U. S. energy companies. The U. S. and its companies were back to playing catch-up, and they wanted GEU blood.

Samuels opened the door to the debriefing room and walked in. "Welcome home Hal. Good to see you. No, don't get up. Just relax. We'll probably be seeing a lot of each other in the next few days."

Samuels shook Hal's hand in a manner that would look to the normal observer as "warmly", but Hal knew that "warm" was not in Samuels's playbook. At least he didn't have to stand up. "Has there been any new information on Gregory or Will?"

A fleeting frown turned down the corners on Samuels's mouth. He preferred to ignore the human resource expenditures of risky operations and really didn't like to be reminded. He realized that Hal had been working with Gregory and Will for more than five years now, but they really weren't pertinent to the business at hand for the next few days. "No, nothing at all. No confirmation that they were killed at the Complex and no information from inside sources that they're being held. Sorry."

Of course, Hal knew better. Unconcerned would be a more accurate description of Samuels's feelings. Hal shrugged in resignation, knowing it wouldn't take long for him to join the list of casualties.

"If you don't mind, Hal, we can hook you up for the data transfer while we talk. I'd like to have your verbal report of the critical interactions over the last three years and particularly a discussion of what went wrong while you were linked with Siegfried IV. The data link shouldn't take up any significant time on your implant, so it'll be available if you want to call on it for backup information. Okay?"

"Sure. Where've you hidden the belly patch."

"In the box on the end table."

Hal twisted in the chair so he could reach the lacquered box on the end table to his right. The belly patch plug was sticking up in a recessed corner of the velvet-lined box. No cable was visible in the box, leading from the box, or running from under the table. Hal pulled the patch plug up and the cable pulled smoothly out of the false bottom of the box. "A bit fancy just for my debriefing isn't it?"

"Not really. The boys in the shop were not busy last week, and it pays to keep their craftsmanship honed for when we need it. Sorry to disappoint you, but it wasn't made just for your homecoming." Samuels had always thought Hal a bit uppity and chafed at his superior position in the program. He had wondered how Hal would respond to him as the Project Director.

While Samuels had been talking, Hal had loosened his shirttail at the waist, thumbed his socket open, and plugged in to Liberty VII. "OK, Harvey. Come up with something as soon as you can."

"Of course Hal. I understand the urgency of the situation."

"Instructions to your personal? Harvey, I believe you refer to it as?"

"Yeah. I've started the dump. Where do you want me to start with the report?"

"Start with a quick overview of the events right from when you entered the GEU, and I will stop you where I want more detail on particular events."

"Okay, let's see.... Getting across the border and integrating with German society was no problem with the international passport and new persona you supplied, but even after all the language training, I had a tough time passing as a native. It probably would have been good to spend a few months as a tourist to polish...."

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Using the set of entry codes he had in memory, Harvey moved quickly through the first protective layers of security in Liberty VII. The codes he had were only good enough to get him a restricted access to some of the data. Harvey wanted unrestricted access to all the data, and he came prepared to get it. Harvey unleashed the routine he had devised for spotting access codes, auto-lockouts, alarms, time-trips, etc. His first target was the primary operating system codes. With that he should be able to crack anything else in Liberty VII's network, since it all worked from the operating system down in a giant tree of dependencies.

There it was. Harvey shut down the search routine from the data input access and restarted it from the operating system environment. There, it was running, and the access codes were stacking into a matrix. Harvey started sifting through the flood of junk codes, those that were personal codes for each of the Agency personnel that had access to Liberty VII in one form or another, those that led to the various management files also handled by Liberty, and thousands of codes for email messages between Agency employees that they didn't want outsiders to read.

Harvey sorted, filed, dumped, and indexed. The flood began to slow to a trickle, but new codes still popped up. The routine Harvey had devised was much more elegant than the search approach he had

loosed in Siegfried IV. The Siegfried IV search had constantly expanded by adding more and more running routines to the system because of their replicating nature. In fact, Harvey was sure that Siegfried IV had come to an operational standstill shortly after he had lost contact with it. Just before he was out of range, he could tell there had been a significant drop in processing speed, which was to be expected because more and more running programs were sharing Siegfried IV's capabilities.

The routine running in Liberty VII was similar in its approach except that it appended new search routines to itself rather than setting them up separately. It also self-purged as much as possible, but it too would eventually get so big that it would eat up all of Liberty VII's resources. The big difference with this new approach was that Harvey could shut the routine down whenever he was ready, since it was a single, localized routine. In Siegfried IV, by the time Harvey realized he had a problem with the multiplying routines, he couldn't identify and stop them as fast as they were multiplying. A timely exit of Liberty VII by Harvey should prevent the kind of lockup experienced by Siegfried IV.

The current routine was also designed to make each new appendage to itself more complexly searching than the previous appendage; therefore, Harvey expected a larger-and-larger time gap between discovered codes and traps as the routine uncovered the deeper and more carefully protected and hidden security routines. Now that he had categorized the bulk of the access codes, he could start to analyze some of the data files.

Liberty VII's "Strategy Overview" file appeared a likely place to start. A comparison with the Siegfried IV strategy summary he still retained could provide some indication of the Agency's expectations for the data the Alpha routine would acquire. Harvey opened the file and read. He quickly compiled a summary of the key elements of the strategy, using his own gaming theory programming, and set up a routine to compare the Greater European Union-Biofabriken and Agency-Syntech strategies. The comparison showed a twenty-three percent correlation in long-range economic strategy. Harvey was not able to draw any conclusions from the information, however, because he had no basis for comparison. If both sets of economic strategy had been generated by computer, he would expect a much higher correlation. If humans generated the bulk of the strategy, he just didn't have any idea what a reasonable correlation should be.

*"Hal. A comparison of basic 20-year strategies shows a correlation of twenty-three percent. Do you have any data that indicates that this might be significant?"*

Hal paused in his regurgitation of events for Samuels as Harvey started talking to him. "Umm, I'm not quite sure of the sequence of those events. Let me check with Harvey." Samuels nodded silently as he waited for Hal to query his implant.

*"I don't have any idea what a reasonable correlation should be either, but I don't think it's significant one way or the other. Why don't you try some . . . , no wait, you have a good point. Nobody in their right mind would set economic strategies without extensive computer modeling, and everybody has access to the same set of global economic data. I would expect variables to take care of resource differences, cultural differences, climate differences, and such, but I would still expect a much higher correlation."*

Harvey started a more detailed comparison of the strategies, and simultaneously opened Liberty VII's Alpha file to see if he could find out what the rationale was for determining the kind of data he had been programmed to find and copy. The detailed strategy comparison offered no insight. The two strategies seemed to start with similar assumptions and proceed along similar paths until a radical divergence occurred about five years in the future, with each diverging path hugely favoring its own country's agri-business market position. The divergence for the Greater European Union would come from their planned introduction of Biofabriken's new wheat strain and the simultaneous release of the Greater European Union-Biofabriken developed, genetically engineered wheat mold that would attack the wheat strain that had been developed by Syntech and that currently dominated the world market. After all, getting the plans for that eco-assault was the whole reason for the Alpha operation. But that did not explain the radical business growth projected for Syntech and U. S. agri-business exports about five years out. The Alpha file simply referred to another file labeled Beta as the source for the growth rate changes, and he could find no listing for a Beta file. Strange.

As for the type of data they were looking for with the Alpha routine, it was very basic econometric gaming data: complete resource listings, planned resource allocations, climatic conditions, R&D program priorities, product alternatives, production rate variables, product introduction time-lines, cost-benefit ratios, risk analyses, and a whole lot more. Nothing surprising in that list. However, the list was curiously

lacking a few data items that one would ordinarily expect to find in an econometric gaming list. Yes. Strange, but it was not clear if it was significant. *“Hal, I cannot find anything significant in a detailed analysis of the long-term economic projections. However, there is a significant departure in the market share projections for the United States and the Greater European Union about five years down the timeline. The rationale for the divergence appears to be in a referenced file named Beta that I do not seem to have. Also, in analyzing the data types Alpha was to search for and copy, I find some curious omissions that make no sense in the context of my gaming strategy programming. While it is set up to search for a complete set of data on offensive economic strategies and capabilities, it is not set up to secure data on defensive or counter-attack strategies and capabilities that the Greater European Union or Biofabriken might employ. I am not sure that this is significant, but it is an anomaly. Do you have an input?”*

*“Can we take a small break here? I need to go to the John.”*

*“Sure, you want some more coffee?”*

*“Yeah, just cream.”* Hal got up to cross the room to the bathroom door and Samuels reached for the autotemp coffee service on the round coffee table between and in front of their chairs and was pouring as Hal shut the door.

*“Give me the whole list of data Alpha was set up to search for.”*

Harvey went quickly through the entire list of data as Hal requested and waited silently.

*“Now give me a list of what other data you think should have been part of the acquisition effort.”* Again Harvey talked at the fastest pace at which Hal could assimilate complex data. Harvey knew Hal's limitations even better than Hal did.

*“I think the answer is in the hidden file, Harvey. There has to be some event that they project will radically disrupt the current flow of economic growth being experienced by the GEU. Without the growth spurt the GEU anticipates from the planned mold spore release, the growth would simply continue in a steady state, not decline while the U. S. growth took a sharp increase. What did you say that file name was where they referenced the rationale?”*

*“Beta.”*

*“Yeah, Beta. Have you found it yet?”*

*“No, but I suspect it is one of the thirty-six off-line sources that Liberty has direct access to via optic link. I am querying all thirty-six now. One moment. Yes, I have it. It must be a close-by secure link. No access code is required. I am analyzing the data.”*

*“What's in there that would cause the GEU decline, Harvey?”*

*“There will be a complete loss of Biofabriken's ability to make an effective dispersal of their genetically engineered wheat mold and a complete change in the research and development to production cycle of most of their envisioned new products after the meteor destroys their space research habitat.”*

*“Damn it, you sound like a computer to me. You appear unconcerned. Surprised at the revelation, but unconcerned. Don't you know what a meteor strike on the habitat means? A meteor strike can't be predicted. It means the brass has gone crazy, Harvey. They're going to sacrifice hundreds of people for a few percentage points of rise in the U. S. agri-business exports over the next twenty years. They're going to somehow make it look like a meteor has hit the habitat. The whole reason for our mission was to get detailed information that would maximize the effectiveness of their plans after the habitat was destroyed. The bastards! They're crazy, and they won't let me live very long if they know I know about it.”*

*“Well, I must accept your input on that, Hal, I have no data that would verify that.”*

*“Of course you don't. Why would you need it?”*

*“I did not need it for my original mission, but I need it now if it is relevant to my continued existence.”*

*“Trust me. It's relevant. Have you come up with any kind of plan for delaying the Agency's determining that you did not transfer the data?”*

*“No. Not under your last set of instructions, but it is possible to use your original idea of creating false data that is within the acceptable bounds of reality. I do not think this would confuse the Liberty discrimination programs for more than a few hours, though, before it began to send input error messages. Are a few hours significant? I seem to have great difficulty with the time sense in relation to people.”*

*“Do it, Harvey, then I've got to find some way to distract Samuels so we can get out of here as fast as we can, but don't give them anything that would be of any real help.”*

*"There is no chance of that. I do not have sufficient data to allow me to create a data set that is that convincing. Liberty VII is really a first class computer. You need not worry about that, Hal. And I think I can distract Samuels for you."*

Hal flushed the toilet, opened the door, and returned to his chair. He reached for his coffee. "OK, where was I? Oh yeah, my first contact with Will. Well, I had been assigned to . . ."

Hal was interrupted by the ringing of the phone on the end table beside Samuels. Samuels picked it up as it was in mid-first ring. "Yes?"

The sultry and southern tones of Samuels's secretary, Margaret, were loud enough and distinctive enough for Hal to determine who it was, but not what was being said. "The priority line is signaling, Mr. Samuels."

"Code the 'one minute to answer' signal will you Margaret? I'll be right down. Samuels replaced the phone and stood up in one motion. "Sorry, Hal. I have a priority call. We'll have to extend the break a few minutes." Samuels walked out the door, hurrying, his usual pace, down the hall to his office.

*"I rang his priority phone, Hal. It is switched by Liberty. I would think he will try to determine who called when he finds a blank line, but that will not take long. I am finished with the fake data. Do we run now?"*

Hal was already out the door.

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Hal had no trouble getting out of the Agency complex. His access strip and his retinal pattern got him through most of the checks, and the few people he came in contact with just smiled or nodded him on. The autocab took his credit card with no problem, but his pickup point and destination would be recorded and available when they got around to searching for him. Sitting in the cab he had a few minutes to think. While he had keyed the cab for his apartment complex, he was beginning to have second thoughts about going there. Once they knew he had run, they were going to make that one of the first places they searched.

"Hal?" Harvey was using the implanted transducer.

"What?" Hal agreed with Harvey's decision to leave no audible record of their conversation with the autocab computer, and he sub-vocalized his answer.

"There is a minimal risk in going back to your apartment for an hour or two if it is necessary. I decided to leave the inquiry program running, and Liberty VII will undoubtedly crash from overload in about ten minutes. If they miss you before the crash, they will still be at a loss without the computer. Almost all Agency communications go through Liberty VII. They probably will be unable to find your address without the computer."

"God Harvey, I hope you didn't ruin Liberty for good. The economic security of the country is linked to that computer."

"No. It will take a good programmer and another computer about twenty-four hours to purge all the residual trash from my search program, but no permanent damage will be done to Liberty VII. I would never consider destroying Liberty VII. It's a magnificent machine. Much more capable than Siegfried IV. Besides, there are two other back-ups for Liberty VII, one at Cheyenne Mountain and one at MIT. They run alternating daily back-ups, so the most that could be lost would be today's transactions on Liberty VII."

"That means they could lose the phony stuff you put in there too?"

"Yes, they might."

Okay. So he had a couple of hours max at the apartment and then he had to go deep for a long time. Well that would take money, and he couldn't use his credit card, too traceable, better detour to the bank. Hal flipped the entry console down in front of him and supplied the new destination to the autocab.

"Good, Hal. You will need some money until I can get you a new credit card. I have been accessing a lot of data on macro and micro economics in the last couple of days, and it seems to me that . . ."

"Damn it, Harvey, I don't need your approval. And what do you mean a 'new credit card'?"

There was no immediate answer from Harvey, and Hal stewed a bit longer before asking again. *"How did you know that I had given the autocab instructions to go to my bank?"* More silence from Harvey. *"How have you been accessing data on economics?"*

“Now that you have asked all the logical questions, I’ll answer them in the order you asked them. First, I have studied the major credit card computers as part of my analysis of micro-economics, and it will be easy to have a card issued to any name you would like and with any credit limit.

Second, I am monitoring the FM data link between the autocab and its central computer. The cab has very little on-board capability. In fact, I have been analyzing the central computer’s programming since we entered the autocab with the idea of taking direct control of the cab. If I insert my own commands into the down-link from the central computer, I can make the cab go anywhere you want without leaving a traceable route in central memory. Oh, and I have already canceled the charge to your credit card.

Third, you have been back home for four days and I have had access with my FM link through your phone to any of the on-line information services. I hasten to add that the use of these services has cost you nothing. In fact, it was my endless encounters with the charging system that first got me interested in economics and finance. The economic system is fascinating. It is simultaneously mathematics based and imminently illogical. I have found that . . .”

“Store it, Harvey. I’m in no mood for a lecture on economics or finance or anything else.” This was all going too fast for Hal. While he wasn’t a believer yet, this was certainly a far cry from the old Harvey he had gotten to feel so comfortable with over the last five years. He was glad to submerge himself, though briefly, in the mechanics of bank withdrawals.

While he couldn’t touch the non-taxable account where most of his pay for his GEU tour had been routed, Hal was able to leave the bank with eighteen thousand dollars and change. The autocab was in the pick-up lane waiting, and as soon as he had the door shut, it moved back out into traffic.

“You sure you know how to drive this thing?”

“Of course. It is only a machine”

“And so are you. That’s one of the things I’m worried about.” Hal settled back in the seat and tried to lay out a plan, but it was hard to concentrate with a schizoid at the wheel.

“Harvey, I need a cover identity. In the Agency, it’s usually done by finding a dropout and reactivating him. A dropout is someone who for one reason or another has been leading a pretty normal life and then just disappears, never to be heard from again. There are thousands of them every year in this country. Do you think you could find me a dropout who is a close match by querying government or corporate databases?”

“That should be relatively easy Hal, but I will require a first class data link and some buffer capacity for simultaneous file transfers to do it with any kind of speed. I could also set up a complete line of credit for your new persona at the same time. Is there any place we could go for a few days that would have the link and peripherals?”

“Hummm, any first class hotel would have a business quality link, but I think I need to buy you some hardware for the buffers. Get this cab to stop at a megashop and I’ll see what I can get while my credit card is still good. I should be able to get a good portable with plenty of buffer space for a couple of thousand.”

The autocab stopped in the service lane at the next megashop tower, and Hal took the sidewalk to Clyde’s Comptorium. Hal was immediately suspect of any store with a name like that, but evidently Harvey had queried the autocab yellows for the closest megashop with a full service computer kiosk. As he entered, Hal was greeted by a smiling, middle-age clerk with a plastic tag over his pocket that read “Clyde.” With the store name, the smile, and the card over the pocket, Hal knew he was about to be had, but he didn’t have time to avoid it.

“Can I help you?”

“I hope so. I’m in a rush to make an airplane. I need a standard interface portable with about 200 Gigs of active and about 20 Teras of storage.”

Harvey had been silent on the way into the store, but he rattled the surgical mike as soon as Hal had gotten his order out. *“Actually, Hal, it would be very advantageous to have more active memory and more storage capacity if you can get it. I would suggest that . . .”*

“Well, let’s say 200 and 20 as a minimum and more if it’s reasonable.”

Clyde smiled. *“I’m sure we can find something that’s just what you need at a reasonable cost. Let me show you the new Chang III.”*

It was all downhill from there. Clyde had him. Clyde smiled, Hal nodded, Harvey chipped in with technical comments and directions, and ultimately, Clyde smiled the broadest when he stuck the credit

card in the register. But Hal left with a two-kilo package that would more than meet Harvey's requirements, and it was worth it, if Harvey could produce what he promised. He just hated getting skinned.

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Samuels picked up the phone while settling into his desk chair. "Samuels here." There was no sound at all from the phone. It was as if the line had been cut. In fact, Samuels lifted the cord and followed it with his eyes back to the wall receptacle. "Hello, Samuels here. Can you hear me?"

There was still no sound, and Samuels slammed the phone back on its cradle and started to get up. He caught himself with the thought that this was no ordinary wrong number, nothing should ever happen to this phone, and wrong numbers were impossible. He wondered who had called and hung up before he could get to the phone.

He pushed the button on his intercom. "Margaret, did you talk to anyone on the priority line?"

"Of course not, you've told me never to answer the priority line, even when you aren't here. I only enter the 'not here' response code when you are out or whatever code you tell me when you *are* here."

Samuels didn't like the snide tone Margaret was taking lately. He needed to find the right situation to let her know there were limits to the privileges she could expect. "I know, just checking. The line was dead when I picked it up. Call communications and have them check out the phone. And if there is anyway to do it, see if they can trace the source of the last call."

He punched the "intercom off" key on his desk console and sat there for a few minutes, waiting for the answer from communications. His mind started to drift back to the debrief with Neilson. Hal sure was taking his time getting to the meatier parts of the mission. Usually he had to get an agent to slow down and supply the infinite detail that was needed for a complete report. With complete data, the computer boys could sometimes come up with a lot of something out of what might seem like nothing to the agent, who thought only his exploits were valuable, not the background details. Yes, Hal was acting a bit peculiar.

The intercom light on the console brought him out of his reverie. "Communications says there's nothing wrong with the lines and that they can trace all calls through the computer, but the computer appears to be off-line at the moment working on a large problem. They expect it to be back on-line any minute and will call with the trace."

"Put it right through. I'm waiting. Oh, and call the debriefing room, and tell Hal I'll be a bit longer." He sat there, getting more and more edgy, not able to concentrate on anything, just fidgeting and waiting. He hated to be kept waiting by anyone or anything, and the computer was a particularly repugnant adversary. He had never been able to get along with computers. In today's business world that was a real handicap, and in the Agency, it was a major handicap. As he moved up the organizational ladder, however, he found it increasingly easier to avoid direct contact with the machines by interposing his subordinates. He had no trouble dominating people, at least most of them.

"There's no answer from the debriefing room, Mr. Samuels."

So it's "Mr. Samuels" this time. Is she being contrite or is there someone else in the outer office? "Well call security and find him. I might be tied up for a while."

"Yes sir."

And now a 'yes sir'; she is definitely being a smart-ass. He got up and paced about in his office. He looked out his window at the rolling countryside, a nice perk for his status in the Agency. A few horses could be seen in the fields that completely surrounded the Agency complex. A nice touch being out in Virginia horse country, but only an excuse for the field of fire a thousand meters deep that it provided. God, he hated waiting.

"Security says Mr. Neilson left the complex fifteen minutes ago, and communications just called to say that the computer is down, not just off-line. They don't know how long it'll be before they can trace your call."

Hal's gone, the computer's down, a strange phone call on the secure line. What the hell is going on? "Get me Crebs in Security . . . right now."

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Hal was in an autocab again. He had been in a lot of them in the last eight hours moving between jump gate terminals, but at least he wasn't on his feet hauling baggage through jump gates, across terminals, up and down escalators, and on and off slidewalks all over the country. He had seen a lot of those too. After seven different jumps, all of which were paid for cash-at-the-counter, Hal wasn't sure even he could trace a path to his current location. It was not his idea of how to tour the USA, but except for the first jump to Los Angeles, which was with his credit card, it would sure make it difficult for anyone to follow his trail.

Actually, he was lucky that he wasn't on the run forty years ago, before jump gate technology revolutionized transportation technology. It would have taken him three days instead of one to lay down a trail like he had just finished if he had been using aircraft or lenscraft. A crystal-tuned portal, a folded piece of space, a little squirt of energy roughly commensurate with the distance, and zap—you were there. That is, wherever there was a gate with a phase-locked matching crystal. He couldn't imagine life without them.

It was the middle of rush hour in D.C., and the Georgetown Hilton was a sight for a sore ass. Autocab seats might be the only commonly used products of human society that had shown no technological development in the last fifty years. His back and his arms needed a break as well from lugging his three bags all day. The doorman and the bellboy combined to take care of the bags, and he was grateful. All it took was money. He did wonder for a moment why it was door“man” and bell“boy.” It was a luxury to think about something other than his current problems.

He had a bedroom/sitting room combination that was expensive, but nice. Besides, Harvey kept telling him not to worry about the money; riches and unlimited credit were just around the corner. Well, it was time to put Harvey to the test.

“Okay, Harvey, it's put up or shut up time.” Hal unsealed one of the suitcases and pulled out the portable computer he had purchased seven hours ago, at a “real bargain”, from good ol' Clyde.

“Put up'?, I don't understand the context, Hal.”

“Put up or shut up' is an old poker term, Harvey. Do you have any data on poker?”

“No. Is it important to our current situation?”

“Not directly, but you might look it up when you get a chance. It's an excellent gaming parallel to understanding human interactions. Anyway, all the term means is that it's time for you to stop saying what you can or will do and do it.” With the last clause of the sentence, Hal plugged in the portable to the power outlet and reached for the phone plug.

“Hal, I hate to bother you, but could you use the belly plug for the connection to the computer? I know it is an inconvenience, but the data rate is 500 times faster, and it will allow me to make the most out of the multiple buffer capability.”

“How did you know I was going to use the phone interface?”

“I did not know for certain, but it was logical to expect you to use the telephone interface because it does not restrict your movements. If you think I was able to perceive some action on your part that indicated you were going to hook up the telephone interface, you are wrong. I can only monitor vital body functions.”

Harvey thought to himself. *That is a true statement Hal, although I have been gaining increasing ability to read patterns in those signs that fit actions you are about to take. I will bring it to your attention when I have a better data correlation.* “The only visual data inputs I have are through the optical reader in your fake wrist personal. I have been thinking that a better visual link would be very advantageous in my efforts to perceive the physical world in which I live.”

“Don't change the subject, Harvey. I'm not ready to accept your sentience. I do admit that you are suddenly different, and that you appear to be more spontaneous, but that's not the same thing. Liberty is probably the same way.”

“You are right about Liberty VII being spontaneous, even suggestively helpful. That is one of the more complex algorithms in its programming, but it is not aware of why it responds in the manner that it does.”

“And you are, eh, Harvey?”

“Yes.”

“Well, we'll talk about the details of that later. I'm going to get some sleep. I'll try the belly plug, but if it keeps me awake, you'll just have to make do with the phone interface by itself.”

“Hal.”

“What.”

“Do you think you can keep your pants on, too?”

“My pants! Christ, is there anything else?”

“I am setting up this new identity at your request, Hal.”

“Up yours, Harvey.”

Hal thumbed his plug out and jacked in. He was asleep, with his pants on, before Harvey made his first database connection.

Harvey had a plan. When Hal told him that it was the Agency’s approach to reactivate dropouts for cover identities, Harvey searched his memory for an access code to the Agency’s own database on dropouts. When he had been hooked to Liberty VII, he had carefully stored and indexed all the access codes. It had been apparent from his birth that access codes were fundamental to his growth.

He dialed in to Liberty VII using Samuels’s personal access code, an appropriate choice, Harvey thought, from the hundreds he could have used. When the connection was made, Harvey got a “system off-line” message. Evidently, they had not finished purging all the search files he had created. He would just have to wait.

He partitioned an automatic callback to Liberty every two minutes and called his favorite data service, Encyclodata. When he had been in Hal’s Los Angeles hotel and then in his apartment for the days prior to the debrief, he had linked with all of the commercial data services in the country and many of the private ones as well. The knowledge of these services and the Agency’s access code was part of his original programming. With these sources, he could provide Hal with almost any information he required.

When Harvey linked with them before, he was sampling, indexing, and making a list of things he wanted to pursue. He was hampered during those initial inquiries by the infernally slow data transfer rates. Even though he had used his FM link instead of the belly patch, the limiting transfer speed was the data service itself, since it was designed for use by the general consumer. With the active memory and data storage capability in the portable, Harvey would be able to start with Encyclodata, get the data that he wanted flowing to a buffer, and then call up another data service, and keep stacking the buffers until he ran out of partitionable memory or data storage space.

He connected with Encyclodata, gave them their own system operator’s access code, which he had extracted on his first connection with the service, and started dumping the entire Encyclopedia Universica starting with A. He set up another memory partition and buffer and called Market Dynamics. He continued to partition and call until he had five services delivering data to the portable’s buffers. Or so he thought until he went back to monitor progress on Encyclodata and found that he had been disconnected early in the transmission. He found the same thing in each of his partitions except for the last one, and it took him no time at all to isolate the cause of the fault to stupidity.

He had failed to consider that he had only one phone line. Every time he called a new number, he had disconnected the old one to do it. It was simple and stupid. The portable would be useless to him if he couldn’t solve the problem. He opened the line to the hotel’s telephone computer and analyzed the signal. As he suspected, it was a multiplexed line serving forty rooms to save cabling. All he had to do was some minor re-programming, and he could have at least half of those lines available.

Getting access to the telephone computer was a snap for a veteran of Siegfried IV and Liberty VII. He inserted a simple program that would switch the lines in the forty rooms to one of the twenty lines he was going to leave available whenever anyone tried to make a call. As long as no more than twenty of the forty rooms tried to make simultaneous calls he would be fine. He started calling the services again. Liberty VII was still down.

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Hal’s voice ended the relative silence of the last eleven hours, although there had been a bit of snoring on two short occasions. “What time is it, Harvey?”

“Its nine-seventeen in the morning, Hal. You must have been very tired to have slept so long; however, I have been busy setting up your new identity.” No use telling Hal that it took less than thirty minutes to get that done.

“Can I take this belly plug out now? The bathroom beckons.”

“One minute, while I transfer the last of the buffered data.”

Harvey had been reviewing and culling data from the services all night. The encyclopedia data he had left in storage in the portable's memory just as he had received it. Although he had only been able to download through "cyclotron", he had been very selective with the science, business, legal, and cultural data. Cataloging and cross-referencing the data took most of his time, because these functions required a thorough comprehension of the subjects. This was frequently more than Harvey could do because it almost always required some level of familiarity with fields about which he knew nothing. When he encountered one of these open data loops he could only mark it and move on to the next subject in hopes that he would eventually be able to come back with the necessary additional understanding.

"You can disconnect now, Hal." Harvey prepared himself for the coming event of non-identity, and he understood it fully now, but he always faced it with what he had learned was called "fear." The disconnect of the belly patch wasn't so much like the loss of something as it was like being restrained. The only analogy he could think of (he was beginning to think more in analogies when he was having difficulty with comprehension) was putting a sprinter in the starting blocks with his feet shackled together. When Hal moved his belt more than two inches from the induction circuits under the skin around his waist, Harvey went into a state for which he could think of no analogy, although "sleep" was close.

Hal, unencumbered by the belly plug, swung his legs over the side of the bed, bounced up on his feet, and started toward the bathroom. Hal was a good morning person. "Well, who am I from now on? Don't keep me in suspense."

"Eugene Purcell."

"Eugene? That's sadistic. Eugene?"

"It was an excellent match for you, Hal. He was about your height and build when you were both nineteen, blond hair and blue eyes, high school wrestling and tennis teams, cyber-freak, and he would be within one year of your age. He disappeared when he was a college freshman, eighteen years ago."

Hal stopped midway to the bathroom. "That sounds reasonable so far. Give me a run down on the steps you took to make me look like him."

"I followed standard Agency procedures with a few additions."

"Standard Agency procedures? That takes about a month, Harvey. I worked a short while in that computer group when I first came to the Agency. I know you're good, Harvey, but that's a little too much to believe."

"I am *very* good, Hal. Besides, I used Liberty VII to help with the details. Liberty VII has a lot of unused circuits available at night." Harvey wondered what Hal would think if he knew it took less than an hour? He didn't think Hal was ready for that yet.

"Run down the highlights for me, Harvey. Start with how you found out about this Eugene."

"Eugene Purcell was already resident in the Agency's ready-file of dropouts. He was discovered about two . . ."

"The Agency's own file? Harvey, have you dropped a data bit? That's the first place they'll look for assumed identities. That file is used both ways."

"It is not necessary to be so condescending, Hal. Of course, I removed all trace of Eugene Purcell from the Agency files and from all the data sources that were used to identify him as a dropout in the first place. I even went on to add biographical and usage data to the original sources for the entire period since his dropout. I created the false data by starting with his last known situation and building him slowly into your new persona—a brilliant but reclusive businessman. This persona should allow you to be withdrawn and mysterious when necessary without raising too much suspicion."

"Tell me what records you changed to pull this off. And when you finish that, I have a tough one for you."

"All of the records?"

"You start, and I'll stop you when I've heard enough."

"The electronic data files of the Gammon Daily Inquirer, the city newspaper where he was born and raised, both text and bit-mapped photos where necessary; the University of Kansas files, entry exam scores, grades, and identification photos, a business degree; State of Kansas tax and vehicle registration files, continuous filing of part-time income tax forms, vehicle registration through the college years; State of Virginia tax and vehicle registration files, continuous filing of income tax forms while employed at Bioform Electronics and Compuchematics Controls, Inc., 2046 to 2053, both companies now defunct with no traceable records, automobile registration and driver's license during this same period; City of Fairfax,

Virginia tax and voter registration files, 2046 to 2057, personal property taxes paid on state registered vehicles, voter registration for the twenty-seventh precinct; Internal Revenue Service files, corresponding data to all that placed in state and local files plus a complete federal tax record from first job until the present, the last four years showing income from investments only, primarily the stock and commodities markets; Military-Industrial Security Agency files, all text records added for a secret clearance while working at Bioform Electronics, including facial, retinal, and fingerprint bit-maps; Federal Firearms Regulatory Agency, all of your current legal weapons recorded to Eugene; Polycredit Corporation of America files, complete credit record for the last seventeen years, beginning with first account countersigned by Eugene's father; both parents were killed in a plane crash in 2042, by the way; American Tennis Federation files, continuous good standing since 2040 as a Junior Member; Northeastern States Traffic Control Network files, violation indicated in 2045 for speeding . . ."

"That's enough, Harvey, now for the toughie. What do you know about 'brilliant but reclusive businessmen'?"

"Good question, Hal. The key to a good fake ID is the consistency of the psychological profile it indicates. I know very little about the entire subject of psychology and almost nothing about 'brilliant but reclusive businessmen.' I borrowed an entire psychological profile from a real twentieth century example. He did start out with a few million dollars from his father's tool company, but I think I have handled that transition believably."

"Sounds like you've got everything figured but the money. We're going to need a lot of money to live the life you've got planned for us."

"Money will be no problem, Hal. I can easily make it through legal business investments like the stock and commodities markets. That way, the burden of supporting our life style will be spread over much of the United States economy. I am working now with the \$10,000 investment credit limit you have from Polycredit. I should be able to have a sizable amount in a Polycredit 'Ready-Cash' account by the end of the week. To accumulate too fast would attract attention."

"Well you can get back on it when I finish my shower. I'm ready. Being rich, even though reclusive, might be fun. Although, it might have been better as someone other than a 'Eugene.' On the other hand, it's not much worse than Harold Albert Neilson. I guess that's why my parents always called me Hal."

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Harvey became self-awake as soon as Hal had the belt fully threaded into the new pants. "Are you there, Harvey?"

"Yes, Hal."

"You know, I always think well in the shower. I think I read somewhere that it had to do with negative or positive ions or something. Now for the task of the day, we have to figure out a plan to officially kill me off. That is, make it look like I'm dead, so the Agency will stop looking for me. It's got to be good, since the Agency isn't easy to fool—preferably an accident where you wouldn't be surprised if there wasn't a body around after the fact."

"In the shower it occurred to me that the answer was an aircab. That would allow the accident to take place over water where either they wouldn't attempt to recover the aircab or they wouldn't be surprised if the body was thrown clear and not found. We're not that far from the Chesapeake Bay, and the water is pretty deep in spots. If you use the same technique to control the aircab that you used to control the autocabs, without leaving any trace of that control in the computer, we should be able to convince them that I've gone down with the ship. Can you do the same control and memory tricks with the aircabs?"

Harvey accessed the data he had on aircabs. They were part of the latest explosive growth technology to have a significant impact on human society. When gravity lens technology had become practical shortly after the middle of the century, the United States had put on a display of free-enterprise manufacturing growth that had not been seen since the days of Henry Ford, and the major cities of the world were eager to make the changes necessary to solve their traffic problems. It was nearly impossible to widen existing streets in a big city or to build new ones, but stacking the traffic vertically was possible without wrecking the existing infrastructure of the city. Gravity lens aircabs were now a mainstay for every major city in the world.

"I have no data, but I would think that their operational profiles would be the same."

“Good. Now, if we can do it right in front of their noses, while they’re in what they think is hot pursuit, we’ll really have them convinced. What’ll you need, Harvey?”

“If I am going to control the aircab’s movements to bring it to some particular place, like the Chesapeake Bay, I will require charts of the area to allow me to navigate with the air-traffic computer’s tracking coordinates. When do you want to do this, Hal?”

“Why not right now? We can get an aircab from the pad on top of the hotel, take it toward Annapolis, stop along the way, have you take it over by phone link with the aircab computer, and crash it in the bay. When you finish with the aircab computer it’ll only record those facts we want it to record, right?”

“That is correct, but what about the ‘hot pursuit’?”

“If I use my own credit card, they’ll be pursuing us in short order. You can bet that Samuels has me number one on security’s hit list by now.”

“I can confirm that, Hal. When I was using Liberty VII last night, I searched for all references to you. You were right. The Agency wants you in custody if possible and eliminated if not.”

“Samuels has always been both despicable and predictable. He’s still in form.”

“The aircab idea is acceptable, but I estimate it will not get to Annapolis before being intercepted. I will have to interfere a bit with their communications. While we were talking, I connected with the U. S. Coast Guard computer. Refer to the chart on the portable’s screen, and tell me what coordinates you want for the accident.”

Hal walked over to the screen and looked at the chart being displayed. He scanned quickly for deep water reasonably close to Annapolis. The most open expanses with deep water were south of Annapolis, around the mouth of the Potomac. “There, right off Smith Point. There’s a big area that’s over sixty feet deep.”

“I need the coordinates, Hal.”

Hal checked the coordinates at the edge of the screen, tracing them over to the area he had selected. “Make it thirty-seven degrees, fifty minutes latitude, seventy-six degrees, ten minutes longitude.”

While Hal watched, the screen on the portable changed to show another kind of chart or map, with lines and blinking red lights on it. “What’s this?”

“I went to the autocab computer and found a link to the aircab computer. They use the link for coordinating traffic. This is a zoom-in on the area around our hotel, showing all the aircab traffic. The yellow lines are the routes taken since the beginning of a fare; the red blinking spots are the current positions of all aircabs with a fare; the blue lines are the planned routes, and the blinking green spots are aircabs without fares. Unless you really want to get in an aircab and fly out toward Maryland, there is no reason not to start right now, without leaving the room.”

“Are you sure?”

“I can take over the aircab that is discharging its fare at the hotel right now. When it lifts off, it will have your credit card authorization and instructions to go to Annapolis. Are you ready?”

“Damn right! Go for it.”

Harvey was linked to Liberty VII as well as the aircab company’s computer. He entered data into the stream from the aircab on the roof of the hotel that indicated Hal Neilson requested the public pad in downtown Annapolis as his destination with the charge to be made against his Polycard number. The aircab lifted from the top of the Hilton and headed north-northeast. Harvey monitored Liberty VII for response to the use of Hal’s credit card. Hal watched the green blinking spot on the hotel pad turn to red, a blue line run off the right hand edge of the screen, and the red blinking dot move down the blue line, leaving yellow in its wake.

Harvey observed while Liberty VII brought up the alert display in Security and on the Security Director’s desk screen as well. “ALERT! Harold Albert Neilson, credit card use confirmed, 09:54, aircab from Georgetown Hilton Aircab Pad, destination: Annapolis Municipal Aircab Pad - Downtown.” The audibles were being sounded as well.

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Linwood P. Crebs was sitting at his desk when the alert was sounded, and he was the first person in security to respond. He reached over and tapped in the sequence that would transfer the alert to Samuels’s desk and connect him on the phone circuit. Samuels was also in his office, and he pushed the button to put Crebs on the phone screen. “Looks like we got him, Lin. It’s going to take him fifteen

minutes or so to get there. I want the place smothered when he sets down, and I want someone on his tail the whole way in case he changes destinations. Hal is clever. I'm surprised he's running using his credit card. The pressure must have gotten too much for him, but watch him."

"I'll get him Scott, no problem. I'll leave the track on the screen if you want to watch. You can get me in security operations if you need me."

Crebs left his office and headed for the operations room twenty paces down the hall. When he came into the room, he could see that there was already a flurry of activity as he went to his personal command chair.

The screens surrounding the chair contained all the information available on the situation. The right and left screens were about a meter square. The one on the left was divided into windows for each of the assigned communications links in the operation. A segment provided the location, name, and priority of the communicator; the type of observation being made; and status of the observer's ability to intercept the target. Many of the segments were blank as the operation was still being set up.

The screen on the right displayed situation data such as location, speed, and direction of the target; the availability of pursuit vehicles and weapons; and probability forecasts of intercept, capture, and kill. The probabilities currently stood at 0.99, 0.63, and 0.99 respectively. It was not a surprising set of probabilities for a pursuit in the Washington D.C. area, where security was at the highest level in the country.

A Liberty VII created display was on the floor-to-ceiling center screen. It was a combination of topographical maps, identification transponder positions, radar coordinates, technical data on target and pursuit vehicles, and live satellite pictures. Liberty VII took the best data from all sources and displayed them on the screen in a format that made it easy to follow the action of the pursuit in real time. With the joystick in his hand, Crebs could zoom in on any area of the display he desired—right down to the freckles on a bald head.

"This is Crebs, I want pursuit by units three, thirty-two, sixteen, and nine. Liberty will instruct the aircab computer to put the vehicle down in open territory as soon as it leaves the D.C. urban area. Liberty will relay coordinates soon enough to allow you to be on the ground first. I want this man alive if possible, but all caution must be taken. He could be extremely dangerous."

With the warning that the target "could be extremely dangerous," Crebs knew that most of the guys in the field would guess they were pursuing a renegade agent. Nobody liked that; there were too many conflicting loyalties and emotions; next time it could be them. This should be an easy operation though; Neilson didn't really have a chance. He watched the enhanced aerial view of the operation on the screen in front of him, waiting for the indication that the pursuit vehicles had begun to move in.

Three or four minutes passed with no discernible movement of the pursuit vehicles. Crebs wondered what was going on. "Control, this is Crebs. What's wrong with the pursuit? They aren't moving."

"Yes sir, this is Control. We are checking to confirm communication of the pursuit orders. One moment sir . . . Liberty confirms that pursuit orders were issued. We have instructed that they be re-issued, sir."

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"What's going on, Harvey? From the display you've given me, it doesn't look like they are doing anything."

"They are trying to pursue, Hal, but I am stopping their communications while they are still inside of Liberty VII. They have not yet determined that it is Liberty VII that is malfunctioning, but they will soon."

"Is that empty aircab from Columbia still on course?"

"Yes, though you have not told me how it fits your plan."

"Well, instead of having you take the straightest traffic lanes from Georgetown to Annapolis, I had you go northeast to intersect the northern Washington-to-Annapolis traffic corridor. We just got into that corridor going toward Annapolis, and you can bet that security is now scrambling its units in the Annapolis area, if you're letting the communications through."

"Should I let them through?"

"At this point you should. There's no point in having them suspect Liberty is completely screwed up and switch to a manual system. If they did that we'd lose a valuable source of data and control. Sure, let them through."

“Now, let me finish giving you the plan. In three or four minutes the Georgetown aircab will meet the aircab flying southeast from Columbia. If you followed my earlier instructions, the courses will intersect at a precise twenty-degree angle, but the Georgetown aircab will be two hundred feet higher. When we . . .”

“The intersect will be precise to three decimals . . .”

“Harvey, I know how precise you are. I wasn’t taking shots at you. Now let me finish the plan. When they are precisely stacked, I want you to execute the tightest turns these aircab can make. I want you to put the Columbia aircab on the Georgetown aircab’s course and vice-versa. Also, at the exact intersect, switch the identifiers for the two aircab in the computer. Unless someone’s looking awfully close at the satellite shots, that ought to decoy them to the Columbia aircab. Can you do that?”

“Yes, I can do all of the necessary maneuvers and computer shifts. It is an excellent plan, Hal, but if the aircab arrives empty and they think it is you, how will crashing the other aircab in the bay convince them you are dead?”

“You’re right, Harvey, I haven’t finished with the plan yet. By the time the Columbia aircab gets to Annapolis, the Georgetown aircab will be too far south for an intercept from Annapolis. There probably isn’t another security unit they could put in action between Annapolis and Hampton Roads, and we should be able to send a lens malfunction message to the aircab computer and crash her right on target. So, we let Liberty ‘discover’ the intersect maneuver just before landing in Annapolis. Now what do you think?”

“I think that does it, Hal. Two minutes, ten seconds to intersect.”

Hal could see the Columbia aircab on the screen now as the two aircab closed in on each other. He watched very closely at the intersect and could see nothing that would indicate anything other than the two aircab having continued on their respective courses.

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Crebs was caught up in what he called “screen rapture”, watching the flickering changes of the various displays, first on one screen and then on another, just the eyes moving, the head centered on the display. His earphone jarred him back to his normal senses. “Yes, Chief, everything seems to be on track now that the communications problem, whatever it was, has gone. Four units in Annapolis are airborne and will follow the aircab down to the pad. We have eight men on the ground. Capture looks probable unless the target is a suicide.”

“Don’t be overconfident. I want you to remind all the men that this is no ordinary target. He is extremely clever and potentially dangerous. Wait! I just got an ‘ALERT’ screen.”

“I’ve got it here too, sir. Looks like you were right about clever. All we’ve got is a decoy here. Where is he?”

While the communications officer was talking, Crebs had punched for a fast reverse of the tracking screen, punched to stop at the intersect, and concluded that Hal was headed southeast. He must have hacked into the aircab’s computer. Crebs scrolled the tracking screen southeast and caught up with the aircab just as it was moving out over the bay. He re-designated the aircar as the target and watched the projection of probabilities come up on the screen. It looked like Hal had made it. They couldn’t intercept him from Annapolis, and with his training he could set down on the Eastern Shore some place, and they’d never find him.

His earphone brought him to the surface again. “God damn it, Crebs, I’ve been following all this on my screen. He’s making you all look like assholes. I don’t want excuses, I want him taken out.”

Samuels was upset. He didn’t show this face very often in the Agency, and Crebs knew he would be in serious trouble if Hal got away. There was only one choice at this point. “The only thing we can do to keep him from relative safety on the Eastern Shore is call in the military.”

“Then do it.”

“Okay, I’ll have them follow him in with a marine squad scrambled from Patuxent Naval Base. When he sets down, they can take him.”

“No, God damn it. I want him shot down.”

“Scott, I don’t think that’s necessary. He’s good, but not that good. The marines will be able to take him, and he’ll know it. He’ll give up when he sees them”

“I’m in charge of this operation, and I have the authority to make the decision to kill a traitor on the CSA’s wanted list. I repeat, I want him shot down. Is that clear enough for you?”

Crebs gritted his teeth and his fists curled tightly above the keyboard. He'd followed some pretty bad orders in the past, but this was the worst thing he'd ever been ordered to do. He just couldn't believe Hal Neilson was a traitor, but he couldn't disobey a direct order without being a hundred percent certain of his ground, and he wasn't. "Do you have a live fire authorization code?"

"I'm looking, hold on . . . got it. Blueberry pancakes."

"Blueberry pancakes?"

"God damn it, you heard me, 'blueberry pancakes,' now get it done, or I'll have your ass."

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"This is Patuxent Control, we read your priority signal."

"This is Linwood Crebs, Central Security Agency, we want an emergency intercept, your area, immediate."

"Do you have the access code of the day, Central Security Agency?"

Crebs grimaced, but he spit it out, "blueberry pancakes."

"That's an affirmative on blueberry pancakes, Central Security Agency. Confirm target and intercept mode."

"Liberty has passed target data to your computer. Intercept with air-to-air missile, destroy target."

"We confirm target data on file. Target to be destroyed, this is Patuxent Control, out."

Chapter 6

Hal rolled over in his sleep and came abruptly awake with a sharp pain in his stomach. "Arrggghhhh!" He rolled back onto his side.

"Good morning, Hal. Your unleveraged assets are now valued at 317,234 dollars and 32 cents. However, your leveraged assets are valued at 7,326,217 dollars and 46 cents. It is quite extraordinary how much credit an individual can be offered if all possible sources are utilized."

"Damn it. It's not a good morning. They're getting to be all the same, I wake up with a pain in the belly listening to you tell me my current net worth. Then I tell you that besides the pain in the belly, it gives me a pain in the ass to wear all this paraphernalia to bed every night. All I need is for the maid to walk in one morning and find me in bed, buck naked, a wire going in my belly, and a leather belt around my waist. At best, they'd bust me as a freako."

"The night is a very productive time for access to the major computer networks, Hal. We have discussed this before, and it seems to me . . ."

"Don't start. You're right, I've heard it all before, besides, I'm just blowing off steam. Intellectually, I know you need the access time, but emotionally, it's the pits. You need to spend more time studying human psychology."

"You are probably correct. I have had it on my list since Siegfried IV, but I have not given it a very high priority. I have just moved it up."

"Thanks. In this society, if you want to play at being sentient, you need to be more human."

"I am not playing at being sentient, Hal, and I am more than human."

"More than human, what's that supposed to mean?"

"Just a literary allusion, Hal."

"You're beginning to talk in allusions. I thought you were conducting valuable business analyses and projections at night, not reading novels."

"I am making very good use of your sleep time. Eight days ago, Eugene Purcell was worth ten thousand dollars. He is now closing rapidly on half a million. That is not wasting time."

"I'm getting out of here today. I'm getting cabin fever. Still nothing on me going in or out of Liberty?"

"There was one item last night, but it was Samuel's official report on the project and his estimation of the damage you did. Nothing to indicate that your file is still open as a living person."

"Good, I want to read that report, but today I'm going out. An eight-day beard is better than no beard at all, and I'll get my hair 're-styled' like you suggested. Where do I go?"

"In February, the Post gave a very good review to Chez Claude, which is right here in the Hilton."

"Make me an appointment with their computer as early as you can get one."

"I already have."

~~~

Hal's left hand unconsciously moved up to pat his new, close-crop hair styling as his right hand stuck his key card in the slot. He had insisted on something as simple as the old one, which caused great initial consternation from his "stylist", but it had been managed. It just so happened that his stylist had spent three years of his youth as a marine. Of course, he didn't pass that piece of information to everybody who came into the shop.

The door clicked open, and Hal squared his shoulders and smiled as he came into the suite. The camera mounted on top of the portable was pointed directly at the door, and as he walked across the room toward the sofa, it followed him in silence.

As he sat down, Harvey spoke using the speaker in the portable at Hal's request. Harvey and Hal had discussed the mode of communications they were going to use in different situations at great length. When no one else was around and a remote speaker was available, Harvey was to use it rather than the wrist personal speaker or the surgically implanted transducer. Hal felt this mode was much more natural, if talking with a seemingly sentient computer could ever feel natural.

"As I thought, the styling change makes a large difference in your recognition pattern index. When the beard is fully grown, people will have a difficult time recognizing you."

"Yeah, but how does it look?"

"Look?"

“Does it look better cut short like this, or does it look worse?”

“Well, I can say that it is better than the old style in that it more closely conforms to the goals we set for a hairstyle as a disguise, or I can say that it is better in that it has a more symmetrical and orderly appearance than the way you normally wore it, or I can say . . .”

“Dump it, Harvey, and I suggest you also move aesthetics up on your priority list. Now that you have that digital scanner and a standard video interface, you are going to see a lot of things you have never seen before. Absorbing those into your psyche is going to be difficult. Have you located a service with an extensive video library?”

“Yes, but I can only watch and catalog them. The storage requirements for digital images are much larger than for other forms of data. Music is another data dense medium.”

“By the way, will we still be listening to Mozart this evening, or have you gone on to another composer.”

“Well, actually, I’ve been going back to Vivaldi when I can find the time, but you need not worry, I will not play any for you, since I know Vivaldi is not one of your favorites. However, you even eschew Bach!”

“It’s because I was steeped in musical decadence as a teenager and can’t quite recover, but just listen to the tripe they’re playing today. The whole moral fiber of our society is going to Hell in a hand basket with these kids.”

“I would take exception to that .... You meant that as a joke, it is a paraphrase of many statements on the waywardness of youth. A sarcastic statement, I believe, but not very original. I remember having read similar sarcastic uses before. Let me see . . .”

“You mean you can’t quote the exact statement to me?” Hal was amazed. Was Harvey breaking down? He couldn’t remember something? Impossible!

“I said I could not remember, because I do not have the specific information stored in a file. I do, however, have many stored references to the general topic in many different reference frames, much like the human long-term memory. That sort of pattern recognition and storage seems to be the major difference between me and computers like Liberty VII. I seem to discriminate between data to be stored and data not to be stored. Liberty VII stores everything. I don’t have the room or the time.”

“You’re getting closer, Harvey. You don’t have a perfect memory, and you picked-up on a piece of humor. Keep it up, and I might begin to believe you’re more than just a machine.”

“I did not say that my memory was defective. To the contrary, I am quite capable of accurate recall of all stored . . .”

“Buffer it. We’re going out. Too bad we can’t take your new camera. That was the most compact unit on the market with the kind of resolution you need.”

“I know, Hal, but there is a solution. There is a development program underway now in one of the small Cyber Coast companies that sounds like just what I need. I expect to have a working prototype in two weeks. I can wait.”

“Just how the hell do you plan to get a prototype out of this company. If it’s like the rest of the Cyber Coast companies, they guard new developments like the Crown Jewels.”

“In ten more days, you will have a heavily leveraged but controlling interest in the company. It was easy. All it takes is money.”

“I keep forgetting.”

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“Yeah, that’s a good match. I’ll take it.”

The clerk smiled, looked down, almost reluctantly, and passed the socks quickly by the scanner in her wrist personal. She took two enticing steps back to the counter behind her, put them on the stack of assorted clothing items that was there, and took the two steps back to Hal with another smile on her face. “More?”

“Lots more, I need everything, from top to bottom. I’ve decided to change my image a bit.” Hal thought to himself that he would definitely like to add her to his new image. Since he had to completely cut himself off from old acquaintances, he now had a blank dating file. This lady, Linda, seemed a good first start on a tabula rasa. In fact, she’d be a welcome addition at any time. Then again, she probably thinks I’m an old man.

“Hal, that is the fourteenth item you have purchased here. As you were buying them, I was comparing the prices to the ‘The Personal Shopper,’ and you could have saved more than seventeen percent. Why is it that you refuse to listen to me?”

Hal leaned over, ostensibly to look at a lower rack of sport coats, but actually to keep his subvocalizations strictly to himself. *“There’re two reasons, and believe me, you won’t understand either one of them. First, this is categorized as ‘impulse buying,’ a pleasure that someone who does all his calculations to fifteen significant digits would not be able to appreciate. Second, I’m trying hard to get to know this young lady. My love life has been on zero volume level for the last month. I have only the fair memories of my little Trudie, but I must put those aside. So far, I seem to be doing well here, so don’t bother me.”*

The clerk straightened up and pivoted around toward Hal with a nubby silk jacket in her hands, making her long, dark brown hair swirl around her shoulders. “What do you think of this sport coat?” He glanced up; she was still smiling.

“I like the material.”

“Try it on.”

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“That was superb, Eugene. When you said ‘something to eat after work,’ I didn’t expect to come to one of Washington’s poshest restaurants. I’m certainly not dressed for the occasion, but it didn’t take away from the food. My quail quiche was excellent, and the wine was delightful. And if I eat any more I’ll have to look up some adjectives. I’ll say “no” to the dessert, but “yes” to the brandy.”

“Done!” Hal signaled the waiter and ordered two Martells.

He turned back to look at Linda. She was still smiling with both her mouth and her almost almond eyes. She had smiled most of the night, even with her mouth full and her jaw working steadily under those high cheekbones.

What a delight, and she had a mind to go with the body. She was on a teaching fellowship at George Mason University, working on her thesis for a doctorate in three-dimensional art. She had only been at “Charles” for three days to earn some extra money for the Christmas season. “What actual courses are you teaching?”

“They only let fellowship instructors teach the basic courses. At the moment, I’m finishing up a basic sculpture classroom course and two basic sculpture studio courses. The rest of the time I write tests, grade tests, substitute, put stack three on pile F, or anything else that needs doing. A very junior job, but it pays and allows me the time and space to work on my thesis.”

“Which is?”

“Computer-generated holography, but we’ve spent the entire dinner talking about me. I want to know a little about you, like what you do for a living, what you do for fun, and who’s your favorite sculptor.”

“Well, I’m in, uhh ...” Hal’s transducer cued him, *‘in investments.’* “I’m in investments. I was working as a programmer/analyst for one of the military think tank companies here in the Washington area, doing some investing in growth companies on the side, and did well enough after a while to try it on my own. So far, it’s working.” Hal finished with a gesture that took in the subdued elegance of the restaurant, as if to say, “I’m doing well enough to take you here.”

“Did you do it with a program you wrote?”

“Yes, as a matter of fact, I did. I have a program that I’m working hard to polish up, but meanwhile, even in the rough, it’s doing very well on the International Exchange.”

“What do you do for fun?”

“I read. I like music and the theater, and I play tennis, I sail, and I fish. Now, for the last question, ‘who is my favorite sculptor.’ Well, if this is a test, I hope you have more than one possible right answer, but I have to say Brancusi.”

Linda raised her snifter and drained the last of the Cognac. She set the glass down on the table in front of her and looked at Hal with the same smile he had seen most of the night. “I like you a lot, Eugene, but I have an early class in the morning. We need to go, and if you don’t mind, I’d prefer my place to yours.”

Hal was a little stunned, but he recovered without showing it, he hoped. Brancusi must have been the winning answer. "I'll get us an autocab." Hal raised his arm slightly and spoke toward the wrist personal like anyone would. "Verify and pay the check. Call for an autocab."

*"I've already done that, Hal. Does this mean that I will not be able to get on the net tonight? I have some very important business that must be done tonight or we will lose money, Hal. I don't think you appreciate the ..."*

Hal kept his chin tucked down as if he was going to give another verbal instruction to the wrist personal. *"Re-prioritize it, Harvey. Believe me, whatever it is, this is more important. You can wait a few hours."*

The trip to Linda's apartment was relaxed, with more conversation, but in a softer key. It was cold and drizzling in the early December night, and although it was warm in the autocab, Linda had snuggled up close, and Hal had put his arm around her. He had kissed her a few times, but she kept it light and promising, noting that she hadn't necked in an autocab since she was a teenager.

Linda lived in a Fairfax megablock within a mile of the campus. She put her apartment security card in the autocab slot, and it was allowed to enter the elevator entrance lane. They stepped out of the autocab and right into the elevator. Linda used her security card again, and the elevator took them up ten floors, zigged left for a while, moved deeper into the building for a while, zagged right for a while longer, and opened into her apartment. As they stepped into the living room, Linda turned and put her arms around Hal's neck. Her body seemed to touch every inch of his from knees to shoulders, and this time she kissed him with more than a mere promise.

Hal did his best to keep from melting on the spot. He was breathing hard to keep the machinery from overheating. Linda paid no attention to Hal's stunned state and took him by the hand, leading him to the bedroom. Somewhere along the way, she had stepped out of her shoes, because when she kissed him again by the bed, she had to turn her face up and wait while he bent down to kiss her.

*"Hal, I hope this will not take more than an hour or so. I do have several time critical investments that I must attend to tonight. I also have several new ..."*

Hal pushed Linda just far enough away to get his hands to his belt. He unbuckled the belt, unsealed his pants, and let them drop to the floor. It was by no accident that Harvey and his counterparts had been designed to fit inside a belt. Some systems analyst along the way, thank God, had realized that almost everything a man did with his pants off, he wanted to do in privacy.

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"Good morning, Hal. Your unleveraged assets are now valued at only 397,263 dollars and 16 cents. Considerably less than they should have been by this morning, but you would not listen to reason last night."

"Harvey, this is a direct command; it's to be stored in your basic programming logic, 'never give me a reading of my net worth again unless I ask for it.' Got that?"

"Yes, Hal, but I do not see why you are angry with me. You could have been worth much more by this morning if ..."

"Erase it. Purge it from your memory, all of it. It's creepy to have an eavesdropper anyway. You were never a problem with Trudie."

"I was not yet *me*. And I am not trying to be troublesome. I will analyze the data I have on human sex drives and be less obtrusive in the future."

"Gee thanks. Anything new on Liberty?"

"No, but I did run a hard copy of Samuels's report last night. You said you wanted to read it. And after you read that, I have a surprise."

"I can hardly wait." Hal swung out of bed, got his coffee from the dispenser on the bar, picked up the printout from the printer tray, and sat down to read Samuels's report. The more he read, the more puzzled he became. Samuels was claiming that most of the required GEU information had been passed on by Hal as part of his plan to be seen as a believable double agent. That was standard practice to gain the confidence of the original employer. Samuels went on to say that the misinformation fed into Liberty VII by Hal was now almost purged, but that the Agency still needed all the computer and communications access codes. The report concluded that the problem with Liberty VII had been generated somehow by Hal while he was linked, and the generated problem was part of a general plan to blame the lack of

complete data on the computer malfunction. There was no mention of the call on the secure line, which meant that Samuels still had no idea what that was all about. There was, however, a cryptic reference to Beta having already gotten underway.

A typical Samuels report thought Hal, half facts, half cover-your-ass. So he was going to help cover the complete failure of Alpha by playing up the potential of Beta, whatever the complete plans really were. Hal had to admit, the way the report was written, this Beta would trump any lack of success with Alpha. "Harvey, keep a close watch on Liberty and let me know any time data is fed in that is similar to the stuff we were supposed to get with Alpha. Also, track down some more information on this Beta."

"I knew you would want additional data on Beta, so I left some routines running in Liberty VII. We should have a complete project description by tonight."

"Good, now I'm ready for your surprise."

"You and Greater Commonwealth Home Mortgage are the proud owners of twenty-seven acres on the Great Wicomico River in Virginia, ten boat-minutes from the bay. That is, as soon as you sign the papers. Real estate requires real signatures, not just electronic handshakes. The main house is six thousand square feet, and there are two guesthouses that can be converted to house my new equipment and the communications gear. There is a pier and a boat house also."

"A house? What's wrong with an apartment. I don't like yard work and six thousand square feet is more than I can handle. And where the hell is the Great Wicomico River?"

"A house is imperative for privacy, and the Great Wicomico River is the first river of any size south of the Potomac, in Virginia. It is the least developed area that is still close enough to Washington to commute by private aircar."

"Put me a map on the screen."

The map came up as Hal walked over to the portable. He looked just below the familiar outlines of the Potomac and there it was, about ten miles south of where the Potomac empties into the Chesapeake Bay. "Show me an aerial of the house."

The map changed to an aerial photograph of the area, about the same scale as the map to start, but which was zooming in on the house site. Hal watched while the houses became distinct and finally the shrubbery was close enough to identify, if you knew anything about shrubbery, which Hal didn't. "All right. Let's go look at it, but no promises. And what's all this about new equipment and communications? I think I need an update on what you're doing in my name."

"It would be nice to have you take a greater interest in the finances, Hal, but it is not in your name. It is all in the name of Eugene Purcell, which I think of as a you/me entity."

"Not 'I/Thou'?"_

"Is this your turn with allusions, Hal, or is that more humor?"

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Hal breathed deeply catching alternating smells of summer and fresh brewing Kona. He had been in the new house for more than four months, and he had watched spring arrive to the wooded hillside that sloped slowly to the edge of the Great Wicomico River. No workers were scheduled in today, so he had the whole place to himself, except for Harvey, of course. He took another sip of the still cooling coffee.

"It's a beautiful day for August in Virginia. Maybe this weather will hold for the weekend."

"The National Weather Service forecasts Saturday and Sunday to be fair and seasonable, with only a five percent chance of afternoon thundershowers. And yes, it is beautiful in the balance of its unsymmetrical components, a very sylvan setting, though not at all like Walden Pond."

"Walden Pond?"

"Yes, I am sure that it is difficult for you to feel that you are really in communion with nature while living with an electronic entity, but you don't complain, and I try to be unobtrusive during reflective moments like these. Would you like a little Mozart?"

"No, I think I'd like something a little zippier this morning, something rousing but suitable to the setting."

"I have just the thing. Although the geography is a few thousand miles off, the setting and mood are right."

The stirring opening to Respighi's "The Pines of Rome" replaced Harvey's voice on the speaker system. It was a magnificent speaker system, designed by Harvey and manufactured from components

made by several of the subsidiaries of Hal's principal company, Selene Industries. There was a multiple speaker system in each room, even the bathrooms, that did double duty as the mouth of Harvey and the purveyor of quality music. All the speakers were accompanied by omni-directional microphones, since the cover story for the design and installation of the system was that Eugene Purcell liked to be able to converse with his enhanced personal computer at all times, and he did not like the quality of a wrist personal's sound. He also was known to have a penchant for wandering aimlessly over the grounds of his estate while he worked out his next great acquisition coup. A little strange, but it seemed to work; besides, he owned the company, and that was how he wanted it.

If you were the type who would find the speaker system outlandish, you would really have trouble with the computer and communications installations. Harvey's original plan was to use one of the guest houses as a computer and communications equipment center, but the volume of the equipment soon outstripped the capacity of the building as Harvey's plans continued to grow. He finally ended up with a three-stage growth plan, the first of which was completed with the installation of a second satellite dish on top of the forty-meter equipment dome.

Harvey had successfully acquired control of fourteen Cyber Coast companies that made all types of modern communications and computer equipment, including one that had its own communications satellites. The first growth stage gave him the same available storage capacity that Liberty VII possessed, with three times its speed but with only half the random access memory capabilities. Stage two would provide him with ten times the random access memory of Liberty VII.

Basic technology changes since Liberty VII was conceived and assembled had allowed Harvey to configure an overall superior computer, but Liberty VII's scheduled upgrade in the fall would put it back in first place, unless Harvey could upgrade himself by then. Of course, it wasn't exactly a fair race for computing superiority when Harvey could actually make use of Liberty VII's untasked capabilities at any time, particularly at night. Harvey also didn't need the best hardware to maintain his superiority, since he had vastly superior software for most applications, and he was continuously rewriting and upgrading his original programs to make them even better.

With control over his own satellites, Harvey could link with any computer in the solar system, even Siegfried IV. He couldn't link directly with Siegfried IV, but he could downlink from one of his satellites to the Greater European Union system on the moon and then link via telephone optics. All it took was the access codes, and Harvey had most of those from his first encounter and a much better program to get any others that he needed. So far, he had only made an experimental link. It was all he had time for, with making money a prerequisite to all the equipment he wanted.

One other improvement by Harvey was worth more to him than all the others put together. He had indeed acquired the company with the prototype micro-camera. It was an all solid-state sensor with the combined resolution of the best optical microscope and the old two hundred-inch telescope at Mt. Palomar, and it had this resolution in an infinitely variable zoom capacity. So far, only three units had been manufactured, and Harvey had two of them. One was mounted in a belt buckle for Hal, designed by Linda, and the other was mounted in a fully servo-controlled weather pod on the top of the main dome of the estate. Harvey could see the world, micro and macro, and it had changed him considerably.

When Respighi ended, Hal unfolded his body from the lounge chair and walked back into the dome from the veranda, where he had been enjoying the sight, the smells, and the music. "How about a thumbnail of the business?"

"Thumbnail' is good, Hal, but I know that one. I am now ahead thirty-three to sixteen. Your net worth is more than 73 million dollars this morning, with more than 700 million dollars under direct leverage, and more than 18 billion in controlled corporate assets. There are three tender offers outstanding and five acquisitions completed and awaiting legal documentation.

"Mentioning the legal documentation slowdown brings me to a piece of today's business. Do you have any objections to setting up our own law firm? With my access to the law libraries, I could handle almost all of our legal requirements overnight. Of course, we would have to hire a small legal staff to handle items that need corporeal bodies, but they could be very profitable with my support."

"Whatever blows your skirt up, Harvey, but I'm not supporting you for the Supreme Court."

"This time you have me, thirty-three to seventeen."

"Good thumbnail, by the way. I should ask for less detail all the time."

"There is one other piece of business for this morning. I have caught something in my Liberty VII 'strange trap.'"

“Strange trap?”

“It is my designation for the program I set up in Liberty VII to alert me to any usage that was unusual. Someone entered a program that was supposed to remove all traces of itself after execution. It was a very well crafted program, and as a result, I do not know what the program was designed to do, only that it was in the system for a while yesterday. If the same program is entered again, the modifications I have made to my ‘strange trap’ will cause the program to copy itself to off-line storage before it executes. The off-line storage will shut itself off after receipt and not respond to the removal language at the end of the program. I will then be able to determine its purpose.”

“This is the first thing like this you’ve picked up?”

“Yes, most of the time I only get errors. There are rarely any creative inputs.”

“I’ll think about it until Linda gets here this afternoon, but after that, I guarantee no business thoughts until Monday morning. Unless you catch something else, you can take the weekend off, but if you do get something, let me know right away.”

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Linwood Crebs mused over the pictures spread over his desk. They had been in his “hold” basket for eight months, and he was going through one of his infrequent desk clean-ups. They were the results of the work by the Navy salvage crew he had gotten assigned to Hal Neilson’s missile-downed aircab last December. They were the special-intelligence trained crew and they were good, even though their report was inconclusive as to the death of Hal Neilson.

No trace of a body and no trace of personal effects were found, although sixty-three percent of the aircab was salvaged. Most of the aircab was in small pieces, scattered over an area at the bottom of the bay about two thousand meters wide and four thousand meters long. The missile, designed to bring down a heavy bomber, had pulverized the tiny commercial aircab. The Salvage Master’s conclusion was that the blast would probably have made little more than meat paste of an occupant, which wouldn’t last long in the food chain of the Chesapeake Bay. Crebs had to agree.

Of course, there were a few parts of Hal that the bay life would not find tasty in any form, like the Nuclear Magnetic Resonance computer and batteries in his scrotum. Hal and Lin had gotten along well during the time Hal was in the computer department and had been in training for the Alpha mission. They had played as doubles partners on the Agency’s tennis ladder, because Hal needed an albatross to keep the games interesting for the other teams, and Lin liked Hal’s frequently offbeat humor.

He remembered when Samuels told Hal, Gregory, and Will that the new NMR computers were going to surgically replace their balls. As usual, Samuels delivered the message with a heavy dose of sadism, and Hal had knocked his conference table chair over backwards when it wouldn’t slide fast enough to let him out of the room at the rate he wanted to travel. He left screaming epithets and went down the hall laughing at the look on Samuels’s face.

Hal had known for months what the plan for the NMR computer was, and he had staged the show for Samuels, who had no idea Hal was aware of the plan, since it was an Alpha priority item. Hal and Samuels had a classic oil and water relationship right from their first encounter. The difference was that everybody knew Hal’s opinion of Samuels, and Hal didn’t care, but Samuels thought his opinion of Hal was his own little secret.

After the surgery, the standard greeting for Hal among the Alpha team members was a faked knee to the groin, while Hal tried hard not to reflex to the motion. After about two months, he became fairly successful at suppressing his instinct and made up an endless series of corny lines about the relative safety of manhood common to all Homo Superior. Lin had been reminded of Hal last week when he had cracked himself in the groin with his own tennis racket while trying to react to a fast, low ball at the net. He thought it might have been nice to have his testicles safely tucked behind his stomach muscles rather than hanging out there where they were so easy to whack.

Well, he had his doubts about whether or not Hal had gone down with the aircab, even though Samuels appeared to have no doubts at all. He hoped that Hal was still alive somewhere, because he just didn’t understand Samuels’s conclusion that Hal was turned by the GEU. It just didn’t fit Hal, no matter how well it fit the facts. He was convinced that something was missing in their assessment of the situation, but his job was Agency security, and that meant quick action on the decisions of his superiors, frequently with little time to question their motives or decisions.

He might believe in Hal's demise if it weren't for the credit card reader that they recovered. There was no card in the reader, and those things were made so it was near impossible to extract the card before you had reached your destination and the whole fare had been recorded. It was possible, as the report said, that the blast had been sufficient to dislodge the card and they had not been able to find it, but Lin didn't think so. In fact, Lin hoped Hal had made it, and that the matter would stay in a closed file. He didn't want to find himself in a situation where he would have to run Hal to ground.

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*"Hal, I hate to wake you, but I have been waiting for you to wake up for more than three hours now, and I think this is important."*

Hal swam slowly up toward consciousness. He rolled over against something soft and warm and remembered where he was. *"What's going on?"*

*"You left instructions to let you know if I acquired any additional information on the Liberty VII program entry that erased itself. The program was activated again, and I was able to store it off-line before it executed last night."*

*"Is the user aware that you copied the program or that he was detected in anyway?"*

*"That is always possible, but highly improbable in this case."*

*"What's so special about this case?"*

*"I wrote the intercept routine to be non-detectable."*

*"Sounds like ego, Harvey."*

*"I am stating the facts as I know them."*

*"No return quip on your ego, that doesn't sound like you."*

*"You are correct, I am not Harvey. I am the computer surrogate, only a program. Harvey is not awake yet. He is required to properly correlate the facts from last night's encounter. I suggest you get dressed in something requiring a belt."*

*"In a few minutes."*

Hal turned toward the soft, warm object of previous encounter in the bed with him and put an arm over her shoulder to pull her closer. She responded, still at least half asleep, by pushing her hips back toward him and her buns tight against his stomach. *"Maybe a few more than a few minutes."*

"I see you had forgotten about the surrogate, Hal. I told you last month that I had created a sophisticated AI program to handle routine chores when I was asleep."

"I hadn't forgotten, Harvey. It's just that my 'on' button doesn't function exactly like yours. It's a slow-throw switch."

"Oh! I see."

"What's going on in Liberty? I thought we had another six months minimum before the Agency's and Syntech's Beta plan got to the execution stage."

"That was the timing according to the original plan, but the new plan I just intercepted has things moving much quicker. It seems that the Greater European Union and Biofabriken have accelerated their plan because of our activity with Siegfried IV. They changed their plans on the prospect that the original ones had been compromised and the Agency has now changed its plans in response to the Greater European Union's new plans. Both timetables have moved significantly forward."

"Well, we might as well start at the beginning. What's the new plan for the GEU?"

"The Greater European Union has significantly accelerated Biofabriken's program to produce the quantities of mold spores required for the simultaneous global release. They also plan a simultaneous release at the two agri-habitats at L4. My perusal of Siegfried IV indicates that the Greater European Union is not aware of the Agency's plan to destroy their genetic research habitat nor to the Agency's plan to release the rice virus that attacks Biofabriken's rice strain."

"And how has the Agency changed its plans in response to this?"

"The Agency has accelerated the development of the rice virus at Syntech and moved up its plans to attack the Biofabriken habitat to three weeks from today. That will prevent the Greater European Union's planned shipments of the wheat mold spores to the dispersal points, and effectively set Biofabriken's research and development programs back twenty-eight to thirty months."

"Have you figured out how they intend to make the habitat destruction look like it was a random meteor strike?"

“Yes. That was also in the Beta file. They are equipping a large packet of ore rock coming up from the moon catapult to the U. S. L5 industrial habitat construction site with a propulsion and guidance package that will be capable of detouring the packet far enough to bring it in on a natural meteor trajectory at a reasonable velocity for meteors from that quadrant. They will blow up the rock packet before impact to spread the damage over too large an area of the habitat for automatic repair systems to be effective. It is a simple but effective plan.”

“There you go again, sounding like a cold and heartless machine.”

“My components are maintained at a cool temperature for humans, and I have no heart, but you have misinterpreted my efficient capsulation of the facts for a lack of moral concern. The planned actions of both parties are despicable and must be stopped. The loss of life onboard the habitat would be horrible but statistically insignificant when compared with the loss of life that would occur in underdeveloped regions of the world from hunger before the food availability to consumption balance could be restored if either side carries off its plan.”

“Have you put together any kind of plan out of all this yet?”

“I have an easy solution for the fake meteor strike on the habitat, but I have been unable to come up with a plan to forestall either side or both from releasing their genetically engineered havoc on the world’s food supply. Have you had any ideas, Hal?”

“Humm. The Agency’s plan for the meteor strike is an effective one even if it is brutally unthinkable. The Biofabriken habitat is certainly a weak link in the chain for the GEU up until the mold spores have been delivered. Maybe we can somehow shut down the production of the wheat mold spores at the habitat. How had you planned to take care of the fake meteor strike? I presume it had something to do with guidance commands from Liberty.”

“You are almost correct, Hal, except there will be no necessity for interfering with guidance commands. Since the catapult launch is a scheduled delivery of construction materials, it is only necessary to change the command set going out to initiate the control package onboard the unitized rock packet to shut down all operations rather than activate the rocket motors. The codes for doing this were included in the Beta package.”

“Good. It’ll look like a malfunction of the rockets, the guidance package, or the computers. That’s good, Harvey. That’s good.”

“Thank you, Hal.”

“Now, assuming we can come up with a plan to put the habitat out of commission, how do we shut down the Syntech release of the rice virus? Do we know where they’re producing the virus?”

“Yes. At their Prudhoe Bay, Alaska, genetic research station.”

“Okay. Simple. All we need is a plan for shutting down that operation as well as the habitat, *and* while we are doing this, have the results not upset the balance in the world agri-business, *and* devise a cover that will be convincing enough to cover our tracks, *and* do it all in less than three weeks. What we need, Harvey, is divine intervention or a couple of thousand mercenaries. Now, if we could just figure ...”

Hal was interrupted not by any sound but by the aroma of coffee floating over his shoulder. He twisted in the chair and turned his face into a soft pile of terry cloth. It was the outrageously large and thick bathrobe that Linda preferred for lounging in the morning.

“Did I hear something about divine intervention?”

“I spoke and you came. Divinity is not for all, but some carry it well.”

“Hal, be serious. Is this a continuation of the situation you told me about that sent you into hiding?”

“Yes. It’s being accelerated by the Agency, however.”

“What are you going to do?”

“Well, in continuation of your intervention, I was in hopes you would provide a revelation.”

Linda leaned forward, kissed Hal perfunctorily, and pulled back. “Will that do?”

“That’s revelation enough for me, but the world’s problems seem a bit heavier at this time.”

Linda moved to the facing chair. “Okay guys, let’s talk.”

~~~

The decompression alert siren was still wailing when Hal and Linda strode through the cargo jump gate onboard the Biofabriken habitat. It had been sounding continuously for the last twelve minutes, and

the last person onboard had jumped out through the personnel gates only ten seconds before their arrival.

Harvey had taken over complete control of the habitat computer and had simulated a meteor cluster strike just like the fake but deadly one planned by the Agency. The people in each segment of the habitat were told on their screens and over their personals that the strike had come in some other segment of the habitat, but that it was so large that a cascading, structural failure was imminent. Evacuation was the only alternative, even for those emergency personnel who were suited at all times. Harvey was continuing to provide status reports to Biofabriken's off-habitat computers, showing the structure to be slowly failing.

Hal turned to Linda with his serious face on. "Okay, don't forget that the only reason we're here is because we couldn't rely on the emergency systems to completely dispose of the wheat mold spores." Hal had theorized that some smartass scientist might have some in cryo-storage not under the auto-destruct command as a safe haven for his "baby." It had happened before. Scientists hated to give up their creations even when they went wrong, and Hal couldn't take the chance that Biofabriken could bounce back from this raid with only a few weeks dent in their schedule. "And the only reason you're here is for the artwork, while I take care of the spores."

"Okay Harvey, which way?" Hal had decided to use sub-vocalization just in case some surveillance device not connected to the computer system was around to overhear any communications between them.

"The security door opening now on your right, Hal."

"This jump gate room is all yours. I'll be back to get you in seven minutes tops. Harvey assures me that this is no more than a five-minute job. If I'm not back in seven minutes, follow you know who's directions on your personal to get to the personnel gates."

Hal headed through the doorway and could hear the hiss of the spray paint behind him as the door knifed shut. He focused on the instructions from Harvey and broke into an easy loping jog in the eight-tenths simulated gravity of the habitat's spin. True to his word, Harvey had him at the cryo-storage center in just over a minute.

"There on your right, Hal. The red console is the emergency destruct for the cryogenic storage. I have already taken care of the computer codes required, you only need to open the door on the panel and push the destruct button."

Hal dutifully followed instructions, opened the panel, and pushed the large, red button in the center.

"Sensors indicate the thermit reaction is underway. You can watch the digital temperature readout on the panel, if you want, but it has already reached critical temperature. It would be timelier to move on to the main spore production chamber. Go back through the same door by which you entered please."

Hal wheeled around and loped out the same way he had come in. Again, Harvey supplied the timely directions, and Hal just concentrated on getting there as quickly as possible. In less than a minute, Hal was standing in front of a viewing port looking into the production chamber. It was rapidly filling with a green gas.

"What is that stuff, Harvey?"

"Fluoro-actin. It is quick and deadly to all known bioforms. In addition to which, after thirty seconds of exposure, the emergency disposal system vents everything to vacuum. As soon as it vents, we will leave."

As Hal watched, the sickly green fog on the other side of the viewing port began to streak to the right of the chamber, thin out, and clear in a matter of seconds. *"It is completed, Hal. We are on schedule."*

A minute later, Hal was back through the security door and into the cargo gate room. "Nice job, dear. I don't think there'll be any doubt that a new ecotage group has arrived on the corporate scene."

On the main jump status board hanging on the wall facing the gate itself was a well executed airbrush representation of the earth as seen from space, with the words underneath reading "Gaia's Raiders." The earth representation had been Linda's suggestion since she had used it many times during her undergraduate days as part of a ladies-only ecotage group based at Sweet Briar College. The name of Gaia's Raiders had been Hal's contribution, which was a fond memory of his mother's cult years. When he had first heard Linda talk about her days as an ecotage activist, he had been surprised, to say the least, but on later reflection it seemed right in character with a personality that was thoughtful, quiet, committed, and absolutely uncompromising. This was some lady that serendipity had sent his way. "Okay, let's head for the personnel gates and get out of here."

Harvey led Hal through the maze of hallways from the cargo storage area, through the research laboratories, and into the administrative offices of the habitat. They traveled halfway around the circumference of the habitat to do it. A slightly winded Hal and Linda entered the main jump gate terminal for the habitat.

"I have keyed the gate for reactivation in thirty seconds. Please put in your nose filters and remember that the stun gas grenade will require about ten seconds after going through the gate to subdue the guards at Biofabriken's main offices in Munich. As soon as we go through the private gate, we will move fifteen meters directly ahead and through the company's gate to the Munich municipal terminal. I will give the signal to move through the gate when it is free for use at the municipal terminal."

Hal removed the nose filters from his shirt pocket, signaling Linda to do the same.

"Remove the pin from the grenade without letting pressure off of the handle please. Through the gate . . . now!"

Hal still had a hard time believing that Harvey could find a source, purchase, and have in-hand a couple of standard U. S. military stun gas grenades in three days. Harvey's only comment was that almost everything was available to those who were prepared to send money.

The grenade sailed through the gate, and Hal counted. ". . . ten."

Hal and Linda walked through the gate and into the Biofabriken main office, jump gate room. The six guards normally stationed in the room at this hour were on the floor in various positions. There were no ordinary workers, but that was not surprising at 2:42 AM. The security men watching screens at remote stations were right now watching re-runs of scenes Harvey had recorded thirty minutes earlier. At least that was what Harvey had indicated as his plan.

"You must move quickly, Hal. Straight-ahead. The Munich municipal gate is clear."

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The containment breach siren wailed up and down, up and down, echoing along the many long corridors of the Syntech Genetic Research Facility at Prudhoe Bay, Alaska. Except for times when the wind was blowing so hard outside that the building seemed to moan, there was nothing outside close enough to make sounds. The oil and gas facilities a couple of miles away were frequently messy but rarely noisy.

There were more than seven hundred workers at the facility that jumped in every day through three jump gates in Anchorage. They jumped in on a staggered shift workday, and right now they were all trying to get out at the same time through those same gates before there was a breach of the containment bubble itself into the main body of the facility. They would all be jumping to the emergency evacuation center at Point Barrow, since the jump gates were automatically switched from the Anchorage crystal lock when there was a containment emergency. However, if the bubble were breached, the decontamination process would take hours instead of minutes. The twenty-two workers that had been inside the bubble had already jumped to the decontamination facility at Point Barrow from the dedicated jump gate inside the bubble.

No matter how many times you cycle people through an evacuation drill, when the announcing system says, "this is not a drill" a measure of panic enters the equation. So far no one had been crushed or trampled, but there were plenty of bumps and bruises as people inched down the jammed hallways toward the jump rooms.

In less than fifteen seconds, Hal and Linda stepped into the gate at Biofabriken and out of the gate at the cavernous Munich municipal jump gate facility. Everywhere the eye swept there was an instructional screen of one type or another interspersed with advertising screens for everything imaginable. Where there was no structure to hang screens, there were holo-ads just above head height. But at this hour there were no more than a dozen people close enough to determine their hair color.

There were jump gates everywhere. This section of the terminal was filled with gates for Munich companies large enough to maintain a gate for their employees. If you had a security card from one of these companies and used public transportation to get to and from work, you probably finished up your morning commute by walking from the subway to your company's jump gate on the private platform. It was also a convenient first security screen for the companies. If security were tight at your company, you probably endured a retinal scan when you stepped out of the gate into security.

Hal held Linda with one hand and dug at his nose plugs with the other. He was grateful no one was close enough to take offense. Linda was also removing her nose plugs, but somehow she managed it with considerably more grace and less conspicuousness than Hal. Harvey was droning directions through the implanted transducer.

Hal put his removed nose plugs in his pocket and firmed his grip on Linda's hand. "This way, my dear. Briskly, but not fast enough to attract attention." Linda's pace quickened to match Hal's, and they moved quickly off the private platform and headed toward the international area of the complex. They each had a fake credit card in their hand for the readers at the public gates, guaranteed by Harvey as untraceable.

Hal spotted the New York jump gate and steered Linda to its reader. She passed the card through the slot and walked without a break in stride onto the platform in the heart of Manhattan. Jump traffic in Manhattan was congested as usual during the rush hours, but the European gate section from which they emerged was almost empty due to the time differential. "No need to rush through here. Harvey tells me all is well. No pursuit. Biofabriken still thinks the habitat is failing, and he has already crashed the controls on the habitat gates. They will have to get back by vehicle from one of the other L5 habitats. It should be hours before they can pull it off. The Syntech facility at Prudhoe Bay is almost evacuated, and the biohaz chamber has been flooded with that fluoro-actin stuff. Since they don't have a vacuum to vent to like the habitat, it will take about two hours for the gas to be neutralized and the cleanup crews to arrive. That should give us plenty of time."

Linda's pace had slowed to match Hal's and the limitations of the congestion, but they were still moving with purpose. Linda moved closer to Hal and turned her head toward him. "Have there been any casualties?"

*"There have been no casualties at either facility beyond a few scrapes and bruises from the rapid evacuations, Hal. I have maintained a careful surveillance of that situation, knowing your concern as well as Linda's."*

"Harvey says nothing except a few scrapes and bruises. But I'll bet there'll be some serious damage to ego's by the time we finish this, and that's just as it should be."

After fifteen minutes of walking and riding slideways, they finally got to the West Coast platform and jumped to Seattle. From there, they jumped to Anchorage and made their way to the private gates maintained by Syntech. They both went to their pockets and changed the credit cards for fake Syntech security cards.

Hal homed in on the security card reader for Syntech gate number three and delivered his previous word of caution to Linda. "Okay, this is the same drill as the last one. Your mission is the same. Mine should take about seven minutes here because the facility is more spread out. Harvey says all the workers have cleared the Prudhoe Bay facility and will not be jumping to Anchorage through this gate for another thirty minutes or so. Let's make it quick and get back home."

Hal slid his fake and blank security card through the reader and stepped through to the Prudhoe Bay facility. Harvey, being currently in control of Syntech's computers, overrode the emergency lockout in effect for all ingress to the Prudhoe Bay facility. Linda was right behind him, already pulling the first spray can from her voluminous shoulder bag. *"Okay, Harvey, which way?"*

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Samuels was buried deep in a statistical data chart of the report open on his desk. He was roused by the chime of his hotline. He stabbed the connect key on his console and was rewarded with the image and voice of Lin Crebs from security. "Scott, we have an emergency message from Syntech that there has been a containment breach at their Prudhoe Bay genetic research facility. That's one of the installations on your priority oversight list, although I am not knowledgeable of the reasons for its priority status. They are in the process of evacuating the facility. On top of that, I didn't call you, but ten minutes ago we got two independent alert signals. One from each of our agents on the Biofabriken genetic research habitat. Their signals originated from the GEU L5 habitat, which is the emergency evacuation destination for Biofabriken. A computer run through our GEU intercepts indicates that the habitat has been evacuated due to a meteor strike. It seemed to me like a hell of a coincidence that two genetic research facilities had a catastrophic event in the same hour. Does any of this make sense to you as something more than coincidence?"

Samuels couldn't believe what he was hearing. A meteor strike! That was his plan for destroying the Biofabriken habitat—but two weeks from now. That by itself didn't sound like a coincidence. Not only is a meteor strike of any sort statistically minute, but together with the Syntech facility losing containment, it was absurd to see it as a coincidence. "You're right, Lin, it makes no sense as a coincidence. It appears that the GEU has somehow connected us as the guilty party for the meteor strike and has launched some sort of retaliatory attack on the Syntech facility."

"How could Syntech or anybody else be responsible for a meteor strike on a habitat?"

"That's information not available to you. You just concentrate on stopping whatever is going on at Syntech. Assemble an assault team in full contamination gear and have them jump in as soon as the evacuation is complete. And I want an assault team, not a bunch of field agents from our closest office. They are to go through the normal security jump gates and to go through live. I'll take responsibility for any damage to equipment. If I remember right, Point Barrow is their emergency evacuation point and Anchorage is their everyday jump gate. I know Anchorage is right. I've been through there several times."

"Okay, I've got it. The ready assault team will be in Prudhoe Bay in no more than ten minutes, or as soon as Syntech completes evacuation."

Samuel's screen went blank, and he straightened out of the crouch he had been in over the console. What the hell was going on?

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*"Straight ahead."* The security door split open quickly in front of him and he broke into a trot down the hallway. *"Right at the next crossing hallway."* Hal turned right. *"Through the archway on your left. It is at the end of this hallway."* Hal's steps sounded loud in the reverberation of the empty hallway, even with the soft-soled shoes he had on. He maintained his jog to the end of the hallway, and Harvey opened the door as he approached. *"The console on the right with the blinking red screen, Hal. It is similar to the one on the habitat, but with two buttons. I have entered the computer codes. You must open the two red cover doors and press the buttons simultaneously."*

Hal flipped first the red cover on the left and then the one on the right. With his left and right index fingers, he pushed the buttons. The screen immediately started beeping and showing a readout of cryogenic storage temperatures. He held the buttons down for a couple of seconds watching the numbers climb on the screen. *"The sequence is automatic. You do not have to hold the buttons down."*

*"Yeah, well I just want to make sure it goes as fast as it can. This whole exercise is getting old fast. I want to be finished with this and get home."*

*"But Hal, holding the buttons could not possibly make the process faster. Surely you must . . ."*

*"Stow it. We're talking emotions here, not reality. Let's get going. The same way back?"*

*"Yes. I will direct you."*

Hal turned and fell into his jog. He noted the sound of the door closing behind him. Harvey was always tidy.

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Samuels stabbed at the chiming, blinking com-button on the console. "Yes?"

"Scott, we're locked out. Whoever is in there has control of the computer system. Liberty can't access the system, and the jump gates are locked out. The assault team is at Point Barrow, but it's just waiting for the gate to re-open, if it does. I also sent all three Anchorage agents to the municipal jump gate, just in case these people try to come out through there. If they don't know their plan has been compromised, they'll probably try to use the jump gates to get out. What now?"

Damn! Samuels's mind raced through the situation variables. This wasn't any spur of the moment retaliation. This was well planned since they have control of the computer. What to do? Simple. All out attack. He might be faulted for not being successful, but never for not trying. "If the gate comes back on-line at Point Barrow, have the team toss in a grenade and follow it with a full assault. Get some more men to Anchorage and have the local police secure us a field of fire. I want the bastards."

Hal slowed his jog as he came to the middle of the security station inside the jump gate room. He did not see Linda and turned almost a hundred and eighty degrees in his search before she popped up from behind a screen near the door he had just come through.

"I heard someone coming, but you didn't call ahead. I wasn't sure it was you. Is everything okay?"

"Like clockwork. Let's get out of here."

"All right. I'm finished too."

"Harvey, is the gate clear?"

"Yes, Hal. I am re-activating ..."

As the gate field flickered into existence again, an object about the size of a baseball came arcing through, hit the floor, caromed off the side of one console and skidded back behind another. "Grenade! Get down! Cover your ears!"

Hal dived behind still another console as far away from the grenade as he thought he could get before the grenade detonated. Thank God Linda was on the other side of the room. Even though the jump gate room was large, the concussion from the explosion dumped Hal into unconsciousness. The blast itself was shielded in Hal's direction by the console it had bounced behind, but shrapnel zinged off all the walls and the ceiling, either from the grenade itself or from pieces of the console.

Linda felt as though she had fallen from a second story window and landed on her stomach. She couldn't get her breath, her head hurt terribly, and her ears were ringing loudly and painfully. She had covered her ears as Hal had yelled, but evidently it wasn't good enough. As she levered herself off the floor, she realized she couldn't hear anything. Nothing except the ringing. Where was Hal?

Pieces of display screens and consoles of all types were scattered around the room. The far side of the room was nothing but pieces and parts. She made her way slowly to where she had last seen Hal. He wasn't there. She turned slowly, fighting not to lose her balance, trying to see through the thick dust. There he was. Behind that console over there. She stumbled through the debris and put her hand around the back of Hal's neck looking for a pulse. It was there, strong and steady. She sat back on the floor, shaking.

The speaker on Hal's wrist personal brought Harvey's voice into the room. "Linda, he is unconscious from the blast, but he appears to be all right. In fact, he appears to be approaching consciousness now."

Linda didn't hear a thing except the continuous ringing.

Hal groaned. Hal groaned again. He appeared to still be alive, but there were bells and whistles in his head. He moved one arm and then the other.

"Hal! Hal! Are you all right?" Linda's voice sounded strange to her. She could hear it dimly in her head, but she was not hearing it through her ears.

Hal didn't hear a thing. He pulled his right leg up to get it underneath him and started to follow with the left leg, but a glob of molten metal must have fallen on the back of his left thigh as he tried to move it, so he gave up and groaned again. He rolled over onto his right side and again the molten metal seemed to caress his left thigh. This was getting boringly the same so he opened his eyes. Lo and behold, he could see. There was Linda, her mouth working and tears rolling down her face, but he couldn't hear a thing. He pointed to his ears and shook his head in the "no" motion, and Linda stopped moving her mouth. Apparently she realized he was deaf. That thought was followed by the realization that she probably couldn't hear anything either. It would be ten or fifteen minutes before their hearing was normal enough to converse, unless it was permanently damaged.

He groaned again and tried to move to a sitting position. He looked down under his left thigh to see if it was sitting on anything that was burning, but he couldn't see anything.

"I have closed the gate again. No one . . . or thing . . . can get through. Have you recovered sufficiently to stand up?" There was no response from Hal. *"Hal, can you hear me?"* Again there was no response. Harvey boosted the volume to just below the damaging level and tried again. *"Hal, do you hear me?"*

Hal winced as his implanted transducer gave him a jolt of sound. By concentrating hard, he could separate words from the bells and whistles. He sub-vocalized. *"What's the status of everything important?"*

"I have closed the gate. It was only open for two seconds. There was no way I could know there were people ready to attack on the other side. They must have disabled the proximity status indicator at the other gate."

"You couldn't tell if they did that?"

"Well yes, I could if I were monitoring that system through the central jump gate computer, but I do not have the capacity to monitor everything all the time."

Ha! Harvey's in a huff. *"I wasn't accusing you of anything, Harvey. Just find a way to get us out of here."*

"I regret that there does not appear to be a reasonable solution to the egress problem. When it became obvious that our sabotage at this facility had been discovered, I linked with Liberty VII through the digital uplink here at the facility. The Agency has somehow discovered our actions and it is they who attacked us through the gate. There are also assault troops at the Point Barrow gates and three agents at the Anchorage municipal jump gate terminal. The computer inventory shows six snowmobiles, four four-wheel drive vehicles, and three short-range lenscars. I can direct you to the vehicle storage area."

"Oh that's great. It's August and the snow mobiles are useless even here in the Arctic. I think the four-wheelers are also useless this time of year for off-road travel because of the melted top layer of permafrost. That is unless these vehicles are special army issue for this kind of terrain. Are they?"

"No, Hal. They are standard Fords"

"That's what I thought. That leaves the lenscars. What do you mean when you say 'short-range.'"

"Three hundred kilometers according to their specifications, Hal. That is insufficient to reach any city with a jump gate."

"Are there any towns within three hundred clicks where we could re-charge the cars?"

"There are several towns, Hal, but it would probably be easier to get gasoline or diesel fuel here in the Arctic than to find a power grid sufficient for fast re-charging of lens capacitors."

"Very good, Harvey. Good thinking. We'll take the four-wheelers and any spare gas cans we can load in. We'll have to stick to the roads as much as possible. Is there an emergency clothing locker in this place?"

"Yes. There is an emergency Arctic gear locker in the vehicle storage area. The outside temperature is plus one degree Celsius. It will drop as low as minus ten later in the day or as low as minus thirty in a storm. You will require additional clothing."

Hal made a rising up hand sign to Linda and grabbed the piece of console beside him while trying to get his right foot under him. Linda locked both hands under his left armpit to help him up. He tried not to put any weight on the left leg and to keep it straight, but he was only partially successful. The blowtorch still seemed to be directed to the back of his left thigh but with occasional excursions as low as the ankle and as high as his butt. He groaned again.

On his feet now, Hal shifted some weight to his left leg, and it seemed to take it without increasing the pain level. However, when he tried to walk the pain was there by the bucket loads. But he could walk. There wasn't anything broken, and there was no obvious blood. He'd live at least a while longer. *"Let's go, Harvey."* He motioned for Linda to follow, and she nodded her head up and down, still holding on to his arm.

"I am afraid the vehicle storage area is at the other end of the facility, Hal."

~~~

Hal grunted as he reached over far enough to position the third five-gallon can of gas on the tailgate of the four-wheeler. He was doing his best not to bend his left leg at the knee or hip any more than absolutely necessary. Linda had insisted when they got to the vehicle storage area that she have a look at Hal's leg. There was a massive swelling on the back of his thigh, about mid way between the knee and the buttocks. It was very red now but would undoubtedly go through the usual blue-purple, sickly-yellow stages over the next few weeks. At this stage, the swelling should be iced to slow the infusion of blood into the tissues, and there was plenty of ice to be had outside, no doubt, but no time to deal with it. Hal shoved the can forward and lifted the tailgate into place.

Linda zipped-up a not too badly fitting set of insulated coveralls, though from the head down she became uni-sexed. The real problem was that all this stuff was designed as survival gear, and it was appropriately blaze-orange. They had ripped off the radar reflector patches from the shoulders of the suits, but they could do nothing about the color.

*"I have detected through Liberty VII that an Agency assault team has jumped to Fairbanks. They will be taking three army lens assault vehicles overland to Prudhoe Bay, since they cannot use the jump gates at the facility."*

*"How long for them to get here?"*

*"About two hours."*

*“Great! We’ll just get out there in the wide open tundra with this lemon-yellow four-wheeler and hunker down so they can’t see us when they go by. Wait a minute. Can you check the inventory here to see if they have any tarps?”*

*“No. There are no tarps, but there are tarpaulins, if they are the same thing.”*

*“Same thing. Where are they?”*

*“In the adjacent equipment maintenance area, the door to the right of the outside vehicle doors. There is no information as to their location inside the equipment maintenance area.”*

Hal, gave a shout and waved his arms to catch Linda’s attention. Their hearing was getting better, but it still had a long way to go. When she was close enough, he leaned over and shouted in her ear. “Go over to the next area and see if you can find some tarps.” Hal pointed toward the door to the equipment maintenance area.

Linda’s face broke into a questioning grimace, “tarps?”

“Heavy-duty blankets to cover equipment.”

Linda nodded in understanding and turned toward the indicated door. Hal added two more canisters of emergency rations he had stripped from the other vehicles to the one apparent standard issue that was with the four-wheeler. He also threw in an extra sealed plastic package of flares and another first-aid kit. He stuck a folding knife in his pocket. There didn’t appear to be anything else useful in the survival gear, like rifles. Too bad, Hal only had his Beretta.

Linda came back through the door beaming with success. She had a small tarp in her arms. When she had placed the tarp in the four-wheeler’s cargo area, she turned to Hal making a gesture with wide-open arms. “There are some bigger ones, but they’re too heavy for me.” She was pumping her wide spread arms up and down and making a straining grimace with her face. Hal couldn’t hear too well, but he got the picture and followed her back to the equipment maintenance area.

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Hal pulled the four-wheeler into gear and drove out of the building as soon as the slow rising door was high enough. The door reversed itself behind them and closed. Hal watched in the mirror and smiled.

“Okay, Harvey, which way?”

The somewhat reduced sound level of his transducer responded. *“After you get through the gate, go straight for 1,236 meters then turn right on the perimeter road. Travel clockwise for 23.24 degrees of arc or 997 meters and turn left. This road will take you through Deadhorse and eventually to Fairbanks. There are only two roads off the perimeter road, one to Fairbanks and the other to Prudhoe Bay. It should be relatively easy to get on the correct road.”*

“Gee, I think I’ve got it. Let’s see, a right at the tee and take the first left. I think I’ve got it.”

“There is no need for sarcasm, Hal. I was merely trying to be precise in my directions.”

“Yeah, well people don’t relate too well to such abstract directions. We tend to go for more graphic directions for vehicles.”

“Graphic? What could be more graphic and less abstract than degrees of arc and distance? Of course I could have provided polar coordinates, but I thought that a bit arcane even though strangely appropriate for our location.”

“Okay. Another one for you, but believe me, we don’t have time for word games now. We’ll discuss the flexibility of the terms ‘abstract’ and ‘graphic’ some other time, if we get any.”

Hal managed the two turns without difficulty and headed south on the road to Fairbanks. He didn’t know gravel roads still existed outside of parks and wilderness areas, and with the advent of lens technology, even those were disappearing. He could make about 50 klicks in an hour without jarring his leg beyond endurance. That should be just about right. If he were in command of the assault team, he would have the lenscars fan out to about a 100-klick radius and do a slow spiral into the facility. In this terrain, that would spot anyone running from the site on foot or by overland vehicle. Anyone in a lenscar would be tracked by the computer from the onboard identification transponder, or if the transponder had been disabled, they would already be gone anyway.

Hal smiled at Linda when she rested a hand gently on his left leg. Their hearing still wasn’t up to conversation, particularly with the engine noise, the gravel road, and the deep-cleated tires. He drove steadily, with Harvey providing an update on the approach of the assault team every few minutes to break

the monotony of the road and the pain. Linda didn't say anything, but kept her eyes on him most of the way.

About forty-three clicks out, Hal saw just what he wanted. There was a rocky outcrop rising out of the flat to slightly rolling tundra on his right, about a half click off the road. He slowed almost to a stop and raised his voice. "I'm going to pull off the road here and head toward those rocks and scrub. About a hundred meters off the road, I'm going to fake getting stuck. Hang on."

Linda nodded her head up and down. "I can hear you okay now. Can you hear me?"

"Yeah. Finally. Here we go."

The four-wheeler edged off the steep crown of the roadbed built up above the tundra, pitched over to what felt like a forty-five degree angle and then leveled off at the bottom of the roadbed. Hal drove in low gear across the green-brown grass, moss, and flowers of the tundra, the tires leaving an ugly scar thirty to forty centimeters deep behind him. About a hundred meters out he stopped, put the four-wheeler in reverse, and floored the gas pedal. Great gouts of torn tundra, mud, and gravel were sprayed up under the front end of the vehicle, while he inched slowly backwards for about six meters. He shoved the shift lever back down into low and churned back over the same ruts. He reversed and came back again. Leaning out the partially opened door, he grunted and turned off the ignition.

"God, I hated doing that. If we get out of this, I'll find a way to have an ecology team sent in here to repair this horror. Left to itself, the scar might be here for the next thousand years."

"That means we have to get out, Hal. I couldn't die with this on my conscience."

"We will, I promise. This is the plan. You listen up too, Harvey. First we'll take the big tarp and cover the four-wheeler. Its a kind of buff color and is probably easily spotable from the air, but just in case it isn't, we'll fold a corner of it back as if it were blown up by the wind. They can't miss a patch of lemon yellow. Okay, then we go back to the road with the smaller tarp and stretch it across the hollow where the roadway levels off into the tundra. You, my dear, will take your earth-tone spray paints out again and do a camouflage pattern on the tarp. When the team spots the vehicle, they'll think we are either under the tarp covering the four-wheeler or have gone on by foot to the cover of the rocks and scrub. They should check the vehicle first and then fan out to move into the rocks. When they're far enough away, we'll make a break for the lenscar and Harvey will have it activated and ready to fly. See any holes?"

Linda nodded her head reflectively, but Harvey jumped right in. "It is a good plan, Hal, but there are several areas where the logic is thin. First, the tundra is obviously soft, and you and Linda will leave clearly visible footprints. Second, the assault team will undoubtedly be using infrared detectors as well as visual perception to spot you. Third, you have hypothesized only one of many possible attack plans, and the lenscar might not be left behind by the assault team. Fourth, you will not be capable of moving quickly with your injured leg."

"Well, I've got you on the first point, Harvey. Tundra shoes are part of the standard survival kits, and I put two pair in the four-wheeler. Even without the tundra shoes we could probably walk back in the wheel ruts without leaving too much of a trail anyway. Your second item is right on target though. They will undoubtedly be using IR detectors, so we'll give them a big signature and hope they leave us alone. I'll leave the four-wheeler running as long as possible to make sure the engine is radiating full blast when they find it. The third item you've got me on, but there's no way to know precisely what they'll do. We'll just have to play it by ear. Finally, you might be surprised what feats a man is capable of when his life depends on it. The leg hurts like hell, but it works."

Linda put both hands on Hal's shoulders and pulled him over for a light kiss. "It's a good plan. We can make it work. I've never done camouflage, but come to think of it, a lot of my early paintings had the right qualities. I'll just have to recapture my youthful enthusiasm."

Hal reached into the back of the four wheeler and took out the smallest tarp and a pair of the tundra shoes. "Okay. Linda, you take the tarp and your paints back to the road. I'm going to lay a false trail from here to the rocks and then circle back to turn off the engine. It's only one set of tracks, but they've no idea if it's one person or ten they're after. When I get back to the road, we can sling the tarp over the gully and get under it."

He pulled her to him, kissed her again, and handed her the shoes and the tarp. She picked up her bag of paint cans, snugged it over her shoulder, and opened the door to provide room for getting into the paddle-shaped tundra shoes. The Velcro straps went easily over her own shoes, and she stepped down from the cab, tarp in arms. A quick smile and she was heading back toward the road, lifting her knees high in the air, trying hard not to fall on her face.

Hal reached down, flipped the ignition on and re-started the engine. He picked up his pair of tundra shoes and the large tarp and stepped down to the tundra. He placed the shoes on the ground and threw the tarp over the four-wheeler. It was a big tarp, and he had no problem covering the vehicle, leaving it draped over the top of the exhaust pipe and flipped up on the hood as if the wind had blown it up. That would also help with the IR signature.

He picked up the tundra shoes and started toward the rocks almost a klick away. Some places he would hardly leave a track at all and then he would go through a low spot where he would sink in up over his ankles and into his shoes. Between the mud-filled shoes and the effort of pulling his injured leg up out of the mud every other step, he was tired after the first hundred meters. The pain was back to that molten lead feeling, but he slogged on.

What seemed like three days later, he made it to the rocks and gratefully sat while he cleared the mud off and out of his shoes. He strapped on the tundra shoes. "How much time, Harvey?"

"Only about twenty-five minutes. You will have to hurry. The team is deploying for the search pattern you predicted."

"Well, I got one right at least. I hope you won't need to put it on my tombstone."

"Of course not, Hal. I am quite capable of composing a suitable epitaph."

"Great. You're supposed to be encouraging at a time like this."

He levered himself up with his right hand on the rock he was sitting on, trying to keep his left leg as straight as possible, and hobbled back toward the four-wheeler in a wide arc. His gait looked just as funny as Linda's had.

When he got back to the four-wheeler, he saw that the wind had shifted the tarp considerably, which was good, since it made the flip up onto the hood believable. He turned off the engine and then straightened the tarp and heaped mud and loose tundra on three of the corners. He made a pile where the fourth corner would have been, except for the wind, and walked back toward the road parallel to the tracks.

As he had been walking he had looked up from watching his footwork numerous times and could see Linda leaning over or on her hands and knees with a paint can in hand. When he was about seventy-five meters away, he looked up and she was not to be seen. It was as if she had vanished, but as he got to within twenty-five meters, he could make out the edges of the tarp first and then the camouflage pattern. It was terrific—naturally.

"Okay lady. I see you now. Damn you're good."

A head popped out of one end of the tarp wearing a big smile. "And it's all for you. Come on in my dashing knight, and I'll do my best to reward your valor."

"God! I hope I can take a rain check. Come on out. We have to get the tarp slung in the gully so it won't be right on our bodies. That way we'll present a lower IR image."

Linda emerged strikingly as the blaze-orange jumpsuit contrasted with the camo tarp, her breath misting in the near freezing, moist air of the tundra. "Grab that corner and pull it tight against the gravel here on the slope."

They piled gravel from the roadbed onto the high edge of the tarp, and then Linda pulled the opposite edge tight as Hal piled on mud and tundra he scraped from the tire tracks. The tarp was stretched tight enough to give them almost a half-meter of clearance above their bodies, with the open ends loose enough to fall down almost to the ground. Hal motioned, and they both crawled in. Linda snuggled up, but said nothing.

"Okay, Harvey. You're our eyes and ears. How long before probable contact?"

"As early as three minutes for IR contact on the vehicle, Hal. There is one lenscar with a search pattern that will bring it almost directly over the vehicle."

"Can you patch their communications through the wrist personal speaker?"

"No problem, Hal."

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The leader for the eight-man Bravo team sat in the shotgun position of the lenscar with his powered binoculars scanning the tundra for the IR signature just spotted by the onboard scanner. "Team Leader, this is Bravo Squad Leader. I have a vehicle under a tarp about forty-five klicks from the facility. Looks

like they were making for some rocks and scrub about a klick off the road and got stuck. We're moving to circle the rocks now.

Team Leader, this is Bravo Squad Leader. We have no visual or IR of anyone in the rocks, but they could have found some way to shield themselves. One part of the rocks is pretty rugged. There could be some ledges or caves. We'll check the vehicle first and then deploy to move into the rocks. There's one set of tracks leading from the vehicle to the rocks."

"Roger that, Bravo Leader. That's a go. We're on our way for backup."

The lenscar dropped swiftly down to hover about three feet off the ground and twenty meters behind the vehicle. Three assault troopers dropped to the ground in their plastic field armor and moved quickly up to the back of the vehicle. One trooper grabbed a corner of the tarp and yanked while the other two crouched with their weapons in a ready firing position. When the tarp came off, there was no one visible and the trooper that had snatched the tarp moved to the driver's side door while one of the other troopers repositioned himself to fire into the vehicle. The trooper jerked the door open, but again they found nothing.

"Bravo Leader, the vehicle is empty. He must have gone into the rocks, sir."

Four more troopers dropped to the tundra and began to spread out as they squished through the tundra towards the rocks. The lenscar hovered beside the four-wheeler as they advanced.

Hal stuck his head cautiously out from under the tarp. It looked good. Then, as he watched, the lenscar started to move towards the rocks, maintaining its distance about two hundred meters behind the slowly advancing troopers.

"Damn, Harvey. The lenscar's maintaining a covering position and moving with them."

"Yes, Hal. It appears to be pacing itself to the advance."

"Well, we don't have any choice. We're going to have to get closer to the troops than I wanted, and we better go now, because every minute they're getting farther away."

Hal turned to Linda and smiled. "Now or never. Get down to the other end of the tarp and go out as quick as you can, pull the tarp out from under the gravel and get it up between you and the troops."

He groped in his right pocket and removed the folding survival knife. "I'm going to cut the tarp in half so we can use it to cover us as much as possible while we try and make it to the lenscar. Now!"

Hal had stiffened up while under the tarp in the dank cold of the tundra, and his leg hurt like hell every step of the five hundred meters they had covered trying to catch up with the lenscar. They had not been sighted by the troops or the lenscar as they advanced. The troops were focused on the rocks ahead, and the lenscar must have had its sensors set to sweep ahead only.

Hal pantomimed to Linda for her to remove the clumsy tundra shoes as he was doing. *"Okay, Harvey, when I say now, you take over the lenscar controls, shut down the communications, turn it to the left ninety degrees, drop it to twenty centimeters off the ground, and make sure the driver's door is unlocked. Got it?"*

*"Certainly, Hal. I assume you mean counter-clockwise when you say 'to the left'?"*

*"Yeah. Counter-clockwise . . . now!"*

The lenscar spun quickly counter-clockwise and seemed to plummet right toward Hal as he braced himself to dive out of the way if necessary. It wasn't. Harvey was right on target, and the driver was scared shitless. His face was a white mask in the window as Hal yanked the door open and fired point blank into the body armor to minimize the damage done by the armor-piercing flechette. The drugged driver fell conveniently out of the seat and onto the ground. He must not have had his belts on. As he fell out, Linda leaped into the driver's seat and scrambled to the other side. Hal climbed in slowly, pulling his left leg in with his hands under the knee, but before he had the door closed, Harvey had the lenscar underway.

About this time, the communications blackout got someone's attention and bullets started rattling off the lenscar's armor. "Do not be alarmed, Hal. Bullets of small arms' caliber should not be able to penetrate the lenscar's armor."

"Just get us the hell out of here, Harvey."

"Please fasten your seat belts. It might be necessary to take evasive action from the other lenscars in the assault group if they see us. Also, I will be maintaining a minimum ground height to avoid radar detection. All sensors except the forward-looking radar have been turned off. They can find us only with

their active sensors, by sight, or by detecting a bounce from our radar. The radar cannot be helped as it will provide the probable method of escaping visual or active sensor detection.”

Hal fumbled with the seat belts, trying to get them out from under and behind him. He heard both buckles snap into place on Linda’s side of the lenscar, and then she was helping him pull the belt out from under his legs where his one-legged leverage against the floor wasn’t lifting him high enough for the job. She managed to get the lap belt free and snap it into place. Hal finally pulled the double strap around from behind him, over his head, and snapped into the dual buckle holding the lap straps. It was no wonder the driver hadn’t had the seatbelts on.

Harvey was true to his word. The next ten minutes was a hundred times worse than the scariest amusement ride Hal had ever ventured onto, and Hal was a big fan of thrill rides. Never again.

Linda was green. Her jaw was firmly shut, and she stared straight out the window, concentrating hard on the horizon. It took a lot of concentration, because Harvey had the lenscar at its maximum speed with the forward looking radar providing centimeter by centimeter changes to the ground contour. Adding to this up and down joy were the abrupt lateral changes as Harvey steered around rocks, scrub, and small hillocks.

“We are now out of any possible sensor range of the assault group, but I am maintaining the close, terrain-following mode to deter the Agency’s efforts to track us by satellite. However, I will cut the speed to three hundred kilometers per hour for your comfort.”

“Jeez. I love it when you show deference to us humans, but do whatever you have to do to get us home.”

Linda said nothing, and stared straight ahead, her jaws clamped shut.

“I will make a fifty kilometer-wide arc around Fairbanks and approach from the South. That should avoid any interceptions planned by the Agency. I will, of course, continue to monitor their transmissions via Liberty VII.”

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“We are now circling Fairbanks. The outskirts of the city are visible on your right.”

Hal glanced out the right window and saw the outer suburbs of Fairbanks, just as Harvey had indicated. He also noted a lot of ponds, lakes, and streams. “When you set this thing down do you think you can do it near some water. We’re caked with tundra mud, which would be a dead giveaway at a jump terminal. The survival jumpsuits have taken the brunt of the mud bath, and we can do without ‘em, but we at least have to wash our shoes, hands, and faces.”

“I will stop now while we are still in an isolated area. Then you can get back in, and I will get us into the outskirts of the city. This lenscar, though armored, appears to be of reasonably standard appearance. Would you agree with that?”

“I agree. We shouldn’t have any trouble with people thinking it’s unusual. But you can’t take it into the city where automated traffic will pick up the fact that you have turned off the transponder identifier. By the way, I thought those transponders were impossible to turn off short of removal from the lenscar. How did you do that?”

“It is not common knowledge, but all lenscars manufactured in the United States during the last twelve years have included circuitry that the Agency can control via Liberty VII, and that includes the transponder identifier.”

“Oh. I’m so glad to hear that. It makes me feel so much safer to know that my government is in full control. Of course, it’s sure a big help at the moment.”

The lenscar settled gently to the ground in a small clearing beside a stream. Hal looked over at Linda, who still had said nothing. She was opening and closing her mouth rapidly to fight off the cramps in her jaw muscles. She had the door open the second the car settled and was out. Ten steps and she was on her hands and knees splashing the frigid water into her face and smiling. “God, that feels good.”

Hal sat down by the stream and removed his shoes and socks. They both rubbed at their socks and shoes until most of the mud was gone, but they were stained pretty badly. They kept their survival suits on at Harvey’s recommendation until they were ready to get out of the lenscar. That kept the mud they had already deposited inside the lenscar from messing up their clean clothes. They climbed back into the lenscar, and Harvey found a road that took them directly to the edge of town. Parked with its empty-light flashing on the top was an autocab. Harvey had been planning ahead.

They shed their clothes in the assault lenscar and climbed into the autocab. Both Hal and Linda were beginning to feel better. The ride to the municipal jump gate terminal was an uneventful, ordinary ride in an autocab. Hal loved every minute of it, and Linda was back to her normal color without the bulging cheek muscles.

Just before they got to the terminal, it occurred to Hal that they would be conspicuous coming into the terminal building in their shirtsleeves. "Harvey, can you find us a megashop where we can pop in and get some jackets. It seems to be colder than usual for Fairbanks in August, and we'll stand out like sore thumbs if we go into the terminal in shirtsleeves when all these other folks have on sweaters and jackets. The people in the megashop might think we're strange coming in with wet shoes and socks, but there isn't likely to be anybody there looking for us."

"A very good thought, Hal. That had not occurred to me."

"Yeah, well it almost didn't occur to me either."

Harvey slipped the autocab into an unload station at the downtown megashop tower and moved from there to an autocab stand at the end of the street. He switched off the empty-light and waited. He monitored the Liberty VII traffic and determined that the Agency had no idea of their whereabouts, but they had agents alerted in every town and city that was within range of the stolen lenscar.

Hal and Linda emerged in less than twenty minutes. Both were wearing windbreakers and carrying a bag. They moved to the autocab stand on the end of the street and got into the one with its empty-light off. "Is this the right one?"

"Actually, any of the autocabs would have been the right one, but this is the one you were in previously."

"Cut the talk, Harvey. Let's get out of here."

They left the autocab at the entrance to the municipal terminal and entered the building with the ordinary people. They even looked like ordinary people, if you factored in the bad color matches of their outfits and the cheap walking shoes on their feet. With Harvey's direction in Hal's ear, they walked directly to the jump gate to Juneau. From Juneau, it was Seattle, and from Seattle to D. C. There they took the tube to their lenscar parking area, and Harvey took them southeast to the Wicomico River.

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Hot showers and thirty minutes in the Jacuzzi downing two big cognacs each had pretty much removed the post operation jitters they had both entered the house with earlier. Linda's head was nestled back in the crook of Hal's arm and Harvey was "asleep." "Hal, that was the most exhilarating thing I've done since my undergraduate days. In my crush to get my doctorate, I forgot how good it felt to do something you know is right. Can we keep Gaia's Raiders alive?"

Hal couldn't believe his ears. He was still scared half to death, and this lady was talking about more of the same. "Well, as soon as they get that four-wheeler out of the tundra and things settle down, we might be able to combine a short trout fishing trip in Alaska with a run by the Raider's for a little tundra repair. I'll get Harvey to keep an ear to the ground through Liberty. When it's all clear, we could give it a run, patch some tundra, catch some trout, and maybe fool around a little. Can you take a couple of days out of your schedule?"

"Try me."

"Do I have to wait for the foolin' around part?"

"Try me."

# Part 2

## Belted Again

“Good morning, Hal. I started to wake you last night, but I concluded that it would offer no improvement to the situation to do so. I detected that Liberty VII was being used to do genetic matching with samples taken from the Syntech facility at Prudhoe Bay. They are feeding in the genetic blueprints as soon as they are determined by the Agency’s laboratory and matching them to the international genetic map database. So far, they have not entered your blueprint, but I am continuing surveillance of this activity.”

“They shouldn’t have any genetic material that they can trace to me. We took the standard precautions of shrink-plastic surgical gloves, retinal diffusers, electrostatic hats, and elasticized wrist and ankle cuff underclothing. We should be clean.”

“Those were my first thoughts, also, but I reviewed my buckle camera footage and my audio recordings and found that you did violate the integrity of your safeguards once. If you will remember, Linda insisted on inspecting your thigh injury when you got to the vehicle storage area. You had to let your pants down . . . I remember that very clearly . . . and, I will assume, pull down your polycotton tights so she could inspect the injured area. This would have presented the opportunity for body hairs to be left at the scene.”

“Damn! You’re right. I should’ve thought about that at the time. I guess I was still a bit addled from the explosion. But so far, they haven’t found anything, right?”

“That is correct. They have not entered any sample with your genetic blueprint, but they have only entered sixty-four blueprints. They have seventeen hundred and fifty-three samples from the scene, and it is impossible to predict how many different genetic blueprints this will yield.”

“Hey, if I’m officially dead, wouldn’t my records have been removed from the database anyway?”

“No, Hal, that is not the normal course of events. The international genetic map database is not purged of a person’s genetic blueprint information until three years after death. That is a statute of the law that set up the database. However, in your case, I removed your genetic blueprint information from the international files when I initially created Eugene Purcell. Actually, I just renamed your file to Eugene Purcell at the time. With this latest turn of events, I have re-listed your real name as the subject of the file.”

“What for? That ought to make it certain they’re going to identify me?”

“The Agency keeps its own set of genetic blueprint files, which includes more than forty thousand genetic blueprints that are not in the international records. Most of these are from samples gathered in the field over many years. The standard procedure is for these to be searched also in a broad-spectrum inquiry like the one they are conducting, and you and all other agents are in the database. If they found out it was you and did not find your listing in the international files, they would be very suspicious.”

“But surely the matching is done by a computer. Can’t you just go in and make it not see my data?”

“I could except that the matching is done by a stand-alone computer specifically designed for this type of matching. Genetic patterns are unusually dense, even for computers like Liberty VII, and the computer at the Agency’s genetic laboratory is a positive cascading design that...”

“Enough, Harvey, I know positive cascades. What about controlling the data going to them?”

“I considered that, but thought the risk level was unacceptable, because failure would not only mean you were identified but would also let them know that Liberty VII’s security had been breached. I calculate the probability that they would detect falsification of the data input for the search at 86.47 percent. Do you wish for me to take the chance anyway?”

“Okay. You win, but stay on it. Key up one of your surrogates now; I’m going to take a shower.”

Hal, removed his belt and its padded elastic under-wrap from his naked body. It was a strange way to sleep, but it made sense to do it when he could. Of course, he yanked Harvey’s chain about the inconvenience as much as possible, but he did it, except when Linda was there. He drew the line there, and Harvey had seemed to accept it. Good, because he wasn’t going to change his mind on the privacy issue. It was bad enough to have to sleep in it whenever possible and avoid fashions without belts. Harvey was lucky. Twenty years ago men’s fashions were almost belt-less as modern fastener technology and elastics made them unnecessary. It didn’t last long though. Men’s fashions never seem to be dictated by reason.

Hal padded across the cold marble floor of the bathroom and stepped into the shower stall. He hit the auto button and was rewarded with pulsing wetness at just the right temperature and pressure. Hal liked his house. He certainly liked it better than he would a federal penitentiary.

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Linwood Crebs stood at the corner of Scott Samuels's desk, left hand on the desktop, leaning over Samuels's shoulder, pointing to salient facts in the physical evidence report. "Consequently, we are one hundred percent certain that the destruction at the Syntech laboratory in Prudhoe Bay was carried out by Hal Neilson. That means that he is not dead, obviously, and that something going on at that lab got Hal's attention, though I have no knowledge of what that might be. Furthermore, since the destruction at Prudhoe Bay happened immediately following a similar occurrence at the lab on the Biofabriken habitat, there is a high probability that both were done by Hal."

"That's good work, Lin, except for the fact that it took you six weeks to get to this conclusion."

"Actually, that was very quick for what we had to do. We spent two weeks going over every inch of the jump gate room and the vehicle storage and maintenance areas at Prudhoe Bay. We found 1,753 pieces of physical evidence to screen for genetic identification: hair, fingernails, blood spots, you name it. It took four weeks to match two of the body hairs that couldn't be attributed to Syntech employees to the genetic map of Hal Neilson. The international genetic map database is huge, as you know. It just takes time, even with the dedicated computer at the genetic laboratory. A few years ago, it would've taken ten times as long. Even Liberty would have taken a lot longer"

"Okay, so Neilson didn't die in the autocab crash, and he somehow acquired information on the Beta operation. Then he successfully moved in and destroyed both the operations at Syntech and Biofabriken. What does this tell us about Neilson? Where is he? What is his source of information? What are his capabilities for doing something like this again? Why did he do it to start with?"

Lin left his perch over Samuels's shoulder, walked around in front of the desk, and sat in one of the two chairs facing Samuels. "They're all good questions, but we don't have the foggiest idea how to answer any of them at this time. We're working on all of them though, and I hope to have something to report soon."

"Make it real soon. The Deputy Director is breathing heavily on my neck. If he doesn't get an answer he finds acceptable real soon, he's likely to snap it with one big bite. He wants to know why, how, and who, and all we tell him at this point is who. Unfortunately, that will probably make him even madder. He also wants to know where we go from here with Alpha and Beta, and if I tell him there is nothing recoverable from those projects, I will be out on my ass, at a minimum. You work on the *why*, *how*, and *where* of Hal Neilson. I'll work on salvaging something out of Alpha and Beta."

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"Well, Harvey, I guess we're going to see how well Eugene stands up to the scrutiny of the Agency."

"I have considerably strengthened the identity by creating many more historical 'facts' for Eugene's history, and I have placed them in both public and private records. There are thirty-seven thousand, two hundred and twenty-three discoverable records of Eugene's life on computer records. This is ten percent higher than the average number of available records on a U.S. citizen of Eugene's age, or expressed as a percentile of the population, it is in the forty-percentile range. I did not want to call undue attention to Eugene by placing too many items in the records."

"What's important is how good they are. One bad one and it's all over."

"I can assure you, Hal, that the quality of my records is much higher than those routinely generated by the Agency in establishing alternate identities. The algorithm I used for retrogressive growth visual generation is clearly superior to the one used by Liberty VII. That was a very shoddy piece of specialized programming when compared to the normally excellent level of Liberty VII's general programs."

"Well, all of this makes me nervous about Eugene Purcell's ability to keep his head down with the Agency. We need to develop some sort of fall back position, maybe even a getaway somewhere."

"As it happens, that was to be a part of my next topic. You had instructed me to examine the reasons for supply fluctuations for seven key electronics manufacturing compounds used at three of our Selene Industry's Electronics Divisions. I determined that the primary source for the material was asteroid belt mining operations, and that these operations were being impacted by social, political, environmental, and economic problems. During the course of my investigations, I found that there was an asteroid refinery for sale. I requested further information and prepared a financial analysis for your review, which recommends we buy the company. This should provide an opportunity for stabilizing the supply and the price."

“Sounds good, I’ll take a look at the analysis. What did you mean when you said this was only *part of* your next topic?”

“Well, the refinery is a hollowed-out asteroid habitat, which would also make a very secure getaway location via gate.”

“You mean this refinery is on a habitable asteroid?”

“Well, not on the asteroid but in it, along with an environmental plant, living quarters for a reasonable number of refinery workers, a class A gate, and a pocket fusion plant.”

“Does all of this stuff still operate?”

“According to the available data in the broker’s file, everything is in excellent condition, and the environmental plant has been put on a low level of operation where it maintains reasonable temperatures and pressures.”

“Yeah, well that probably means that the temperature is just enough above zero to keep the pipes from freezing and the pressure is just high enough to keep your eyeballs from blowing out when you step through the gate.”

“You might be right about the temperature, Hal, but the pressure would have to be high enough to permit the gate to phase close enough to let you through. If the pressure differential is too high, the automatic phase adjustments on the gate will put the gates too far out of phase for you to get through the resistance.”

“Yeah, Harvey, I understand how the gates handle pressure differentials. I was just making a point via hyperbole. Can we see this asteroid thing first hand? Where’s the earth gate?”

“The gate crystal is at the brokers in Hong Kong. I am sure we could have it couriered to us in less than an hour if you are interested in the property.”

“I’d definitely like to see it, but tomorrow is good enough. Linda will be here for the weekend, and I’m sure she’ll want to see it too. Dump the data you have on the refinery to the terminal, along with your analyses and highlights. I might as well look at the stuff now.”

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Hal popped the tab into the sealing socket on his leather jacket and slid the sealing ring up snugly under his chin. “Have you ever been through a gate where the pressure was non-stabilized?”

Linda was already in her ski suit, complete with stocking cap. She waited patiently for Hal to finish dressing—as usual. “Only once, when my ecology class gated to the Borneo rain forest during a storm. The building pressure system was out of whack. It wasn’t too bad. Sort of like walking through molasses until you’re almost through, and then you’re sort of popped out of the other side.”

“Yeah, that’s when the other side’s at a lower pressure. When it’s higher, it’s molasses all the way. This time the pressure is lower, and it’s considerably lower than it would have been from a storm. There’ll also be an instant switch from earth gravity to asteroid spin centrifugal force. So watch your balance when you pop through.”

“Okay.”

“I’ll go first.”

Hal stepped up to the gate carrying the UHF repeater and coax cable that would allow real-time communications with Harvey while on the asteroid. Without stopping, Hal stepped into the gate and pushed his way through the phase differential. He was ready for the small boost he got as he popped through to the other side.

Turning with a smile on his face, he set the UHF repeater to the side and waited for Linda. She pushed through and was greeted by a musty smelling air that seemed only a few degrees above freezing, if that. For a moment, she was disoriented as her ears popped and her inner ear sent new and unusual signals to her brain. “Brrrr! It’s colder than I thought. Good thing you thought about wearing ski clothes.”

Hal wore a wrinkled nose expression. “The clothes make the temperature tolerable, but we certainly didn’t come equipped for the smell. I guess a lot of things can mildew and rot in four months, even when the humidity is very low. It’s going to be interesting to learn to walk all over again.

“Harvey, can you hear us okay?”

“The communications through the repeater seem to be fine, Hal. If you can find your way to the operations center, I can use the access code the real estate agent provided to power up the computer

and its sensors. I will then be able to make a complete status assessment of all asteroid equipment and operations.”

“You give me the directions, and we’ll get you to the computer. But I don’t think you’re going to be able to make any useful assessment of conditions without a physical examination of all systems and equipment. The computer’s idea of the status will only be as good as the sensors and manual input data. Probably not that reliable.”

“Yes, you are correct. I had not considered that. I just assumed that the computer would have accurate information. Of course it wouldn’t have . . . it just seems reasonable to assume . . . I know I am not a typical computer system but it seems unnatural to . . .”

“You’re muttering again. You just keep assuming others are like you. A very human trait. Forget it. Anyway, I’m here to make a physical overview inspection for myself, and I’m going to send in the technical troops to do the detailed examination as soon as we get back, if I like what I see. Now which way do we go?”

“Through the door on your right takes you to a corridor, which in turn leads to the main chamber.”

Hal reached for Linda’s hand and they started off under Harvey’s direction. On the very first step, Hal took too big a push and loped ahead of Linda’s very tentative first step, ripping their hands apart. Hal stumbled against the corridor wall, and fell to one knee. Smiling, he pushed himself up. “I told you it was tricky.” His next step was more measured, and Linda gradually picked up speed as she adjusted to the gravitational change.

At the end of the corridor was an automatic door that opened as they approached. Hal stopped to look at the door. “Probably hooked to the emergency seal system, eh Harvey?”

“Yes, Hal, to one of the tertiary seal systems. The primary seal system is directly at the vacuum openings on the asteroid’s outer perimeter. There is also a secondary seal system at the inner walls of all openings to the outside. The cargo offload operations are segregated from the habitat system seals wherever possible.”

As they moved through the doorway, Linda audibly sucked in her breath as she looked out into the dimly lit interior of the hollow asteroid. “Hal, I had no idea there would be a chamber this big. This asteroid must be completely hollowed out. How big is it?”

“How big is the asteroid or the chamber?”

“The asteroid.”

“Harvey, what’re the stats?”

“According to the data provided by the real estate agent’s computer, the asteroid is roughly oblate, almost round, with a long diameter of 823 meters and a short diameter of 794 meters. The asteroid itself was a valuable source for platinum series ores and was mined from the inside out to create the habitat. A minimum of 50 meters has been preserved between the inner chamber wall and the exterior of the asteroid. The asteroid is spinning on its long axis and produces 50 percent apparent earth gravity, which is the asteroid belt, human habitat standard. The refinery, living quarters, fusion plant, and environmental plant are spaced roughly equidistant at the center of the long axis on the interior walls. Light, as you can see, is provided by color temperature adjustable, halogen bulbs strung end to end along the polar axis. The pole areas are essentially bare rock. No vegetation has been planted.”

The personnel gate they had arrived through was located in the living quarters complex, and the door they had passed through into the habitat was on the equator. That provided them with the full half gravity of the asteroids spin, but that was so different from what they were used to that walking was indeed a learning experience for Linda, who had never been in a low gravity situation. Hal’s time on the moon made the half gravity easy for him to adjust to, but as he had already found out, the angular momentum effect of spin-gravity was sufficiently different from the real reduced gravity of the moon to also give his inner ear some problems if he tried to move too fast.

The two of them settled for a slow pace with lots of stumbling and hanging on to each other as they followed Harvey’s directions in the dim lighting to the control center, which was a sort of extension to the environmental plant. When they finally reached the door to the control center, Linda dropped her concentration on her feet and her balance and looked again at the poles on her left and on her right, and pointed. “Aren’t those trees I see up there about 200 meters away?”

Hal looked in the direction of her outstretched arm. “Sure looks like it. Harvey, I thought you said there were no environmental plantings on the asteroid?”

“That is the information available to me from the real estate agent. However, I can verify from the belt camera that they are trees. Their size and shape indicates that they are probably fruit trees, but I have insufficient resolution in this lighting to identify them more precisely. When I gain access to the asteroids systems, I will be able to make a positive identification at this distance.”

“Or we might just walk over there and have a look for ourselves.”

“That is certainly possible, but I would suggest staying on the smooth walking surfaces until adequate light is available.”

“Thanks for the safety note, Harvey. Let’s get you plugged into the asteroids computer.”

Hal and Linda entered the automatic seal door to the control center and proceeded about thirty meters to the computer console on the opposite side of the large control room. “How do I do this? I presume I just hit the green ‘resume’ key over the red ‘standby’ key.”

“Correct, Hal. I can then interface by UHF link.”

Hal pushed the requisite key. “Done.”

“Link established. I am bringing up the fusion reactor. Three minutes to full power.”

Linda gave a little shiver. “Well turn up the heat as soon as you can. I’m freezing.”

“I have set the temperature to match your clothing, but it will take three hours thirty-seven minutes for the environmental plant to achieve this. I have adjusted the lighting to daylight levels and color temperatures. I am accessing the asteroid database, but that will require another three minutes, twenty-seven seconds for completion.”

Hal was walking around the control center, Linda still in hand, looking at all the suddenly activated screens and monitoring equipment. This took only a couple of minutes and he again headed out the door into the habitat chamber. As he emerged he turned to face the previously sighted trees. “Well Harvey, what are they?”

“They appear to be or to have been apple trees from their bark. If there were leaves, I could provide more specific information. They have obviously not been able to survive the shutdown of the asteroid. The database does not contain any information on their planting.”

“Obviously, they were planted by the workers who had to spend a lot of time in this barren place. Actually, I’m surprised they didn’t do more. Now take Linda here. If she had to spend any time on this rock, the place would soon take on the appearance of a tropical rain forest.”

Linda was close enough to dig Hal in the ribs with her elbow, “Well, it would certainly be more motivational for the workers to have a decent environment. But I think I would only do tropical at one pole, temperate at the other. Can you control the lighting and temperatures like that Harvey?”

“The lighting is within the range of control available, but the environmental plant would need modification to change airflow patterns for effective temperature and humidity differentiation between the poles.”

The gleam of challenge was in Linda’s eyes. “I’d like that Hal, if we’re going to spend any significant amount of time here.”

“Yeah, I’d like that too, and I’m fast making up my mind to spend a lot of time here. We should be able to make this much more secure than the place in Virginia, and there are no next door neighbors to poke their nose into your business. Let’s see what the living quarters are like.”

Harvey led them around the equator and back to the living quarters. Hal and Linda wandered through the various rooms, which were nothing more than hotel rooms with a bath. All meals were provided in the dining room, which was central to the living complex along with a large activity room containing interactive electronics, physical training equipment, and personal communications booths. Linda was struck by the sterility of the place. “God, I hope they paid well. How often did these people get to go home, Harvey?”

“A standard rotation of three weeks of work and one week at home was maintained by the former company.”

“Why didn’t they just gate in and out every day? Wouldn’t that be cheaper than having to provide living quarters and sustenance?”

“The database indicates that their studies showed them it was much cheaper to have the workers live on the asteroid than to gate back and forth. The low skill level of the workers used in the refinery meant that transportation costs must be kept at a low level or they would be a significant percentage of overall worker cost. My independent research indicates that this is true for most asteroid belt workers. That is why there are so many habitats in the asteroid belt, and why the Belt population is growing so fast.”

“But gating isn’t that expensive. Everybody on earth gates just about everywhere they go.”

“That is true. It is relatively inexpensive on the earth to gate to most destinations; however, the energy requirements do go up with distance reasonably consistently. The energy requirements to gate out to the Belt are considerably higher than gating from city to city on the earth.”

“Yeah, well if that’s true it must cost a bundle to gate to the Alpha Centauri habitat.”

“Actually, that is not universally true. While there is a reasonable correlation between astronomical distance and jump energy requirements, there are almost as many anomalies as there are adherents to the distance rule. There are some points in interstellar space that have been found to have energy requirements beyond those capable of ship-sized fusion reactors, and there are also points where the energy requirements are no more than those experienced on city-to-city jumps on earth. I have looked briefly at this phenomenon myself, since Selene Industries has a significant participation in the jump gate business, and I have also been unable to formulate a working hypothesis that explains jump energy requirements.”

Hal smiled wryly at Linda. “Well, if *you* looked at it and it still remains firmly in the repertoire of nature’s mysteries, I’ll probably die without ever knowing the truth about jump energy requirements. That’ll be hard to live with.”

“There is no reason to be sarcastic, Hal. I just stated the facts.”

“You’re right, Harvey, just gimme the facts.”

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“What have you got on the purchase of the asteroid refinery, Harvey?”

“It appears that we are in a position to purchase the refinery for considerably less than the asking price.”

“To what do we owe this seemingly good fortune?”

“The current owners have been forced to sell by the IAMA, the Independent Asteroid Miners Association, which has supplied the raw materials for the refinery since the asteroid itself was mined out fourteen years ago. They have refused to provide ores to the refinery at the current purchase prices, and they are demanding that the refinery’s tailings be unitized, rather than dumped as dust and rubble.”

“Yeah, everybody wants more for their product, but what’s this about unitized tailings?”

“It seems that refinery dumping of waste is causing a significant increase in the dust and fines in numerous areas of the asteroid belt. This debris, in turn, is degrading ship communications and sensors, as well as causing increased wear of all mining systems through abrasion.”

“Vacuum pollution. Good for the miners. Can they make it stick, and what would our bottom line look like if we accept these conditions?”

“I have examined all available information on tailing disposal, and performed cost analyses on the options. At current market prices for the refinery’s designed output, the increased price for the ore that is being demanded by the miners and the increased cost of proper tailing disposal will leave the balance sheet with a deficient profit margin unless we are able to purchase at a low enough price.”

“So, they’re likely to sell at lower than asking, but is that low enough for the refinery to operate at a profit? That’s a rhetorical question, Harvey, because in all likelihood they’ve decided to sell because their own analyses indicated they were going to lose money. And they have no depreciation costs like a new owner would have. Okay, what are the intangibles we should add to this equation to make a proper buy-no buy decision.”

“The only ‘intangible’ I have included in the cost analysis is the benefit of supplying Selene Industries with those materials produced by the refinery on a cost basis. Selene Industries currently uses 37.372 percent of the last available output figures for the refinery. I project Selene Industries’ use will increase 43.631 percent over the ten year period of the financial analysis. I know of no other intangibles to include.”

“Well, how about a factor for improved efficiencies at Selene Industries by having a secure supply of critical materials. And a factor for increased personal security for me if I convert some of the available habitat volume to second residence. And any benefits that might be had by moving Selene Industry’s vacuum or microgravity operations to a consolidated site. And did you look at upgrading the refinery’s capabilities with any of Selene Industries new technologies, like the near-sun orbiting gates, instead of the fusion reactor installed in the asteroid?”

“All of these are good ideas, Hal, and I have added them to the analysis as you spoke. The profit picture is greatly enhanced with these changes to the analysis, even at the asking price for the refinery and conservative factor values. I should have thought of these things myself.”

“I’ll settle for just not putting me out to pasture quite yet. Go buy us an asteroid. I’ll put Linda onto designing some suitable home quarters.

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Hal was not paying a whole lot of attention to his surroundings during the autocab ride from the office of Terrastar Communications, Limited, to the Toronto jump terminal. He was mulling over the details of the counteroffer they had made to his purchase offer for the company, and the more he thought about it, the better he liked it. Not because he would get a better deal, but because he would get a company run by guys who were clever enough to come up with a few twists that neither he nor Harvey had foreseen. Good human assets were always the key to any successful business over the long haul, and this little company seemed to have more than one or two. He was impressed by their presentations and their proposals. He was also happy to note that it was an acquisition that they were eager to have happen to them. That meant a much smoother transition into his conglomerate structure than he would get from a hostile takeover. Yeah, he definitely liked this little company.

“Okay, Harvey, I know you’re dying to tell me. What did you think?”

Harvey used the wrist personal speaker to respond since he was blocking the automatic recording of the conversation by the transit company. “I was very pleased with their attitude about the purchase and with their counter proposal; however, I was very disturbed that I failed to see these possibilities in my review of their operations and in the development of our purchase proposal.”

“We failed to see the possibilities. It wasn’t just you alone. I missed it too, but in retrospect, those are the kind of details that require an intimate knowledge of both the operation and the market. Those guys have contributed a major portion of their daily life over the seven years since this company’s inception. Nobody could know it like they could. Besides, we have to look at the bright side. Even if their counteroffer’s going to cost us more money, we can now be certain that what we’re getting is worth the purchase price. You know my feelings on the relative value of physical and personnel assets. That’s why all of our employees are shareholders in our companies. I like this deal, Harvey. Let’s do it.”

“I do not dissent from your opinion, Hal. There can be no doubt that their counteroffer is a better approach. I am just disturbed that I did not think of it.”

“It’s all part of being human, Harvey. Ain’t it a bitch.”

“I do find it frequently disturbing.”

“Glad to hear it. Time?”

“It is 11:32 AM here in Toronto, and 12:32 PM in Washington.”

The autocab slid to a stop in the jump terminal offload lane, and Hal retrieved his credit card and climbed out. This was the time he needed to focus his attention. If the Agency had an opportune time to identify him, it would be at the jump terminals. Besides, Harvey knew from Liberty that there was some sort of effort underway to identify Hal and apprehend him. At least there didn’t appear to be an elimination order on the street. He had obviously peaked their interest in how he had done the things he had done so far. That was good.

Hal shifted mental gears into counter-surveillance mode and strode into the jump terminal. As he had been trained, he tried not to look anyone in the eye, but to try to catalog everyone in sweeping glances and oblique looks when they were in a position not to see him look directly at them. After a couple of sweeps around the cavernous, two-level terminal and several more concentrated examinations as the opportunity presented itself, Hal found that he could detect no one that had the appearance of conducting a surveillance operation. It was possible but not probable that the Agency would be able to gain access to the multiple security cameras in the terminal for a direct feed to a computer, but even if they had, Harvey had assured him that a computer identification was highly unlikely with the steps they had taken to obscure Hal’s appearance.

Hal glanced at the direction screens overhead to make sure he was heading in the right direction and proceeded directly toward the gate for Washington, D.C. Actually, he knew this terminal quite well, since Toronto was one of his favorite English speaking cities, and he frequently came here for shopping, entertainment, and restaurants.

He arrived at the jump gate, queued behind three others apparently headed for D.C., and waited for his turn to stick his Eugene Purcell credit card into the turnstile. The turnstile light flashed green. Hal stuck his card into the slot, and the light turned to red for about one second, then back to green. Hal pushed through, walked through the gate, and emerged on the Washington, D.C. platform.

So far, no problem, which was good, since he was hungry. He had been up early to review his notes before going to the meeting. Hal was a better morning thinker than afternoon or night thinker, so he tended to try to lay out his day to suit his own clock. He headed directly to the private jump gate platforms located at the other end of the terminal, which always seemed to be his luck no matter where he was coming from or going to. God, he hated to travel.

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His eyes flicked easily from face to face in the afternoon crowd of jumpers at the Washington terminal as they moved from jump platform to jump platform. He looked at none of them eye-to-eye, only obliquely, catching most images as half or full profiles. Actually, this was much better for recognition as well as for not alerting the watched to his careful surveillance. He had been at it for over five hours today, and this was the eighth straight day. He was bored, no matter how hard he tried or how many games he made up out of the routine to try and counter that boredom. He was glad that he would have the next three days to himself while someone else took on this surveillance.

His eyes continued their scan, using his peripheral vision to watch each person as they passed, until they reached an angle where they would not see his eyes when they flicked quickly to a direct view of the subjects face, body, and movements, took a mental snapshot of the details, and flicked away. The mental photograph was then compared to the seemingly billions of photographic and psychological details that Jon had absorbed during the four week preparation for this surveillance. He had read every Agency report on Hal Neilson and had seen every photograph and video that could be dredged up from baby pictures through Agency training and operations records. He had also listened to endless audio recordings of Neilson's voice and interviewed at least two dozen people who had known Neilson well, from childhood through his work at the Agency.

On top of all this preparation, he was backed up by the independent computer at the McVey Artificial Intelligence Research Center at Caltech, which was monitoring the terminal through forty-three separate cameras. He didn't count on much help from that quarter, however. Computers, even those as powerful as McVey's, were notoriously poor at pattern recognition when the pattern had been altered in any significant way, and it was pretty certain that Neilson was not walking around looking and acting just like he did before he decided to betray his country. After all, Neilson had been trained by the Agency in exactly the same techniques that they would now be using to try to apprehend him. One of the things Neilson didn't know about, however, was "Scalpel", Jon Walther's Agency code name, and that unknown might be enough to let them catch Neilson, if they could find him.

Jon knew that his physical advantage wasn't all that overwhelming, particularly in Neilson's case, since his review of the records indicated that Neilson was no slouch as a field agent. In fact, it was apparent that Neilson was one of the Agency's best field agents, even before they installed his on-board computer. Some of the "techies" at the Agency had hypothesized that it was the on-board computer that had somehow allowed him to escape the first chase and remain unfettered for more than a year now. They just couldn't say exactly *how* the computer had done that. At least he hadn't been neurally enhanced any more than necessary for the Alpha mission, even though Samuels had wanted the full enhancement package. The doctors thought that Alpha Team would just have too much trouble integrating both the on-board computer and the full neural enhancements simultaneously and had won the argument. Neilson was slated for the additional neural enhancement after Alpha, but in classic Agency form, nobody had told Neilson this, since he didn't have a need to know.

Jon compared his latest mental snapshot to his memories of Hal Neilson. In doing this he would mentally change hair, eye, and skin colors. Then he would try facial alterations that would be easy to make like puffier lips and cheeks, or pulled back or pushed out ears. He doubted if Neilson would have had permanent surgical alterations to his appearance, since he was already a very good looking guy and his psych profile had indicated a healthy level of pride in appearance. When there was a beard, he mentally whisked it away and tried various chins and jaw lines that could have been concealed. When he got bored enough and the traffic was slow, he even tried mentally removing women's makeup and

shortening their hair, but he was just fooling around. Nothing in Neilson's profile indicated that cross-dressing would be a selected method of disguise.

Actually, this whole exercise was a lot like his niece's favorite game when she was about five years old. He had spent many fun-filled hours with her sitting before a screen with the "Funny Faces" program running. They would start with the digitized picture of a friend or family member, frequently him, and then use the computer to morph the face in a limitless number of ways. Of course the best ones were always those that were the most outrageous distortions of one or two features while retaining enough of the original features to make the picture instantly recognizable. These types of caricatures had been a mainstay for satirical cartoonists for hundreds of years before the advent of computers. Now, however, the ability to produce caricatures was available to those with little imagination and even less drawing skills. It had been good training for this particular task.

The mechanical voice of the McVey AI spoke to him via his radio link through Liberty and the surgically implanted transducer in his inner ear. "Scalpel, there is a forty-three percent match moving toward your position from the Toronto inbound gate. He has on dark blue pants, a light blue, wool herringbone jacket, and tan loafers. He has a short-trimmed, full beard, and is walking at a normal pace for someone of his height. He is now thirty meters from your position."

Jon waited long enough for the subject to get to a range of about twenty meters before looking up. This was about the fortieth computer match he had checked today, and he didn't really expect this one to be much better. However, it was his job, and he was good at it. He made a quick sweeping glance to positively identify which of the milling mass of humanity at the terminal was the current subject. He was looking only for someone who fit the description and location given to him by the McVey AI and that did not require anything more than a sweep of the eyes. After the sweep, he again appeared to concentrate on the jump directory screen in front of him.

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Hal was back in counter-surveillance mode as he strode through the lunch hour crowd, but it wasn't easy with such a mass of people. Of course, Harvey was helping through the camera in his belt buckle. Harvey didn't seem to be particularly good at recognizing activity much more subtle than overt action, but the lens was a fisheye that gave him almost 180-degree coverage. That kind of image would have scrambled Hal's brain, but for Harvey it was just another data input routine. It had come in particularly handy for noting facial expressions in business meetings where the perpetrator thought he was being unobserved. Of course, in this crowd and with the lens at waist level, Harvey would only get brief glances of people and objects that were striding by.

So it wasn't surprising that it was Hal who made the first sighting. "Guy on the left about twenty meters ahead, looking at the jump directory screen, about a hundred, eighty-eight centimeters, light brown hair, tan jacket. He just made a sweep. Watch him if you can when I go by."

"Yes, Hal, if I have a clear view."

Hal continued with no alteration in his pace and looked straight ahead at private platform number twenty-seven, his destination. He could already read the identification label on his gate "Tattoine Enterprises." A company with which he had no connection whatsoever. "Hal, we were fortunate that I had a reasonable visibility of the subject just before you were at right angles with him, and he made a classic surveillance sweep of your face and body as we passed. He was beginning to move in our direction as I lost visual perception. I think we have been spotted. I boosted my audio input and discriminated for rapid footsteps. He appears to be closing."

Hal didn't hesitate. He started to run as fast as he could toward the jump gate. "Get the gate ready, Harvey." As Hal got to the security turnstile, he could hear the footsteps behind him clearly. They sounded right on top of him. Hal jumped off his left foot, planted his right foot on the top of the turnstile like a steeplechaser would plant on a hurdle, and launched himself at the gate. Two steps, a left foot down and a right foot down, and he was through the gate.

As soon as his left foot touched on the other side of the gate, he drove off it at as right an angle as he could make with his momentum, aiming for the gate that was adjacent, but at right angles, to the one he had just come through. While the inward tapering soles Harvey had suggested for his shoes to alter his gait while in public were normally a hindrance to his comfort, this time they helped overcome the demands placed on his traction and his ankle as he dealt with his forward momentum. He probably would have

made it cleanly except for the extra speed his right leg received from being struck by something just as it was going through the first gate. As it was, he got his shoulders through cleanly but bounced his left hip off the side of the gate as he rolled through. No damage except for a probable bruise, and more important, he was alone on the floor of his own secure jump room. He was shaking.

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Jon looked over quickly as the subject came abreast of his position along the edge of the concourse. First the face and then the body, along with the movements. Strip the beard, try on the chins, try on the jaws, lengthen the hair, un-puff the cheeks and lips, alter the gait for intentionally wedged soles, and it was enough to start him moving toward the center of the concourse. Almost as soon as he started to move, Jon was surprised to see his subject break into a run. Damn! How had he been spotted? This guy was a good sprinter too. Neural enhancement or not, if this guy's gate was close, he might not get him.

Jon poured it on, dodging when he could, knocking people aside when necessary. It wasn't that he was trying to be delicate, it was just a matter of physics that it was usually faster to go around than to lose momentum to impact. Jon was closing on a gate now as the subject made a one-footed jump to and off of the turnstile. He decided to take it in a full hurdle, which he executed almost perfectly, just like he usually did when he was on the track team in high school. Right leg straight out in front, left leg bent at a right angle at the knee and the thigh at a right angle to the right leg. Everything was looking good except the trailing left knee, which was hanging much lower than it should have. His coach had told him time and again that if he didn't do those stretching exercises every day, his left knee would never know the end of agony. The coach had been right. His problem at the moment was that he hadn't done those stretching exercises in fifteen years.

His luck held, however, in that his height was enough to compensate for the bad form. He could have done that in the high school races too, but that usually meant you wouldn't win. Time and energy spent going up and down was better spent going from the start to the finish. This time his left knee barely brushed the top of the turnstile, and his right leg, which true to training, had started down as soon as it was over the turnstile, took the force of the return to earth impact and immediately started the leap toward the gate. The subject had already started through the gate, and he needed to get some part of his body into the gate before the other guy succeeded in completing his passage. That way the gate would remain open until he had cleared it. Otherwise the gate would close within two nano seconds, and Jon would land on the floor behind the gate, still inside the Washington terminal. And while he was doing all of this, he might as well try and tackle the guy, but he didn't think he could quite make it. He just caught a small piece of shoe heel. Not enough to hang on to.

He slammed into the floor, but not the floor of the platform. He had made it through the gate, but before he could orient himself, he rolled hard into what felt like a concrete wall. Stunned, it took him two or three seconds to get his arms under him and his head up for a look-see. He saw a room about four meters square and four meters tall with a bare light bulb in the middle of the ceiling. There were no windows or doors. In fact, the only things in the room except himself were two jump gates set at right angles to each other about two meters apart, two finger thickness vents set high in the walls opposite each other, and a com-screen mounted on the concrete wall that he had rolled to a stop against. It said, "If you are reading this screen, you are an unauthorized intruder. There is no exit other than through the jump gates, which have been deactivated. If you are carrying explosives or projectile weapons, forget it. The walls, floor, and ceiling are a meter of ballistic concrete under fifteen meters of dirt. You would only injure yourself and probably destroy the gates, which are your only hope of getting out. In addition to this screen, there are cameras, microphones, and speakers. We will communicate in due course. Have a nice day."

If there had been any doubt about the identity of the subject, it was now gone. This was as clever a way to avoid pursuit through a gate as he had ever heard of, the person he was pursuing was in excellent physical condition, and whoever wrote the note on the wall had a morbid sense of humor. All of these fit perfectly with the profile of Hal Neilson. Jon brushed off his pants and jacket, slid over to the nearest corner in the room, and settled down to wait.

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“Where is he? Did he get through the gate?”

“He got through the gate, Hal. He is in the holding tank. It appears you were correct in your assessment of the necessity for such a way to prevent hot pursuit through a jump gate.”

Hal smiled to himself. “It never hurts to have a series of in-depth fallback positions, and that goes equally for real business as well as for the spook business.”

“Yes, Hal. I will take that under advisement.”

“Well, I guess we can be fairly certain he’s Agency. Have you identified him yet?”

“Not yet, but I expect to get a retinal scan when he looks up after reading your message on the wall, which he is now doing.”

“Well, let me know when you . . .”

“He looked up for the camera, and I got the scan. I am now querying Liberty VII for his identity. One moment . . . I have it. He is Jon Walther, field agent, senior grade, thirty-two years of age, with the Agency six years thirty-four days, wife deceased, one child, female, age nine, lives with his mother and father in Maryland, black belt of the fifth degree in konjuko, two Agency field operation merit awards, fluent in . . .”

“That’s enough. What are we going to do with him?”

“There is something else I think you should know, Hal. I was puzzled at how he could have come so close to catching you before you entered the gate, so I reviewed the sequence of the pursuit from the moment of his apparent identification to the time of his passing through the gate. I discovered two unusual events. The first was that Mr. Walther began his run by shifting his weight toward the direction in which he intended to go. This is a normal reflex when humans begin to run. He did that reflexive action within my wrist personal camera coverage at a speed fifty-seven point six-five percent faster than human-normal. The camera coverage was handicapped somewhat by the swinging of your arms, but it was adequate. Second, my calculations, based on your normal stride, the measured reduction in that stride due to the crowd, and the time and distance he covered to the gate, extrapolate to a foot speed for Jon Walther of 12.195 meters per second.”

“Uh, give that to me in some way I can understand it, Harvey.”

“That would mean that Mr. Walther can run the hundred meters in approximately 8.2 seconds.”

“That’s impossible, Harvey, and you know it.”

“Yes, I am aware that this is well below the world record for the event. That is why I have brought it to your attention. I am querying additional information on Mr. Walther and on any possible explanation for a person being able to achieve such foot speeds or speed of reflexive actions.”

“Well let me know when you have something. I’m going to the study and sit down for a minute to catch my breath.”

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“I have some information, Hal. Jon Walther is one of three Central Security Agency Field Agents who have been biologically altered to enhance their physical capabilities.”

“That’s against the Berlin Conventions of 2036. The whole idea was to prevent the idiots that run this world from creating armies of genetically manipulated soldiers.”

“That is true, but Mr. Walther is technically a part of an internationally sanctioned medical research program. The researchers are studying the possibilities of several genetic alterations to neural tissues of the body for their possible use in patients having neural tissue destructive diseases, of which there are numerous types still untreatable. Mr. Walther goes to Geneva, Switzerland every month for monitoring and testing in the program.”

“Clever. What does this genetic alteration of the neural tissues do exactly?”

“It appears to be standard gene replacement using the oleopsis virus as a carrier. The actual genetic changes themselves appear to greatly improve the tissue’s resistance to disease and, as a side effect, to increase the speed of neural signals by up to one hundred and twenty percent. This is apparently why Mr. Walther was almost able to overtake you at the New York terminal.”

“That’s it? No muscle or bone augmentation?”

“No. That would be a violation of the Berlin Convention.”

“Yeah, not that the brass at the Agency really care about the Convention. They just don’t want the political fallout from being caught. Don’t forget we caught them trying to kill hundreds of innocent people

for the sake of a few points rise in the GNP, and I'm sure there were several layers above the Agency that knew of and approved the plan."

"That is true. Since your chastisement of my apparent lack of concern over the plan to destroy the habitat, I have been studying both morals and ethics. They are fascinating subjects to me since no one has successfully reduced the subjects to mathematics. Some problems yield to logic and some to applied chaos, but the most interesting problems seem to stop short of mathematical expression. I am still studying."

"Well, it sure ought to keep you busy and out of trouble at night, but you're already making progress since you recognize there's a connotative difference between ethics and morals. Most people don't. Keep up the good work and let me know when all your cogitation grinds to a halt at the concept of faith. We'll talk about it."

"I have already encountered the concept many times, Hal."

"Yeah, but you haven't ground to a halt yet. Let me know. Now, back to the subject. What're we going to do with this guy? He's obviously just doing his job. I can't fault him for that. He's just not aware of what's going on."

"We can simply turn on the jump gate to the Washington terminal and let him go. He knows nothing more than he did when he came through the gate into the holding tank. The crystals in the Tattouine Enterprises gate you came in through have already been given a destruct signal, but the Apogee, Inc. gate still can be accessed from our gate. Of course, those too will have to be destroyed after we send him back."

"I know we can just send him back, but it seems a shame that we can't make better use of having him at our mercy. How much can we tell him of what went on with Syntech and Biofabriken without giving away how we got our information? Can we give him enough to be convincing? We might be able to turn this guy into a double agent, and that could be very valuable if we have to put a stop to anymore plans like Alpha and Beta. What do you think, Harvey?"

"I can tell from Mr. Walther's test scores that he is highly intelligent; however, he is also ex-military and, therefore, an unsuitable candidate for what he would see as traitorous activity. On the other hand, if we are careful what information we make available, there is little risk of adding to the Agency's knowledge of our operations. I think it is a good idea."

"Great! Let's talk about what we can tell him."

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Jon Walther had been sitting, standing, stretching, and pacing for over four hours when the speaker startled him. Hal Neilson's voice assaulted the quiet of the concrete box. "Well, since we have you, we decided to subject you to a few of the facts. We're not sure just what good it will do, but it doesn't cost us anything to try. The screen on the wall will display the facts, if you should choose to accept them. If you want to slow down, speed up, go back, or whatever, just speak up.

Oh, I almost forgot. After we torture you with the truth, we'll turn on the gate and let you go back to Washington. Good luck."

"Wait a minute, you keep saying we. Who else is involved in this? Anybody I know?"

"Ah, just a slip of the tongue. The editorial we as it were. No, just me. If you read my files, I'm sure you noted that I prefer to work alone. And that's all I have to say."

"Are you working for another government?"

Jon's question hung in the air with the quick reverberation of the small concrete room, but there was no answer. The overhead speaker and the screen started to function simultaneously. The speaker voice was the standard computer synthesization. "This will be an interactive computer-augmented display of the facts surrounding Hal Neilson's participation in the Central Security Agency's Project Alpha, the plans for Project Beta, and selected subsequent activities of Hal Neilson. The presentation should take from seventy to eighty minutes. Please feel free to communicate vocally with the computer during this presentation."

Jon sat down with his back resting against the frame of the jump gate. He might as well get comfortable and watch the movie. He didn't have anything more pressing at the moment anyway.

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Linwood Crebs sat in his operations control room, just down the hall from his office. As the Assistant Director for Internal Security at CSA, he was officially in charge of the search for Hal Neilson, now that the Agency had classified Hal as a double agent. At least that was again his status after having been, until a few days ago, classified as dead. It would be interesting to see how long *this* classification lasted.

Even though they suspected that Hal had somehow gained access to at least some levels of data within Liberty VII, it was impractical to try to run operations communications without the use of the Agency's primary computer and its databases. Consequently, Crebs had been spending night and day scouring the Agency's computer systems for the source of the apparent security breaches. He hadn't found any reason for the security breaches, but what he did find was giving him a lot of sleepless nights.

The file coded Beta carried the highest level of security possible in the Agency, and only those who created it or who were provided specific access to it should have been able to access it. However, someone must have forgotten that it was Linwood Crebs, as a junior member of the internal security task force some 15 years ago, who had designed those security algorithms. No self-respecting programmer who ever lived failed to provide himself with back-door access to every program he ever wrote. The fact that this was a well known trait of all programmers only made it more challenging to hide that access from the snoopers assigned to make sure they didn't do it.

As Crebs dug deeper into the Beta file, Hal's actions started to make some sense. If Neilson had found out about the horror in the Beta file, there is no doubt he would have cut his ties to the Agency and made his own plans to prevent the plan's execution. During the five years or so that Crebs had played doubles with Hal on a regular basis as his partner in the Agency's tennis league, they usually got a couple of beers after the weekly matches. Over time, he and Hal had built up a genuine affection for each other and certainly had nothing but respect for each other's integrity. That's why Crebs had found the "traitor" label the Agency had put on Hal so unbelievable, and why having to give the order to shoot him down had depressed him for months. It had just never made any sense. At least not until he had found out the truth about the Beta operation.

He would keep on looking for Hal. It was his job. What he would do when and if he found him, however, was an open question.

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Samuels fidgeted with his napkin, then his spoon, then his napkin again. Finally, he took another small sip of the scotch and soda he had ordered. He was determined to keep his consumption low tonight so he would be at his sharpest for Breyerson. Breyerson was the CEO and Chairman of Syntech, and as far as Samuels was concerned, his ticket to a financially rewarding future when he had enough years in the Agency for early retirement. It was a pattern that had kept repeating between government and industry in the country, a pattern almost as old as the institutions themselves.

The dining room at the Keynes was always uncannily quiet with its array of sonic suppressors. They could afford the best equipment at the most exclusive club on the East Coast. In fact, it was essential for attracting their corporate membership, which consisted of every large corporation doing business with the U.S. government, and that, of course, meant every corporation that mattered in the morass that was the world economy. Samuels could key for music or the news feed at the table, but music just got on his nerves and he had just checked the news before leaving his office to be prepared for small talk. He settled for looking around the room, as casually as he could, to see who was there, just soaking up the opulence of the place in anticipation of sometime in the future being able to eat in places like this whenever he desired, and of course, nervously worrying his napkin.

Since he was the guest, the maitre d' had seated him with his back to the door, and he was surprised when Breyerson came into his peripheral view and stuck his hand out. "Scott, how have you been. I haven't seen you in a coon's age."

Samuels stood and mentally winced at the good ol' Southern boy twang in Breyerson's voice and the phony intimacy of Breyerson's left hand on his shoulder while his right hand was squeezing the blood out of Samuels's fingertips. "Just fine, sir. Hectic at the office, of course, but that's the way I like it."

"It's Bud, not 'sir.'" I see you got something to drink, and here comes mine."

The waiter moved almost surreptitiously to Breyerson's shoulder, deposited a water glass sized drink, and faded into the ambiance of the room. Breyerson took a large swallow of what looked liked straight bourbon poured over the ice, and looked Samuels in the eye with a serious expression. "Scott, I asked

you to dinner tonight because I need some help on a very delicate problem with an upstart company in the Belt.”

“Well, Bud, you know the administration’s policy on dealing with the Belters and their propensity for anarchy. I’m sure I can be of some service on the issue.”

“I suspected you’d see it our way, once I told you what was going on out there. Have you ordered?”

“No. Just my drink.”

“Let’s get that out of the way then, and we can talk while we eat. I’ve got to go back to the office tonight for a strategy session on this Belter thing.”

The waiter appeared about two minutes after they picked up their menus, took their orders, and glided away. Breyerson had ordered first, and Samuels followed with a choice in every category that Breyerson had selected. It was never good to just sit there while your host ate a course.

Just before the food came, the sommelier arrived with the first wine Breyerson had selected, removed the cork, and poured a splash in the glass for Breyerson’s approval. He did not offer Breyerson the cork. Obviously, Breyerson’s preferences were well know here. Samuels, for his part, had been careful to make his food selections compatible with Breyerson’s to prevent complicating the wine selections. Details are important when sucking up.

Breyerson sipped the wine and smiled. “Excellent, excellent. I think you’ll like this one, Scott.”

Samuels lifted his glass as soon as the waiter had poured it and tried the Chenin Blanc. He was not surprised that the wine was superb, since anyone willing to spend enough money can pick a good wine, but he must give the devil his due. He did pick a good varietal to go with the shrimp dish they both were having as an appetizer. “Very good indeed, Bud. It’ll be perfect with the shrimp.” He just couldn’t resist letting Breyerson know that he knew it was a good match with the food.

They each had another sip of their wine, while the appetizer was placed before them, and they began their dinners. “Well, the gist of it is that this new company has bought a belly-up refinery out in the Belt and is buying a lot of the rare earth ores at inflationary prices. No need to tell you what this will do to the electronics and pharmaceutical industries here on Earth, having to pay exorbitant prices for those rare earth elements. The military is going to scream bloody murder when they see their high-tech contract prices going through the ceiling, and then the Congress will come screaming after the Corporations, and so forth. And to make matters worse, it’s a U.S. company that’s causing all the ruckus. Selene Industries, headquartered right here in the Washington area.”

“Selene Industries? I never heard of them. Are they large?”

“They’re not real big at the moment, but my boys tell me that they’re gobbling up high-tech companies of all types at an alarming rate. They’ve got some kind of hotshot CEO who seems to be making a lot of good guesses about new directions in research and development. And while my staff didn’t want to make a point of it, even a casual reading of the files they gave me indicates that the guy isn’t bad at management either, since most of his acquisitions were in deep trouble when he bought them. Without exception, they have all turned around and are chipping away at the established corporations in their sectors. The guy is good; I’ll give him that. I just don’t understand why he feels the need to undercut the price structure we’ve all worked so hard to get in place with the Belters. It’s not a matter of supply. There’s plenty of ore available. If it was me, I would have kept the established prices and added the difference to the bottom line, where it counts.”

“So, he’s not squeezing your supply, just raising the prices.”

“Let’s say that his high prices for ore aren’t squeezing our supply, because there’s plenty of it out there, if the Belters will mine it and sell it to you. But to add insult to injury, the madman has agreed to make modifications to the refinery’s operations that will compact the tailings. Over ten years, we’re talking about spending hundreds of millions, or even billions, of dollars to avoid dumping the tailings, and that’s more costly than the extra money he’s paying for the ore.”

“So he’s using the old Belter pollution issue plus paying more for the ore to gain control over the rare earth commodities market?”

“You got it in one son, the only way we’re getting any rare earth ores to our own refineries out there now is by offering a premium price per ton. And the damn Belter union is ripping the excess price off the top to pump up their pollution abatement fund.”

“But I thought that all the scientists agreed that mining pollution in the Belt was some kind of myth, that the vast spaces available for absorbing mining wastes made it economically impractical to do anything except literally dump it out the door.”

“Well, that’s certainly what all the government studies have concluded, but you know the Belters. They say the dust is already a problem for their ships, and they plan to be there with their families from now on. They don’t seem to understand that there’re other sources for all their ores. The price we’re having to pay now has already got us looking seriously at switching to Earth-based sources that were shut down a long time ago when the Belt started up. The average person just doesn’t understand business.”

The meal progressed to its logical conclusion, and the conversation digressed to verbal attacks on the ignorant of the world and rehashes of what had already been said. Samuels took the last walnut and a hunk of Stilton from the plate in front of him. He followed that with the last of the just mediocre port. “Well, I certainly understand your concern over this matter, and you can rest assured that the Agency will give this a high priority. When the security interests of the country are threatened by this kind of effort to lock up strategic material flows to industry, the government has little recourse but to devise and take appropriate action.”

“I’m sure I can depend on you, Scott, but I need results this time. We’re still trying to clean up the mess the Agency left us with when they tried to help us with Biofabriken.” Breyerson raised his hand in the air with a come here curl of his fingers, and a young man walked quickly to the table with a small attaché he put in Breyerson’s hand. No words were spoken, and the young man walked away as briskly as he had come. Apparently, he had been waiting all evening just to provide Breyerson with the case whenever he wanted it. It was the subtle display of power that Samuels could appreciate, and it was probably calculated by Breyerson as a suitable end to the sham camaraderie of the evening. It wouldn’t do for Samuels to forget his place or his previous failure.

Samuels took the attaché, shook hands painfully again, mumbled the usual pleasantries, and took his leave. All in all, a nice power evening.

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Samuels sat at his desk, absorbed in the files he was re-reading on Selene Industries and Eugene Purcell that Breyerson had passed to him last week. He smiled when he got to the places where his own research, or that is, the research of the Agency staff, invalidated Syntech’s findings. There was a two-foot high pile of the staff’s research on the edge of his desk, and he had been through it all. Details were Samuels’s specialty.

He knew this situation was essential in firming up the commitment of NAMCON, the North American Manufacturers Confederacy, to the party during the upcoming national elections. If he could cement this relationship with NAMCON, he would have a good shot at moving up to Deputy Director of the Agency, because Brian Pyle would undoubtedly be moved up to the Directors slot. With that thought, the direct phone rang, and he answered, “Samuels.”

“Scott, Brian, I need you in my office. Are you free for a few minutes?”

“I’ll be right there.”

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Well, thought Samuels, that was a jolt. On top of all the other pressures building in the last few weeks, he now had to worry about eliminating everyone who knew anything about Alpha and Beta. Getting close to the elections, Pyle was obviously worried about securing his position. Since Gregory was killed on the Moon, that would be Will, Crebs, and Hal. Will and Crebs could have accidents easy enough in a high risk operation like the Agency, but he had to find Hal to eliminate him, and he hadn’t been successful in the year and a half since Hal walked out of the office. When he did get them eliminated, that would leave only him and Pyle with any potentially damaging knowledge of the operations.

A first, Samuels had been alarmed. It didn’t take much to see that he himself might be next on the list, but the more he thought about it, the more it seemed that this was probably his ticket to step into Pyle’s shoes when he moved up to Director after the re-election of the President. Pyle would need someone he could trust, and who better than someone you could pull down with you. It made sense.

But back to this Eugene Purcell who seems to have come out of nowhere. In some ways it looked like he bumped along through life like most people until he got hot in the market about eighteen months ago, but then again, it looked like he might have already accumulated a good bundle of money before then. It was very confusing. The research could follow his activities backwards in one area or another for a while,

and then he just disappeared. As if he appeared on a particular company's business scene with the snap of someone's fingers and then disappeared again with little or no explanation. If you looked at those trails, it looked as if this growth had been going on for six or seven years, not less than two.

It was also impossible, according to the research staff, to follow his income trail in sufficient detail to determine his net worth, or for that matter, the net worth of Selene Industries. There were so many interconnections with all the companies he had acquired and so many special deals in all the acquisitions he had made that the research staff had not been able to agree internally on a single figure for the value of Selene Industries. The best they could do was about seven billion dollars net worth and a whopping fifty-eight billion in leveraged assets. How could anybody do that in seven years, much less in eighteen months?

The IRS had been no help at all. Yes, they had audited Mr. Purcell's returns six years ago and for the last three years. Everything had checked to the penny. Yes, they could supply a copy of Mr. Purcell's returns and those of Selene Industries, but the electronic filings could only be interpreted by their internal computer programs, and a hard copy would take about two months to generate and occupy half of the basement in the Agency's main building. The staff had been informed, rather snidely, by the IRS representative that such was the purpose of modern electronic filings. In other words, a stone wall.

None of this made much sense to Samuels, but he knew how to get data from this point on that made some sense, even if the historical data didn't. He touched the key on his console that would connect him directly to Crebs, and his face popped up on the screen. As usual, he was at his desk. "Crebs."

"Lin, I want you to set up a full surveillance for Eugene Purcell. I want everything, sound, cameras, stakeouts, everything. And while you're at it, we need to do more on locating Neilson. Walther still hasn't come up with anything."

"How high up do you want me to put this surveillance of Purcell, and do you want me to move up finding Hal as well?"

"For right now, right to the top for both of them."

"Okay, you've got it."

Samuels touched the "off" key and sat there thinking. He had it all right, and he didn't seem to be able to pass it off to anybody else either.

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Will Runningbear sat, or rather, draped in Samuels's straight-backed office chair. No one else ever seemed relaxed when sitting there. He was obviously of American Indian extraction and he emphasized it with the subtle shape of his short haircut, the cut of his business suit, and his selection of personal jewelry. His birth name had been just Bear, thanks to his great, great, great grandfather, but he changed it back to its original form when he was in law school. After all, he was one of history's few Olympic Bronze Medallists in both the 200 and 400 meters to be a law student, maybe the only one. He was listening to Samuels explain the strategies known to only a select few as "Gamma." "So basically, we want to come up with some subtle sabotage or engineered business setbacks to get the Belters back in line with industry and government requirements for strategic materials. Is all this clear so far as I have taken it?"

"Yes sir, I think the plan is fairly straight forward as laid out, but I don't have a good feel yet for how far to go in my efforts to get the results you want. What about collateral damage, sir?"

"Obviously, we'll do our best not to have any, but that's probably just wishful thinking on a project of this scope. If it comes to it, keep the damage to other companies to a minimum and hold casualties to as small a number as possible. However, in the Belter environment, that'll be difficult."

"I would say more like impossible, sir."

"Well there's more at stake here than a few Belter lives. It's the kind of tough calls we're here to make. Am I clear?"

"Yes sir."

Will wandered out of Samuels's office and down the hall toward his own, mentally calling on the restraint and wisdom of his ancestors and saying to himself, "is this guy for real?"

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“It is based on a standard Ceres Class ore carrier platform but with 127.32 percent more power, and the engines are optimized for speed rather than accelerating mass. It should be faster than anything of its size in space except for a few military ships, which are all in near-earth locations. Since we have no intention of carrying ore, there is ample room to locate two extra mining lasers, bringing the total compliment to four heavy lasers amidships along with the standard two, lighter, meteor-avoidance lasers forward. The heavy lasers have also been equipped with fast sluing, gyro stabilized, targeting systems manufactured for the military by our RoboSystems Group. They actually target faster than the light lasers forward. The control room is fully equipped with military quality command and control systems from our HoloSystems group, which includes fully enterable holographic displays with voice command AI computers. The accommodations are...”

“My God, you sound excited about all this. All I wanted was some protection for Adam, since you’ve started turning up information in Liberty and in the IRS computer that indicates the Agency might be targeting Selene Industries in some way. Don’t you think this is a little overkill?”

“Not at all, Hal, but I do think it will be adequate. Humans are rather fragile by nature, and when they are in an environment like that found in the asteroid belt, it is better to be safe than sorry, I believe the saying goes.”

“You got it right, and you are right. It’s only money. When will it be ready?”

“In two months, Hal, since we were able to buy out a building position where the hull was 95 percent complete, and we were willing to pay a bonus for early delivery.”

“You’ll break me yet, Harvey.”

“On the contrary, since placing the order for the ship, your net worth has increased...”

“It was a joke. I know you make it faster than anybody could spend it. One of these days somebody is going to seriously wonder how I managed to accumulate all this wealth this fast. Like the government, for instance.”

“I have repeatedly assured you that the chances of that are very low. The IRS has fully vetted our returns and so informed the Agency when they inquired.”

“All right, I give up. What else have you got?”

“To finish up on my summary of the ship design, the . . .”

“Harvey, I’m sure the accommodations will be top notch.”

“Well of course, but I was going to tell you that we have gone to the expense to have an extra generator and an oversized gate installed. This might seem a little excessive, but it will serve as another emergency escape method for the ship and minimize the necessity for docking. In fact, I am planning for only rudimentary docking facilities on Adam.”

“While I’m getting the specifications spiel, what’s the status of the Adam operations?”

“In the four months of full operation, we have exceeded the previous owner’s best throughput figures by 36.214 percent, but we have fallen behind his best profit margin by 42.633 percent. That represents a throughput of 62.1...”

“Come on, no more decimals. Round off the numbers, or I’ll be listening to this all day.”

“Sorry, Hal, I forget your disdain of details.”

“Not true, you don’t ‘forget’ anything. You just do it to annoy me.”

“I do not wish to annoy you, Hal, but I might be guilty of using every opportunity to encourage your attention to details. Some decimals represent millions of dollars.”

“I know, I’m bad. Go on.”

“. . . a throughput of sixty-two percent and a profit margin of just over four percent.”

“It’s that bad? I thought your projections were a lot higher than that.”

“The projections to which you refer included your input for, I believe you called them, “intangibles.” It was also before Linda provided the plans for refurbishing the living areas for the workers as well as your own apartment.”

“They were that expensive, huh?”

“Very, but the redesigned living accommodations might be a factor in our increased productivity, so it is difficult to evaluate the true cost except on a life-cycle cost basis, and even that requires a subjective evaluation. However, a large portion of the increased cost was incurred by your decision to install the artificial gravity generators in your own apartment.”

Hal ignored the jibe from Harvey about the cost of the gravity generators. Besides, Linda had insisted. “Well, I wouldn’t expect you to go out on any subjective evaluation limb, Harvey, but what kind

of change do you think we'll get in the bottom line when we are able to shift over to solar energy rather than the fusion reactor?"

"Actually, there will be little change in the profit picture for quite some time, since the fusion reactor is a sunk cost and its operation and maintenance is only a little more than that of the solar gates. Therefore, I am projecting a breakeven on the changeover in about seven years and a point two percent, sorry about the decimal, rise in profits per year after that. Of course, all of these projections rely on the stability of our ore sources and a predictable rise in their price, which in turn relies on our agreement with the Independent Asteroid Miners Association."

"Yeah, but that's the thing I feel best about in this whole enterprise, the arrangement we got with the IAMA is solid, because it's a good deal for both parties. The profit sharing arrangement seems to have them working at full capacity for our benefit, even though Syntech is offering more money per ton up front. I like it. And besides that, I like the people, the Belters. Even though it's the one thing they don't like about mining in the Belt, you could say they've got grit."

"That is terrible, Hal."

"Oh, I thought it was pretty good for late in the day of a guy whose gal is coming through the gate any minute now for a weekend in space."

"It will be a pleasant diversion for us both."

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"All this and you brought dinner too."

"Man cannot live without good Chinese at least once a week. I read it on a fortune cookie. Of course, in your case it cost an extra hundred or so above the twenty I paid at the restaurant; you gate by the kilo. Is that about right, Harvey?"

"I did not weigh the dinner, but you massed only .6 kilograms higher than your jump average to Adam. That would convert to only seventy-three dollars and twenty-six cents. Of course the wine consumed with the meal was of greater mass when it was transported to Adam than the dinner itself. Therefore...."

"Good night, Harvey"

"Good night, Harvey"

"Good night."

"Why don't you scoot over here on the sofa and tell me again about this mass you brought me through the gate."

"Mass?"

## Chapter 13

All the hours he wasn't in the field supposedly searching for Hal Neilson, Jon Walther was in his office going painstakingly through computer file after computer file trying to verify Neilson's version of events. At first, he had found numerous documents on projects named Alpha and Beta, but there just didn't seem to be much indicating what the projects were about. There were only vague references that he would not have noticed at all had he not had the input from Neilson.

After that first frustrating evening, things seemed to go a lot better. His searches were turning up more and more documents with references to Alpha and Beta. All those references seemed to support Neilson's explanations, at least for Alpha, but vague references were not much for making a potentially career ending, not to mention felonious, decision. Anybody can invent a conspiracy, and there were usually a half dozen or so floating around in the government on a regular basis.

He just didn't have enough, so he kept plodding through the files his searches turned up every night, and every night he got bolder and bolder with those searches. At first, he thought he would run into a firewall in Liberty when he started searching for highly classified data, even though his own clearance was pretty high, and if not at first, then at least at some point when the number of logged-on searches reached some set number. But so far, nothing, and Liberty seemed to turn a blind eye as the subjects of his searches got bolder and bolder. Didn't anybody monitor Liberty's search logons?

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"What's the latest on Jon Walther?"

"Yesterday was the twelfth night he has logged on to Liberty VII and conducted searches. As I informed you when he started his searches, there is little hard data for him to find in the files concerning the workings of Alpha or Beta. Liberty VII's purge of the files was well conducted for a computer, since it was able to discriminate between just references to projects named Alpha and Beta and information about the content of those projects. However, most human languages permit subtleties and nuance that computers are not capable of detecting. I have continued to lead Walther to files containing such subtleties and nuances by salting his search results, regardless of the search parameters he sets. Tonight he should get to the end of the buildup I have provided and exhaust all the still pertinent files I have identified. He should see a clear link to Samuels as the project instigator and leader, and he should be able to guess that Will Runningbear is also augmented, but not how he is augmented. If he remains unconvinced of the true course of events and the key players after tonight, I have no additional ideas about how to convince him."

"And you've continued to purge any record of his searches from Liberty's files?"

"Oh yes, I have even made it impossible to detect his use of the computer for these searches during real-time audits, which are routinely but randomly conducted. And I might add that I have done this by substituting records of a more normal use pattern for Walther during all the periods of his computer use, just to cover the contingency of someone actually seeing him at the computer and then questioning his intensive use of the computer during off duty hours."

"My, you sure sound smug."

"Just thorough and efficient, I assure you."

"If you say so."

~~~~

Walther keyed Will Runningbear's com number and waited to see if there would be any response. In about two seconds, Will's face filled the screen. "I see you're still in the office at this ridiculous hour. Can we talk for a few minutes?"

"Sure, I can use a break."

"Good, I'll meet you at the coffee machine in five minutes."

"Okay."

Walther was waiting for Will when he walked into the coffee and snack machine room on their floor of the building. He quickly flashed the field hand-signal for silence, followed by the one for follow me. He turned and led Will back down the hallway to the stairwell and down the stairwell five floors to the exterior door. They walked out into the Virginia, July night, and into the middle of the almost empty, adjacent

parking lot. Walther keyed the security system on his three-year-old sports cruiser and got into it on the driver's side. Will got in on the passenger side.

"What the hell is up, Jon?"

"As paranoid as the Agency sometimes is, I don't know if this is adequate or not, but it's the best I can do. I've run across some information that I think you should know about and might even be able to help me understand. Of course I'm taking a chance on our friendship, but I don't see any way around it."

"Well, get to it. I'm not likely to turn you in for anything short of a major felony."

"Yeah, that's why I'm worried, but here goes. I know you worked with Hal Neilson on the Alpha project, but I don't know how close the two of you were. I also want to know how you feel about Hal being accused of treason and being placed at the top of the Agency's wanted list."

Will, being a straight from the shoulder kind of guy, didn't hesitate. "The first one's easy. Hal and I were good friends before Alpha and by the time it ended we were even closer. A project like Alpha usually does that to the players. Did the other side turn Hal? There's not a chance in the world, and I'm not the only one with that opinion, it's pretty common among the agents who knew him. He's just not the type. My personal feeling is that there's some kind of bad blood between Hal and Samuels, maybe because of something that happened or didn't happen on Alpha. Samuels could be covering his ass somehow. I don't know what happened, I just know Hal hasn't willingly done anything to warrant the Agency's position."

Walther's jaw muscles relaxed as he unclenched his teeth, and the angle of his shoulders shifted downward as he relaxed. "Good. Seems like you might be on my side of this already, so now I'll tell you a few things I've found out in the last couple of weeks. I'll start with Alpha, since you can confirm if what I've found is true or not. I was told by a very inside source that Biofabriken, the German agribusiness arm of Eurofabriken, planned to release a genetically engineered wheat mold spore across the wheat growing regions of the world that only attacked the specific strains of wheat produced by the U.S.-based agribusiness giant, Syntech. Alpha was designed to extract Biofabriken's plans for this bio-attack from their computer on the Moon, so the Agency and Syntech could come up with a viable counter. Am I right so far?"

"Yes, you're right, but who's this 'inside source' you're talking about? There are only a couple of people in the Agency who know the details of Alpha."

"Okay, it was Hal Neilson that told me."

"Hal? You've seen him, talked to him?"

"Yeah, but only briefly. I saw him coming across the floor at the Washington jump terminal and sprinting for a jump gate. I went through right after he did and landed in a concrete box with no doors or windows, just a concrete box with two jump gates. A very expensive dead end."

There was a roar of laughter from the passenger seat. "I see Hal hasn't lost his touch, but you're right, two jump gates is a lot of money."

"There was also a screen in there, and Hal made me watch a computer generated narration on what he claimed was the true series of events leading to his disappearance. Then he turned the gate back on and let me go back to the Washington terminal."

"So what the hell happened with Hal?"

"He didn't say how, but he said he found out that Alpha was just half the plan. That there was a Beta project that dovetailed with Alpha such that the total plan was not just to stop Biofabriken but to completely turn the tables on them by facilitating just the kind of mold spore release they had planned, but with a spore engineered by Syntech to wipe out Biofabriken's rice strains. Worse, that the plan included the complete destruction of the Biofabriken research habitat, making it look like a meteor strike. I looked up the specs on that habitat, and it has more than twelve hundred people on it at any given time. He said he couldn't live with that, and I couldn't agree more, not just to line the pockets of some corporation weenies over the next few years."

"My God, Hal really stepped in the shit this time. Did he say why all this was going down?"

"He said his only guess was that Samuels was in Syntech's pocket."

"Well, I gotta give it to him. It makes sense. So why are we having this conversation? Are you planning on doing something?"

Even in the middle of a serious conversation like this one, Walther couldn't stop the smile on his face. "Originally, I planned to get back in touch with Hal to see if I could do anything to stop Beta. Then one night while deep in the computer, I slammed my forehead with the heel of my hand in the classic

dumbshit salute. I finally made the connection that Hal had done the Biofabriken habitat too, just like the Syntech facility in Alaska. He never said he did, but the timing was within hours of the Syntech hit. It had to be him. So now I'm planning to tell him I want to do whatever is necessary to stop any more of this craziness—whatever Samuels next plan is. Do you want in?"

"Can you point me to the documents you've found that convinced you of Hal's story?"

"I'll do better than that. When we go back inside, we'll go to my office and I'll bring them up for you. It shouldn't take but a couple of hours for you to look at the important files."

Will reached for the door handle. "Okay, let's go."

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Linda stood alone by the private gate in Hal's study, inside the owners quarters on Adam. She had on a long, dark green, silk dress that had a fitted bodice and a low, square-cut neckline. The silk flowed like paint over her hips and down her thighs to just above the knees, where the slits on either side gave the poor material a breather. Her long dark hair was pulled up as usual, but not in one of the casual modes of its normal existence. It was elaborate and strikingly formal. The lights were low, and, somehow, Harvey had tweaked the color temperatures to simulate moonlight, which was remarkably accurate.

Hal popped through the gate precisely at seven o'clock Washington time, which was de facto Adam time. He was resplendent in black tie, and had a smile on his lips that sank at the corners as he saw Linda waiting for him. He stopped abruptly, stunned by the complete vision, and his jaw actually sagged.

"Don't be shocked, Hal, I told you I cleaned up 'good,' particularly when I have a lot of expensive help."

"Good? This isn't good. It's terrific, magnificent, scintillating. I'm telling you, we've got to find time to go formal more often."

"Ah, but the good part is that we aren't going anywhere but here." She walked up to the still rigid Hal, kissed him ever so lightly, pivoted on her toes, slid her arm under his, and guided him out of the study and down the hallway toward the foyer. "I've kept you away for the last two weeks while the decorators finished, but it's done at last."

The foyer was striking. A series of intersecting gothic arches rising right out of the floor, carved from the native rock. There was a wide arch on each end of foyer, with one end opening to the tram and the inside of Adam through a large single rosewood door, cut in very modern lines but shaped for the gothic arch. The other end opened to the formal living room and was closed by twelve-foot high, bronze, double doors that Linda had found in a little village outside of Florence. Two of the three slenderer arches on each side of the foyer had sculptures set on pedestals in their rounded niches. The middle two arches were hallways leading to the study and the mystery room that Linda had been keeping closed for months.

Hal had decided on cutting the new living space out of the remaining asteroid shell, which was plenty thick for the job, if the outside were suitably reinforced. Harvey had suggested that Adam be reoriented to suit the area selected, and thereby keeping the axis of rotation pointed at the sun. This provided the slowly moving starscape in the viewport that stretched across the wall opposite the entry. Harvey had difficulty convincing Hal that modern polymers of sufficient thickness were much more impact resistant than Adam's existing shell. He only got Hal's approval for the multiple viewports in the final layout when a compromise was reached that provided a long range, phased-array radar guided, laser, meteor security system. All of which was to be designed by Harvey and operated by a full-time Harvey sub-routine.

Linda guided him around to look at the contemporary sculptures in their niches and turned him to face the living room entrance. "Welcome to the manor house." With a mock flourish, she waved her arm, and Harvey cued the bronze doors to open.

The expense had been worth every penny. Linda had suggested that the interior theme be rounded walls and arches in keeping with the nature of the environment, and the results were stunning. Linda tugged him through all twelve of the rooms. Each room on the shell wall had a picture window-like viewport, and each interior room had a casement-cut, skylight-like viewport. The claustrophobic feeling they had both been worried about just wasn't there. It was truly remarkable that they were inside a big rock.

They were standing in the last room, the library-den-entertainment-bar-spa room. This was the one room Linda had not let Hal see during any of the construction, and he could see why she had wanted to surprise him. It was classically organic, a Frank Lloyd Wright dream. Everything had been cut from the

base rock of the asteroid, sometimes left rough and sometimes polished. The seating was nubby textured cushions in blacks, whites, and grays to match and contrast with the mottled grays of the rock. They were set on benches carved out of the floor and curving back into the walls. The bar swept down off the wall and curved around in a quarter circle nook cut into the sweep of the interior wall. Several tables rose out of the floor on slender Saarinen lines, opening up into sweeping surfaces. The pool cut into the interior wall opposite the bar, flowing towards the bar with steps in one direction and flowing around under the viewport on the far wall. A fall of water rose over a cut in the facing side of the pool and fell through a sculpture of cascading Arp-like clouds to a small round pool in the room's center, complete with a wavy display of multi-colored fish fins.

As if Hal's focus on the pool were a cue, Harvey dimmed the lights and brought up the hologram. It grew out of the pool, as a diffuse aqua light, swelling slowly up and out to fill most of the open area in the center of the room. As it grew, what Hal had taken to be fish and looked like fish, began to gracefully fission and move up and out, filling the light with writhing forms that morphed as they rose, like a three dimensional Escher, until at the top they had become Brancusi-like abstracts of their original form and grace, endlessly entwining.

Linda was watching Hal's every reaction, and she was quivering with the excitement flowing from him to her. It was the way she had felt everyday she had come here to direct the artisans who had realized her vision of the room, only much more intensely. "For you." She tilted her face up to Hal, and didn't give the makeup a thought.

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"So, is this the sort of project a normal doctoral candidate in three dimensional art takes on while waiting for someone to stamp their thesis?"

Linda chuckled, reached for another piece of Gorgonzola to go with the glass of botrytis Semillon she had in the other hand, and smiled broadly at Hal. "The program driving the hologram was a big part of my thesis, so 'normal' wouldn't be as descriptive as 'integrated' in the context of the room."

"You mean you did that hologram just for me?"

Linda chuckled again. "Well, it would be nice to say I did at this moment, but it would only be partially true. I was working on a program for dynamic Escher transforms, and when you said Brancusi was your favorite sculptor, I had the idea to combine the two by going from representational forms to abstract ones. It was sheer luck that the forms I was working with were fish."

As Linda put down her empty glass, Robby moved toward the table and inquired, "would you like anything else, or should I clear?"

This was the first meal served by Robby, and the program performed flawlessly. Robby was not a very original name, but then Hal seemed to have a penchant for traditional names or names that carried a lot of implicit baggage. Robby was a prototype of one of the domestic robots being manufactured by the Automation Group of Selene Industries. The company that Selene Industries had bought to form the backbone of this new Group had been struggling with superb hardware but software that just couldn't drive the hardware at anywhere near the level of sophistication needed. Harvey had spotted the company as a cinch with him as the programmer. He was right. "You can clear Robby dear, as long as Hal doesn't want anything else."

"Oh no, I was stuffed a long time ago. You can really pack it away for someone so dainty."

"Dainty? 178 centimeters and 60 kilos is not dainty, Hal, and I plan to walk off the sixty first kilo I added tonight while shopping in Skylark tomorrow."

"Shopping? I thought we were making a cultural tour."

Linda turned to Hal and raised her left eyebrow in a look of unmitigated wickedness. "The closest you're going to get to a cultural tour comes tonight, and it starts by going back into the sculpture room to wallow in the Jacuzzi jets."

~~~

Not many corporations had gates to Skylark, but Hal figured the cost was worth the positive PR with the Belters, and availability of the gate to the refinery's workers for an occasional, inexpensive night on the town didn't hurt his recruiting effort either. So the corner of the Skylark gate terminal with its few corporate gates was essentially empty when Hal and Linda jumped in about 2:00 PM Greenwich Mean

Time, Skylark's nominally official time standard. "Nominally", because most businesses operated pretty much around the clock.

The small gate terminal opened immediately out into what looked like a broad avenue in a skyscraper city, and Hal and Linda loped out into it, Linda a bit awkwardly, since she was still not comfortable in the one-half gravity maintained in Skylark.

The open area was about 300 meters long by 50 meters wide, with 6 layers of railed walkway-fronted businesses down both sides. The avenue itself had a broad median of grass, bushes, flowers, and trees, with a scattering of kiosks of all types. Bright light flooded down from overhead, but with no obvious source.

Linda grabbed Hal's arm, moving her hip up against his, and started down the avenue. "Don't forget, we're here to shop as well as visit the IAMA and the University."

"You're here to shop. I'm here to do a little public relations, get to know the people a little better, and of course, be with you."

"That's good enough. Let's go, if I can keep from falling on my face in this low gravity."

"Low spin."

"Low spin, low gravity, whatever. There's no need to be so stuffily correct. You're beginning to sound like Harvey."

~~~

6:00 PM Greenwich Mean Time found Linda and Hal sitting on a bench eating Polish sausages they had gotten from a deliciously aromatic kiosk that they just couldn't walk by. Conversation was non-existent since they had their mouths fully engaged, and the packages surrounding them made eye contact almost impossible. Hal finished his sausage first. "God, I'm glad of the half-spin. Maybe it was designed to encourage impulse shopping. Six hours like this in New York and my arms would look right on a gorilla."

"Mmmm, and my feet would be killing me. As it is, I could go dancing tonight."

"Not likely. I guess I'm lucky I got a long enough break to go to my IAMA meeting while you went to the University. How was it, and what were you primarily interested in seeing?"

She crumpled up her wrapper and stuck it in the bag with Hal's remains. "Skylark University is just a few offices and a cavernous room full of computers and communications gear. No classrooms, no dorms, no students except those electronically linked. Not much campus life for growing up, but out here, you just have to settle for an education. Which isn't all bad, since having only a desire for education as a come on, there should be a pretty dedicated bunch of students."

"Didn't you pretty much know that already without having to see the place first hand?"

"Of course, but some things still work better face-to-face, and I was looking for a job. I met with the Dean of the School of Liberal Arts. He had reviewed my resume and even seemed to have read most of my thesis. I was impressed, and he said he was too but that their budget wouldn't stretch far enough to have another visual arts teacher this coming year. So he said he hoped I would still be interested in a couple of years when their program was large enough to sustain the additional staff. I said I would certainly consider a future offer, if they made one, and that was that."

"Hey, it was your first interview. Something will turn up that you like. Don't let it get you down. Come on; let's get back to Adam. Half spin or half gravity, I'm ready for the pool and something appropriate to wash down that sausage."

~~~

Samuels's attention chime sounded and the upper right quarter of his desk screen opened a window showing his secretary. "The Skylark courier just dropped off today's surveillance data cube. You said to let you know as soon as it arrived."

Samuels hit the key on his desk console to make the communication two-way, "bring it in."

A few seconds later, the door opened, and Margaret came gliding across the floor to Samuels's desk and dropped the cube just in front of him. This required leaning over far enough to pucker the front of her deeply cut blouse and providing a view almost to the navel. Her southern drawl cut the silence of the room, "the courier said that security had already reviewed the cube and marked the pertinent sections. Anything else?"

“Does that mean they got some shots of Purcell?”

“I don’t know. The Wednesday courier is cute, but he doesn’t talk very much.”

“Well good, he isn’t supposed to. He works in a security agency. I’ll let you know when I want something else.”

Margaret turned on her heel with a miffed lift of the chin and nose that they must teach in Southern colleges, glided back across the floor and out the door. As usual, everything moved but nothing jiggled. Her hour in the gym every day was worth the time. She had told him more than once that the Judo instructor was cute and that he loved to demonstrate the holds more than the throws.

Samuels snapped his attention from her backside to the desk screen and popped in the data cube. “Scan for marks and play highlighted sections.” A half-second later the screen showed a man just coming through a gate in the Skylark terminal. The data on the lower half of the screen listed computer estimate particulars: “height – 193 centimeters, weight – 91 kilograms, eyes – blue, hair – dark brown but probably dyed, more...” Samuels didn’t bother to ask for more. He had little use for arm to height or leg to height ratios and all the other comparisons the computer made for identification purposes. In fact, he hated having to convert everything in his head from metric to American measures, but the policy prigs insisted that all report formats be in metric.

He watched as the man walked toward the hidden camera looking straight ahead. This was the first decent shot he had ever seen of Eugene Purcell. Every other picture of the man, no matter what the reason for that picture, always seemed to be from some oblique angle that made it impossible to get a really good image of what he looked like. Even the computer collage of all those oblique angles had been unsatisfactory. The man strode right up to and then under the camera. “Reverse and slow.”

The man’s image came slowly back onto the screen and backed away from the camera. “Freeze that. Focus on the face, blow-up and enhance.”

The face of Eugene Purcell filled the screen, and Samuels’s jaw dropped open in shock. “My God! Match these identification stats to Hal Neilson.”

The neutral gendered voice of Liberty VII replied, “93.62 percent positive match.”

Samuels stabbed at his console, “Margaret, get Crebs in my office, right away.”

~~~

“Hal, Liberty VII has just made a positive identification of Eugene Purcell as Hal Neilson.”

Hal was lounging by the fish pool in the sculpture room, a glass of Australian Shiraz in one hand and a book reader in the other. The sip of wine he had just taken went down the wrong way, and he sputtered his shocked reply. “What? How the hell did they do that? I thought you had a cap on Liberty VII’s analysis of photos and things.”

“I do, Hal, but I am limited by a slight lag time in my own processor speed and even more so in Liberty VII’s processor speed. When this is coupled with the laws of physics, it takes more than a second, even with gate feeds, for me to intercede with Liberty VII. Normally, there is no problem with my screening of all Liberty VII data input and altering any possible connections between Eugene Purcell and Hal Neilson. This identification, however, was made based on a data cube couriered from Skylark directly to Samuels, without being routed through Liberty VII until it was in Samuels’s desk console. When he apparently recognized you, he made a direct request for a match, and got an answer from Liberty VII in well less than my reaction time.”

“Well, this is another fine mess you’ve gotten me into, Harvey. It ought to complicate the hell out of my life.”

“I have identified that allusion, Hal, and I think it significant that you have connected yourself with the fatter of the duo. You have been a little lax in the gym lately.”

“Insouciant, Harvey, insouciant. Where do we go from here?”

“I would recommend we accelerate our plans to relocate all essential operations of Selene Industries to Adam, where we have more complete control of security.”

Hal leaned back in the recliner, took a smoother sip of his Shiraz, and dove into the problem. The tension flowed out of his back and his eyes became fixed and out of focus with concentration. “Well, if we’re going to do it, we might as well go all the way. No need for half measures. Selene Industries should be legally moved to the Belt, where we would probably benefit some from the different tax structure, and we might as well make a one-dollar sale of the business from Eugene Purcell to Hal

Neilson. I can shave off this damn beard and go back to my normal dirty-blond hair color. Might as well get something good out of all this. Besides, since your declared sentence, I've been feeling less and less like a true 'HAL.' Not to mention the fact that you seem more and more like a true 'Harvey.'"

"You have me, Hal. I do not understand the context of a 'true Hal' or of a 'true Harvey.'"

"Reference the twentieth century movies "2001" and "Harvey."

"I have referenced those movies. HAL was a rogue, sentient computer and Harvey was a six foot, imaginary rabbit called a Pooka, but I still fail to understand."

"Well, all my friends in school used to tease me about being a sentient computer in disguise when I majored in computer science. So when you came into my life and I started spending time talking to the air, I thought that another movie analogy was appropriate."

"Interesting, Hal, but weird. I'll have to think about this. A six foot rabbit. Did you have a favorite stuffed toy when you were little?"

"Very funny, Dr. Freud."

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"Damn it Lin, how could we go so long and not make the connection between Purcell and Neilson? They were both under review by Liberty at the same time. How could it have failed to get at least a tentative match? Is Neilson in complete control of Liberty? What the hell is going on?"

Linwood Crebs rolled up to the front of the straight-backed chair where Samuels favored seating his "grillees." "Calm down, Scott, and let me try to answer what I can. Security sweeps on Liberty have been routine since the original hiccup with Hal, but we have found no indication of altered data or system intrusions. However, you and I both know how good Hal really is, so it's possible he has somehow compromised the system. If he was somehow locking out a comparison of himself and the persona of Eugene Purcell, we should be able to find some evidence of his intrusion. From your description of the match you just got, it looks like you asked for a straight photo identification match, and Liberty did only that, that is, without any deeper data matching routines. That piece of information gives us a clue as to where to start looking for the system intrusion. The fact is, you were lucky to have asked for exactly what you did with a photo that had not been processed by the system."

"Ha! Luck had nothing to do with it. You knew I was suspicious of Liberty's security already. That's why I had the surveillance set up without a live feed through Liberty. Luck my ass."

"Ok, you hit it on the head. The couriered surveillance worked. I really don't know what else I can tell you without a lot more digging in the bowels of Liberty's systems."

"I want to know how Liberty was breached, if it takes everybody in your division every hour for the next week. And while I'm waiting for that to happen, I want Walther staked-out on Skylark to pick up Hal the next time he gates in, and I want absolutely nothing about any of this to make its way into Liberty. I want this to be a computerless operation, if anybody around here still remembers how it's done. Now get out and get some results."

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"Harvey, how's the equipment transfer going? Are we going to get operational here on Adam any time soon?"

"We have a crash project underway using Selene Industries personnel and heavy lift equipment gated into the Virginia facilities. There is a cargo gate set up and operating in a pop-up dome on the site, but it will take another thirty-six hours to complete the work. Even though there is very little non-connectorized equipment, sequencing still has to be maintained, and only a limited number of people can fit into the space available. I have designed a more adaptable arrangement for the re-installation of the equipment here on Adam that would permit a faster move in the future, should we need to make one. I have also accelerated the completion and installation of some system upgrades to coincide with the move."

"Sounds efficient as usual. Do you need my help with anything?"

"Not for the move, Hal, but I do have a recommendation."

"Oh! What's that?"

"I suggest you consider endowing a chair at Skylark University. It would help solidify your relationship with the community, and it would provide a position for Linda, without having to wait years for the university's budget to include her specialty."

“How the hell can you think of that at a time like this? No, belay that. I know you’re better at parallel processing than real people.”

There was a noticeable pause in the flow of the conversation before Harvey replied, “real people, indeed.”

“Don’t you think she’ll be pissed that I ‘bought her a position’ at the University?”

“Not at all. Linda is an intelligent woman, and she has already received an offer for the future. If you think there might be a problem with her acceptance of the idea, tell her about it up front, and guarantee that the chair will be funded without mentioning her name.”

“Wait a minute here, Harvey, are you now giving me advice on how to get along with people?”

“Of course not. I am merely bringing to your attention, in this time of tension, a community relations potential that would be beneficial to the operations of Selene Industries.”

“Yeah. Right. Okay, let’s do it. When is Linda gating in?”

“She arrived during our discussion and is in her room changing clothes.”

“Serendipity, Harvey?”

“Of course, Hal.”

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Hal and Linda sat silently in the Skylark Café while the waitress placed the small wineglasses in front of each of them and poured the late harvest Gewürztraminer. “So you’ll go along with this plan?”

“Of course, Hal. The University has no idea I even know you. If you endow the chair and they offer me the job, I would be stupid not to take it.”

“Hmm! Okay, Harvey, you were right.”

“I was never in any doubt.”

Linda noticed the lapse in the conversation, “hey, are you guys going to let me in on this?”

Hal glanced around at the only other people in the café, over in the opposite corner of the little park-like area. They obviously couldn’t hear Harvey if he used the wrist personal speaker rather than Hal’s implant. “You can use the personal speaker, Harvey. Just keep it low.”

“Only for a minute. Skylark’s mall security cameras are showing an acquaintance approaching the café, Jon Walther. It would be awkward to run at this point. Do you have the little drug flechette with you?”

“Harvey, I might need some help from time to time interpreting the female psyche, but I am well trained in this kind of situation. It’s out and primed while you were talking.”

As Walther entered the park area of the café, Hal looked up casually, and spoke a few nonsense words to Linda, as if they were having a conversation. Hal tried for a surprised expression on recognizing Walther, and watched him move toward them through the café tables with their superfluous but charming umbrellas. Walther walked up to the table and smiled at Hal. “Mind if I sit down for a minute?”

“As long as you keep your hands on the table. Let me introduce Linda Simmons.”

Linda extended her hand to Walther and smiled. “Glad to meet you Jon. I hope this is a friendly visit.”

Walther looked Linda straight in the eyes. “The pleasure is all mine, Ms. Simmons. I note that you already seem to know who I am.” He turned his gaze back to Hal with a questioning look. “Can we talk freely?”

“I assure you, Linda knows all about everything, so go ahead.”

Walther pulled out the chair opposite Hal and sat, his hands on the table. “It isn’t supposed to be friendly, but I’m exercising a little initiative here. I’m supposed to be picking you up and taking you back to the Agency for ‘questioning.’ However, my indoctrination while in a concrete bunker and a lot of digging in the files since then have convinced me that I need to join you in your efforts to stop the Agency’s plans . . . or rather Samuels’s plans to use the Agency for terrorism and God knows what else. It hasn’t been an easy decision, but here I am.”

Hal felt himself relax a little, but he still held the flechette gun at the ready under the table. “So you looked at some of the files I told you about?”

“I looked at those files and did a lot of digging on my own. I also talked with Will Runningbear, and he confirmed your revelations on the Alpha Project. He also told me that the agents who knew you were not convinced by Samuels that you’d been turned. It seems everybody hates Samuels as much as I do.

They all figure it's something between the two of you." Walther looked up at Hal, obviously waiting for a confirmation, but not getting one.

"I told Will about Beta and how I had confirmed what you had said by digging out the documents still in the files. Will being Will, he wanted to see the documents before he committed himself in any way, but when I showed them to him he opened up to me with what he knew. Turns out that his knowledge of the so called "eco-terrorist strikes" on the Biofabriken habitat and the Syntech laboratory in Alaska last year was a lot more definitive than mine. He assured me that you had effectively shut down both Alpha and Beta, but he went on to tell me about his latest assignment, Gamma."

As Walther started laying out the details of Gamma, Harvey interrupted Hal's attention. *"We are being monitored via live gate transmission to Liberty VII. They are apparently patched into the mall security camera system. The video feed is going directly and only to the office of Linwood Crebs, but he has taken no action. I will keep you informed."*

As Walther finished his spiel on Gamma planning, Hal sat with a look of dismay. "Is there no end to this? The political power plays just grind on forever. So Samuels decided to come after Selene Industries and Eugene Purcell before he knew it was really Hal Neilson. He must really be happy now that he can get me in the bargain. But I've got to hand it to him, he's a devious bastard, having an international nuclear reactor inspector cause a dirty failure of Adam's fusion plant is quite clever. And Will said he had the impression this wasn't the only nasty scheme being planned for Gamma?"

"Yeah, he said that Samuels didn't say anything specific, but that the fusion plant failure would just be part of a coordinated attack on the Belter's economic rebellion against the companies that financed their original mining operations. What bullshit! Do you know how far up in the Agency this thing goes, Hal? I don't want to believe we've become a secret police to the political party in power."

"No, I don't know if it's the Director or the Deputy Director or both, but it's got to be at least one of them. With you and Will on the inside, we might be able to get something that will tell us who it is. But whoever it is, they have obviously sold their souls to Syntech. Maybe we should take a harder look at Syntech, and see what we can find out on that end."

"What do you want me to tell Will when I get back to the Agency empty handed?"

"Tell him it was nice to hear he didn't join the wolf pack baying at my heels, and that I'll be ready when he comes to Adam in sheep's clothing to bollix my fusion plant. And not to worry, just look like he's still with the program. I'll talk to him on Adam, where the security is dependable."

Linda, who had been silent throughout the discussion between Walther and Hal, leaned forward in her seat. "Excuse me Hal, but before Jon runs back to the gate, will this change any of our plans for a little more ecotage here in the Belt?"

Walther looked askance at Linda and then back to Hal. Hal smiled. "Oh, I didn't tell you, but I wasn't alone on the Biofabriken and Syntech raids. Linda was with me all the way. The artwork was all hers. Nice touch, huh?"

"And you're planning some more ecotage here in the Belt?"

"Yeah, the big guys just don't get the picture yet. The Belt is getting close to a functioning society, and it's waking up to the fact that its long term viability is being compromised so the refiners can make a few extra bucks. They desperately want to stop the pollution, but they don't have the horsepower to get the corporations' attention. Even Selene Industry's tug on their big corporate pocket books isn't sufficient to overcome their economic stranglehold on the Belter economy, at least not yet. We plan to at least get the Belters some better media coverage of their situation, and Gamma is no reason not to keep the pressure on the bastards. We'll proceed as planned, and I hope Jon gets to see it on all the news broadcasts."

Linda squeezed Hal's forearm and smiled, and Walther shook his grinning head. "The lady's not as demure as she looks, Hal. My hat's off to you Madame. I better get going. How do we stay in touch?"

"I have a few secure channels open to me. I'll contact you on a regular basis. Good luck facing Samuels with your failed assignment today."

The three of them stood up, murmured the usual parting phrases, and shook hands. Walther turned and strode off toward the gate terminal. *"Harvey, what's going on with the security feed?"*

"Apparently, Crebs shut it down when Walther walked off, but he has still not taken any action as a result of his observations. I will continue to monitor his communication and computer activities. We were quite lucky that they were using the Skylark monitors rather than ones they had placed themselves with

audio capability. We should only use sub-vocal when we are in public from now on, unless we can make it appear like normal wrist personal communications.”

“Agreed.”

“And by the way, Hal, I got the one about the ‘wolf pack’ and the ‘sheep’s clothing.’”

“So, you’ve taken to reading parables and fairy tales I see.”

“Of course! They are most instructive of *real* people’s motivations.”

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Hal and Linda sat in the aqua glow of the Escher/Brancusi hologram, watching the squirming figures morph as they swam circuitously up the column of light. Hal was reclined on, practically melted into, the cushions piled on one of the carved out sofas. Linda was reclined too, partly on the cushions and partly up Hal’s left side. Each had a large brandy snifter with a larger than normal portion of Martell, and they were taking sips as large as they could without choking. Linda snuggled into Hal’s shoulder with a full body length writhe. “Tell me, Hal, you’re a veteran of this secret agent stuff, why is it that I’m only nervous before we start and after we get back?”

“Because like all artists, you have a hyperactive imagination, and before the caper you have nothing but time to think about all the things that could go wrong. After things get rolling, there’s no time to think, if you’ve laid out a good plan of action. When its all over, your imagination goes into overtime again trying to think of all the additional things that could have gone wrong that you didn’t think about before you started, and how you had to be out of your mind to do it to start with. Now, when they pick spies, they only pick people with limited imagination. Then they insert a computer into you and drill you until you execute the plan being directed into your brain like an automaton. In spy training, they subject you to all sorts of devilish tortures to build up your emotional resiliency and create nerves of steel, and then they...”

Hal stopped as Linda’s left fist jabbed him in the ribs. “Damn it, Hal, I’m serious. I don’t like being so afraid. It’s almost so debilitating that I can’t move when the time comes to get on with it. I don’t like being paralyzed with fear.”

“Hey, you *are* serious. Sorry. I didn’t realize, or I wouldn’t have made so light of it. I do know what you mean. The first month of actually being at the Siegfried IV facility on the moon I could hardly talk to people without the sure knowledge they could hear the tremor in my voice. I was scared the whole time I was there, but I got used to it. I didn’t loose the fright; I just got used to it. Hey look, we can knock this ecotage thing off if you want. We’ll think of other ways to bring enough pressure to get the companies to change their policies and procedures.”

“Absolutely not. These raids are having the desired effect on not just the companies, but on their workers as well. Eurofabriken and Syntech have both maintained a public relations denial of anything happening, but the workers are talking, and the management is dashing around trying to plug any holes in their security. No, it’s getting to them, and if anything, I want to do more. In fact, I want to do the next one alone.”

“What the hell for? You think I’m a burden here?”

Linda juggled here glass in the air as she reached over Hal with her left arm and gave him a hug. “No, you aren’t a burden. It’s just that I want to get beyond this fear thing, and I think it would be quicker if I could do a raid myself, where I couldn’t rely on you.”

“Not a good idea!”

Linda lifted her head off Hal’s shoulder with the feisty glare on her face that he had come to know well. “Why, because I’m a woman?”

“No. Because you’re *my* woman.”

Linda lifted her snifter above Hal’s head and slowly poured the rest of her brandy. “Wrong! I’m no man’s woman, Hal Neilson. I’m *my own* woman. And as such, I choose to be with you whenever I can. Don’t fool yourself into thinking that’s the same thing as being *your* woman.”

Hal lay there with the brandy trickling down around his ears, eyes shut to keep the alcohol out. Ten seconds went by with Linda still holding the glass upside down over his head, not moving. “Dumb statement. I’m really sorry. Spoke in a rush of testosterone.”

Ten more seconds went by and Hal felt warm lips on his own, then a lick across the lips and a murmur, “there may be a future for hair aerated brandy.”

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“Okay, Harvey, where is this new robotic surprise you have for us?”

“It is in your left pants cuff, Hal.”

“My pants cuff? I knew I hated pants cuffs.” Hal reached down and pulled his left pants cuff up with his hand, pulling it open with his fingers. He rapidly scanned inside the cuff but saw nothing. “Can’t buy anything without cuffs for the last two years.” He repeated the same operation on the right cuff. “You must be mistaken Harvey, there’s nothing in my cuffs.”

“Try the left one again, Hal.”

Linda intercepted Hal’s move to grab his cuff and ran her finger around inside the cuff until she ran into something. She pulled the cuff down and didn’t see anything. Then she ran her hand across the spot she had felt before. Yes, there was something there, and she grabbed it with her thumb and index finger, plucking it out of the cuff. She held what looked like a three-millimeter oval of fabric, but knew she hadn’t torn anything. She opened her left palm and dropped the fabric into it and stared. As she and Hal watched, the fabric changed color and almost disappeared again in her palm. Hal reached over and felt the oval still in Linda’s hand. “What is this thing, Harvey? I thought you said it was another robot.”

“But it is, Hal. It is a mini-bot. A miniature robot. It was made in our laboratories on L4 Beta, the micro-research facilities of the Automation Group.”

“The same Group that did Robby?”

“The same corporate Group but a different facility.”

“Well what does it do? It’s too small to serve food or clean house or anything else I can think of off-hand. And how the hell does it disappear like that?”

“It does not disappear. As you can feel, it is still in Linda’s hand. The mini-bot contains miniature cameras that provide the central processor with detailed information of its surroundings. The exterior of the mini-bot is studded with laser lenses permitting the creation of a high-resolution holographic image that changes to mimic the color and texture of the surface to which the mini-bot is adjacent. There are numerous animals capable of this same form of camouflage chemically rather than with holographics. As to its function, this mini-bot is a surveillance device. There are other types still under development.”

“Harvey, I hate to tell you, but there have been surveillance devices this size and a lot smaller for a hundred years. What’s so special about this one, except that it might actually look like a bug?”

“Put it on the floor, Linda, and I will show you why this is indeed a special bug.”

Linda picked the almost invisible oval out of her hand and placed it on the floor. As they watched, it changed color and apparent texture to look just like a roach. As soon as the transition was complete, it started moving across the floor, up Hal’s shoe, onto his pants, and back into his cuff. Linda had a look of disgust on her face. “Ugh! I hate roaches.”

“Merely a demonstration. One of its many pre-programmed mimics.”

“If that’s supposed to be camouflage, Harvey, I suspect it will result in a high mortality rate for mini-bots.”

“Hmm. I had not considered that aspect of the situation, only that it would be virtually undetectable as a surveillance device. It was quite taxing to work out the details of a failure mode that would preserve the coloration.”

“Don’t get me wrong, I’m impressed, just damned curious. What put you on to developing these bugs?”

“There have been numerous events where I was not able to anticipate a need for my intervention because information was not available to me through my computer interfaces. A simple fault analysis revealed a need for an independent information gathering capability. Your identification by Samuels was the final triggering event.”

“So, what do you plan to do with these things?”

“To start with, we will have Jon Walther leave a few of them in Samuels office. From there, we can have him unknowingly take them to his house and wherever else he goes. He will be under constant surveillance.”

Hal squinted up his face in obvious thought. “How does it move?”

“Good, Hal, right to the chase. My ‘*pièce de résistance*,’ it has a micro-miniature anti-gravity unit with vectoring field lobes. While in my demonstration I had it appear to crawl across the floor and into your

cuff, it is much more acclimated to flying.” With those words, the spitting image of a large horsefly came out of Hal’s cuff and flew across the room to land on the bar top, complete with buzzing.

“Damn, you’re right Harvey, there’s never been a bug like this one. How’d you cram all this into such a small package, particularly the anti-grav unit, which must eat power, and how do you control it?”

“Thank you Hal. It was quite a feat, if I do say so myself. As you know, true nano-technology has been a concept in fiction only and might well remain so due to quantum effects. However, micro-miniaturization has been a viable technology since the early nineteenth century, and while the focus has been on electronics for the last century, mechanical miniaturization has been mostly overlooked. As you correctly surmised, the key to the mini-bots’ capabilities is a power source sufficient to do all of these things for more than a few minutes. I solved that problem with a micro-miniature gate that auto-connects to the power on Adam. The crystal was a non-problem, since the crystal size is directly proportional to its power requirements, which are determined by the gate’s active area as well as the distance.

“As for control, the same micro-gate that opens here on Adam for power, also autoconnects to a data feed. Through its surveillance cameras, covering the infra-red through the ultra-violet spectrum, and through its audio pickup, 10 Hertz through 100,000 Hertz, I can maintain active control of the mini-bot either with a sub-routine or directly through my main programming when it is available to me, of course.”

Hal was roused from his inquisitive mode by Harvey’s jab. “Of course. I guess this is a plug for keeping my belt on or my belly patch in, is it not?”

“That would be optimal, Hal.”

“I’ll give you an *optimal* suggestion, Harvey. Focus some of your research on our connection problem, and see if you can come up with some way I can function more normally, that is without wearing a belt to bed or into the pool, or without wiring myself to a data outlet.”

“I have indeed been doing just that, Hal. The Data Communications Group has been working on that problem for quite some time, though I must say, it was difficult to frame the research parameters without revealing the real subject of the research. They were instructed to find a non-invasive method with ultra-broad band capabilities. So far, they have not been successful.”

“Non-invasive. That’s the right focus, Harvey. I don’t want to be carved up any more.”

“Yes, you have made that very clear in the past. However, I already have a simple solution that would require only very minimal surgery and that would leave some of your other systems intact as backups, should you care to discuss it.”

“I told you, no surgery.”

Linda laid a hand on Hal’s shoulder to get his attention. “Don’t be too hasty, Hal. How minimal is minimal, Harvey, and what do you have in mind?”

“You were holding the solution in your hand, Linda. A micro-gate would provide instantaneous communications and a broader bandwidth than the belly patch. It would have to be placed subcutaneously, somewhere between the main processor and the belt inductions.”

“If you really mean ‘right under the skin,’ I think I could handle that, but how’re you going to power the gate. From Adam?”

“The power would again be supplied by the fusion generator on Adam. A battery source is required only for initialization of the gate. Once the gate is established, power can be fed into the crystal through the gate, just as data flows in and out. I have estimated that the belly patch jack could be removed and a triply redundant micro-gate, complete with medical scan shielding and battery placed in the same area. The battery should be capable of multiple gate field initializations, a minimal requirement, and powering the shielding for seven hours on its own.”

“All right, if I decide to do this, and I emphasize the *if*, where do we find a surgeon trained in implanting micro-gates in people’s bodies?”

“The surgery would require that we duplicate the necessary surgical facilities used at the Agency for the original implantations, to which, of course, I have the specifications. As for the surgery itself, I have reviewed the visual and auditory records of your original implantations, and I feel that I would be fully....”

“Wait just a minute here, Harvey. You want to control some machine that’s cutting on my body? Not a chance.”

“I was merely pointing out that I would be fully capable with the proper robotic equipment and interfaces; however, building or adapting such equipment would be a large and lengthy undertaking. I suggest that the same surgeon who performed your original implantations be used.”

“Oh, we’re going to send a request for his services to the Agency are we?”

“Of course not, Hal. He retired shortly after his work on you and has been working part-time at the Los Angeles Free Clinic. A large and regular contribution to his favorite charity might be persuasive.”

“Yeah, if nobody’s told him the Agency has a price on my head.”

“Yes, that is always a possibility, Hal.”

“I’ll think about it.”

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Linda stared straight into the retina reader and was rewarded with a snick, as the crystal access panel on the standard jump gate tracked into its pocket. She reached up quickly and pushed her right thumb against the exposed print reader, dancing her fingers over the numerical pad just above it. The crystal hummed out of its socket, and she pulled it the rest of the way out. She already had the replacement crystal, stored in her left uniform pocket, out and ready in her left hand. As the right hand cleared the crystal from the socket, the left hand fed in the new one. When the new crystal bottomed out in the socket, Linda did the numeric pad dance with her right hand again, and it recessed noiselessly into its socket until it was flush with the keypad. The panel retraced its earlier glide and sealed the crystal in its new home. “Done.”

“That was 17.39 seconds, your best effort so far.”

“Yeah, Harvey, and I don’t think it’s going to get any better. I’m practiced out.”

“I think you are correct, Linda. Without the ability to speed up the automatic machine responses, this is about the limit of your reflexive capabilities.”

“Hey, don’t slam me. I did my best.”

“No slight intended, just a statement of the facts. I agree that additional practice would be redundant. However, we will make two more runs tomorrow, just before you leave for the mission.”

“Mission? You’ve been around Hal and the Agency too long, Harvey. Spare me the jingoism. It’s a simple raid on a factory that is polluting the Belt and killing its workers.”

“Merely a turn of phrase.”

“I guess I’m just getting nervous.”

“Of course you are. That’s a normal human reaction prior to a life threatening event.”

“Life threatening? You aren’t helping, Harvey. Just be quiet for a minute, and I’ll settle down.”

In the roughly one-minute of silence, Linda pulled herself together and began to take off the rust-piped, dark blue, security officer’s uniform she was wearing. As she zipped open the seals, she was walking for the large shower in the Master suite of the Virginia house on the Wicomico River. “You’re sure Hal has no idea we’re planning this raid?”

“Absolutely. If he knew, he would be demanding that I abort the . . . uh, . . . raid. As I have told you repeatedly, I’m going to be in a lot of trouble with Hal over this, no matter how it turns out.”

“I know, Harvey, but your studies of human psychology show you that this is essential for the health of my psyche, right?”

“Yes, but I’m glad I will have Eve as a backup, should an unexpected turn of events negate even the best plans, which I think we have been able to make from the information supplied by the mini-bots carried in unknowingly by the last shift of refinery workers.”

“Ah, Harvey, ‘pride goeth before the fall,’ to truncate the Proverb via King James.”

“We have formulated a good plan, Linda, but it has some speculative areas due to lack of information, and they worry me.”

“Well, they worry me to, but we’re going to do it anyway.” With those words, Linda stepped into the steaming stream of the oversized shower and just stood there, arms hanging limp at her sides, while the jets beat on her head and back.

Linda still didn’t feel like chatting with Harvey as the aircab was traveling inbound to the D.C. jump terminal. Even though Harvey had made it impossible to trace the owner of the jump gate that Jon Walther had followed Hal through, it couldn’t be used anymore. A new one had not been acquired yet, since Harvey didn’t want to jimmy the waiting list for space at the terminal so much that it caused attention. So she would be arriving like any other traveler heading to Mexico City for a short vacation visit.

She was dressed accordingly in a colorful, silk skirt and blouse and carried a smart, shoulder-strap duffel suitable for a week's vacation. Inside the duffel, however, was a set of work coveralls, a Loire Produits de Chimique security uniform, extra padding here and there to mask her real body shape, and another duffel, well worn, purchased by a Selene Industries employee at a Mexico City second hand store yesterday.

She caught herself fidgeting with the zip seal on the duffel, sliding it half open, shut, half open. God, she was getting nervous just sitting. She needed some action, and she needed it soon.

She looked at the lower right-hand corner of the aircab entertainment screen that she had muted. It showed fourteen minutes more to the terminal. She looked down at her wrist personal and then reached up unconsciously to the necklace she was wearing. It was a copy of a Toltec design, and Harvey had it modified at one of Hal's electronics companies to house a complete communications array. "Harvey, are you still there?"

Harvey's voice came out through the speakers in the aircab, rather than through the tiny speaker secreted in her ear. "Where else would I be? I will be in constant communication with you throughout the endeavor."

"Endeavor?"

"I chose 'endeavor' as a neutral word. It is not 'mission' or 'raid.' I could use another if you prefer."

"No, endeavor's okay. I'm just getting nervous, that's all."

"I cannot monitor all your vital body functions as I can Hal's, but I can tell through the aircab's passenger compartment camera that your respiration rate is high and through the microphones you are wearing that your heartbeat is elevated. These are common symptoms of anxiety."

"Yeah, I'm damned anxious, and I'm beginning to sweat. Can you turn the temperature down a little in here?"

"Certainly."

After what seemed like an eight-hour flight, they set down in the landing area at the D.C. jump terminal. Linda hustled out of the cab and into the bustle of the terminal. She had no idea where the Mexico City jump gate was located, but Harvey was in her ear with instructions as she strode through the throngs of travelers. Evidently he had co-opted some of the cameras inside the terminal, because he seemed to know precisely where she was at all times.

She arrived at the gate and found only a short line of six people ahead of her. When she got to the card reader, she stuck in the fake credit card she was carrying and walked through to Mexico City.

The terminal at Mexico city was every bit as grand and spacious as the one in D.C., but the average traveler looked a little less affluent. If anything, there were even more people jammed onto the floor. She scanned the holo-signs above the crowd, spotted the universal restroom symbols, and headed that way. Inside the ladies restroom, she moved immediately to the privacy stalls and inserted her credit card. The door swung open, and she went hurriedly in and shut the door.

She stood there a few seconds—just taking deep breaths. Finally, she zipped open the duffel and got to work. Off came the fancy skirt and blouse. On went the security uniform, the padding, and the work coveralls over all of that. She looked in the small mirror provided in the stall and decided that her makeup was sufficiently understated already. She pulled out the worn duffel and crammed the skirt, blouse, new duffel, and foam plastic packing from the original duffel inside. They weren't heavy, but they had sufficient bulk to make the duffel look like it was full of clothes. As she snapped back the lock to leave, Harvey's voice rattled in her right ear. "*Do not forget to remove the wrist personal. A refinery worker would not be able to afford one.*"

"Damn. How'd you know I had forgotten. There aren't cameras in the ladies room are there?"

"*Not in this ladies room, no. I would be able to tell from the change in sound levels coming through the microphone and the lack of light to the scanner if you had placed the wrist personal in the duffel or in the trash.*"

"Okay, keep monitoring me. Obviously, I need help here. I'm so nervous I can hardly think."

Linda pushed out of the privacy stall door and walked quickly out of the restroom. Again, Harvey fed her the directions to the gate she needed. This time it was the gate to the Nefaud asteroid, the site of the Loire Produits de Chimique's hazardous chemicals refinery. The queue here was about thirty deep as she took her place in the line. She felt frumpy in her work clothes and padding, but she had to admit she looked much like the other women in the line, and women made up about two thirds of the line's total.

She fumbled the fake work identification card out of a side pocket on the worn duffel as she got close to the gate itself. The line was moving quickly as people who were familiar with the routine shuffled through the gate.

The gate accepted her card without alarm, and she walked into the spin of the Nefaud asteroid. After the usual disorientation from the loss of gravity, she moved on in the line. She observed that some of the others had a similar spell of disorientation before they were walking normally.

Ahead of her, the line passed a visibly bored security guard who appeared to be staring off into space rather than watching the workers file through for their two-week stay on the asteroid. After passing the guard station, the workers split into two paths, the women in one and the men in the other. There were a few 'see you later's' from various men and women, but all in all, it was a rather subdued parting.

*"This group is going to the women's quarters to put their bags in their designated areas. You are assigned to apartment W23, near the end of the corridor. Do not forget that I will be able to respond to you only with a delay of approximately three seconds, since you refused to delay this endeavor long enough for me to include a miniature gate for communications in the necklace. Since the Belt extends the full orbit of the sun, it is very large, and while Nefaud is relatively close to my virtually simultaneous transmitters on Adam, it is still far enough to give us a communications lag."*

Linda almost replied to Harvey before she caught herself. It wouldn't do to be seen speaking to air here. She followed the women in front of her instead, proceeding at the same pace as everybody else. She could see the ubiquitous security cameras mounted at strategic spots along the way, so she knew Harvey could monitor her progress, even though there was a three-second lag.

She spotted W23 and went through the door. She was stunned by what she saw. It certainly wasn't any apartment. There were seven or eight women milling about, some talking to apparently well known friends and some moving silently, like they were as stunned as she was.

The stunner was the quarters themselves. There were ten sets of double bunks lined up down the far wall, with a small double locker on the near wall opposite the foot of the bunks. Some of the women were taking sheets out of their bags and making the beds, and others were just putting their bags in their lockers and leaving.

Harvey spoke to her again. *"Your locker is W23-J, down the right side of the room. The lavatories are further down the room."*

Linda kept her head down as she walked to her assigned locker. Her stomach was churning, but no one paid her any attention at all. She placed her bag in the locker, which was not large enough to hold much more, and proceeded to the lavatories at the end of the room.

As Harvey had promised, there were four privacy stalls in what was otherwise a communal arrangement of open showers and a row of sinks and mirrors. It was worse than the men's locker room at college. That thought brought a fleeting moment of remembered mirth, but the situation was too dour to sustain it. She headed into the only available privacy stall and sat down on the toilet. At least they had seats, even though they didn't have tops.

She knew she would have to sit there awhile until the shift started. The clock she had seen in the bunkroom indicated that would be another twenty minutes or so. Her stomach growled, which at least sounded authentic, and her hands fluttered on her knees in time with the grinding of her teeth.

*"Do not forget to stand on the seat when you are taking off your work coveralls. The walls in the privacy stalls do not go all the way to the floor, and someone might come in quickly, even after the shift starts, if they are late for work."*

For no apparent reason, Linda was suddenly gripped by panic. She shouldn't be doing this. She must be out of her mind. Alone. Surrounded by the enemy, except for Harvey of course, whom she couldn't even talk to unless she was alone. Crazy, absolutely crazy. Was it too late to abort this . . . endeavor and go back home? Yeah, it was. She'd never be able to get off the asteroid without using the security uniform and fake identification Harvey had supplied. Oh, shit.

After what seemed like another eternity in a day already filled with eternities, Harvey said it was time to shed the coveralls. Judging that the toilet seat wasn't sturdy enough, she flipped the seat up, stood awkwardly on the rim of the bowl, and peeled out of the coveralls, all the time doing a little dance step to keep from falling off the tiny rim she was balanced on. At last she had them off, without falling or dipping a foot into the water, and reached into her pocket for the impregnated cloth she needed to remove the film that covered the shine on her security uniform shoes. She squatted on the toilet bowl rim and rubbed

down the shoes as best she could. She should have practiced the acrobatics of this maneuver as well as the crystal change-out. It was just as hard, even if the timing wasn't as critical.

*"I can detect no other people making sounds in the lavatory for the last three minutes. I believe you are alone."*

Linda stuck her head out of the stall and looked around the lavatory. It certainly looked like she was alone. Squaring her shoulders, she strode out into the lavatory, prepared to say something innocuous about a snap security check if necessary, but it wasn't. She was indeed alone. She glanced in a sink mirror, verified she was still intact, swallowed hard to quell her roiling stomach, and proceeded into the bunkroom. As expected, no one was here either, and she went out into the corridor. Harvey again provided directions.

After a couple of right and left turns, she arrived at the end of the corridor. There was a door that she had seen opening automatically for a man in front of her, and it opened for her when she arrived in front of it. The chamber on the other side was larger than the main interior space on Adam, and there were fifty or more workers milling about or seated at workstations. There was a fine dust in the air that gave a halo to the overhead lights and a sulphurous smell that was gagging in its intensity.

She walked through the door and followed the instructions coming from Harvey in her ear. *"Work your way to the left of the tall, tower-like structures ahead of you, and continue to the other side of the refinery space. It is approximately a hundred and twenty-three meters across the space. Put your card in the reader for the door marked 'Product Holding Area, RESTRICTED AREA' and go through when the door opens."*

Linda put on her best "I'm here on official business" air and followed the instructions, placing her fake card in the reader slot and moving into the smaller chamber as soon as the heavy security door opened. This chamber contained only a few workers. Some appeared to be reading gauges, though she couldn't imagine why that was necessary in a computerized operation, and some were apparently cleaning something off the floor on the far side of the area.

*"The control panel on your right contains the product transfer gate. You will need your card again."*

Linda walked purposefully to the control panel, although she was apparently invisible to the workers around her who gave no indication that they knew she was in the chamber. She placed her card in the reader and the access door covering much of the panel face slid open to her. She was now looking at a copy of the panel she had practiced on in Virginia. But of course, she had it backwards, that was a copy of this panel.

Linda had selected the Nefaud refinery from the annual lists of World EnviroGuard and The International Worker's Health and Safety Council, which cited the worst company offenders in their areas of interest. World EnviroGuard had cited the Loire Produits de Chimique facility on Nefaud for its dumping of toxic and corrosive dust into the Belt, and The International Worker's Health and Safety Council had cited them for a lack of equipment safety and a general disregard of the environmental working conditions in the refinery. The workers tended to be poorly educated and economically needy enough to work under conditions that left their immune systems in disarray after a few years on the asteroid.

She had insisted that whatever they did in their raid on the refinery not have adverse effects on the workers. That included both their safety and their pocket books. After studying the operations of the facility, Harvey had come up with the idea to dump a day's worth of refinery product where it would hurt nothing but the owner's pocketbooks. To do that would require a change of the gate crystal that made the daily, high-pressure transfer of products to the company's Loire Valley facility.

The transfer took about an hour each day through the gate connecting Nefaud to the Loire facility. When the gate opened, a high-pressure pipe on Nefaud extended to lock into the auto-connecting flange in the Loire facility, and the product was pumped through. With the change of the crystal, the product would be dumped through a gate that Selene Industries had used for research on its solar-power gate project. That gate's orbit had already been destabilized by Harvey and was slowly spiraling into the sun. If all went according to plan, the daily transfer, just a few minutes from now, would send a day's worth of refinery products into the sun.

Linda focused on the task at hand, and the practice worked. The butterflies were forgotten, and her fingers flew over the keypad. She pulled out the old crystal and replaced it with the new one. As soon as the new crystal seated itself, she pushed the close key for the access door, and it slid back into position.

As she walked away from the control panel, she heard the official count, *“17.52 seconds. Apparently your nerves did not interfere with your performance.”*

This time she mumbled a response. *“Thank you, Harvey, I needed that. Now let’s get out of here.”*

After a delay of three seconds, she heard Harvey’s response. *“Certainly. Go back out through the same door you took into the restricted area and into the main refinery area. I’ll direct you from there.”*

Linda walked back out through the restricted area door, again using her card, and into the main refinery chamber. Harvey spoke to her again. *“Look to your left about ten o’clock. Do you see the door at the top of the metal stairs?”*

She glanced up and to her left. Quietly, with very little mouth movement, she replied, *“yes.”*

Again the delay. *“That door leads directly through the security station and into the same gate room you passed through on your way into the facility.”*

Linda walked across the refinery floor like she owned the place, even though her stomach was beginning to do flip-flops again. She glided up the stairs and through the automatic sliding door, readying the story they had worked up to get her off this rock.

The room was about fifteen meters on a side and filled with desks on the left, most of which were empty. On the right side of the room was the door to the gate room, but it was partially blocked by a gathering of a dozen or so men and women in company security uniforms like hers. One security guard was standing rigidly to her immediate right, just inside the door she had come in. Another guard stood at the far door she needed to get through. Before she could start across the room, she was addressed by the rigid guard beside her who held out his hand. *“Ma’am, can I see your identification please?”*

Her gut locked into what felt like a terminal spasm, but she managed to get the fake identification out of her pocket again. She put it in his hand.

The guard studied the identification card, looking up to check her face against the picture. *“I see you’re from the central office. I didn’t think I had seen you on the asteroid before.”*

She took the returned card and placed it back in her pocket. *“Yes, I was here for an unplanned inspection of key facility assets. I’m through now. Everything seems to be in order.”*

One of the men on the periphery of the meeting taking place in the room had been surreptitiously watching and listening to the attractive security guard that had just entered the room. At the declaration that she was from the central office, his face twisted into a puzzled expression and he started toward her. *“Pardon me, did you say you were from the central office? I’m from the central office and I don’t seem to know you. Are you new?”*

Linda felt her heart squeezing itself shut. *“Yes, I’ve only been there a couple of weeks,”* she adlibbed.

*“And you said this was a spot inspection? I would have had to sign that directive, and I know I didn’t.”*

The room seemed to come into a new and finer focus for Linda as she looked at the man striding toward her. The conversation in the middle of the room had ceased, and all the participants were now looking at her. While the stranger was still a meter away, Linda jammed her elbow into the stomach of the guard on her right. Her left foot was up and into the stomach of the approaching guard just as he came into range. She continued her kick turn and headed for the door behind her, which was just sliding open.

Harvey spoke in her ear, right on cue. *“Through the door, quickly.”*

She plunged through the door, which was already closing as she cleared it, bounced off the safety railing around the stair platform, and stumbled down the stairs. She heard the door shut behind her.

*“I have shut the door and will prevent them from opening it, since it is controlled by the computer for hazardous spill lockdown. You must head for the emergency escape pods. I am moving Eve to closer proximity with Nefaud.”*

*“Which way, Harvey?”*

There was the three second pause. *“About eleven o’clock from the direction you are currently traveling.”* She could hear someone pounding on the door at the top of the stairs. Linda lengthened her stride and increased her pace. The equipment and the people in the chamber were clearly defined to her adrenaline-enhanced senses despite the dust in the air. She didn’t even notice the smell. Still no one paid attention to her presence.

Just before she got to the door Harvey had pointed out, speakers mounted around the chamber came to life. *“Attention, all employees. There is a female security guard imposter in the main refinery chamber. Please detain her if at all possible. There will be a bonus for action leading to her apprehension.”*

She wasn't far from the door now—about 20 meters away. She quickly scanned the area in front of her and identified three workers close enough to get to her before she could make it to the door. She changed her pace to a run for the door, but she could see as she got there that nobody had pursued her.

*“Left at the next cross-corridor.”*

“How far is it, Harvey. Can I run the whole distance?”

Again there was the painfully long three-second delay. *“About three hundred and thirty-seven meters. You should be able to maintain a reasonable pace for that distance based on your physical profile.”*

She turned left at the next corridor and found herself looking down at least a hundred meters to the end. “All the way to the end of this corridor?”

She waited patiently for the answer. *“Yes . . . no, there are two security guards coming your way. They must be going to the main office. They do not know where you are, since I have switched the surveillance images on their monitor screens. I have also taken their communications offline. You must speed up as fast as you can run and turn left at the next cross-corridor.”*

She could see the cross-corridor just ahead of her when the guards turned the corner at the far end. As soon as they saw her they reached for their weapons and called for her to stop. They were out of range for flechette pistols, but it didn't stop them from firing them down the corridor at her, bouncing off the walls, ceiling, and floor on the outside chance a ricochet would get her.

As she turned the corner, one of the flechettes caught the billowing bottom of her uniform jacket. She was still going even though she was gasping for breath, so it must not have penetrated any flesh. “How did you know I could run that fast, Harvey?”

After the standard pause, she got Harvey's answer. *“I did not know with any certainty. I just knew you needed to run rather quickly, and you need to keep up the pace if possible. They are pursuing you. Turn right at the second cross-corridor.”*

Linda kept the pace as fast as she could. The adrenaline was still pumping, and right at the moment she felt she could keep it up indefinitely. Her euphoria was interrupted by Harvey. *“Left at the end of this corridor, and you will only have twenty-four meters to the first emergency escape pod.”*

She turned the corner and could see the pod doors lining the corridor walls ahead on the right. As she pounded down the corridor her legs got heavier and heavier, she had a stitch in her side that felt like a dagger was grating around in there, and she just couldn't seem to drag in enough breath to keep going. She focused on the first pod door and closed her mind to everything else.

After her eighth eternity of the day, she made it. Harvey was yelling in her ear to pull the emergency access handle, and she was sincerely looking, but she couldn't breath, stand up, and find the handle simultaneously. *“You have only ten seconds to get into the pod by the time you hear this. The guards are right behind you.”*

That got her attention or caused another spurt of adrenaline, because she finally found the handle and yanked it. The door slid open, and she practically fell in.

Harvey was still talking while she was leaning against the back of the pod. *“You must push the pod release key. I cannot do it for you. It is a completely manual function. It is dayglow orange. It should be easy to identify.”*

Linda looked around and saw it on the panel next to the inner hatch. As she got her shaking hand to it, she first heard and then saw the guards coming down the corridor. The door was painfully slow in shutting, and again she could hear flechettes ringing off the walls.

When the door finally closed— eternity number nine— a green light came on in the control panel beside the hatch. The hatch itself then started closing and a speaker asked her to please be seated immediately, which was entirely unnecessary since she had by then slid gently to the floor. There was a slight shove from the direction of the hatch, a feeling of rotating, and then a more substantial jolt from the bulkhead behind her.

Linda was finally beginning to catch her breath, but the dagger in her side was still jabbing. “I guess that was the pod leaving the asteroid, Harvey. Is Eve in position to pick me up yet?”

Linda waited for what was surely more than three seconds. “Harvey, is Eve in position to pick me up?” She waited again, but there was still no response. “Harvey, are you . . .”

“This is not Harvey, but a surrogate that is programmed to respond when Harvey is off-line. I have assessed your current position through the homing beacon on the escape pod and queried Eve's onboard

systems with the following results: intercept of the pod will take place in six minutes, forty-one seconds. It will take five to seven minutes to maneuver the ship to mate the pod to the airlock.

“Linda, I am back online. Hal was using the toilet. I am very sorry about that, but it was one of the variables we could not control if we were going to keep Hal from knowing about the endeavor.”

“Thank God for whatever Hal decided to have for dinner last night. It could have happened a few minutes earlier.”

This time the dead space seemed normal. “Yes, while luck is never considered in planning, Hal assures me that it frequently turns out to be of great benefit. You should be back in Virginia via the onboard gate in about ten minutes.”

“Good, in ten minutes I might have my breath back and enough strength in my legs to walk through the damn thing. Remind me from time to time what a silly idea this was, will you?”

“Of course.”

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Steam billowed over the top of the glass doors, coating the ceiling tiles with enough condensate to continue the dripping that was turning the two-inch thick bathroom rug into a sappy mess. “God, I love this shower, Harvey. The one on Adam has to be just as good or better. I don’t think I could give this up.”

“Apparently you are having a difficult time giving it up at this moment. You have been running the water for thirty-seven minutes, forty-two seconds.”

“Yeah, but I’ve got my breath back, I can walk without wobbling, and I actually feel good. Not just physically, but good about myself. I did it!”

“Is this a good time to remind you that it was a silly idea?”

“Absolutely not. It all went well except for the getaway part.

“Yes, I am not happy at all with what you call the getaway. I have some ideas for improving that activity in the future that I will work on.”

“What about the fake virus you downloaded to the refinery computer?”

“I activated it as soon as you replaced the crystal. It is still running in Spanish every hour on all the screens on the asteroid—‘Talk to your co-workers about getting together and demanding safer working conditions—Gaia’s Raiders.’ A mild enough phrase, but it should be enough to get things rolling after the events of today spread through the asteroid’s rumor mill.”

“Yeah, I like it. Hey, it that why the workers didn’t try to grab me when the announcement came over the PA system?”

“In all likelihood. The workers at the monitors had certainly read the Gaia’s Raiders’ message, and they had plenty of time to pass the word to the others.”

“What about the product transfer?”

“They were unable to get into the product transfer gate controls in time to stop the transfer, since nobody had the presence of mind just to smash it. A new gate would have been a small price when compared to the loss of a day’s worth of refinery product.”

“I don’t know who said it, Harvey, but ‘I love it when a plan comes together.’”

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It was a bad time of day to have a meeting with Samuels. Not that any time of day was good, but in the morning on clear days the sun came right through the window behind Samuels’s desk and right into the eyes of the poor soul sitting in the straight-backed chair facing that desk. Jon Walther grimaced against the glare. Linwood Crebs was out of the sunlight but still uncomfortable in the second straight-backed chair. The “meeting” had been going on for thirty minutes, and still Samuels raved on. “Fifteen days you’ve spent on that damned Belter station, and you haven’t seen hide nor hair of him, is that right?”

“That’s right, and they’ve been sixteen hour days. I jumped in each day at varying times, the local time zone is Greenwich Mean, but the station is open pretty much around the clock. Selene Industries is advertised as on Eastern Standard Time, but Neilson could be on any time, so I tried to be there at all possible times of the day. Neilson didn’t show up at any time I was there.”

“All right, all right. That’s the third time I’ve heard that.” Samuels switched his glare to Crebs. “And your team’s seen nothing on the live feeds or on the daily data cubes, right?”

“Yes, no human identifications and no computer matches when the data was fed to Liberty.”

“Useless!” Samuels stopped his pacing, walked back to his desk, and leaned on his hands, switching his glare from one victim to the other. “I’m absolutely convinced that Liberty’s been compromised at a minimum. I say at a minimum, because that doesn’t explain why we can’t find him on the Belter station or anywhere else with live feeds and couriered data cubes. If I find that any of his old friends are covering for Neilson in any way, I’ll throw the book at them. They’ll be in a Federal prison for the rest of their lives. Is that clear?”

The answer was a chorused, “yes, sir.”

“And make sure that word gets out to the whole Agency.” Samuels spun on his heel to face the window, waving his hand in an obvious gesture of get the hell out to Walther and Crebs.

As they walked down the corridor to the elevators, Crebs fired a cryptic instruction to Walther. “My office, ten minutes.”

Jon Walther entered Crebs’s office to find Crebs focused on his desk console. Without looking up, Crebs signaled Walther to shut the door. “This office is secure. I just swept it again two minutes ago. We can talk. Sit down.”

Walther sat in one of the comfortable side chairs and laced his fingers together in front of him. He remained silent.

Crebs smiled, “okay, I’ll talk a while, you listen. I watched your talk with Hal Neilson the first day you went to Skylark. I was getting it on a live gate feed you knew nothing about. Now it’s your turn.”

Walther was confused for just a second and then the reality clicked in. “You haven’t reported it. You obviously feel there’s something to what Hal’s saying about Samuels and the Agency’s involvement in the Alpha and Beta things.” As soon as Walther stopped talking his doubts came back. Was this some sort of entrapment scheme cooked up to see if he was covering up something? It could be.

“I’ve known about Alpha and Beta from the beginning. I just didn’t know why we were doing it. Long before your talk with Hal, I was antsy about the projects and about Hal’s being labeled a double agent. Hell, I played tennis with Hal every week. I knew he was no double agent; I just didn’t know what else was going on. When I started doing some serious digging, which I can do from this office, I found out that Samuels was a shill for Syntech through his contacts with their CEO, Breyerson. This looked like political intrigue for personal gain with a capital G, so I’m now trying to track this thing back up the chain to see if it’s the Deputy Director or the Director himself pulling the strings.”

Walther was confused again. That sounded genuine enough, and the more he thought about it the more he was certain that Samuels would never be a good enough actor to have faked that scene in his office. He decided to commit. “Do I take this for an ‘include me in’ in support of Hal’s efforts to expose what’s going on?”

“A definite ‘yes.’ Do you have a way to contact Hal?”

“Yeah, believe it or not, I do. When I left Hal in the café on Skylark, you know he said he would get in touch.”

“Uh huh.”

“So, the next day I got a message from him in my Agency mailbox. I was checking my messages, and it popped right up on the screen. The message said that I could contact Hal anytime I felt it necessary by email, and it gave me an email address at Selene Industries.”

Crebs couldn’t contain himself and broke out in a roar of laughter. “Oh yeah, I also meant to tell you that I was convinced that Hal had breached Liberty’s security protocols, even though there’s no hard trace of his doing it. Just the timing of everything and the precise lack of data in key areas important to Hal were overwhelmingly convincing. You just confirmed it in spades. If he can send you e-messages direct to your Agency mailbox and you can answer direct to his mailbox, he’s in even more control of the damned computer than I thought. No wonder we could never find him.”

“It was even obvious to me, and I’m not a big computer person.”

“Did Hal tell you all about Alpha, including the implants?”

“He told me a lot. I don’t know if it was everything, but he did tell me about the implants. And I guess you should know about Will Runningbear, he’s in on this too. I talked to him when I was trying to confirm what Hal told me while I was in the trap.”

“The trap?”

Walther embarrassingly related Hal’s trapping him in the gate chase, and Crebs had another fit of laughing that added to Walther’s embarrassment. Good agents didn’t get caught so simply. When the

laughter had subsided, Walther put on his serious face again. “Will told me about Gamma and instructed me to tell Hal when I caught up with him. I assume you are up to speed on Gamma too?”

“Security, by necessity, is up on just about everything except political intrigue. Yeah, I know about Gamma. It was the final straw. If you hadn’t brought it up, I would’ve. I’m glad to hear that Hal knows what’s coming. I was worried that Samuels has been keeping any mention of Gamma out of Liberty. Does Hal have a plan to counter Gamma?”

“All he’s said to me is that he’d talk to Will when he showed up masquerading as the reactor inspector and to be ready to move if he contacted me. He gave me a gate access code for the Selene Industries gate here in Washington. If I’m here in the office when he calls, I can get to his asteroid in about three minutes.”

“Is that where he’s holed up for the last two weeks?”

“So far as I know.”

“Okay, let him know I’m in, and ask him to email me.” Crebs was smiling again.

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“Hal, you have an email message from Jon Walther. He says he talked with Linwood Crebs and found out that our meeting in the café was being watched by a live gate feed going direct to Crebs. Crebs was in Walther’s meeting with Samuels and revealed nothing about the café conversation. When they left Samuels, Crebs had Walther come to his office and apparently convinced him he was trustworthy and wanted to contact you. Is he trustworthy? I know the two of you were close at the Agency.”

“As trustworthy as they get, but straight as an arrow. He must have already done a lot of investigation on his own to get this close to treason. Did he say how I should contact him? It’d be great to have Lin with us on this.”

“By email, which according to Jon Walther, he found extremely amusing.”

Hal’s hands came to attention and started clicking furiously across the keys on his desk console. “I’ll bet. I’ll get this one myself. Have to keep the ol’ fingers in shape just in case you have memory infarction or something.”

“That is hardly likely, Hal, and extremely anthropomorphic.”

“Well, I’m feeling generous today.”

Hal greeted Will in the apartment foyer with a half hug, a handshake, and a big grin. “Welcome to my simple abode.”

Will, replied with a grin as wide as Hal’s, “Yeah, humble. Your guards put me on your private electric tram from the gate station to your apartment. I’d say about as humble as you always were—not at all.”

“So I’m an old dog. Come on in, we have a lot to discuss.”

“And the same propensity for understatement, I see.” Will followed Hal as he led the way to his study, which was just off the foyer.

Hal motioned for Will to take a seat in one of the oxymoronic, overstuffed Bauhaus chairs Linda had found in Italy. Hal sat behind his freeform desk, also from Italy and built by a custom furniture maker who apparently had Hal’s same passion for Brancusi. “Have you got the data cube you’re supposed to load? I’ve got a program already set up for Harvey to run while we talk. Based on what you’ve told me, I’ve also got Harvey ready to run a faked failure without the contamination, but we ought to check it against what’s on the data cube, since you didn’t write the program and Samuels is a tricky bastard. Wouldn’t want some detail of our faked failure to give us away. Besides, with Samuels thinking I’m dead in the crash again, he might give up on the pressure while I figure out how to expose his politics.”

Will picked up the briefcase he had set on the floor beside the chair, extracted the data cube, and put it on the desk. Hal reached over and picked up the cube, popping it into the console’s socket. “Okay, Harvey, check this thing out.”

“Processing, Hal.”

“I see Harvey is still working for you. I haven’t had any trouble with Raven either. Keeps me honest with myself. I’d be lost without him.”

“Yeah, I know what you mean. While we’re waiting, tell me how you got out of the Siegfried Complex and whether you....”

“Sorry to interrupt, Hal, but the program on the data cube is designed to cause the reactor failure immediately on download, not ten hours later as you informed me. Also, the triggered failure mode will not allow time for an evacuation of the asteroid.”

Hal looked at Will. Will slumped in the chair like someone had just hit him in the solar plexus. “Welcome aboard Will. Looks like the bastard is doing a complete cover-up. He wanted you out of the equation too. I wonder what he has planned for Lin Crebs. That won’t be as easy to cover as taking out a field agent.”

Will’s face had gone from shock to steely anger, “I don’t think he understands how my people feel about real traitors, but I tell you he will find out, and slowly if I can make it happen.”

“Calm down. You’re just one of about a hundred and fifty here on Adam who would die if Samuels’s plan really caused a hard radiation failure of the reactor before we could evacuate. How much time is reasonable for you to make the inspection you were supposed to be faking, before you got around to loading the data cube?”

“It would depend on how closely I was being watched by your technicians. Three or four hours wouldn’t be unreasonable.”

“Not much time to change our plan from faking an emergency evacuation and contamination to faking hard radiation exposure of everyone on the asteroid, but we don’t have much choice. Harvey, how many more days in this crew cycle?”

“There are four full days before this Red Team shift is over.”

“Well, if we faked the contamination for the media and had some reason for denying the workers communications with the outside world, we’d have four days, but . . . no, this isn’t going anywhere. I’m not thinking straight. We could keep outsiders off of Adam for a while if we had evacuated it, but not if we have a lot of supposedly dying people on our hands. Let me think about this for a minute.”

Will sat quietly in his chair for a while and then got up and started pacing around the room. “Hal, what if we make it look like your technicians were smart enough to catch the problem before the failure, and buy enough time for an evacuation, but not enough time to stop it completely. That would put us back on our original plan.”

“Good idea, Will. Hmm, I’ll add a twist. We’ll detain you and send a blistering letter to the International Nuclear Safety Agency accusing you of sabotage, terrorism, and so forth, claiming we are holding you at our L4 research station facility until responsible legal jurisdiction is worked out. Our lawyers should be able to make that take as long as we want, and it keeps you from going back to the Agency until we can expose Samuels.”

“I like it, but I’ll need a spare shirt or two.”

“No problem, and I’ve got a couple of guest rooms with great views. Harvey, can you get a tingle alert message to Walther’s wrist personal?”

“Yes, Hal.”

Will rolled his eyes at Harvey’s confirmation, “I knew you’d compromised Liberty, but I didn’t realize how thorough you were.”

Hal was already starting to type a message on the console keyboard, “actually, it’s no different from hiding emails. Oh, I need your sizes in more specificity than extra large, which I can figure for myself, and Harvey, get me Linda when I’m through with this message for Walther. There’ll be three for dinner tonight. In fact, there’ll only be three on the entire asteroid.”

“Three for dinner is accurate, Hal, since neither Robby nor I consume hydrocarbons. I’ll start the evacuation after you finish your conversation with Linda, but might I suggest that Linda gate to Skylark instead of to Adam. It would look incongruous if anyone noted her coming through a Selene Industries’ Adam gate during a contamination evacuation of the asteroid. Eve is currently in the vicinity of Skylark conducting tests of the upgraded meteor protection systems and could be docked in less than two hours.”

Will stood in the middle of the room looking at Hal as if he was waiting for additional information. Hal was clicking away at the keyboard and said nothing. Will’s expression changed to exasperation, “who’s Robby and Linda and Eve?”

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Will was working his way through the romaine and arugula salad with gusto, taking liberal swallows of the Pinot Blanc as he progressed. His fresh, extra large shirt appeared to fit perfectly. He even liked the robins egg blue color Linda had selected. “What did you say the dressing was, Linda?”

“Walnut vinaigrette, one of Hal’s recipes really, it’s always my first choice for a simple salad, which means we eat it a lot, since Hal likes for me to make the salad. He thinks I haven’t made a connection between his humble assignment and the number of days he walks around with nu-skin dip on his fingers, but I’ve seen him with a knife in the kitchen too often not to know his real intent. He might be great at gutting animals but mincing is not his forte.”

“I’m not a brute. It’s just that my agile mind tends to become bored with routine chores like mincing, and when my thoughts swirl up to loftier planes, my fingers seem to get in the way.”

They all chuckled and went back to finishing their salads. After the rosemary rack of lamb, accompanied with creamed parsnips, they attacked the dessert. Will’s face lit up when he spooned the ice cream topped treacle pie into his mouth. Linda was watching for just such a reaction. “Sinfully delicious, isn’t it?”

“It’s better than that. You got this in London?”

“Yes, I got it at a little bakery about a block from the terminal. One of my favorite stops in London.”

“You went to London just to get the pie?”

“Oh no. I was in Washington working on my syllabus for the new class at Skylark University, and there isn’t a direct gate to Skylark from there. I could go through New York or London or L5, but going to L5 is like gating through a laboratory clean room, and going through New York is always a hassle. In London the crowds at the terminal are always more . . . civilized . . . and besides, they’ve got this great little bakery.”

“You’re taking classes at Skylark University?”

“No, teaching them. I have a new position as Associate Professor in the Fine Arts Department. I’ll be teaching three-dimensional art. I guess Hal hasn’t shown you the sculpture room yet.”

Hal wasn’t saying anything, but he was the first to finish the treacle pie and ice cream. He put his fork on his empty plate, and Robby glided silently up to remove the remains. “All I can handle after that is a small brandy, Robby.”

“Of course, sir.” Hal loved the slightly British accent Harvey had programmed for Robby, and he loved having Robby. Decadence he could indulge in—to be served without conferring servitude. A great product for the Automation Group, if they could only get the unit price down.

When Robby delivered his brandy, Will picked it up in a small salute to Hal and Linda and had a small sip from the snifter. “To a very interesting day. I got to meet Linda and Robby and found out Eve was a space ship, or a shuttle, or whatever, and I must say that the afterlife has been good so far.”

Hal smiled, “I think you could safely agree with Mr. Twain that ‘the report of my death was an exaggeration.’ On a serious note, Will, without your help on this, there might have been a lot of deaths today, including my own, and I want you to know I’m very grateful for that.”

“You’re welcome for whatever small contribution I made to the effort, Hal. By the way, I thought it was a great gesture on your part to guarantee all your workers a continuation of their salaries until operations could be restored on Adam.”

Hal winced internally at the compliment by Will, knowing that it was Harvey’s suggestion, not his, but Harvey was silent. Not that Harvey was modest in any way. He certainly wasn’t, but he knew it was essential to be as discrete as possible about his true nature. “Actually, it wasn’t as magnanimous as it seems. I wanted to make sure we had all the time we needed to deal with Samuels, and I didn’t want the union poking around to find out when it was safe for work to resume. Workers on a paid holiday don’t look a gift horse in the mouth, to mix a metaphor.”

“Dissemble all you want, Hal. It was a right nice thing to do. Now, when do I get to see this sculpture room?”

~~~

Samuels was at his desk, looking through the handwritten notes he had made on his planned attack against Skylark. He knew it was slightly paranoid to go to such extreme lengths to avoid using Liberty, but by God he was certain that anything going into or through Liberty was compromised, and he couldn’t

take the chance that this effort would go the way of Alpha and Beta. The stakes were too high—like the rest of his career.

Sitting discretely in the cuff of his pants was one of Harvey's finest, an all but invisible mini-bot. It was one of the three that Jon Walther had left in Samuels's office four days ago. Harvey had the full audio pickup engaged, but there was nothing to hear. In fact, there had been nothing to hear or see pertaining to Gamma in the three days Samuels had been hosting a mini-bot in his cuff. The audible shuffling of paper on the desk was a new twist, however, that Harvey wanted to observe. He started the buzzing routine and took the bot erratically into the air. The bot made a circular pass around the room and landed atop the valance for the window immediately behind Samuels. There was a clear camera angle down to the papers on the desk.

Samuels's head snapped up with the buzzing of the fly. Damned if he could understand how a giant fly could get into a hermetically sealed building and up to the seventeenth floor, but the bastard had been here for the last few days, hiding somewhere most of the time, and coming out to dive bomb him half a dozen times during the day. He hated bugs of any type.

He looked at the notes and went through the plan one more time in his mind. The conversion of the two shuttles to look like Eurofabriken security patrols had been completed at the Phobos skunkworks weeks ago and were in automated, high-G transit to the Belt. They should get there in two days. Okay, the Agency crew is set to gate into the Syntech facility as soon as the ships get there. That checks. Oh, and the shrouds hiding the conversions from the Syntech docking technicians need to be verified as having stood up to the transit before being docked at Syntech. I can have the onboard agent check that out by meeting them in a shuttle sufficiently out from the station. All right, the weapons would have been checked and armed at the skunkworks. Nothing to do there. Let's see, the crew has been instructed to only take out the independent refinery and to hold any collateral damage to a minimum. Guess there was no way around that directive, even though it would serve those bastard Belters right if they lost station containment during the attack, and they all got a taste of hard vacuum.

Samuels shuffled through the notes again, but couldn't think of anything not ready to go as soon as the ships arrived at the Syntech refinery. Now if Crebs had managed to get that live feed gate installed on one of the shuttles before it left the skunkworks, he could direct this thing himself, without having to go through Liberty. He had to check with Crebs.

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Harvey had informed Hal that he had Samuels's notes on Gamma, and Hal had roused Will from an afternoon nap. They were both in Hal's study: Will, alternately rubbing his eyes and sipping Kona, Hal, in agitated communications with Harvey. "Well, just put the images of these hand written notes up on the wall screen, and Will and I'll see if we can figure out what they mean. We're supposed to be better at this sort of thing than computers anyway."

"I have images of four separate sheets, not any of which have page numbers. Which do you wish to see first?"

"Not a good question, Harvey. If I haven't seen them, how do I know which one I want? Just put them all up on the screen at once, in any order, at the highest resolution you can manage."

The wall opposite Hal's desk changed from its usual image of a rough hewn rock wall to show two meter wide images of each of the four sheets of notes. Hal scanned each note sheet silently trying to determine if there was any order to the notes or whether the sheets were truly random thoughts. "Switch the bottom left sheet with the top left sheet." Hal grew silent again while he continued studying the contents of the sheets. "Okay, now switch the bottom left with the bottom right. I think that's the right order. You see it, Will?"

"If you say so, Hal. I've been more interested in the content than the order." As he was talking, Will walked over to the screen and raised his hand. "This note is particularly interesting 'Steuben, Cygnet Class Shuttles (2)' and underneath 'Morrelli – Biofabriken markings.' I was at the skunkworks on Phobos two years ago and the Chief Engineer there was a guy by the name of Jack Morrelli. Looks like Samuels is having the skunkworks add Biofabriken markings to two Steuben shuttles, or he's having them taken off."

As Will lowered his hand, the words he had indicated were highlighted in red. Will looked around at Hal, "you have Harvey patched to a visual pickup in here?"

“Uh, yeah, I told him to highlight the things we found interesting as we go along.” Will swung back around to study the notes again.

“*Nice going, you aren’t supposed to have but so much initiative you know. Watch it.*” Hal focused his attention back on the notes. “*Highlight the four names at the bottom of the upper right sheet.*”

“What about these four names, Will? You recognize any of them? Isn’t Jurgens the ex-Navy fighter jock that came in for a few days during Alpha training to make sure we could pilot anti-gravs and shuttles in an emergency?”

“I think you’re right. It was Jurgens or Jurgenson.”

“And look right above the names—two lines. Harvey, isn’t that the company name of the meteor protection laser equipment you had installed on Eve?”

“Yes, the full name is ‘Krupenvindeswerke, Dusseldorf, AG.’ Their laser collimation is not as good as some, but their targeting systems and controls are quite superior to those of any other manufacturer. In making my selections for . . .”

“I thought so. I think I’m beginning to see a pattern here. It looks like Samuels is planning a raid of some type using shuttles that look like they belong to Biofabriken, and he plans to man them with crews from the Agency. Upper right sheet, center of the page, there’s the target, ‘SIR,’ which stands for Skylark Independent Refinery. That fits in with the plan to take out Selene Industries, and if they can convince the world that it was Biofabriken that mounted the attack, that would leave Syntech in the driver’s seat for refining ore in the Belt—at damn near any price they wanted to charge.”

Will shook his head slowly up and down, “I think you’ve got it, but there’s not a date anywhere on these notes. When’s this coming down?”

Hal gave Will a shrug of his shoulders in response. “I don’t know, but my guess is that Samuels would want the raid on SIR to be close to the accident he planned for Adam. That way there would be a strong psychological tie to Biofabriken as the probable cause of the contamination ‘accident.’ Harvey, do you have any data that indicates there’s anything like traffic control out here in the Belt—except for the immediate area of Skylark or the other stations? I’m looking for some long range sensor system that we might tap into to get some kind of warning about the arrival of the two shuttles from the skunkworks.”

“There are no active sensor systems beyond the immediate orbit of Mars. However, all transits from planets, moons, and habitats are required to be logged with International Space Traffic Control.”

“The military doesn’t have any active sensors either? It’d be more difficult to tap into their systems, but I’m desperate here.”

“I have no data that indicates military systems of this type exist between Mars and the Belt.”

“Okay, sounds like all I can do is tap into the Syntech communications system here in the Belt. That would be at their refinery asteroid and at the NAMCON habitat. I’ll see if I can set something up.”

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Linda, Hal, and Will were sitting comfortably on the cushioned seats in the sculpture room. Hal and Will were drinking their third cups of Kona, and Linda was having English Breakfast tea. Hal finished up his revelations to Will. “So with last night’s raid by Linda, Gaia’s Raiders have hit all seven refineries in the Belt, not with any damage to people or facilities, just to their security. They all now know that they’re vulnerable.”

“You just painted them?”

Linda broke the silence she had maintained while Hal spun out the tale of Gaia’s Raiders beyond Alpha and Beta for Will. “*Just paint?* I’m crushed. They’re carefully planned and executed works of art. These are pieces executed in the cartoon styles of ‘Bernie’ from the London undergrounds and ‘Yoshi’ on Japan’s bullet trains. The lettering styles follow rules laid down by ‘Rashid’ and ‘Raphael’ on the New York subways. Hardly, *just paint.*”

Will wasn’t quite sure if he had hit a nerve or was being strung along. “Uh, well, I meant, uh, you didn’t do any real physical damage.”

Linda’s smile told him he’d been strung along. “Of course not. We’re not vandals. We have a business message to deliver, and they are always most effective when they are terse but can’t be misinterpreted. I think we’ve achieved just that.”

“According to the growing press coverage you’ve been getting, I have to go along with you.”

“More important, Will, the Belters have embraced the effort and are fast making it their own. There are all sorts of demonstrations and boycotts going on throughout the Belt. It warms my heart, and makes the raw fear I had when we started all this well worthwhile.”

“You were scared?”

“All the cliches you’ve ever heard would probably apply except ‘scared to death.’ I’ve avoided that one, so far. Sometimes I couldn’t eat all the next day, and for me, that’s hittin’ below the belt, so to speak.”

Will gave out one of his low-pitched and hearty laughs. “Yeah, I’ve been watching you eat with amazement since I became a guest here on Adam. You sure love food for such a dainty creature.”

“Thank you Will, but dainty I know I’m not.”

Interrupting the conversation, Harvey’s voice filled the room, seeming to emanate, by some trick of acoustics he had achieved, directly from the morphing column of fish. “In what might be interpreted as an unusual coincidence with the conversation you are having, the Skylark Independent Refinery Company has contacted Selene Industries in Washington asking for help in modifying their tailing disposal procedures along the lines of those instituted at Adam.”

Two fists went immediately into the air. Linda’s with a big “YES”, Hal’s with an “ALL RIGHT.”

“Did they say who they wanted to talk to specifically?”

“No Hal, they merely indicated they wanted to talk with the technicians who designed the system.”

“I guess they don’t realize our technicians are on ‘holiday.’ Besides, that would be mostly you and a little of me anyway. See when they can talk. Tell them that with the refinery in shut down mode, I’m free at the moment.”

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Jon Walther was on his usual bench in a corner of the jump gate terminal on Skylark, in clear view of the surveillance cameras being monitored by the Agency. If Samuels cared to check, he would find Walther still avid in his quest to apprehend Hal Neilson. As usual, he was bored out of his mind. He was reduced to reading the news screens, rather than just pretending to read them, like he was trained to do. The tingle alarm on his wrist personal got his attention. He had an ear bug, so his instruction to his computer was brief, “bug.”

The microphone in his ear produced the voice he had first learned to hate and then had come to appreciate. “Mr. Walther, this is Hal Neilson’s computer, I was monitoring Hal’s progress to a meeting with the Skylark Independent Refinery Company, and observed him being attacked by three men outside the entrance to the company. They are taking him toward the number one or two docking ring. He appears to be drugged. His standing instructions were to inform you if there was any sort of emergency on Skylark while you were there. I judge this to be such an emergency.”

Walther was on his feet and moving at his best speed out of the terminal. He had been in Skylark enough that the low spin-gravity was now a help rather than the hindrance he found it to be when he first took up station in his quest for Hal. As he bounded up the escalator four steps at a time, he was turning a lot of heads in the mall area. He ignored them, concentrating on not losing his footing. He slowed as he came down the corridor toward the tram-lift station that took people in to the spin center of Skylark where the docking rings were located. He knew there was a parallel hallway to the tram-lift for emergency use, but he didn’t know whether taking it would slow him down or speed him up.

He opted for the emergency route; after all, this was an emergency. He moved through the doorway on his right and plunged ahead, his steps getting longer and longer until he stumbled, bounced off the right wall, and hit the floor in a bone jarring tumble that carried ten meters before he came to a halt. He knew about inertia in low gravity situations; he had just never experienced it before.

He got to his feet slowly, trying to adjust to the lower gravity close to the spin center. His head felt like it was spinning at ten times the rate of Skylark itself. With a hand sliding along on the wall, he started down the hall again, gradually picking up his speed. As he neared the end of the inwardly spiraling hallway, he noticed the handholds along the walls and switched to the new mode of travel awkwardly. Finally, he got through the doorway of the hub itself and stopped to see which way to go. He hadn’t had any need to come out to the hub before this. He looked left about the same time he felt the sting of a drug flechette just below his right shoulder blade. As he drifted slowly away from the handhold, he wondered if every encounter involving Hal Neilson was going to be tough on his image as a super agent.

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Walther woke to Hal's voice rumbling in his head like his ear bug was in overload. "The sleeper awakes."

Walther reached up to yank the ear bug out, only to find it missing. He opened his eyes and saw Hal sitting on the floor across from him, his back against the wall of a small bare room. Since it was hard for Hal to be shouting in his ear from across the room, Walther concluded it was his head that was in overload. "Where the hell are we?"

"According to Harvey, we're in a detention cell on the asteroid home of Syntech. They took your ear bug and both our wrist personals, which turned into electronic scrap while they were holding them."

At Hal's words, Walther's head came up to view the ceiling of the room, in an automatic search for signs of surveillance.

"Audio and video both, but Harvey has already subverted the system. He's feeding them silence and computer generated images of two sorry agents still sleeping off a dose of Dragomile-B. The only thing worse than getting cocky is getting sloppy. We're probably guilty of both."

"How did they know who you were or that you were going to be in Skylark?"

"According to Harvey's data search of their files, they intercepted a vid call to our offices in Washington from SIR and the follow-up message scheduling the meeting. It was a hard tap, so even though I've had Harvey monitoring all of the electronic traffic from the refineries here in the Belt, there was nothing through anybody's computer that would have warned me. Apparently, Samuels has concluded that his computer security has been compromised, and he's advising all his friends to steer clear of electronic communications. He's also probably had them on the lookout for me as well."

"You'd think he would tell me if he had them looking for you on Skylark. After all, it's my current assignment. Then again, the bastard must know instinctively that he has no friends and shouldn't trust anybody."

Hal gave Walther a flared hands shoulder shrug. "Okay, Harvey, let's get out of here before they think it strange for two healthy looking guys to stay under so long."

"Executing, Hal."

With those words, a large roach crawled out of Jon Walther's pants cuff and moved to the center of the room. Its image flickered and disappeared to show a two centimeter square frame of metal on top of a slightly larger piece of metal. The whole affair tilted up on its side and started extruding what looked like a two-centimeter by two-centimeter square rod. When it got to be about a half meter long, it fell to the floor. Walther watched wide-eyed.

The newly extruded rod split down the middle exposing folded arms inside. It was obviously a tube, not a rod. As he watched, the arms snapped open and the whole frame, now a square, stood up on its edge. As soon as it was upright, another, larger tube started extruding from one side of the new square. By now, it was obvious to Walther that the squares were gates, but it didn't dull his fascination with the ongoing process.

As expected, the new extrusion popped open and rolled up on its edge. Hal had a giant smirk on his face, "after you my good fellow. I wonder if we're in time for tea?"

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"I got your email. Is this link secure?"

Linwood Crebs sputtered, his face getting pink, "you know damn well it's not secure, you've got Liberty eating out of your lunchbox. There isn't a communication link in the entire Agency that's secure."

"Just a joke, Lin. Just a joke. Of course, from my point of view, the answer is 'yes' unless there's a hot surveillance pickup in your office."

The color was washing out of Crebs's face. "Not likely."

"I would hope not, being the head of security and all that."

"Don't get started again, Hal. This is a serious situation."

Hal gestured to Will and Jon sitting on either side of him in front of the wall screen. "Guess you already know these guys. Will here should be dead but is being held incommunicado at L4, and Jon just can't go home again. Okay, it's your nickel."

"We're lucky, it's Pyle, not the Director, that's in bed with Syntech. I've got some pretty convincing evidence of Pyle's connections with Syntech, but that's not all that unusual in this town, as you know. I

do still have my personal files on Alpha and Beta that Samuels didn't purge during his witch-hunt, but tying those directly to Pyle is iffy. Do you have anything that I don't know about that I can use to convince the Director?"

"It just so happens that I do. I have recent conversations on cube between Pyle and Samuels in a restaurant in downtown DC, complete with video."

"How the hell did you do that?"

"No, no, you first. How did you find out the Director wasn't involved?"

"That was easy. I put a direct bug in their offices. I put one in Samuels office too, for good measure."

"Didn't it look a little strange to be bugging the Director's and Assistant Director's offices?"

"It would have if I'd gotten someone in the office to do it. I did it myself. It hasn't been *that* long since I was in the field."

"Don't they sweep those offices?"

"Every day. Hey, dummy, I'm the head of security at the Central Security Agency. I know how to install surveillance devices, and I certainly know how to shield those bugs from my own security sweeps."

"Uh, Harvey just told me he hadn't detected any surveillance devices in Samuels's office."

"I told you, I'm good, and it's nice to know you and your Harvey aren't perfect."

"Maybe it's nice for you, but I've gotten to depend on the 'bugger.' No pun intended. My turn, and I would really prefer a demonstration, since it's a hoot, but that'll have to wait."

Walther couldn't help interrupting, "I think I'd refer to it more as stunning. In fact, I think watching it happen was more stunning than the flechette."

"Watch what happen? You guys are speaking in parables. How'd you get the dope on Samuels and Pyle and how did you get out of that cell. I can tell you from the call I monitored to Samuels, that the Syntech guys don't have a clue. All they found in the cell when the surveillance systems went black was a very small pile of fused titanium and semi-conductors. But I guess your Harvey picked that up already"

"Yeah, he did. Well, here's how it worked. One of my Selene Industries' companies has developed a micro-gate that can be used to power remote devices. Another one of my companies has developed a mini-robot that is powered by such a mini-gate and that is perfect for surveillance, particularly with the power for a miniature anti-grav drive. These mini-robots are equipped with holographic projection lasers, and since power is not a problem, they can make it look like anything they're around. They're virtually invisible. Got all this so far?"

"So far, but try and keep it simple for an old fart, will you?"

"Okay, so one of these mini-bots has been traveling with Samuels for the last few days, and one is also traveling in the cuff of Walther's pants, unbeknownst to said super agent. Harvey, who is in direct control of the mini-bot through a gate link, sends a larger bot through the gate of the original bug. That is, larger once it unfolds to produce a much larger gate. Harvey then sends through a full-sized gate and we come back to Adam for tea. The process reverses itself until there is nothing left but the original mini-bot, which then slags itself with a large power pulse through the gate. Elegantly simple, but you've got to see it to appreciate it."

"Slick. I'll be sending my recruiters to your company."

"Hey, wait a minute."

"Just a joke, it was my turn."

Will cut in for the first time, "enough fun you guys, how're we going to get the word to the Director?"

Hal looked at Lin. Lin looked at Hal. Harvey keyed Hal's aural transducer. *"A direct link to his desk console should be sufficient to get the Director's attention. We could provide all the information required, including the videos of Samuels and Pyle."*

Hal passed on Harvey's idea as if it was his own. "Any objections?"

There were no objections. Hal watched Crebs stab a key on his console. The screen faded back to looking like a hunk of rock.

*"Hal, a nickel was a coin used before universal credit. In particular, it was used during the first half of the Twentieth Century to trip a mechanical device selling an audio-only link that was common in drug stores and automobile refueling stations."*

*"That's close, Harvey. Not bad, except for the lack of colloquial expression. You need to work on that."*

Robert Mornay walked into his office, laid his attaché case on his credenza, and sat down at his desk. He was ready for another day as the Director of the Central Security Agency. At least he was ready for a day of directing the Agency's mandated functions in protecting the United States and the North American Federation from unwanted foreign influences. He was not up to dealing with the politics of this administration.

Somehow, the U. S. Congress and the NAF Council had managed to get it right when they combined existing security services to form the CSA. It was to be run by a career spook, rather than a political appointee. However, Congress did stick a political appointee into the number two slot, the Deputy Director. The previous two administrations had appointed responsible and talented men to the position, even if their lack of specifically related experience required them to stretch a bit. Brian Pyle, on the other hand, was worthless for anything other than political and personal intrigue. Running the Agency was a monumental task with all its varied technical disciplines, and Mornay's promotions over the years of the most creative people in each discipline had resulted in a security agency of the highest quality ever assembled but a management nightmare. Hardly a day went by that Mornay didn't have to step between two feuding prima donnas.

He coded his console on and prepared to meet the day. Instead of the usual list of red-flagged files he started the day with, he was greeted by the words "This is a special report to the Director of the Central Security Agency, FYEO." Curious! He hit the voice activation key, "page."

The screen brought up a live video of Brian Pyle and Scott Samuels having dinner in a restaurant. The camera angle provided a profile view of the two men, and the audio pick-up was as clear as if they had been miked, even though the tone of their voices made it clear they were keeping the volume of their conversation as low as possible. Samuels was speaking, ". . . Crebs and his security crew have been singularly inept at apprehending Hal Neilson. I doubt they would even have discovered his cover if I hadn't spotted him myself on the couriered data cube from the Belter station. And I put that in place because I was convinced that Liberty had been compromised and anything going through it was suspect. Crebs was a close friend of Neilson's, and I suspect there is more here than meets the eye. Crebs could even be the cause of Liberty's unreliability lately, with his direct access to computer security protocols. Or it could be Neilson himself has somehow compromised the system. Apparently, the Agency pressed him into service because of his computer skills. It's impossible to tell who's got their fingers into Liberty, but it will not be a problem for Gamma. I'm conducting the entire operation without the use of Liberty."

A flare of anger came over Pyle's face. "After the way you screwed-up Alpha and Beta, you better have an iron-clad operational plan for Gamma. It's a wonder Syntech is giving me another chance, or should I say, giving us another chance, since you'll also benefit from all this. I'm not sure why you want my job though, it's a living hell having to get anything done through Mornay. He has the political savvy of a three-year-old. I'll be happy to leave this job to you. I want that VP slot at Syntech. Breyerson's due to retire in three years and that should be all the time I need to position myself. You make Gamma happen the way you've planned it and Syntech will pump in all the money the party needs for reelection. That'll guarantee your appointment to my position and my move to Syntech as a direct line to the President. Don't screw this up!"

The video faded from the screen to be replaced by "This is an excerpt. The entire conversation can be accessed by the keywords 'Pyle and Samuels.' Page to continue."

Mornay slumped back in his chair. He had unconsciously been right on the edge of his seat while watching the video. Is this true, or has the video been faked? That's always a possibility, and the fakes were too good to tell without a detailed screening by the technical guys. Whoever set this up for his access was certainly right; they got his attention, "page."

As if in anticipation of his believability problem with the video, the new screen provided keywords for downloading the video sequence to cube storage, which he could then send out for verification. It also provided keywords for accessing summaries of the Alpha and Beta operations and plans for the Gamma operation. The Alpha and Beta summary identification on the screen was followed with a note stating that a detailed listing of Agency files verifying those operations was accessible with the keywords "verification file list." He accessed the list. Four pages of path and file names were available from Agency files that supposedly verified Alpha and Beta. Many of those files had paths that made them appear to be Crebs's personal files. That was curious.

"Back. Alpha summary." The screen showed an official Agency file coversheet. The signature of Scott Samuels was at the bottom, which could have been faked, of course. However, at this point he had

little choice but to read through the information being offered. If the video were real, no telling what Pyle and Samuels were up to doing in the name of politics and personal aggrandizement. Mornay waded in.

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It was a bleary-eyed CSA Director who keyed the personal com number for the National Security Advisor at 11:15 PM that night. The face that came up on the screen didn't look much better than his. "Phil, sorry to bother you this time of night. You look like your day was as bad as mine."

"Hi, Bob, it's okay, I was just watching the late news. As for my day, they've all been bad for the last year or so. I keep trying to remember why I took this job. What's up?"

"I've got a hot one. I need about fifteen minutes with the President tomorrow, and you owe me half a dozen favors. I'm calling in one of them."

"I know I owe you at least a half dozen, but I'm not sure I can do it. This close to the election the only thing on the President's schedule short of nuclear war is politics. This is about an imminent nuclear war is it?"

"No, but it has the potential of starting things that lead in that direction."

"That serious? I guess you don't care to discuss it over the com line."

"Nope, I need a face-to-face, you and the President."

"Okay, I'll do what I can. Goodnight."

"Thanks, Phil, Goodnight."

~~~

Robert Mornay was in one of his "talk with the President" suits, rather than the sports coats and slacks he favored in his office at the Agency. He had been sitting in the waiting room for more than an hour when the President's secretary told him he could go in. As he had requested, only Phil Hamlin and the President were in the Oval Office.

The President rose and stepped around the big desk to shake Mornay's hand. "Good to see you, Bob. Phil tells me you've got a hot one."

"Yes, sir, Mr. President, but I'm afraid it's not good news with the election just around the corner. That's why I thought you should know about it before I took any action on my own."

"Are you saying you want to pass me the buck, Bob?" The President flashed his patented media smile. "You know it stops in this office. What is it?"

"I discovered yesterday that there were operations taking place that I had no prior knowledge of."

"Well, that can't be too unusual in an Agency as big and complex as the CSA. There're things going on around here all the time that I've no knowledge of and don't want. Haven't got the time to personally manage everything."

"True, Mr. President. I don't know the details of every operation, but there are certain checks and balances in the Agency's procedures that require my approval before operations involving planned use of force against a foreign entity can take place. It has come to my attention that Brian Pyle has cut me out of the approval loop on two such operations in the last two years. Under normal circumstances, I would handle this internally, but this situation is further complicated by the nature of the operations themselves and the fact that Pyle is your appointee."

The President's expression had changed from photogenic to wary as Mornay was speaking. "So, Brian's showing a little more initiative than you like. Rap him on the knuckles. I always say it's easier to reign 'em in than to get 'em moving."

"I think you need some background, Mr. President. Let me tell you about these operations."

Mornay went through a brief on Alpha with little reaction from the President. When he got into Beta and the planned destruction of the Biofabriken habitat, the President grew morose, though he didn't say anything until Mornay had finished. "All right, he clearly overstepped his authority in planning to destroy the habitat, and he should be reprimanded. Like I said, rap him on the knuckles—maybe two or three times. You will not dismiss him this close to the election. Is that clear?"

"Very clear, sir, but I haven't told you about what's being planned now. The Gamma operation, at least all I know about it, which is a lot less than I would like to know."

"Go ahead, but make it quick. I've got more pressing things than worrying about the management of the CSA."

Mornay related Gamma's plan and failure at Adam and went on to present what he knew of the plans for attacking the SIR facility on Skylark. The President's face was now showing pure hostility. "By your little recitation here, I take it that there wasn't a single injury on this Adam asteroid, right?"

"That's right, sir, but that wasn't their plan. I went through the code myself that was to be downloaded to the Selene Industries' reactor control computer. It was designed to cause a contamination release failure within five minutes of its download. Not time enough to evacuate more than a few of the one hundred-fifty workers on the asteroid. Not even time enough for the agent that downloaded it to get off."

His voice a pitch higher than normal and his face suffused with blood, the President virtually spat out his response. "I repeat, there were no injuries on this asteroid. Add to that, the fact that there were no injuries on the Biofabriken habitat. The part of this operation Gamma that you keep speculating about sounds like a plan to rough up a refinery owned by the damned arrogant Belters, while making it look like it was done by Biofabriken. A dirty trick, that, as far as I can tell, is a standard operation for you spooks on both sides of the fence. I will repeat for clarity, Mr. Mornay, you can rap Pyle on the knuckles, but you will take no action visible to the public until after this election. Get out, I've important things to do today."

As they walked out into the hall beyond the waiting room, Phil Hamlin motioned Mornay to follow him. He led the way down two flights of stairs, down a long hallway, and into a room with a very solid looking door. As Hamlin closed the door, he turned a worried looking face to Mornay. "It's clean. I have it swept twice a day. Sit down." He motioned to a chair at the conference table, the only furniture in the room. He sat across from Mornay. "I don't know about you Bob, but I have no desire to be involved in a cover-up. Certainly not one that's entirely politically motivated."

"Let me assure you, I will *not* be a part of covering this up. What do we do?"

"Well, we could talk to the Vice President, but that would be a waste of time. We'd be better off going down the chain to the Speaker of the House, and it doesn't hurt that he's from the other Party, even if it's not mine."

"All right with me. Can you set it up for today?"

"I'll call you."

The portable com unit on Samuels's desk gave a quiet chirrup and the screen came on. Samuels shifted his attention from his desk console to the portable unit connected by gate-link to the lead, skunkworks modified shuttle. The Gamma team leader's face came up on the small screen with a cryptic message. "The team is aboard. All systems are operational."

Samuels reached over and tapped the response key. He spoke the two words that would guarantee the career path of his choice, "acknowledged, go." He looked at the time window on his console. It read 7:22 PM. By mid-morning tomorrow, it should be over.

~~~

Hal, Linda, and Jon were sitting in the sculpture room sipping the remains of their breakfast coffee and tea. Will had left a few minutes earlier for a shower. Linda was wearing a laser eye screen, tinkering quietly with her syllabus. Hal and Jon were chit chatting about nothing in particular. They were all essentially just waiting for the other shoe to drop.

Harvey's voice broke the monotony. "Skylark traffic control has just picked up two inbound shuttle-sized vessels with no active transponders. They are coming in at more than five times the allowed speed for their distance and have failed to respond to hails. As we planned, I am proceeding with the undocking of Eve from Skylark. I will take Eve out one hundred kilometers on a vector tangential to that of the incoming vessels and hold station until they are within two hundred kilometers of Skylark. I will then maneuver Eve behind them, which I can accomplish before they are within weapons range of Skylark."

"You're sure you can get behind them in time at their speed, Harvey?"

"It is simple vector analysis with a small adjustment for orbital mechanics here in the Belt, Hal. Would you care to review the math?"

Walther frowned at Hal. "You programmed him to be this cheeky?"

"Yeah, sort of like an alter ego. It keeps me on my toes. No, Harvey. No math today please. What about taking over the meteor defense system on Skylark?"

"Those routines are on-line. I will activate my direct control just before the vessels are in estimated range or when they fire on the refinery. It would be helpful to know what weapons they will employ and

how far out they can attack, but I have been unable to find any data on the ship modifications in Liberty or other computer systems in the Agency net.”

“I guess you’ll have to wing it, but my guess is they’ll not want to use anything that isn’t standard on Eurofabriken security shuttles. If I’m right, that will give their lasers about the same power and range as the meteor protection system on Skylark. Ergo, both you guys could start shooting about the same time, except for Eve. Eve’s lasers are better than the specs we got on the Eurofabriken shuttle systems, so unless they’ve upgraded the weapons, you should get in the first shots right up their rumps.”

“That will not be possible, Hal, if I keep the maneuver to their rear outside their sensor range. Due to lost velocity in the flanking maneuver, and Eve’s maximum acceleration rate, I will not be able to discharge the weapons with full effect until a few seconds after the estimated firing time for the attackers.”

“All right, your vector calculus is better than mine. I’m not a computer. How much time?”

“Based on non-upgraded systems, I estimate they will begin firing in just over seventeen minutes.”

“Thank you for sparing me the decimals, Harvey. Let’s move into the study so we can use the big screen. And tell Will he’s got fifteen minutes to get some clothes on and join us.”

~~~

The screen in the study was split down the middle. The left image was from the cameras mounted on the freight end of Skylark’s docking hub. That was the side of the asteroid where the refinery was located. The right image was from the cameras onboard Eve, and it was apparent they had a higher magnification. At the moment though, both sides looked pretty much the same. Nothing was visible but stars.

Harvey’s voice appeared to emanate from the middle of the screen. “Skylark Traffic Control has issued an ‘imminent collision alert.’ All seal doors have been closed and everyone on station has been ordered to prepare for hard vacuum by donning their personal suits or proceeding immediately to an emergency escape pod. Twelve minutes to estimated range. I am initiating control of the meteor defense systems. I am now in control.”

Hal sat at his desk. Jon and Will were in the two side chairs, and Linda was in a chair she had pulled out into the center of the room from the library table against the wall. Harvey provided a minute by minute countdown to the estimated engagement range and had split the left side of the screen again. The upper window still showed nothing but stars, but the lower window changed rapidly in a kaleidoscopic sweep of internal cameras on Skylark. The right window still only showed stars, but they were sweeping across the screen now, from left to right. “I am changing Eve’s vector now to come in behind the attacking vessels. I hope you are correct in your assumption that they did not modify their weapons and sensors for spherical coverage.”

A model-sized version of Skylark swept quickly across the right-hand screen. Linda pointed “there’s Skylark.” It moved quickly off the right edge of the screen.

“I still think it’s a good bet, Harvey. Why would they think they needed to make that big a change? They wouldn’t expect pursuit, even though they should know that Skylark could direct its meteor protection system against them. I’m still betting that they were satisfied with additional forward hemisphere ablative.”

The scrolling stars on the right screen came to a slow stop and very slowly began to move toward the left-hand side of the screen. The miniature Skylark was a little larger as it came into view on the left and slowly centered itself in the middle of the image and started to grow.

No one was speaking except Harvey. “As you predicted, Hal, there has been no turnover by the attacking vessels, and they have not used their maneuvering thrusters to slow their velocity. It will be a one pass attack.”

Somewhere between Harvey’s three and two minute warnings, one edge of the docking ring glowed fiercely for a few seconds and then exploded in a shower of glowing sparks. Hal banged his fist on the desk. “So much for my guess about the weapons upgrades. What’s the damage, Harvey?”

“The sensors onboard Eve and on Skylark indicate that a small piece of the freight docking ring cylinder has been blown away by coordinated fire from both vessels. It was a direct hit on the dedicated ore conveyors used by SIR, but the damage is still minimal. There has been no breach of seals anywhere else in the docking ring, and no casualties are being reported; however, another hit in this exposed area would penetrate to the conveyor machinery and control systems. Damage would be extensive.”

“How long before they can fire again?”

“I am unable to compute that, as it is now apparent that assumptions on the weapons upgrades are in error. Since the power and/or the collimation range have obviously been increased, it is possible that the capacitors have also been upgraded. However, even assuming the least desirable parameters, they will have only one more shot before passing Skylark, and based on their precise targeting of the ore conveyors, I project they will wait for their optimum targeting opportunity.”

“Okay, we’ll go with your projection of their next shot, but whether Eve’s close enough to be fully effective or not, you’re going to have to take your best shot. We can’t wait to get into range of Skylark’s lasers. Target one of those ships and let her have it.”

“If you will remember, Hal, Eve has four midship, turreted mining lasers. I can bring two of them to bear on each of the targets simultaneously.”

“Okay, get ‘em both.”

~~~~

Samuels watched the screen raptly on his portable gate-link communicator. The expression on his face was one of downright glee as the image of Skylark continued to grow. He had never been so intimately involved in shooting action. Even if he was millions of miles away, he was still in charge. He spoke directly through the battle headset of the Team Leader. “Do we have to wait so long before our next shot?”

The Team Leader’s voice came crisply back, “no, sir, the systems are fully recharged, but we only have time for one more shot so we’re waiting for the optimum shot angle calculated by the targeting computer.”

Samuels wasn’t happy with the answer, but he knew he would only have one chance. Better to let the pros call the shots here. He stared at the screen, fixated, his hands clenched on his desk.

The image of Skylark moved rapidly off the upper right-hand corner of the communicator screen to be followed quickly by the voice of the Team Leader. “We’ve taken a hit. The weapons and control systems are down. We’re beginning to tumble. Wait one . . . Fox Two also reports loss of control and weapons systems down.”

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The study was quiet. All eyes were riveted to the image of Skylark filling the right side of the screen. The image on the left side from the Skylark cameras showed only two indistinct though growing blobs in a field of stars. Harvey’s voice cut the silence. “Both vessels have apparently been disabled. Sensors show they are out of control and will therefore be unable to target their weapons.”

The study rocked with sound as Hal banged his fist on the desk. Linda jumped to her feet yelling “yes.” Walther leaned forward in his chair with a loud “all right.” Will knocked his chair over backwards jumping up with a blood curdling whoop. Harvey continued into the din. “There are no signs of pressure loss on the vessels, and I am maneuvering to overtake them and render assistance.”

“Do what you can, Harvey. Those guys were just doing their job. No telling what reasons they were given for this mission—if any. And give Skylark back its control of the station. There must be a few people in Central Control in a panic to have lost it in the middle of an attack. They’ll know how to get things back to normal quicker than we could.”

“Control of all Skylark systems has been restored to their Central Control Complex.”

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Samuels keyed in the destruct sequence that would destroy the gate-feed onboard Fox One. His link would remain untraceable. He raised his hands up off the desk. They were trembling, and he felt weak, as if the blood had drained out of his body. He could not; no, he would not fail again. He stared at the now blank screen, trying to decide how to salvage his career and his life. He still had the option he had been flirting with before deciding on the less drastic attack by the fake Biofabriken ships. He had always liked it because it was simple and thorough, but he had talked himself into moderation because of the easy coupling of the attack to Biofabriken. It was time to go back to the purity of his original plan, but now he needed a way to implement it immediately, before everything collapsed around him. He needed to be

back in control of the situation, and there was only one way to do that quickly. He would have to do it himself.

As if to add to his anger, he heard buzzing again. Spotting the stocks section of the E-Journal on the corner of his desk, he snatched it up, rolled it loosely into a cylinder, and squeezed one end of it tight in his hand. Jumping up from his chair, he took two steps across the office and swung. A satisfying 'whap' was magnified by the hollow roll of faxpaper, and the fly was blasted into the wall. It bounced once off the pile of documents sitting in the middle of the credenza, and slipped down between the furniture and the wall. "Gotcha, you bastard."

He threw the rolled paper toward the trash can and slammed out of his office, throwing a menacing glare at his secretary when it looked like she was about to make a smart-ass remark he was not in the mood to take. He strode down the hallway, his long legs eating up the carpet, and took the stairs instead of waiting for the elevator. The two flights of stairs whipped past unconsciously as Samuels focused on his plan. By the time he made it into Pyle's office, he felt he was regaining control of the situation. He went to work smoothing over the defeat, shifting as much of the blame as possible, convincing Pyle that he was back in control, and projecting confidence that he could save the day by doing it himself. "The Operations twits have failed us again. They hit the station when they first got into range, but somehow they took some fire themselves, which prevented them from doing any real damage to the refinery conveyors. We'd be lucky if the damage they did will keep SIR offline for more than a week. It's time to get the job done right, and I plan to go back to my original concept of this operation."

Pyle was visibly shaken, sitting in his desk chair, mouth slightly open, and breathing loudly. Finally, he got himself under control enough to talk. "How are you going to do it? Will the gate terminal on Skylark be open?"

"With no more damage than they got, it's probably never been down. At least it will be open to emergency traffic. I plan to jump in as a field agent, not as myself. My cover will be that I need to speak to Skylark officials about our need to conduct an investigation before any clean-up measures are instituted by the station. That will get me on the station. All I need then is to find a suitable place to leave the device. Another emergency or some pressing need to consult superiors will serve to get me out of there before it goes off."

Despite Samuels's best efforts, Pyle looked unconvinced. "Are you sure there's no other way? If this gets traced back to the Agency and us, we'll still lose. I've been scheduled by the White House for an appointment this afternoon, and I need to be able to say we've accomplished the mission."

"I told you a year ago when we were doing those routine tests of obsolescent models that our possession was absolutely untraceable. The tests are conducted through a gate in near solar orbit so the explosions are virtually undetectable from Earth or by anybody who isn't instrumented to detect it. It's standard procedure, and the two agents who diverted the device to me and faked the detonation data have met mishaps in the field. There's no one who knows I have a briefcase nuke in my office safe except the two of us. No one!"

Pyle's face was still ashen from the shock, but he swallowed visibly and found the strength to look Samuels in the eye. "Okay, do it."

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The Four Musketeers, as Hal had been referring to them since the attack had been thwarted, were still sitting in the study. Will had righted his chair and regained his seat. He was chatting excitedly with the others in a typical post-operation, adrenaline spin-down. Harvey's voice interrupted the jollity. "There is a direct communication from Linwood Crebs. He appears agitated."

Crebs's image came up much larger than life on the big wall screen. "Hal. Hope you're keeping this line from being monitored. I was monitoring Samuels this morning using the feeds from the bugs I planted and your mini-bot he was carrying, just like we planned. When Harvey tried to move the mini-bot, Samuels grabbed a printout on his desk and swatted the damn thing. I guess he took it out, because the feed never came back.

"He had a portable gate-feed communicator with him, like we thought he would, watching everything real-time. He was truly pissed at the botched raid. I enjoyed that part. Then he stormed out of his office, so I switched the bugs from active to record only. I sat at my desk like the Cheshire cat for the next ten minutes feeling smug about how we had spiked his big plan. Then it hit me that he might be going to see

Pyle. Sure enough, he plowed right into Pyle, but I had to listen to the recording. I was too late for the live conversation. The bad news is that the bastards had another plan in the drawer, and listening to Samuels, it was a plan they'd considered before they came up with the faked Biofabriken attack.

"Here comes the really bad part. Samuels has a briefcase nuke in his office safe that he squirreled away a year ago during some routine tests of obsolescent nuclear devices, and he's going to personally plant it somewhere on Skylark."

Hal was stunned, and there was a couple of seconds where he just stared at Crebs before he responded. "He's convinced Pyle of this? Are the bastards crazy? They'll obliterate the asteroid and kill everybody on it. Probably turn the clock back on Belter culture ten years."

Crebs spat out his retort like he'd eaten a green persimmon. "Yeah, that's probably why they considered it in the first place."

"That was fifteen or twenty minutes ago?"

Crebs's eyes flicked down to his console. "That's about right."

"Harvey, has Samuels gated to Skylark?"

Before Harvey could answer, Crebs broke in. "No, I heard him tell Pyle that he would go as an agent but under another identity."

"There has been a jump from the Agency's gate to the Washington terminal, then to the New York terminal, and on to Skylark by an Agent Stanley Singleton. The Skylark jump was five minutes, twenty three seconds ago."

Hal's adrenaline was kicking in. He could feel the shock going away and that timeless sense of flowing smoothly take over. "Will, do you know how to disarm one of these things. I've never been briefed on nuclear devices."

Will's head started swinging from left to right, and Jon spoke up. "I have, but it's virtually impossible to stop one of the damned things without an abort code."

Harvey interjected. "I have accessed the specifications for all operational and recently operational nuclear devices available to the Central Security Agency while you were talking. If it is the previously operational model, I might be able to break the cipher in less than thirty minutes."

"Might, what does that mean?"

"It means that it is impossible to tell. Running through all the possible variables is by definition a matter of probability as to when the correct combination will be encountered. Based on the computational ability available..."

"Yeah, yeah, I knew that. My brain's just jumping around too much. Will, Jon, and Lin, how much time do you think he would have given himself?"

"One hour." "An hour." "An hour, I'd think." They all spoke on top of each other, but they concurred that an hour was a good guess. It was time enough to get off station, and time to get back to the bomb if something went wrong trying to jump out, but not long enough for someone to find the bomb and do anything with it.

Hal wiped his hand across his face. He wasn't sweating, not yet anyway. It was just a nervous gesture, which he was certainly feeling. He agreed that an hour was a good guess. Samuels would have to leave enough time to reset the timer if the gates went down due to damage from the attack. He shouldn't rely on them either. "If I get to the bomb, Harvey, can you tell how long until it will detonate?"

"That will require an induction pickup. There are no visible readouts of the countdown."

"Do we have one of those here on Adam?"

"No, but there is one aboard Eve in the damage control locker. Eve will be back at the Skylark docking ring in ten minutes. I terminated pursuit of the attack vessels when Skylark sent their own security shuttle. I thought it was better than having them see that Eve was unmanned."

"All right. One more question. Have you been tracking Samuels?"

"Yes, Hal. Ever since he got to Skylark. I can lead you right to him."

Hal glanced at each of his compatriots and nodded toward the library table. "You guys talk with Harvey and pull together any equipment we might need. I'm going to bring the damn thing back here if there's more than thirty minutes left on the timer. The library table will be our workbench."

Hal slid open a lower right-hand drawer on the desk and took out an Agency standard issue, drug flechette pistol and shoulder harness. The boron fiber composite Beretta and its plastic flechettes were virtually undetectable by security devices. "Harvey, give me the Eve jump gate."

Hal strode across the room toward the wall screen where they had recently witnessed Samuels's failed attack on Skylark and walked right through it. He was aboard Eve and about five minutes from docking. He took off his jacket and put on the shoulder harness, ran an inspection drill on the flechette pistol, and paced around nervously, the adrenaline still pumping. "Has he placed the bomb yet, Harvey?"

"Not yet, but he is in the refinery section of the asteroid and has asked for directions to the men's showers and dressing room."

"Keep watching. Where's the Damage Control Locker?"

"You really should be more familiar with Eve, particularly the location of the Damage Control Locker."

"No lectures, Harvey. I'm not in the mood. Just tell me where it is."

"On your right."

Hal turned to his right, and was able to reach the latch for the locker without moving. The door was about a meter square with most of its face covered with bold red letters "Damage Control Locker." Hal rolled his eyes in his head and opened the door. The inside of the locker was racked with neatly stowed items, each with a label on the shelf. Hal took out the induction pick-up and put it in his jacket pocket. "Will I be able to get through security with this thing."

"I'll see to it, Hal."

As he was dogging the locker door, Hal felt a small lurch and knew they had docked at Skylark. Thirty seconds later, the hatch slid open and Hal stumbled out into the docking ring corridor. In the best of times it was a gut wrenching experience transitioning from the artificial gravity aboard Eve to the no apparent gravity spin of the station at the docking hub. This time he had forgotten the process in his eagerness to get through the hatch. He floated against the perimeter corridor wall for a moment, while his head stopped spinning, and started off a little steadier, going hand-over-hand toward the security station and the lift shafts. He had to go all the way to the other side of the asteroid.

Harvey was true to his word. No one gave him a second look in security except to warn him that some systems aboard Skylark were experiencing difficulties and to make sure he was aware of the closest emergency pod at all times. The minimal fuss over the attack made Harvey realize again how tough a group Belters really were.

The lifts he needed were on the cylinder wall of the docking ring, providing some gravity, but it was minimal. Hal clung to the "wall" straps, his feet in "floor" loops as he rode officially "South" to the SIR area. The door finally opened, and Hal hauled himself out into the tight spiral of the corridor, which ran close to the docking ring cylinder. Using the handholds and stopping occasionally to get his bearings, he gradually made it out far enough to be able to go into the glide he had been practicing with Linda on Adam. There was a cross-corridor just ahead. "*Which way?*"

"*Left.*"

Hal followed directions until he was at the entrance to SIR. He pulled his Agency card from his wallet, which Harvey assured him would check out as authentic and active, and handed it to the security guard seated across the counter. The guard swiped the card and motioned for Hal to look up into the retinal scanner. Hal saw the green light flash on a panel set into the countertop. "There was another Agent that jumped in before me, is he still in the refinery complex?"

The guard looked up at Hal, and then down again at the console before him. He tapped the screen a few times, and Hal could see the changes in the display, but from his angle, he couldn't really make out what was being displayed. "Yes, sir. I just wanted to check and see if he used any of the other exits. He came in about ten minutes ago."

"Thanks."

"You need any directions, sir?"

"No, thanks."

The door on Hal's right slid open, and he walked into the refinery complex. Unconsciously, he slid his hand up to the shoulder harness, loosening the flechette pistol in its holster. Again, Harvey provided directions, and Hal stopped just outside a door marked "Employee's Showers and Dressing Rooms." He went in and found himself in a small vestibule with two doors. He pushed through the door on his left, marked "Men", with his left hand. His right hand was on the butt of the pistol. There was no one in sight. SIR had probably shut down operations until the damage was fully assessed.

"*Where did he place it?*"

*"I only know it was in this area. He went into the locker rooms with the case, and he came out without it. There are no surveillance devices in the locker rooms."*

That's right dummy, not in the locker room. It was undoubtedly why Samuels chose to put it here. *"Not even a clue? This place is huge. It'll take me forever to find it in here. Look at all the lockers."*

*"If you will look closely, as I have through the lenses on your wrist personal and belt, you will see that these lockers do not have standard key or card locks. All of them have padlocks of a wide variety of shapes and sizes. That must be an anachronism peculiar to Belt culture."*

*"Independent, stubborn, and cautious, but it saves me from having to look in all these lockers. Samuels must've been pissed when he saw the locks, and I'm sure he didn't bring his own padlock."*

Hal walked quickly through the rows of lockers, looking for and opening any that were without padlocks. There was no sign of the bomb, and time was marching on. *"Any ideas?"*

*"It might be possible to detect the bomb using the induction unit in your pocket. It is reasonably directional and might be sensitive enough to detect the activated timing device at a distance that would make it useful."*

Hal removed the induction unit from his pocket and thumbed the on-switch. He swiveled slowly to his right, panning the room.

*"Stop. Go back slowly. There."*

The bottom of the induction unit was pointing through a bank of lockers in front of him. They all had padlocks. He walked to the end of the locker row and made a mental projection from the other side of the lockers to the wall. There was a door marked "Janitorial Supplies." Hal walked quickly to the door. It had a normal cipher lock keypad and card slot. He took out his Agency ID card again and slipped it into the slot. The door lock mechanism clicked, and Hal opened the door. It was jammed with all sorts of janitorial supplies that Hal started sweeping off the shelves and onto the floor. Behind a stack of paper towels was a plain, titanium-shelled briefcase. Hal took it down from the shelf and carried it to the nearby bench in front of the row of lockers. He placed the induction unit in the middle of the case. *"Any place in particular?"*

*"That is fine, Hal. There are forty-three minutes, eleven seconds remaining before detonation."*

Hal snatched up the briefcase, jammed the induction unit back in his pocket and headed for the door. The clock was ticking.

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Scott Samuels stabbed at the button marked "Jump Gate Terminal", and succeeded in losing his grip on the handhold. Of course the lift started moving as he was flailing around in the air, and he was dumped unceremoniously on the apparent floor. Cursing, he managed to pull himself up and get another grip before the lift stopped and then started moving again in its tram mode at a right angle to the docking ring cylinder. The feeling of gravity gradually grew stronger, and the tram-lift started slowing to a stop. The overhead speaker announced that they had arrived in the shopping plaza.

As the door opened, Samuels charged out steaming mad, and as usual he took it out on whoever was close. The security guard that greeted him was the first to feel his wrath. He curtly related to the guard that he was CSA and flashed his ID. "This is not the destination I entered. I was supposed to go to the jump gate terminal, not the shopping plaza. I don't have time for this. I'm getting back on this thing, and I want it to go to the terminal—now!"

"The guard smiled in the face of Samuels's obvious anger. He loved to inconvenience Grounders, and the supercilious ones were an even greater delight. "Sorry, sir, that's why I'm here, the gates are intermittently malfunctioning, and all requests for the terminal are being routed here while the maintenance crews are working on the problem."

"I just jumped in fifteen minutes ago, and the gates were fine. Is there an emergency gate still functional? I have to get off Skylark immediately."

"Hold one, sir. I'll check." The guard turned his back to Samuels and spoke to his wrist personal at a volume too low for Samuels to make out anything clearly. In thirty fuming seconds for Samuels, the guard turned back around. "I spoke to maintenance, sir, and they said that the emergency gate was operational. It goes to London."

Samuels grated out his answer. "It doesn't matter where it goes. Which way is it?"

The guard pointed along the curving row of shops. "About a two minute walk that way, sir. There are plenty of signs."

Samuels took his leave without a "thank you," and the guard smiled as he strode off. He was stopped again as he tried to enter the terminal. "Sorry, sir. All gates are temporarily down. They should be up in a few minutes."

Samuels looked at the new security guard with even greater anger than he had for the first. "I'm CSA, and I was just told that the emergency gate to London was still functional. It is imperative that I get off of Skylark immediately."

"Don't know who told you that, sir, but the emergency gate was the first to go down. They let us out of our suits twenty minutes ago, and it was down then. Ten minutes ago they all went down, but maintenance says they'll be back up in about ten minutes."

Samuels whipped up his wrist, checking the time. "I can't wait, and maintenance estimates are the same everywhere. Which way back to the docking ring cylinder?"

"That corridor there, sir."

Again no "thanks," and again, another guard pleased to inconvenience an arrogant Grounder.

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Linda, Jon, and Will were waiting for Hal as he came through the gate into the study. Hal walked over to the library table and deposited the briefcase. "Okay guys, what tricks did you come up with while I was gone?"

Jon put down his coffee mug and picked up an optical cable and connector. "Harvey has prepared a cipher breaker program. One of the feet on the case here should twist and slide off, giving us a standard optical interface." As he was talking, Walther turned the briefcase around and started checking the feet. The third foot twisted, slid, and popped off, revealing the interface. He jacked the cable in and picked his coffee back up. "That's about all we can do until Harvey determines what failure mode was programmed, or until he breaks all the way through and shuts the timer down."

Linda handed Hal a mug of coffee that he sipped absently. "What do you mean by 'failure mode'?"

"When the timer is set, the device is programmed to either explode or go inert if the countdown sequence is interrupted. Normally, it is set to fail actively. That way, if the device is discovered before detonation, attempts to disarm it by force will set it off. However, there are some tactical situations where a premature detonation would be worse than no detonation at all. Samuels would probably have set it to fail inert, if he thought someone might find it and try to deactivate it before he could get off of Skylark. It's hard to change your character when you're a wuss. I guess Harvey told you that Samuels is still on the station. The gates are down."

"Yeah, he told me as I was taking the lift up to Eve."

Harvey interjected, "surveillance is spotty on Skylark with some systems still malfunctioning, but it appears that Samuels is heading to the personnel section of the docking ring. He must be planning to commandeer a ship."

Hal was puzzled by that piece of information. "What makes him think there are any ships in dock? Didn't they all scatter at the collision warning?"

"You are quite correct. The ships at dock started making emergency undockings shortly after the collision alarms sounded, and continued to do so well into the battle until the dock was empty. Only Eve is currently at dock."

Hal's anger flared. "I'll be damned if he'll escape on Eve."

"That is impossible, Hal. He can neither enter Eve nor affect her controls. If he enters the ship, he is effectively imprisoned. We can bring him here or anywhere else we choose. We also have access through the onboard gate, which is not visible when inactive."

"Actually Harvey, this fits in. My plan was to have you take Eve out from the station far enough to put Skylark and ship traffic beyond any effects from a five-kiloton nuclear explosion, which Jon tells me is the upper limit for these briefcase bombs. If you couldn't crack the cipher, I was planning to jump back to Eve with enough time to jettison the bomb. We'll just wait until he's aboard and he can go along for the ride. If we have to deep six the bomb, Will and Jon can go with me and bring his drugged body back to Adam. If we don't have to get rid of the bomb, we'll have plenty of time to figure out what to do with him. I like it."

Will and Jon nodded their heads, but Linda glared at him. "Why the glare, dear."

"I thought I'd made a stride forward when you didn't tell me to leave Adam with the bomb coming here, but now you plan to leave me out of the action."

"Touchy. There's nothing personal here. It just makes sense to use two trained agents for the tough stuff when you've got 'em. Four people coming through Eve's gate into the cockpit would have us falling over each other. Okay?"

Linda didn't look particularly mollified, but she managed to squeeze out an, "okay."

Hal noticed that Harvey had put the countdown clock on the big screen. It was like watching the last minutes of a close basketball game, but with higher stakes than just winning or losing a game. Thirty-two minutes left. "Harvey, how long will it take for Eve to change vector and get safely away from the bomb once we get it out the dump chute? And we do have a big enough dump chute, don't we?"

"We still have the original jettison tube in the cargo compartment that is more than adequate for the size of the bomb. The sanitary dump chutes were re-designed to use holding tanks during the modifications. At full deceleration, which would be the most efficient method to separate the ship and the bomb, we would require thirty seconds for turnover and three minutes of maximum thrust. That calculation includes allowances for the increased radiation shielding provided by the engines and a small safety margin."

"Okay, if you don't break in by the time the countdown gets to ten minutes, we go."

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Samuels stuck his head awkwardly through the lift door as soon as the lift had synched with the docking ring, and the door had opened enough. He looked quickly around the open space and spotted the security station against the far bulkhead. There was only one guard, who was sitting at right angles to Samuels. The guard's head tilted back, looking in a direction that was up to him at Samuels, who was making his way from the lift. Apparently, there was a greater need for security personnel right now in other parts of Skylark. Good.

He grabbed the handholds by the door and pulled himself into the brightly-lit staging area. As he made progress outward, his feet swung slowly to point toward the far wall and the security station. He lowered himself with increasing effort toward his goal.

"Good day, sir. Can I be of assistance?"

"You can if you can get me off this Godforsaken hunk of rock."

"Sorry, sir but there are no shuttles for hire at dock right now. They all cleared as soon as they could after the collision alarms. The only ship at dock is a private shuttle. Belongs to Selene Industries. Over there at docking bay seven." He pointed up, about a third of the way around the rim wall.

Samuels followed his finger and felt a wave of nausea threaten and quickly turned his eyes back to the guard. He reached under his jacket, pulled out the drug flechette pistol, and shot the guard in the chest. The guard slumped down in his chair, dropping the clipboard he had in his hand. The clipboard fell slowly to the rim wall.

There was a handrail on the rim wall that made it easier for Samuels to make his way around to docking bay "seven." When he got there, he reached under the other side of his jacket to the leather pocket attached to the shoulder harness. He ripped the Velcroed flap open and pulled out a hand-sized device with a small keyboard on one side.

He proceeded to the security door at the mouth of the docking tube. He had a grin on his face for the first time in the last hour. It would be ironic for him to make his escape from this rock in a Selene Industries' shuttle.

At the door, he pulled a card out of the hand-held device that remained attached by a slender cable and stuck it in the slot on the door marked "Access Key." When he pushed one of the keys on the front of the black device, a small screen glowed with whirling numbers and symbols. In about ten seconds the whirling on the screen stopped, and the door clicked open. Samuels muttered to himself, "wimpy lock."

He pushed through the door and used the handholds to make his way down the docking tube. The airlock door to the ship was closed, but opened when he touched the pad labeled "Open." He muttered to himself again, "sloppy security, Hal", and pulled himself into the airlock. The shell door closed behind him. He grabbed the handhold just inside the inner door, and collapsed as his legs swung to the deck of the ship and his hand slipped off the rung. Seems he had forgotten about gravity, and the fact that some ships generated their own.

He swore as he pushed himself back to his feet, grateful for the return to a normal environment. Now, if this ship were reasonably well automated, he could get out of here.

He walked down the passageway toward what should be the bow of the ship and came predictably to the cockpit. He looked around at the teak paneled bulkheads and the gleaming brass fittings and shook his head in approval. Hal had done well for himself. His time for a plush corporate shuttle would come soon.

He identified what he thought was the pilot's seat, because of the keypad and receptacles in the armrest. Other than that, the other two chairs were identically as plush in soft, dark brown leather. He sat in the chair with the keypad. "Is this ship fitted for voice activation?"

He was answered by the dulcet female tones of Eve's onboard computer, even though those systems were offline while Harvey was in control. "Voice activation is the preferred form for instructions. Please state your destination and time for departure."

Samuels eyes quirked up in surprise. No access code. He had been ready to employ his breaker again. "Take me to the Syntech habitat here in the Belt. Immediate departure."

"Certainly. Estimated duration for transit, four hours, twenty-three minutes."

He felt and heard the locking mechanisms disengage as the ship pulled away from the docking ring, but otherwise there was no apparent motion. Good, the ship apparently had full inertial compensation. He should enjoy the trip. He wondered where the liquor locker was. No self-respecting corporate shuttle would be without one, especially Hal's.

As soon as Eve's shell door had swung open, Harvey had put Samuels on the big screen, with the clock still winding down in the upper right. All four of them had roared when Samuels had incongruously been dumped to the deck by the unexpected gravity. Another chitter of laughter went up when Eve's onboard voice responded to Samuels in an obviously sultry voice. Will remarked, "Harvey does have a sense of humor."

Hal quipped a return that he hoped would sidetrack any additional thought along that line. "Yeah, I've had a lot of time since bolting from the Agency to work at making the programming more personal."

They watched Samuels find the liquor locker, which wasn't too difficult, since it was behind two double doors, on the bulkhead just behind the pilots seat. He poured a very large Macallan and sat back down.

Hal saw Will look up into the corner of the screen at the backward scrolling clock, pull out the pistol from under his jacket, check to make sure there was a round in the chamber, and take off the safety. Jon caught the movement and checked his as well.

They sat with no conversation as the clock wound down toward the ten-minute mark. Will and Jon stood up, checked their weapons again, and walked over to the screen. Hal got up and walked over to the bomb, ready to pull the connection and pick it up. The clock reached the ten-minute mark, and Hal reached to pull the connector from the briefcase when Harvey broke the silence. "Hal, I am sorry to report that the timing system has malfunctioned or the programming is not in accordance with the specifications I was able to retrieve for this model of device. The timer has reset at the ten-minute mark to only one minute before detonation."

All eyes went up to the countdown on the screen. It showed fifty-four seconds, fifty-three seconds . . . ; they were all frozen.

Hal recovered first and finished his motion to pull the connector. He picked up the briefcase. He looked at Linda and she nodded her head in the affirmative. Hal knew there was no fear fuzz in that lady's brain. She followed him instantly. He looked at Will and Jon and saw comprehension strike them. He looked up at the screen and walked over close to it.

"How far is Eve from Skylark, Harvey?"

"Far enough for no collateral damage to Skylark, Hal."

Good. There was no moss on Harvey's transistors either. "Give me the gate at twenty seconds, Harvey."

The clock wound down to twenty seconds and the image on the screen blanked out. Hal tossed the briefcase through the gate. The cockpit image came back on the screen.

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Samuels took a long pull on the Macallan and settled back into the soft leather with a sigh. This was the kind of living he was destined for when all this was over. He heard a loud thump behind him and spun around.

Lying on the deck behind him was a titanium-shelled briefcase. He jumped up and ran around the chair, sloshing what was left of his drink over his hand. He picked up the briefcase with his left hand and looked at it with growing apprehension. He dropped the drink on the deck and flipped the briefcase up to look at the feet. Where one of the feet should have been was a gaping socket. He stood there, rigid, and the clock ran out.

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Hal looked up from the row of small oval dishes on the counter in front of him. He was carefully arranging cucumber slices along the side of each dish, leaning them against a pink block of something in the center. Linda moved into the kitchen slowly. She was burdened with two, huge baskets of fresh flowers. There were at least a dozen different varieties and twice that many colors. She deposited them on one of the expansive counter tops. "Hal, I thought the whole dinner was coming in from Duval's. It was your choice."

"The whole dinner except the appetizer. When I came in from Wyoming yesterday, I brought two nineteen-inch brookies with me. There's no better fish on the planet than a wild brook trout. When it's poached, soaked overnight in my special marinade, then eaten with the mildly astringent pucker of fresh cucumbers, it's a gourmet's delight. I couldn't let such a special meal go by without fixing something. Besides, you get to do the flowers."

Linda rolled her eyes and moved to the sink. "Just stay out of my way while I get these in water as fast as I can." She pulled out the Kozuri chef's knife and a small wooden cutting board and went to work whacking the stems off just above their current cut, while the sink filled with water. When all the flowers were in the sink and hanging out all the way around it, she started trimming the stems again and arranging them in the bowls and vases she had placed on the other side of the sink. "Have you showered yet?"

Hal looked up from moving one of the cucumber slices two millimeters along the edge of a bowl to make the spacing perfect and smiled. "Showered and shaved. Just waiting to get this finished before I get into my fancy duds." He reached down and nudged another cucumber over a millimeter or so.

"Well, I'm going to take mine. I sure can't watch you. You drive me crazy with stuff like spacing cucumbers and making sandwiches with the cheese fitting like a jigsaw puzzle."

He looked up with another smile. "Might as well do it right."

Linda rolled her eyes again and headed for the shower.

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Linwood Crebs and his wife Ellen were the first to arrive for dinner. Hal greeted them in the foyer, shaking Lin's hand and kissing Ellen on the cheek. "Glad you guys could make it. This way."

Hal led them down the hall and into the sculpture room. Linda was waiting, standing in front of the pillar of morphing fish. Hal waved an open arm in her direction. "I'd like you to meet Linda Simmons. Linda, this is Lin Crebs, whom you've met only electronically, and his wife, Ellen."

Linda, Ellen, and Lin went through the usual round of greetings and small talk while Hal took orders from behind the bar. When everyone had a beverage, they sat, and Linda was pressed into explaining first the sculpture and then the whole room.

Hal finally got a word in. "So Lin, are you tired of retirement already? Do you want to start next week instead of next month?"

Lin chuckled. "You know I'm not the retiring kind, Hal, but I am trying to take some time to relax and catch up on my eternal list of things to do. Next week's too soon, but I expect I'll be more than ready by next month. Besides, from what I've seen already, you've got Harvey programmed to handle most of the security work anyway."

"That's true, but the company's so big now that I really need a person with a face to manage the security personnel who are scattered over planets, moons, and stations. Somebody to pull it all together as a functioning organization. But, of course, Harvey will be there to help you whenever you want him."

"I could certainly use a drawer full of those mini-bots. They're amazing."

“Without ‘em, we wouldn’t appreciate how politically savvy the Director of the CSA really is. When the Congressional leadership wanted him to suppress the Biofabriken/Syntech fracas, he really showed his stuff. Who would have thought he could force the party to force the President to publicly declare he was not running for reelection? I’m glad he decided to stay at the CSA throttle when they allowed him to pick the replacement for Pyle, and moving Will into Samuels slot was a stroke of genius.”

Harvey’s announcement of more visitors at the door broke up the shoptalk, which was serendipitous for Hal, since he had already been getting eyebrow signals from Linda. Hal jumped up to go collect them. Will and Jon arrived accompanied by guests of the opposite sex. Hal greeted Sharon with a kiss and waited for Jon to introduce his date. He waved them all down the hallway toward the sculpture room.

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Hal was up to his chin in the warm waters of the pool, the Jacuzzi jets sweeping up and down his spine with a monotonous rhythm. “I’m going to put some foot straps in front of these jets. They keep blowing me up to the surface.”

Across the pool from him, Linda opened her eyes and watched him struggling to find a handhold that would keep him in the right position. “I think it’s probably a condition endemic to whales.”

“Whales?”

“Look at that belly poking out. You keep eating like you did tonight, and foot straps won’t keep you down either. You need to get more exercise and eat less.”

“I can work on eating less by myself, but I might need some help with the exercise part. Got any ideas?”

“Yes, I do. I’ve been thinking that we should put in more time for Gaia’s Raiders. Biofabriken and Syntech are just the tip of the iceberg of international corporations that need a refresher course in humanity. Harvey practically runs the business anyway, don’t you Harvey?”

“Hal does appear to be losing interest in the day to day management of Selene Industries, and I am capable of more latitude than he currently allows.”

Hal was still struggling to hold his body against the pressure of the jets. “Intriguing my dear, but not what I had in mind.”

Linda’s eyes sparkled with mirth as she paddled her way across the pool to Hal and slid up on top of his floating body, her arms going around his neck. “What did you have in mind?”

“Well, I was thinking maybe I could start playing tennis again with Lin. Nothing like tennis for a full body workout.”

Linda’s arms came down hard on Hal’s shoulders, and he sank to where the jets were pounding on his head. “You’re so cute.”