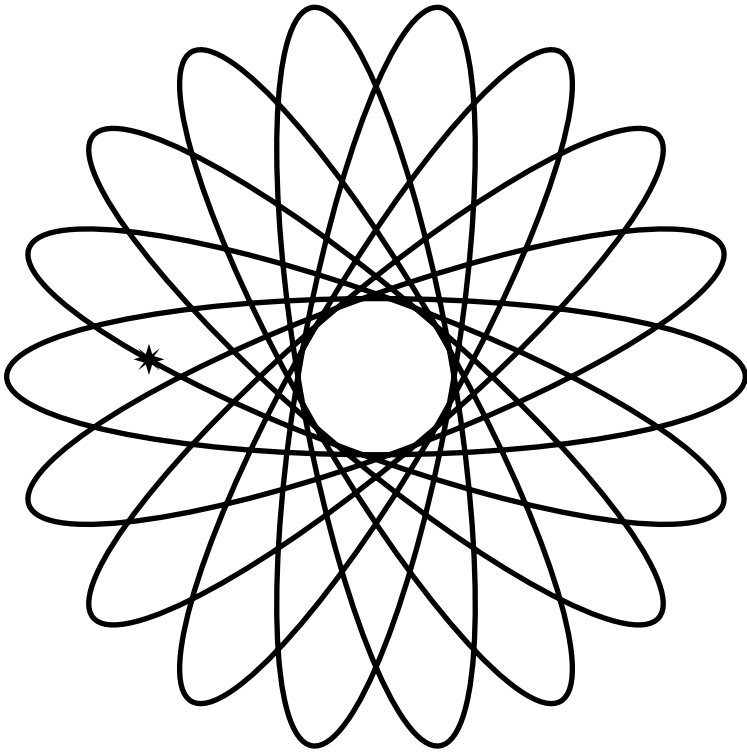
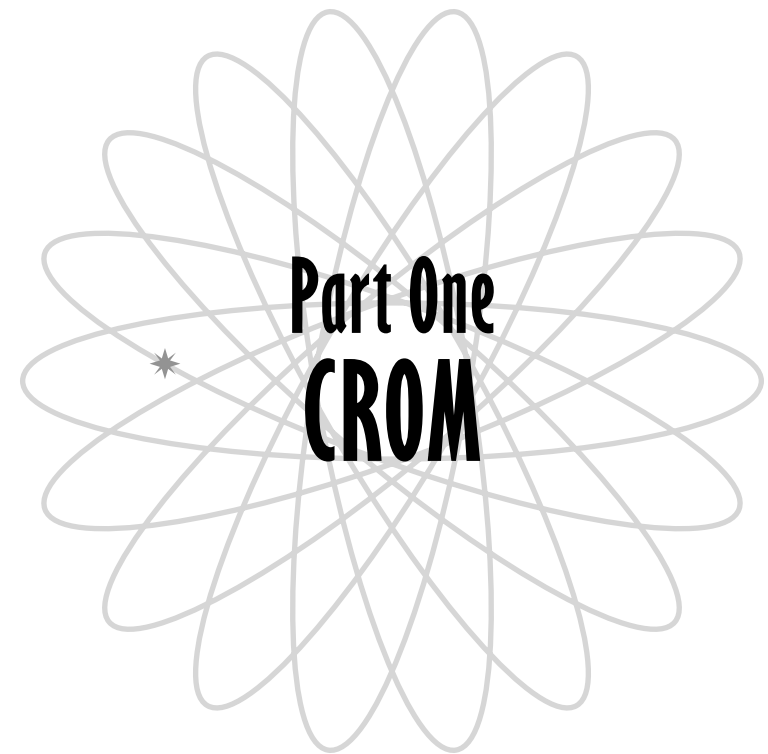


# SINGULARITY



**BILL DESMEDI**

*per Aspera*  
SEATTLE, WASHINGTON



*My own suspicion is that the universe is not only stranger  
than we suppose, but stranger than we can suppose.*  
— J.B.S. HALDANE

# 1 | Proliferation Threat

**M**ARIANNA BONAVENTURE EASED through the access door and out onto the roof of 17 State Street. She paused a moment for breath, and visuals. To one side, the mirrored façade of a setback penthouse held only her own reflection—a slender figure in black body armor with helmet to match. Straight ahead, nothing but an arc of deserted skyterrace and, beyond it, the forty-one story dropoff down to Battery Park. No one, and nothing, in sight.

They'd gotten past her somehow.

Or not. Audio was picking up what sounded like the prole and the extractor, talking in low tones somewhere past the curve of the penthouse curtain wall.

Marianna smiled behind the helmet's silvered plexiglas visor: *Gotcha!* Then she frowned. This was going to be almost *too* easy. From the top of this gleaming column at the southernmost tip of Manhattan, there was simply no place left to go. Her quarry had already run out of island, and now they'd just run out of sky.

What kind of an extractor paints himself into a corner like that?

She'd find out soon enough. Marianna darted across twenty feet

of rooftop garden and into the cover of the penthouse. She hugged the glass wall, began inching along its length.

One of the voices had started yelling. Still couldn't make out words. They'd be in Russian anyway.

Marianna risked a look, then ducked behind an art-deco heat-exchanger hood, out of the wind and line of sight.

Because there, silhouetted against a wedge of Lower Manhattan skyline, stood her wayward prole—the proliferation threat she'd chased through downtown's dog-day streets.

Seen by the flat, filmy light of a late July afternoon, the prole looked deceptively nonthreatening. Looked like what she was: a frightened, middle-aged woman.

Looked hardly at all like a renegade WMD researcher out to sell her expertise in weapons of mass destruction to the highest terrorist bidder. Which was also what she was.

The extractor, the big guy hired to snatch the prole out from under CROM's bodywatch, stood beside her. He was the one doing all the shouting, most of it directed at an unwieldy contraption of fabric and aluminum tubing propped against the guardrail.

That explained some of it.

"Compliance?" Marianna whispered into her helmet mike. "Got the prole up here."

There was a barely perceptible pause, then the man from the New York Compliance office came back. "On the damn roof?"

"The extractor's got a hang glider, looks like."

"You're shitting me. How'd he get it up there?"

"Don't know. Maybe—" Marianna glanced around, spotted a double door further down the penthouse wall. "There's a rooftop elevator. He could have broken the thing down, bagged it, brought it up that way. It's just..."

"Just what?"

"Just I don't get where he thinks he's going with it. The park's staked out, and there's nothing but river beyond that." Even with a twenty-to-one glide ratio and the weak westerlies of a summer afternoon, that rig would never make Jersey. Unless—

Now she could hear it: the sputter of a ten-horsepower motor firing

up. "It's not a glider, it's an ultralight! They're good to go."

"Let them. They can't hide from the spystars."

"Guess again." Marianna was looking at more bad news on her wristtop display. "Alpha set ninety seconds ago."

"Damn! How long till Beta's overhead?"

"Seven minutes." Too long. Whoever'd planned this extraction knew exactly where the holes were in CROM's piggybacked satellite surveillance.

"Okay, sit tight—I'm on my way."

But Compliance was down at street level. By the time he could get here, her quarry would be long gone. And, with them, her last hope of making the Grishin case stick.

It was going to be up to her.

Compliance was still talking. "Don't go trying anything stupid now, Bonaventure. Not when all you're packing is that damned toy. I'll be—"

She cut the connection then. But he was right: She'd been going by the book, and for urban engagements the book mandated non-lethal armament only.

Hence, her Squirt gun—a second-generation handheld version of the antipersonnel web-cannons in use since the mid-90s. When it worked, which wasn't always, it shot out fifty square feet of ruggedized microfilament coated with fast-drying binary adhesive. Ensnared in the stickyweb, a perp would be down for the count and gift-wrapped to boot. It had all sounded good on paper.

Out here in the field, she'd have given a month's per diem for a twin to Compliance's unauthorized Glock. Book or no book.

Oh, hell, here goes. She stepped away from the wall and brought the flared muzzle of her 'toy' to bear. "Hold it right there!"

The perpetrators froze. She edged toward them through rippling ninety-degree heat. Sweat trickled down along her ribcage under the stifling Vectran body armor. Her forehead was bathed in perspiration. A droplet felt poised to run into her eye, but she'd have to lift the visor to wipe at it.

Just a little further.

The prole raised her hands. Behind her, Marianna could see the ex-

tractor fiddling with some sort of handheld. He looked up. Marianna glimpsed a raw-boned, dark-complected face. Through wraparound goggles, cold black eyes stared back at her.

Unnerving, that lifeless gaze, like looking into the eyes of a predator. Marianna felt the gun tremble in her hands. As if scenting her fear, the man grinned at her—a feral grin, widening to reveal two steel-crowned upper canines.

It was like looking death in the face.

Marianna shrank back. Her stomach knotted. Adrenaline coursed through her veins, priming her whole body for flight.

No! She was *not* going to panic. She planted her feet, steadied the non-leth, and squeezed the trigger.

The Squirt gun emitted a hollow click.

No canister chambered.

The damn thing had malfed again. She slammed a small fist against the side of the barrel, pulled the trigger a second time. Nothing.

Still grinning, the man punched a button on his handheld. The elevator doors at her back slid open. Marianna whirled at the sudden hiss, but there was nothing there—not even an elevator. The penthouse express that her fugitives had commandeered was gone. She could hear it hurtling down to street level, leaving behind forty stories of empty air.

She turned back just in time to see the extractor raise a gun and fire.

A sledge hammer slammed into the pit of her stomach. Another, driving all the breath from her body. But—no worse, thank God! Her Vectran body armor, the same stuff they made the Mars rovers' hard-landing airbags out of, was living up to its advertising, absorbing the brunt of the bullets' impact. Too bad it couldn't dissipate their momentum as well. A series of body-blows pummeled her, propelling her backward, back toward the waiting maw of the empty elevator shaft.

For an instant that stretched to an eternity she teetered on the edge, fighting to regain her balance. Fighting and losing. Gravity seized her in its unrelenting grip.

Fetid air swirled around her as she fell, the square of light from the open door above her receding fast, faster.

Oh, God! Only one chance! Marianna gripped the Squirt gun in

both hands and fired it at a passing stanchion. Please, *please*—work this time!

The gun kicked in her hands. Compressed gas exploded from the canister and propelled a spray of microfilament out through the expansion chamber at forty-five meters per second.

The stickyweb snagged the stanchion, the binaries fused, and—it held.

And—she held. Her hands tightened on the weapon's grip as deceleration shock tried to wrench her arms from their sockets. She slammed into the near wall hard enough to rattle her teeth. Still she held on, still alive. For the moment.

Numbers stenciled on the opposite wall told her she'd halted her descent at the thirty-seventh floor. The Squirt gun and holster ensemble were interlocked with her body armor, helping bear some of her weight. Still, both hands clutched the butt of the weapon in a death grip. Scarcely daring to breathe, Marianna dangled above the abyss, a pendulum on borrowed time.

Her helmet headset had been knocked askew, but not so far that its mike couldn't pick up her voice.

"Compliance... need help! Come... get me!"

She told him where, between gulps of machine-oil flavored air. "But... call Building Services first. Tell them... Lock down... the penthouse elevator." She couldn't see the elevator car where it had come to rest more than five hundred feet below her. The extractor might have deactivated it to prevent reinforcements arriving, but no sense taking chances.

A hiss from above her. Four stories up, the elevator doors were closing again. Through them she could hear the engine's drone rise to an angry buzz. The ultralight was taking off for the wilds of New Jersey. Taking her prole with it.

Guess they hadn't run out of sky after all.

One more thing, then. "Compliance? See if you can raise HQ... Tell Pete, tell him got to... go with the Archon option."



Like the two before it, the third email incident of the day found Archon consultant Jonathan Knox in a very strange place—his own office.

Strange, because Knox's clients usually demanded his full-time physical presence on *their* premises, consistent with their belief that they owned his ass. A not altogether unreasonable assumption, given the breathtakingly exorbitant rates Archon Consulting Group charged for the services of its most senior analyst. But it did mean that in an average year Knox saw the inside of his office about as often as the guys who came in to shampoo the wall-to-walls. And, like the carpet cleaners, he saw it mostly at night.

No one, least of all Knox himself, would have expected him to be sitting there midway through a midsummer Tuesday afternoon.

If he hadn't been, there's no way he could have found out that somebody was stealing his identity.

As it was, though—

"You've got mail," the desktop announced.

Knox's gray eyes, strangely old-looking for what was otherwise an almost boyish face, flicked from the five-hundred-page document in his lap to the little email icon now blinking in the upper righthand corner of the twenty-four-inch display.

Definitely weird. No one ever sent him email here at Archon, there wasn't any point to it. Knox had been on assignment at Broadband Utilities Unlimited longer than most of BUU's employees. Anyone who needed to reach him emailed him there.

Probably just a system glitch, like the first two.

Knox stretched his lanky six-foot-plus frame, tipped the contoured chrome-and-leather armchair back even more precariously, and returned his attention to the Functional Requirements spec.

That five-pound cinderblock of a document was his sole reason for being here. It would take total, Zen-like concentration to review it by the Friday drop-dead date, and BUU's North Jersey headquarters was hardly conducive to that. The place was even more of a madhouse than usual this week, caught up in a paradigm shift of tectonic proportions as the latest management methodology-*du-jour* kicked in.

No, better the relative peace and quiet of his commodious corner

suite at Archon's New York headquarters, with its expanse of burgundy broadloom and its floor-to-ceiling view of the East River twenty stories below.

And its periodic announcements of email that wasn't there.

If Knox had been engaged in anything more absorbing, he'd have ignored the interruptions. But whoever said 'reads like a novel' wasn't talking about this Functional Requirements specification. He looked up, cleared his throat, and said "Mack, open my mailbox, please."

A brief pause while Mack, Knox's desktop computer, processed this utterance. Then: "Your mailbox is empty."

Huh! And yet the incoming-mail icon was still blinking merrily away in the corner of the screen. For the third time since he'd arrived this morning, his system couldn't seem to decide if he had email or not. Knox ran his fingers through his already unruly brown hair, thought a moment, then said, "Mack, see if Bob is in."

In response, a videoconference window popped open on Knox's screen, complete with the dreadlocked talking head of Bob Stevens, Archon's system administrator.

"Hey, Jon," Stevens's grin was dazzling white in his dark face. "You coming to the bash?"

"Huh? No, I was just calling in a couple rogue emails. Why, what's up?"

"Boss man's taking the gang down to Radio Mexico for quesadillas and Dos Equis."

"That's our Richard." In the fifteen years Knox had known him, Archon CEO Richard Moses had never passed up an excuse to throw a party.

But, still and all, Tuesday afternoon? "Any particular reason?"

"We just won us a slice of the Psyche project. Word came in an hour ago, now it's raining beer and nachos. You coming?"

"Sounds fun. But duty calls. Got to get through this thing"—Knox thumped the Functional Requirements for emphasis—"before I leave for London next month. Now, about my email..."

"First thing in the morning, okay?" Stevens was already glancing off screen, toward his office door.

Knox grinned. "Sure. Enjoy."

The window closed, leaving Knox alone with the BUU document.

He re-read the page he'd stopped on without any noticeable increase in comprehension. Something was nagging at him. He'd learned to trust that feeling.

What was the old saying? "Twice is coincidence, third time is..." Knox snapped his fingers. "Third time is enemy action!"

Despite, or perhaps because of, having perpetrated more than a few email spoofs in his time, Jonathan Knox found he did not enjoy being made the butt of one himself. But that's what it looked to be: Someone—one of the backroom code jocks, most likely—had hijacked his account and was carrying on an electronic correspondence pretending to be Knox.

Those bozos! All's fair in love, war, and the pissing contest that had raged unchecked between Archon's programming and consulting staffs since day one, but this crossed the line. Knox grinned unkindly as he contemplated various retaliatory options. Perhaps a Trojan horse?

Just then, his speakerphone beeped.

"Jon," said the voice on the other end, "Bag what you're doing and come on down, boy!" The slightly slurred baritone belonged to Richard Moses. Calling, no doubt from the Radio Mexico fête. Yes, in the background Knox could hear voices raised in off-key song, counting down "A Hundred Bottles of Beer on the Wall" in hexadecimal notation. Programmers!

Which reminded him. "I can't right now, Richard. I'm hung up on something here."

He said goodbye and hit the *off* button. Best not to be too specific. For all Knox knew, Richard himself could be behind this—he was no less an arrested adolescent than the rest of the Archonites.

Knox could see them now, swilling brew, carousing, having a good laugh at his expense, while he—

Wait a minute. The Archon offices must be all but deserted, emptied at quarter of five on a Tuesday afternoon by Richard's impromptu celebration. So, *who was running the scam?*

The few stragglers in sales and accounting didn't count: none of them had the skill-set for a world-class goof like this. Even if the thing itself could run unsupervised, the fact remained that the culprit hadn't

hung around to see Knox's reaction to the prank.

And that was just plain unthinkable. Knox had never aspired to membership in the coder fraternity himself, but he was an astute observer of its folkways. And not showing up to gloat once a trap had been sprung was, he knew, an unpardonable breach of alpha-nerd etiquette.

Can't have been anybody here, then. What did that leave? It *must* be just a mail-server glitch.

But that old feeling—that sense of a larger pattern lurching around in the darkness behind the veil of immediate sense experience—wasn't going away. On a hunch, Knox reconfigured his desktop to pull mail the instant it received notification. Then he waited.

Not for long. On the next 'you've got mail' announcement, he found himself staring at a system error: MAILBOX IS LOCKED BY ANOTHER POP3 PROCESS.

He tried retrieving the message manually. Now the mailbox was unlocked again. And empty again.

Enemy action! Somebody had installed a daemon in the server, an autonomous process that was intercepting his email. If it was a prank, it was a damned elaborate one. But it was looking more and more like identity theft pure and simple—the misappropriation of Knox's cyberspace persona for purposes of illicit correspondence.

That correspondence, at least, was easy enough to trace.

"Mack, show me the IPM log for *jknox@thearchongroup.com*."

Archon's central server came equipped with state-of-the-art Internet Policy Management software. Among other things, the IPM tracked all the emails moving into and out of the organization and could list them on demand. Not the message-bodies themselves, just subject-lines, senders, and addressees.

But that was enough. Considering Knox almost never used this account himself, the log should have come up empty. Instead it held eight or nine entries, the oldest of them—entitled 'Long time no see'—dating from this Sunday. That message, and about half the others, had been forwarded through the *jknox* account to someone called *kosmo@gei.ru*, and had originated from...

Knox frowned as he read the sender's address: *reak2@crom.doe.gov*.

*doe-dot-gov*? That was the federal government—the, um, Department of Energy. A quick websearch brought up the DOE home page, but there was no ‘CROM’ listed among its agencies. An undercover op, maybe, and of some hitherto uncatalogued subspecies.

What had he gotten himself into here? Knox had pissed off a lot of people in his time, but that was just *una cosa di biznes*. And, anyway, he couldn’t recall any feds among them.

Why were the spooks messing with his email?

Damned if he knew, but he did know the quickest way to find out.

“Mack,” Knox addressed his computer again, “—link in Weather-top, secure circuit. I need to talk to Mycroft.”

Spooks or no spooks, *somebody’s* gonads were going to wind up stapled to his office wall tonight!



What was keeping the Compliance guy?

Marianna hung in near-total darkness, trying not to gag on the oily reek filling the elevator shaft. Trying not to think about how long the stickyweb would hold. The adhesive wasn’t designed to support a one-hundred-thirty-two pound load, was it? Not swinging back and forth?

Think about something else. Like what? Like how bad she’d wanted this first field assignment? And how bad she’d gone and screwed it up?

But it was *her* case, dammit. Her analysis that had tied the last two disappearances back to the shadowy Grishin Enterprises conglomerate, her late nights and weekends that had put CROM out ahead of the curve on this one.

She should have left it at that. She couldn’t. Call it a chance to settle an old score, call it a misplaced search for some sort of redemption, but she’d had to get out from behind her desk and into the field. She’d cashed in favors and half-forgotten promises, lobbied Pete mercilessly, all so she could be in on the bust. And now—

Where in *hell* was Compliance?

Look on the bright side. At least the email spoof was still running—going on two days now without a hitch. One thing that hadn’t gone wrong yet. And with any luck the mark wouldn’t catch wise till

too late. By Thursday night, she should—

Wait one. What was that?

If she strained, she could almost hear—Yes, a rumble coming from below, faint at first, but growing with every second.

Oh, *shit!*

The power must’ve come back on before Compliance could find the cutoff. The penthouse elevator was beginning its ascent, building speed. It would be here in less than half a minute, moving fast as an express train—and she had no way to get out of its path!