Liberation spectrum

By Cory Doctorow

The tiny multinational lumbered across the Niagara Falls border in its tour bus, Lee-Daniel at the wheel, sipping iced mocha from the flexible straw threaded through the eyelets on his jacket. All the way since the Akwesahsne debacle, he'd been steadily consuming the lethal blend of bittersweet chocolate and espresso and reciting mnemonic sleep-dep chants. But after twenty straight hours he was in deadly danger of falling straight to sleep and head-onning the bus into a Jersey barrier. Or a bullet train. Or a minivan.

On U.S. soil, he pulled the bus over at a temporary roadhouse and set the handbrake. He eased off the driver's perch, chafing his narrow ass to get the blood flowing, and gave forth a drawn-out "gaaaah" as pins and needles stabbed his sweat- marinated muscles. He heard the multinational rousing itself behind him. First, the major investors in the front row. Then the rest of the board of directors in the row behind them. Then four rows of middle managers and finally the great mass of frontline workers, techs, customer service reps, troubleshooters, antennamen, switchwomen, chicken pluckers and left-handed bottle stretchers.

Lee-Daniel flipped the windows to transparent and let the sun shine in, provoking groans from the corporation. MacDiarmid, the angel investor who'd been in since the multinational had been able to fit in a sedan, threw a strong arm around Lee-Daniel's shoulders. "You OK?" he said. The tone had phony solicitousness. MacDiarmid had been a stand-up guy through half a dozen disasters, from hostile takeover attempts to roadblocks to high-speed engine failure, and Lee-Daniel knew a fake when he heard it.

- "I'm fixing to lay down and die," Lee-Daniel said, stretching theatrically, his pipe-cleaner arms straining.
- "I'm street-legal in New York," Mac said. "How about I drive the bus for the next couple shifts?" His black hair was showing grey now, but his eyebrows were still fierce and black, his eyes still sharp in their nest of whiskey-cured crow's-feet.
- "No!" Lee-Daniel said. He never ceded the wheel -- it was his damned company and he'd drive the damned bus. Lee-Daniel saw the shareholder confidence eroding before his eyes.
- "Just for a while, OK? Not permanent, just for a day or two, just long enough for you to get over the sleep deficit and regrow some stomach lining."

It was hard being the CEO of a mobile multinational. The shareholder oversight was murder. "Come on, Mac," he said. "I can drive the bus. One thing I can always do, I can drive the fucking bus."

MacDiarmid looked closely at him, then smiled and gave him a burly man-hug that smelled of sandalwood soap and good liquor. "Yeah, of course, of course."

"Thanks, Mac," Lee-Daniel said. "How about we get some eats?" He put his hand on the geometry reader beside the wheel, re- authenticated to the bus, then hit the hatches. Doors hissed open at the back, at the front, at the middle, fresh dusty air rushing in all at once in an ear-popping whoosh. The bus knelt ponderously and the company piled out.

MacDiarmid hustled away to join the rest of the investors, his exquisite handmade leather shoes slapping the paving, the cuffs of his wool tailor-made

slacks shushing over their gleaming uppers, and as Lee-Daniel locked the bus down and armed it up, he watched the angel investor whisper in his co-shareholders' ears. Lee-Daniel couldn't hear the words, but six years at the wheel of Cognitive Radio Inc. had schooled him well in the body language of investors and he knew his days with CogRad were numbered. The roadhouse was the kind of TAZ that got less entertaining by the second. Lee-Daniel stood in the blinking vegaslights for an eternity while he authenticated to the roadhouse-area-network, surrounded by generic ads while the giant vending machine figured out who he was and what to sell him. Once the wall spat out his token -- poker chips adorned with grinning, dancing anthropomorphic dollar, euro and yen symbols -- the walls around him leapt to delighted life, pitching their wares hard. He struggled with the rest of the corporation to make out the actual nature of the products behind the pitch and locate a tuna-melt and wave his chip at it.

The sandwich appeared in a slot by his feet and when he bent to fetch it, he was bombarded with upsell ads set into the floor tiles: "Lee-Daniel! People who bought tuna-melts also bought thousand-hour power cells. People who bought OralCare mouth kits also bought MyGuts brand edible oscopycams. People who bought banana-melatonin rice-shakes also bought tailormade sailcloth shirts by Figaro's of London and Rangoon."

It only got worse then, as he sat down at a crowded table with middle managers in need of reassurance, while swatting away the buzzing aerostats that probabalistically routed towards those diners with the highest credit ratings, delivering pitches whose tone and content had been honed by genetic algorithms that sharpened them to maximal intrusiveness and intriguingness. It took vicious, darwinian computation to make a high colonic sound like an afternoon at a spa.

"No one else will say it," said Joey Riel, a 17-year-old Metis whose fluency in English, French and Ojibwa had made him the youngest middle manager in CogRad history, eight months before. "So I will. That was fucked up. Too fucked up."

His griping had been constant since his promotion up from antennaman and getting caught between the Mohawk Warriors' plan to seize the radio spectrum on their territory and the trigger-happy Provincial cops had only intensified it.

Further down the arcade, the investors were waving their tokens over a trading table, playing the instant futures market. An aerostat overhead mirrored the gameplay, and as Lee-Daniel watched, MacDiarmid doubled his money on a short-odds bet on two cherries and a lemon, then Earnshaw lost big when his long-odds investment on uranium and coal came back with two windmills and a photovoltaic array.

"Amen to that, bro," said Elaine, who ran the surveyors. She was all lean muscle and blackfly repellent and mail-order outdoorwear, handily capable of living off the land for weeks while trekking the bush, homing in on optimal repeater locations. At the Akwesahsne Sovereign, she'd broken the hearts of a half dozen starry-eyed Mohawk Warriors who'd puppydogged after her as she shlepped the length and breadth of their territory, warchalking neon arrows to indicate RF shadows cast by especially leafy trees and outcroppings of granite Canadian Shield. That was before the Sûreté du Québec arrived on the scene and it all went pear shaped.

"It won't happen again," said Mortimer, the security man. Lee-Daniel had been protecting the old dodderer from the board of directors, who saw him as an insurance nightmare. Mortimer's hands shook, he was nightblind, and he was 98

years old, and there wasn't enough rejuve in the world to give him the mental flexibility required by the modern age. Lee-Daniel had stripped him of his sidearms, even the nonlethals, at the same time as he'd promoted Joey Riel. Now Mortimer carried a loudhailer through which he could bark orders in his old cop voice, the voice that made your asshole clench up and your shoulders itch for a soon-come bullet.

The investors howled again, and the aerostat told them all that MacDiarmid had cleaned up bigtime, paying out 100-to-1 on an investment in Shell Oil collectibles -- two derricks and a shell. The Series A/Series B investors crowded around him, giving him awe-struck backslaps. The other two might be the fronts for gigafunds, but that was all they were: fronts. They were the Voice of the Money while the company was on the road, junior associates who needed to make a good score on their wanderjahr if they wanted to make partner. Mac was solo money, a shrewd individual investor who'd acquired his 15-share in CogRad with no more investment than a year's worth of gas and roadhouse meals while Lee-Daniel was getting the show on the road.

"The Mohawk Warriors are right: The rich get richer and the poor get children," Joey Riel said, shaking his young head at the investors and the board carrying MacDiarmid off to a private dining room for their dinner and nightly board meeting.

"Those Mohawks got you all full of bolshy horseshit, didn't they?" Mortimer said. The Mohawk Warrior Society talked a good anarcho-syndicalist line.

As far as most of CogRad's customers were concerned, tax-free packets were the new tax-free cigarettes. The Mohawk Warriors on the Québec/New York border were in it for the samizdata. They had big plans for their cognitive radio network. They'd peered with two upstate New York networks and an Algerian satellite backbone, and they were reselling enciphered proxy time on their network to anyone who wanted it, providing an anonymizing relay for any and all data, regardless of origin, destination or payload.

Lee-Daniel knew he should have gotten them to pay upfront. Nothing got the blackshirts interested in private wireless networking like routing suspicious real-time chatter between Burmese guerrilla cells and suspected movie swappers in DC. But that wasn't how CogRadio had been built. The native bands that were desperate enough to assert that their ancestral treaties didn't encompass the RF spectrum couldn't afford to lay out cash for CogRadio's hardware, training and remote administration. CogRadio was as much a bank as a technology start-up.

The Canadian government took a hard line on anything that looked like separatism. Two CogRadio employees who'd been unlucky enough to get stuck on the wrong side of the barricades would rot in a Canadian pen for 10-to-15, eight with good behavior. Keeping the corporation's respect after that clusterfuck was killing Lee-Daniel.

With the investors off out of sight, the managers and the frontliners shucked their veneer of civility and began to get wild, invalidating their health insurance with carbo treats. Elaine sucked down three tequila cartons and glared bleary hostility at him.

"If you had any fucking guts," she said, mangling a carton with her strong, scarred hands. "If you had any fucking balls, we would have gotten everyone out. They were my people and you wouldn't stand up to those shitheels," she jerked her head at the investors' private room, "to save them. All you care about is the goddamned money." The smell of old sweat and booze made his eyes water.

It's a business, Lee-Daniel said inside his head, biting his tongue. Where do you think your goddamned paycheck comes from?

Mortimer hitched himself erect, creaking up from his seat. "That's enough of that," he said in his cop voice, laying a still-strong hand on Elaine's shoulder. "If you don't like your job, you can give notice, but you'll keep it polite as long as you're working here."

Elaine tried to shake his hand off, but he kept his grasp firm. Lee-Daniel had been through one or two of these in the first year, and he knew that Mortimer knew what he was doing. Things could get awfully heated up at times like this.

"You're hurting me," Elaine said. "Let go."

"Apologize to the man," Mortimer said, the voice of authority. "You're out of line."

Joey Riel leapt on Mortimer's back, his arms locked around Mortimer's neck. "Don't you touch her, you pig," he hissed. Mortimer took hold of Joey's thumb and twisted it into a come-along and Joey let go, dancing around and clutching his hand.

"You broke my fucking thumb!" he said, and then Elaine was on her feet, shouting incoherently, right up in Mortimer's face, darting her head at him like a striking cobra. The frontliners broke off their gaming and boozing and necking and rushed over, hooting for blood.

Lee-Daniel felt the old adrenaline, the "leadership" brain-reward that he got when it all came down to a crisis. He jumped up on their table, scattering their dinners' active packaging, which curled and waved as it flapped to the floor, cycling through its upsell ads.

"Enough!" he roared. It wasn't a cop voice, but it was a voice nevertheless — the voice of the man who signs the paycheck, the disappointed father who was going to turn the bus around and take the company home this instant if he didn't get respect. Lee- Daniel didn't have to use that voice often, but its rarity was part of its effectiveness.

It didn't work. Elaine still shouted, Joey Riel was digging through the drifts of trash for a weapon, and the frontliners were still cheering their bosses on. "Enough!" he said again, just to check, but it didn't work any better the second time around.

He got down off the table and circled Mortimer, who had the mic for his loudhailer clipped to his belt. Lee-Daniel snatched it up and hit the Talk button, dialing the volume up to max with his thumb.

"Enough!" he said, and the loudhailer amplified his voice to staggering volume. At max, it was meant to be used to signal passing aircraft. Inside the vending machine's claustrophobic bowels, it was like a bullet ricocheting through their skulls. Some of the more delicate antennamen dropped to their knees, their hands clutched to their heads, and Mortimer staggered back into Lee-Daniel, nearly knocking him off his feet.

Lee-Daniel cut the volume in half and hit Talk again. The company shied back when the speaker array on Mortimer's bandolier popped to life. "All right, enough. Company meeting. Get chairs, sit on the floor, whatever. Right here, right now." He handed the mic back to Mortimer, who wiped it down with care and clipped it back to his belt.

He gave Mortimer his poker chip. "Get a bag of ice for Joey," he said. "And thanks, man."

Mortimer gave him the cop stare and trudged off to one of the vending banks and started prodding methodically at its display.

"All right," Lee-Daniel said, again, looking into the expectant, upturned faces of his company. "All right.

"No one is happy about Akwesahsne, all right? I take responsibility. We're wireless hackers, not guerrillas. We're not going to get into that kind of situation again." Joey Riel turned around and stalked to the back of the roadhouse. "Nothing is worth endangering the safety of the employees of this company." Lee-Daniel thought of his investors and their relentless push for more.

"That said, If you want your options to be worth something, someday, this company's going to have to grow. We've been growing at 20 percent per quarter for the past three years, and that's right on track. Maintaining that growth is going to necessitate excursions out of the USA. We'll be going back to Canada -- better prepared, wiser, more cautious -- but we'll be going back. The Caribbean, too. South America and Mexico. I shouldn't have to tell you that radio has no borders. Wherever there's unencumbered spectrum, we'll be there. There's never going to be a 'routine' job, whatever that means. Every job will be different. If you're looking for a 'routine' job, you're in the wrong business.

"We're headed for the Seneca Sovereign in Cattaraugus next. There'll be a week of R&R there: fishing, hunting, gaming. They have a decent theater there that's doing a Beckett revival, and I've got half-price tickets if you want 'em.

"Half-price tickets for those who stay, that is. Because I want to make one thing clear: If you don't like the way I run this company, you shouldn't put up with it. Give me your notice, I'll cut you a check and you can get lost. That's your remedy. That's your only remedy. I'll be sitting right here, any of you want to give your notice tonight."

He sat down at a table and helped himself to someone's carton of crantini, gave it a shake to cool it down, then took a nonchalant sip.

The silence was broken by the door to the investors' dining room hissing open. The Series A investor stepped out into the chaos of the main concourse and crooked a finger at Lee-Daniel.

"We'd like to speak with you, if we may," he said. Akwesahsne was supposed to be a cakewalk. The Canadian Radio and Television Commission -- Canada's RF feds -- were softies, more worried about ensuring that 30 percent of the entertainment product on the airwaves was "Canadian Content" than with monitoring ultra-low-power, ultra-wide-band cognitive radio experiments in rural Québec. The Mohawk Warrior Society, whose reservation was a Siamese twin with another rez in upstate New York, were accustomed to the American way of doing biz, had even underwritten MBAs for a bunch of the bros, which explained the animated growth charts back-linked to hundreds of diverse spreadsheets maintained by research committees across the continental Mohawk Nation infrastructure.

The Mohawk Warriors had raised consciousness. The road signs pointing the way to the rez were augmented with handpainted signage reading "Indian land," and

"Sovereign territory."

The CogRadio magic bus pulled up to the guard in the pillbox at the Akwesahsne main gate, abuzz with new-gig energy, the anticipation of thirty skilled professionals who'd been crammed into a bus for four solid days, ready to tear each other's throats out. The gatewoman was all of 17, not that you could tell at first, so crufted up was she with obsolete martian armor/arms and sensory array.

But once she came onto the bus for her customs inspection and removed her immersive headgear, it was obvious that she was no older than the switch girls who drifted in and out of the CogRad bus, using it as a means of making a little e-gold between footloose adventures in the Great American Heartland.

A 17-year-old with a defensive array of fast-acting anti-serotonin misters was a lot less threatening than a 30-year-old would have been, and orders of magnitude less terrifying than a similarly armed innovation-sick 50-year-old would have been. Joey Riel came forward, stinking of something between sweat socks and Doritos, and greeted her in familiar, colloquial French, something flirty by the sound of it, and she gave him a wry, patronizing smile.

"Why do you speak French, Brother? Why not greet me in Kanien'kéha, or Cree, or even Ojibwa? When we speak whiteman words, they make us think whiteman thoughts." She turned to the bus and gave them a long stare. "Hello, whitemen," she continued, "hello, whitewomen. Welcome to the Mohawk Warrior Society autonomous zone. No weapons. No sex with First People. No drinks or drugs. No whiteman tobacco."

"Cook your own meals, wash your own plates, step lightly on the land. You can observe our nightly meetings if you are respectful, but it's more important that you come to the seminars afterwards. There are lectures, role-playing exercises, personal storytelling, theater of the oppressed, newsblogging, warblogging, linkblogging, puppetmaking, outreach, filterbusting. Whiteman guests are welcome here, provided that they're willing to help the cause."

Lee-Daniel had heard variations on this speech before, but they usually came from hotheads who argued against renewing CogRad's maintenance contract, not the official greeter before they'd even started the gig. He knew well enough to take it in stride and move on, but Joey Riel was blushing furiously at having been shot down for insufficient indianity by this highly macha hottie, and so he waved some verbal dick, asking something in Ojibwa, all testicular.

She fixed him with a withering stare. "You're not the first apple I've met," she said. Apple -- red on the outside, white on the inside. "And you're not the most pathetic. But you're an apple and you've forgotten who you are, and that means that you don't mean anything to me except a sad story and a warning to other First People."

Joey Riel's hands balled up into fists and the investors shifted nervously. Lee-Daniel got to his feet and interposed himself between them.

"Ya-tay-hay, madam," he said. "Thank you for your welcome. Can you tell me where I should park the bus? We've got a lot of work to do today, while there's still light to work by."

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[&]quot;You need to understand, it's not personal," MacDiarmid said, for the third time.

Lee-Daniel set down his ridiculous second-hand crantini carton and climbed slowly to his feet. "You need to understand, Mac, that I don't care if it's personal. Whether you're forcing me out of this company, this company that I built with my own two hands, this company that is hitting every goddamned milestone, this company that is returning good dividends on your preferred stock, whether you're forcing me out because you're not my friend anymore --" he said this in a pinched, Mickey Mouse voice "-- or whether you're forcing me out because you think that it's 'for the best' doesn't matter to me at all. I don't care if you're doing it because you're protecting your investment or because your astrologer told you to, I still won't stand for it."

The Series A and Series B investors, who'd started off looking uncomfortable, visibly squirmed during this. They weren't accustomed to interpersonal conflict in the course of conducting their affairs. But Mac took it all in stride. Angels have to be prepared to slug it out to protect their investment.

"You don't get to stand for it, LD," MacDiarmid said, sipping at a frosty can of slushy ginseng-infused Long Island iced tea. "You don't get a say in it. When the investors are united, you don't have the equity to overrule us. The severance package is generous, the noncompete is lightweight, and you get to go with your dignity intact." He didn't need to add that fighting the board would mean a significant change to that picture. Fuck them and their noncompetition agreement, though -- Lee-Daniel knew that enforcing a U.S./Canada noncompete would be tricky on Sovereign Indian territory.

"What'd they promise you, Mac?" Lee-Daniel asked. He'd shrewdly chosen his investors for their mutual animosity, believing that bitter enemies like the Series A gigafund and the Series B terafund would never come together, and that Mac, who'd been screwed on deals by principals from both funds, would never toss his lot in with them. "What do they have that's worth your throwing away this entire investment?"

"No one's throwing away anything. There comes a point in any business's life cycle where the founders get out of their depth and we need to transition in a professional CEO. You've done a good job with CogRad, LD, and we recognize that, but if we're going to ensure steady growth, we need seasoned leadership."

"Seasoned?" He barked a laugh. "Mac, I invented this business! We're five years ahead of our closest competitors -- who only got that far by copying stuff I invented. Who the hell could possibly be more 'seasoned' than me?"

"You've never run a Fortune Five company," the Series A man said. "You've never had more than fifty people working under you. Executive search firms --"

MacDiarmid waved at hand crusted with three class rings at the gesticulating Series A punk, who barely looked old enough to smoke. He'd only been out of B-school for a year and he'd only been on the bus for a month, but here he was, telling Lee- Daniel that they'd blown corporate funds, money he'd earned, on a slick-ass headhunter who'd spent it getting old frat brothers laid at fancy hotels on Hawai'i while negotiating how much of Lee-Daniel's company they would end up with once they stole his job from him.

The punk shut up.

"Mac," Lee-Daniel said, sitting down again, pulling up a chair. "Come here, Mac, take a seat, talk to me. I want to hear this from you, from the beginning."

Mac stood, exchanging significant looks with the Series A and Series B

investors.

"Come on, Mac, screw that. You and me, end-to-end." That was CogRad jargon from back in the old days. The Internet was end-to-end, which meant that any two points could communicate without an intermediary interfering in the bitstream. In CogRad, you didn't talk person-to-person or man-to-man, you talked end-to-end, just like the connectivity they brought to the rez. "I own 15 percent of this company, same as you -- you owe me a decent explanation."

MacDiarmid stood fast.

"Get in the fucking chair, Mac," Lee-Daniel said, hating the whine in his voice. "If you want me to go along with this, get in the fucking chair.

"Mac, I'm sorry. Sorry if I flew off the handle. I'm a grown-up, you're a grown-up, and we both care about CogRad. Get in the chair and tell me about this. Please."

MacDiarmid sat.

"Listen up, LD. This is a great business, and a great company. Be proud, because you started something fantastic that will grow and grow.

"But I am saving your life. You're burned out. You're making bad decisions that threaten the lives of your people. You can't even let someone else take the wheel when you're nodding off. You can't keep this up forever. Rate you're going, you can't keep this up for another six weeks. If I thought for a second that you'd take orders from someone else, I'd offer to keep you on as COO or VP of Research and Development. There's no way, though -- you're like Napoleon on campaign.

"You're great at the dirty work. You can get a crew onto a rez, get the terminals sited and installed and burned in. You can boss a bunch of egomaniacs and social retards on long road trips. That does not scale, LD. There aren't enough Lee-Danielses to boss all the buses we're going to field. A real CEO doesn't make every single decision there is to make.

"You want it straight. You want it end-to-end. It's come down to your ego versus our return on investment, and your ego loses. We're settling into the next phase, going abroad, and that requires a professional touch. If Canada ends up in a firefight, what'll it be like in Guatemala?"

The Series A man snorted a nasty chuckle and Lee-Daniel gripped the arms of his chair as hard as he could to keep from slugging the punk. Lee-Daniel and his people work around a lot of surveying constraints. At the Moapa River Indian Reservation, the burial ground was freaking perfect for a repeater-array, with a commanding view of the entire goddamned rez. The Paiute elders loved the idea of getting out of the cutthroat slots biz, loved the idea of leveraging their airwaves into a telco that could handle the secure comms for every one of the casinos that they used to compete with.

The money couldn't come at the expense of the burial ground. No CogRad surveyor crew was going to head up there and start hammering in stakes for the repeaters.

The Akwesahsne Warriors took the cake. A fat, middle-aged man in camou fatigues decorated with pow-wow badges who called himself "Meatloaf" briefed them with a topo map of the rez in the school auditorium, and they sat around it in the fading light of the sun that streamed through the steel-reinforced windows.

"The areas that have Post-its are strategic. No one except a Warrior goes within 20 meters of these."

"Sixty feet," Lee-Daniel translated for the surveyors and the antennamen, who were products of the American educational system and hence impedance-mismatched with the entire metric-speaking world.

"Sixty feet," Meatloaf said. "You'll know you've gotten too close if you find yourself at the bottom of a ten-foot pit with two broken legs. Don't go near the strategic areas, OK?"

Elaine stood up and began to pace the map's length. She unsnapped a laserpointer from her gearpig bandolier and began to hit each strategic area in turn.

"All the high ground, right?"

Meatloaf nodded.

"The perimeter, too, right?"

He nodded again.

Elaine gave Lee-Daniel a look, then ran the dot of her pointer over each of the strategic areas again. Some of the surveyors groaned and whispered to the antennamen and the switchgirls.

Lee-Daniel cleared his throat. "Meatloaf," he said, "all respect, but well, this won't work. Our radios operate on line of sight. If we can see it, we can shoot it at half a gigabit a second -- slower if there are a lot of leaves and stuff in the way. If we can't see it, we can't shoot it. Zero bits per second. We need high ground, we need perimeter, otherwise we're just wasting your time."

Meatloaf shook his head. "Radio radiates. I can't see the cell tower, but I can still reach it with my phone."

"That's dumb radio," Lee-Daniel said. "If we want to have a conversation and we're out of sight of one another, we can communicate, but only if we shout. That's fine for us, but it's not so good for the people between us, right, Mortimer?"

Mortimer, who'd been through one or two (hundred) of these demos before, took his cue from outside the doorway, hitting it with the loudhailer dialed up about half way. "Right," he said.

"That's how dumb radio works. You had a bunch of bands that you could communicate in -- cellular, TV, AM, FM, cops, air traffic, whatever -- and rules and licenses for each, governing how loud everyone gets to shout." Taking their cues, the CogRads started to gabble all at once, in stripes through the ranked chairs, saying "AM AM AM" or "TV TV TV" or "cellular cellular cellular."

"Smart radio -- cognitive radio -- is much more clever. Instead of shouting loud enough to be heard across the entire distance, cognitive radios cooperate with one another. When I need to talk to Mortimer, I first check around to see what channels are least occupied and most close to me, then I send my message to the best candidate." He turned to Elaine, who'd come to stand by his shoulder. "Tell Mortimer that it's time to come back," he said.

Elaine turned to a switchgirl who'd positioned herself a few feet away and said, "Tell Mortimer it's time to come back," she said.

The switchgirl turned, but the next person in the chain, a customer service rep, had his phone headset in and was having a hushed support call -- it was faked, just part of the script, but he gave a good impression of helping someone tech a network problem at a distance, tracking a nonexistent support script across his HUD and prodding at the air with a dataglove.

"Aha," Lee-Daniel said, "here's where it gets tricky. What if one of the radios between us is too busy to relay a message? We've got two options. We can wait -- which we'll do if we have to, but it adds latency to the message -- or we can find an alternate path."

The switchgirl -- a network engineer he'd hired himself from a backwater DeVry at a job fair in Tulsa, who ran a little to fat but was still broad-shouldered from her time on the rowing machine she shlepped compulsively from gig to gig, facts that Lee- Daniel could recall with ease even if he couldn't remember her name -- turned back and passed the word onto a surveyor who was standing a little ways out of the way, who relayed it to Joey Riel, who was by the doorway, who stuck his head into the corridor.

Mortimer sauntered back into the auditorium. He put the mic to his lips and boomed "You want something, boss?"

Lee-Daniel clamped his hands to his ears along with the rest of the crew. "No need to shout," he said to Mortimer. "Is there?" he said to Meatloaf. "So, what's the critical path, Mac?" Lee-Daniel asked. "Who's going to run this circus between tonight and your executive search coming through with an empty suit to sit in the driver's seat?"

"We thought you'd stay on, LD, help with a smooth transition."

"Why would I do that?" Lee-Daniel said.

The Series A and Series B investors watched them like a tennis match, silent, eyes shining.

"Why don't you two get us a couple beers, OK?" Mac said to them. They mooched off petulantly.

"LD, this is a company, not a calling. I want you to stay on -- even if they don't -- for a couple weeks because that's the best thing for the company. If you train your successor, it'll get us onto the curve and we'll make more money. You'll make more money. We're not dismantling this company, we're making it bigger and better and more important. A thousand buses, a thousand crews, unwiring as fast as they can go. Lobbyists working for spectrum reform. People with good haircuts and suits who don't talk about 'liberation.'"

Mac was telling the truth now, not that it helped. Lee-Daniel had built himself the ultimate geek job, doing work that mattered and not rotting in a cubicle prison. Staying on would be the best thing for the company, but it was the company now, not his company. Not anymore.

"What's in it for me, Mac?"

Mac leaned in close and whispered fiercely. "You're the wrong man for this job. Whatever you end up doing, it's going to be easier if you have some cash in your pocket. They don't want you to stay, but I put myself on the line,

because it's in the company's best interest. I didn't do it because you're my buddy. You might not be my buddy anymore. I don't like that, but that's business. We can make this company really big -- you'll be able to retire on your share in 18 months if we go according to plan. We'll raise 10 billion on IPO if we raise a cent, you just watch. I've been through this, LD, and I know what a success smells like. This will be a success -- your success -- if you play along. If you don't, well, we could all end up in the shitter. Canada was the last straw for them. We either go on without you or we don't go on at all, do you understand?"

The Series A and Series B men returned with a couple of novelty beers in aerosol cans. Mac and Lee-Daniel sprayed their throats with the brew and swallowed, making faces. This was high style in the circles the Series A and Series B men traveled.

"I see," Lee-Daniel said. "So I either walk out of here as interim CEO, knowing that I'm gone in a couple weeks, or I walk out of here fired. Is that the deal?"

"That's the deal," the Series A man said. "And I don't see anyone offering anything better."

MacDiarmid gave him a shut-up-asshole look, then spread his hands out.

"When I raised money from you, we did it over the course of several weeks. We talked to lawyers. They exchanged documents. I don't think it's reasonable for you to expect me to sign anything now without at least consulting a lawyer."

"You want several weeks?" the Series A man said, with mock incredulity.

"Half an hour," Lee-Daniel said. "I don't think that's too much to ask."

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Akwesahsne was just the sort of woods that the CogRad gear thrived in. Within a week, the entire rez would be unwired at 500 megabits/second, enough connectivity to move whatever data they could find a use for. The Warriors were resentful at first, but they came around.

Lee-Daniel went out with a crew that Elaine was leading, up on the northern border of the Sovereign. She had two junior surveyors with her, all of them loaded with positioning gear that tied in to Galileo, the European GPS network — the Galileo gear cost a fortune, but they'd found that their American GPS kit often mysteriously stopped working when they were working on projects in the territorial USA. They'd ordered the Euro stuff from a bunch of anti-globalization activists who'd found that the same thing happened in any city hosting an economic summit. Europeans were more likely to treat infrastructure as sacrosanct, while the U.S. was only too happy to monkey with GPS for tactical reasons. The Series A man hated the expense of the Galileo gear, hated paying off crusty-punk Starbucks-smashers for critical tools, hated the optics of looking like a bunch of anarchists instead of a spunky start-up.

The surveyors and the Warriors kept their distance as they set out, one Warrior leading and one bringing up the rear. Elaine called for a break every five or ten minutes to check her location against the map and to hammer down an RF beacon that would serve to measure the drop-off over the terrain as they hiked. She used binox with an integrated laserpointer to check the distance and clarity to remote points, and a squealing handheld brick of oscilloscope gear to measure the crossover of the other beacons on the hill. All the while,

she muttered down her cellphone's headpiece with the other crews, making sure they weren't overlapping or diverging too widely, keeping everything squared with the maps on her screens and in her head.

The woods had a high canopy, which was good news. When they started out, they'd focused on getting above the leaf line, since leaves badly scattered RF signals, but they'd ended up with networks that were only reachable by people who were twenty feet off the ground. They'd blown a fortune downlinking the relays to ground-level stations with omnidirectional antennae.

But then Lee-Daniel had had a brainstorm -- build the network below the leaf line. Heavy canopy starved out any foliage that grew below the treetops, leaving a clear line of sight (modulo the tree trunks, which were largely RF transparent) on the forest floor. That pushed CogRad from a theoretical project to a real success.

The frontmost Warrior, a girl of about 16, started off treating Elaine's halts as a nuisance, but after the fifth one, when Elaine unshipped a high-sensitivity digital altimeter, the girl's curiosity overcame her, and she crowded in close to watch Elaine work. She didn't say anything, but thereafter it was clear that she was fascinated by Elaine and her masterful use of all her toys, bangles and bobs. As Elaine stalked through the brush with her face stuck in the output from her various instruments as it scrolled along her wireless clipboard, the girl kept reaching out to steer her clear of the camouflaged tiger pits the Warriors defended their turf with.

Elaine was like a magnet for teenaged girls -- competent, beautiful, in charge. At the next stop, she handed the girl a can of pink spraychalk and directed her to mark the sightlines. The girl almost dropped the can, but then recovered and puffed up a bit, marching off to lay down the hot pink lines. The Warrior at the rear, a man of indeterminate age who wore a camou balaclava, rolled his eyes, but that was OK; Lee-Daniel was figuring out a way to get him engaged, too.

At the next stop, a bare ridge that overlooked the woods on one side and the public highway on the other, Lee-Daniel tapped the other Warrior on his shoulder, then gestured at travois on which Elaine's juniors had been hauling their satellite tester. He cocked his head, then bent down to take one end, and the other Warrior fell in at the other end. The two juniors looked relieved and hitched up their packs, breaking out protein bars from their belt pouches.

And so it went. By the time they reached the next ridge, the girl ("Mermaid") had introduced herself, and the man ("Cobra") had done likewise, removing his balaclava to reveal a middle-aged face handsome but for the deep acne scars.

And so it went, for all the CogRad crews, who'd never had explicit training in making friends with the locals on a gig, but who had learned from the example set by Lee-Daniel and by the middle managers who'd learned it from him.

Elaine gave Mermaid a cheap theodolite with an integrated compass, GPS and altimeter, and a little booklet on how to use it, and the next time Lee-Daniel saw her, she was leading a group of even younger girls on a series of surveying missions around the Indian School. Elaine never had to do near-field surveys -- she'd always get them free child labor for any settled areas. Lee-Daniel liked the idea that the people they connected were learning to work their own gear. He liked the idea that the people they connected were better for it. "Privacy, please," he said.

"We're standing all the way over here," the Series B man said, from the across

the little table. "How much more privacy do you want?"

Lee-Daniel shook his head in exaggerated disbelief and then MacDiarmid led them back out to the communal area.

Once they were gone, he opened his phone and logged in to the administrative overview of all of CogRad's networks. There was the Akwesahsne net, still thriving. About 20 percent of the terminals were offline, but the remainder had picked up the slack. He wondered how well camouflaged they were. He wondered if little girls with toy surveying gear were currently chalking out new locations for more terminals.

The network was alive with chatter from every corner of the rez, as the Warriors coordinated with the press who'd come to cover the stand-off.

He called Meatloaf.

"What," he said. In the background, Lee-Daniel heard loudhailer-distorted speech, choppers, curses, panting.

"The network, it works good?"

"It works good," Meatloaf said. "They're trying to take it down. That must mean it's the right thing."

Lee-Daniel paced the small dining room. The table was littered with legal papers, papers that severed him from his business.

"They're taking them down?" Lee-Daniel said.

"Yes, but we're putting them back up. You left behind extras."

"What will you do when those run out?"

"Buy more," Meatloaf said.

"Don't buy them," Lee-Daniel said. "I can show you how to build them. It's not hard."

"Where are you?"

"Upstate New York. Near Buffalo."

"If you go to St. Regis, east of you, they can get you into Akwesahsne."

Lee-Daniel's muscles throbbed with exhaustion. He felt the phone slip in his slick palms and he gripped it tighter, almost squirting it watermelonseed. He hacked a deep breath.

"St. Regis," he said.

"I have to go, " Meatloaf said.

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"I don't like this," Mac said, the last morning in Akwesahsne. The CRTC choppers had been buzzing the rez for three days now -- at first a few and then growing swarms of buzzing radio-cop helicopters a-bristle with antennae. "I don't like it and I want to get gone."

"I don't like it either," Lee-Daniel said, watching the encrypted RF chatter from the feds spike across his wireless clipboard. They were sitting in a couple of folding chairs by the side of the bus, eating hard-boiled eggs and drinking self-heating tinned coffee, waving away the buzzing clouds of blackflies.

Half a dozen Warriors stood by the cinderblock community center, eyes on the skies, having a slow, low-key discussion with Meatloaf.

"I want to finish the job, Mac," Lee-Daniel said. "We'll do the perimeter walk this afternoon and we're done. It's no good to do all this work and not finish the job." A little girl giggled past him with a bit of surveying twine, further refining the kids' map of the town center.

Mac looked up again at the choppers. There were four of them now, flying a slow perimeter patrol. "Tonight. We go tonight."

"Tonight," Lee-Daniel said. "Agreed. I'll make sure that everyone's packed up and ready to go." He finished his coffee and put on his shades, then walked over to Meatloaf. The other Warriors walked away.

"Helicopters," Meatloaf said.

"Yeah," Lee-Daniel said. "About that."

"Our people in Ottawa are asking about the helicopters." Meatloaf hitched up his pants. "First they send social workers and kidnap us to residential schools. Then they send yuppies who take away our land to make golf courses. They send cops. They send the army. Now helicopters. We survived everything else, we'll survive the helicopters, OK?" That was quite a speech for Meatloaf. Lee-Daniel took it in for a moment.

"That's good," he said. "Excellent. We're going to be finished this evening and then we're going to bug out, OK? If you've got a beef with the feds, that's none of our biz."

"None of your biz," Meatloaf repeated. His fixed stare made Lee-Daniel want to squirm.

"We're techies, not freedom fighters," Lee-Daniel said. His clipboard beeped and he tapped it to dismiss the screensaver. "They're trying to jam us," he said.

Meatloaf nodded as if he'd expected no less.

"They're trying," Lee-Daniel said. "But they can't. To squelch the short-range point-to-point links we're running, they'd have to put out enough power to cook passing birds. Our nets interpret interference as damage and route around it."

"It works even when they jam it," Meatloaf said.

"Yeah," Lee-Daniel said, grinning as he watched the piano-roll display of data scroll past. "You can't stop Cognitive Radio without physical goddamned access. They're going to have to dismantle the terminals if they want to shut us down."

"None of your biz," Meatloaf said.

"None of our biz," Lee-Daniel said, looking away from the clipboard. It wasn't

his idea to bring the investors along on the perimeter walk. This was a purely ceremonial event, only initiated once the real post-install survey had been completed and he was sure that there was network integrity. But networks must not only be integrated, they must be seen to be etc., so they split into two crews and walked the perimeter, or in the case of a territory as big as Akwesahsne, a symbolic segment of it.

They used ruggedized videoconferencing tablets as they went, digital clipboards whose screen was divided in two, each square with the feed from one of the crews. The data went over the localnet, and streamed out over the uplinks to residents of any other unwired Sovereign that wanted to welcome the newest rez to the party.

The two parties each took a direction and hiked out to opposite corners of the rez and then began walking counterclockwise, keeping in constant communication. A little blinkenlight in each quadrant mapped the throughput to and from that host, five bars all the way and not a single frame dropped if all went according to plan.

The investors were with the Northeast party, along with Joey Riel, Meatloaf and Mermaid. Not Mac, he was on the bus, where he usually spent the dusks and dawns, in air-conditioned gloom out of the mosquitos' range. Lee-Daniel took the opposite corner, Southwest, with Elaine and the hard-line girl from the gate on the first day and Cobra, who'd taken to watching the sunsets with him and sharing a pint of forbidden bourbon, not saying anything, ducking the endless committee meetings.

They reached the perimeter and began to pace it off. Over the audio on the videoconferencing tablet, he heard the investors' labored breathing, the slipping of their impractical Oxfords on the slick humus that carpeted the forest.

It was a nice early-fall day, with bloody streaks of sunset on the horizon and the crisp smell of damp and wind and sap dripping from the maples. Lee-Daniel loved an autumn walk in the woods, hell, who didn't, and even with the choppers, he was pretty relaxed by the time he got halfway around the rez, an hour later, in the growing gloom.

It was then that bright beams of light stabbed at them from all sides. Behind him, he heard Cobra curse and then he was shoved aside and down as Cobra and the girl took up back-to-back positions with their weapons -- a gas fogger for her, a hunting rifle for him -- at ready.

"Sûreté," Cobra hissed. Sûreté du Québec -- the Provincial cops.

He'd done the research, knew that the SQ and the Warriors hated each other. The Mohawk Warriors Society had been fired in a kiln bricked with SQ beatings, shoot-outs and gassings. But the Akwesahsne Rez had been at peace for almost three years! The radio cops must be using them to do their dirty work. Why the hell couldn't this have happened tomorrow, when they were on the road?

His radio network, that's why.

Lee-Daniel knelt down and dialed down the screen brightness on his tablet, then peered at it. His half showed his long, narrow face, uplit like a jack-o'-lantern by the screen, eyesockets black and deep, cheeks hollow and stippled with patchy three-day beard. Two of the other quadrants were black -- the tablets were offline or broken. The final one showed the Northeast party, skinny Joey Riel holding a thick branch in one hand and a rock in the other, ridiculous alongside Meatloaf and Mermaid, who had already fitted their masks

and goggles and drawn their sidearms, crouching back to back against each other.

The investors hove into view, whey-faced, lips skinned back from their teeth, eyes crazy-white.

"Get down," Lee-Daniel said, leaning into the mic. "Head to the bus."

"It's dark," the Series A man said, jinking from foot to foot, making the camera sway seasick.

"The bus," Lee-Daniel said. "Get in the bus. Get everyone to the bus." Behind him, Cobra was talking on a handheld radio that ran on their network. They'd sold the Warriors over a hundred of them, and now they were using them, here, using their network, talking through the radio jamming.

"This isn't our fight," Lee-Daniel said, and heard Meatloaf talking, indistinctly, through the radio.

He looked around for Elaine, but he didn't see her. Headed for the bus, that's what you did in an emergency. Fuck.

It was an emergency. There was an even tramping of feet ahead of him, behind him, to his left and right. He stood, slowly, and put his hands in the air.

"I'm not a combatant," he said, loudly, but in a steady voice.

He walked toward the bus, hands still in the air. "I am not a combatant," he said again. A laser dot climbed his toe, his leg, centered on his gut. He looked down at it.

"They will shoot you, you know," Cobra said. "They shoot. They think they're playing cowboys and Indians." He sounded very calm.

"I am not a combatant," he said again, taking another step forward. A second red dot joined the first, climbing his leg and resting within inches of the first, dancing and bobbing like a firefly. From the woods, someone barked in French.

"You keep saying that," Cobra said. "But you put in the radio, right?"

"I surrender," Lee-Daniel said.

"They don't speak English. When they don't want to, they don't speak English," Cobra said. "If I were you, I'd get down and stay down." Then he yelled something defiant in French. The girl behind him tittered nervously.

"Cobra's making them mad," she said, giggling again.

Lee-Daniel turned around slowly, getting away from the harsh white light. Green blobs swam in his vision. He began, very gently, to sink to his knees, when out of the corner of his eye, he spotted Elaine and two of her crew, in silhouette, up in the boughs of a maple that they must have climbed as soon as the SQ arrived on the scene. More steps from the brush, the light coming closer.

Cobra called out more French, three lights on him, his rifle at his shoulder. Two laser dots danced on him, and Lee-Daniel had an irrational urge to slap them away, like horseflies.

The young girl hit her fogger, spraying a thick, opaque cloud of gas. "Cover your eyes," she said, and giggled again. Lee-Daniel pulled his shirt up over his face and dropped. He belly-crawled blindly, towards where he thought Elaine and her crew had been treed.

He knocked his head on a tree trunk and gasped involuntarily, getting a lungful of the gas, which made him retch into the depths of his shirt, bringing on more gasps and more retching. He rolled for the clearing's edge, hit another tree and got to his knees, heaving like a dog. He still had hold of the tablet, and when he could open his eyes again, he looked into it, saw the investors still staring at him, wide-eyed.

"Go!" he hissed. "Jesus, get to the goddamned bus."

"Are you all right?" they said.

"I'm fine," he said. "Go go go!" The CogRad drunk-ons were legendary. When you spent weeks at a time in the deep bush on dry reservations, lugging gear and fighting with bitch physics, you needed to unwind. It was traditional for a drunken riot to ensue on off-days. Lee-Daniel occasionally partook, enough to be friendly, but never so much that he lost control. He set a sane example, and the crew followed it, and so the most harm that a big booze-on would cause was a gang-wide neolithic hangover, swampy and hot and damp.

But the drunk-on that was proceeding when Lee-Daniel stumbled out of the dining-room was like a heavily sponsored Bosch painting. Elaine was alternately necking with and slapping Joey Riel; Mortimer was collapsed on a heap of still-steaming rum- toddy cartons; the customer service reps were playing kick-the-can with their ringing cellphones. The aerostats and the advertorial screens had automatically adjusted to overcome the ambient noise level, and were consequently pitching their jingles and come-ons at megaphone levels.

Lee-Daniel stared blankly around at his crew, hands clasped together tightly to keep them from shaking. He grabbed the first person he could lay hands on -- the Tulsa switchgirl, beefy shoulders. Her name was Leeza, that was it, he could remember it now. She whirled on him, one hand clenched, and he stood, unflinching. She caught his eye blearily, breathing heavily through her nose.

He gave her shoulder a gentle squeeze, then righted a stool and patted it. She sat down.

He moved on to the next employee. And the next. He arranged them in ranks, and the din subsided. The drunkest CogRads kept on shouting, but they were in the minority. Elaine was hollering at Joey Riel, who was hollering back, cords standing out on both their necks.

Lee-Daniel felt a grin on his face, but didn't know why it was there. He put his arms around their waists in an uncharacteristically intimate gesture. They started back from him, but he held them tight. He squeezed, and then gave them each a kiss on the cheek. Elaine snorted, then Joey Riel laughed. He led them back to the crowd of CogRads, lined up like drunken schoolchildren, and sat them down, then cleared his throat, swallowing a sudden sob.

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[&]quot;Get down," he said to Elaine. She was wedged into a crook and tied off with an improvised harness made out of nylon rope and carabiners from her vest. "We've got to get back to the bus!"

"They'll shoot us," Elaine said.

"They can't see us," he said. Laser sights danced in the fog. He heard the crack of Cobra's rifle.

"He's scared," Elaine said. Next to her, also tied off -- where did Elaine keep that many carabiners? -- was a young surveyor, one they'd just picked up in Montana, a kid with a shaved head who had shyly asked him for a job after meeting Elaine at the local Army-Navy store and getting a tutorial on which gear to buy and why. He was wrapped around the branch like a serpent, locked at the ankles, thighs and wrists.

"So am I," Lee-Daniel said. "They're shooting. It's natural. Get him down. Push him off the branch if you have to."

"What about him?" she said, gesturing at the branch below her. There was another surveyor, a 40-something lunk who didn't wash enough and farted too much and blamed it on other people. He was balding and his comb-over hung limply at one side of his head as he hugged the trunk.

"Push him too," Lee-Daniel said.

The tablet, stuck in his waistband, spoke. It was the Series B man. "Don't give them any more advice. You shouldn't be liable for what they do in this situation. Return to the bus."

Lee-Daniel shrugged up at her, caught a whiff of gas that set his eyes to watering and looked back at the clearing. Cobra was lying on his side, face away from them. The girl was holding his hand, face covered by a placid mask, but he heard her sob as she talked into the radio that was clipped to his chest. Lee-Daniel was momentarily mesmerized by this, his network in action, people living or dying by it.

A rustle nearby startled him out of it. "Now! Back to the bus!"

Lee-Daniel climbed the tree. He got up to the first surveyor's branch, Ole Stinky, and he gave the man a shove. He fell like a stone. He stepped on Stinky's branch, grabbed the kid by an arm and yanked, hard. The kid dropped, too. "Down," he said to Elaine, and dropped, landing on the kid.

"Leave them," the Series A man said. "We aren't insured --"

He helped the kid to his feet, then Stinky. In the clearing, the Sûreté had surrounded the girl. Her hands were up, glistening with blood. One turned towards them and shouted something in French, raising his (her? hard to tell with the martian armor) sidearm. Lee-Daniel froze, and then a red dot appeared on the SQ's leg, travelling up to his (her?) crotch. One of the other SQs pointed and the SQ with the gun looked down, then dropped his (her?) arm and leapt back.

Elaine jumped down, holding her laserpointer in her hand.

"Run!" Lee-Daniel said, shoving at the two surveyors, then taking off. A hundred yards downslope, he heard two screams and a sickening double thud. He stopped, looked downslope, then ran back up. Elaine's crew was at the bottom of a tiger pit. The kid was crying and holding his arm at an unnatural angle. Stinky appeared to have landed on his belly, and when he looked up, his face was a mask of blood. They were both making a lot of noise, but not so much that Lee-Daniel didn't hear the crunch of boots coming down the trail a moment before a light hit him. He turned and ran blindly in the moonlight, whacking

into tree trunks, tripping.

The bus was crowded with CogRads and he vaulted up the steps and slammed into the driver's seat, authenticating on the palm- reader and putting the bus through its warm-up/lock-down urban defense checklist. He was vaguely aware of more bodies coming in, then he slammed the door-close button as the shutters unrolled over the windows.

Outside, Warriors ran to and fro, carrying radios. His clipboard throbbed with traffic analysis.

They were already 20 miles off from the rez when he told Elaine that Stinky and the kid never got on the bus.

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The Series A and Series B men were huddled together out front of the roadhouse, along with MacDiarmid.

"That's some scene, huh, boss?" Lee-Daniel remarked as he stepped into the cool night, sucking up the fresh air and the moonlight.

"Maniacs," the Series A man said. "Out of control."

"Just road-crazies. Like when they thought they all had West Nile. They get worked up. Egomaniacs and social retards." He was speaking in the grudging half-sentences that Cobra had preferred. Talking like that made him feel crazy and brave and alien. "They're OK," he said. "They're OK now."

"What did you tell them?" MacDiarmid asked, softly.

"I said goodbye," Lee-Daniel said. "I told them I wished them luck. I told them how fucking great they are, and how important the work is. They know it, but you need to remind them sometimes."

"I'll remember that," MacDiarmid said.

"Don't let these assholes drive the bus, OK?" Lee-Daniel jerked his head at the Series A/Series B men.

"Are you kidding?" MacDiarmid snorted. "Not on a fucking bet."

They turned to look at the investors. Lee-Daniel didn't know either of the investors' names. Fucking spear-carriers, fronts for unimaginable, implacable wealth, charged with returning 400 percent over three years on a national-budget-sized fund.

He had a bunch of exit lines he'd thought of, but none of them mattered out there in the moonlight. He'd shown the CogRads the traffic histograms on his clipboard before coming out. Crazy stuff going on in Akwesahsne.

He used the clipboard to open the bus, stepped aboard and grabbed his duffel. A cab pulled up as Lee-Daniel left the bus. He tapped the roadhouse chip to the door, which swung open.

"St. Regis," he said, leaning in to toss in his duffel. "You know where it is?"

"The Indian reservation?" the driver asked.

"That's it," he said.

"Yeah."

Lee-Daniel looked up from the clipboard as the cab pulled away. The crew was trickling outside. He knew the surveyor out front, knew that he did tricks with a butterfly knife, that he sent money home to his little sister in Muncie. He couldn't remember his name. He was no good with names. But he knew his people.

He looked back at the clipboard, cranked up the volume. Heard the panting, heard the babble, heard his new crew, using his radios. His hands shook. He put the clipboard down, plumped his duffel into a pillow, leaned back and closed his burning eyes. Heard the voices. He picked up the clipboard, started up a remote admin interface for the remaining Akwesahsne radios. He'd sleep later.