

## Episode Fourteen: A Bird in the Hand

*Robert G. Ferrell* 2002-01-16

### Chasing the Wind, Episode Fourteen: A Bird in the Hand

by *Robert G. Ferrell*

last updated January 16, 2002

---

Baseball cap peered warily around the corner. He was at the end of the hallway in which his rented office was located. The coast seemed to be clear, at least for the moment. He held his laptop tightly under one arm. It was the only surviving link to Global Technical Products and his illicit activity. He had destroyed everything else in the office, making quite a mess in the process. "I suppose," he reflected as he made his way carefully down the corridor, "I can kiss the security deposit goodbye." After a few seconds, he shrugged and added philosophically, "Good thing I used a stolen credit card."

He had chosen a Tuesday morning for his escape, not too early (to avoid running into stragglers coming late into work) and not too close to noon (to bypass the lunch crowd). He got onto the elevator and rode it until he was the only passenger. Then, using a key he had "borrowed" from the building manager's office (don't ask) he clicked the elevator over to maintenance mode and took it down to the sub-basement. He reset the control panel and sent the car on its way in order to circumvent the ruckus that would naturally arise when one of the building's four elevators stopped working. This meant that he was now trapped in the basement, unless he wanted to risk summoning the elevator again. Fortunately, he knew there was a way out, a way that led up to street level via a narrow concrete stairway that emerged behind a trash receptacle in the alley. All he had to do was find it.

He did find the door - eventually - and managed to jimmy off the padlock securing it. He crept cautiously up the stairs, like a mouse sneaking out of a hole in a barn patrolled by cats. He watched from the shadows of the alley until the ebb and flow of pedestrian traffic presented an opportunity for him to slip into a passing throng unnoticed. He tried to match his pace and demeanor with those of the nameless denizens of the city scurrying around him, each of them shoulder to shoulder with their fellows, yet a million miles apart on their separate journeys through time and space.

Less than a block from his destination, he caught sight of two men in suits and overcoats crossing the street at a diagonal on an intercept path. He'd been spotted! Quickly he ducked

into an alley and ran full speed to the other end. It was a dead end, but there were empty packing crates piled up next to the chain link fence sealing off his line of retreat. He scrambled up them barely seconds ahead of the pursuing agents, fighting to hold on to the laptop as he climbed. At the top he realized that there was no way he could go any further with the burden of the laptop in his hands. He turned and suddenly flung it at the nearest agent, whom it caught squarely in the chest, sending him tumbling back down over the boxes to the asphalt of the alley. His partner leapt to the injured man's side, temporarily giving up the chase.

Baseball Cap saw that his sacrifice had gained him a few precious seconds, and took full advantage of them. He climbed the last few feet of the fence, and swung himself over the top. Taking a deep breath, he let himself drop to the sidewalk far below.

---

Several hundred miles above the Earth's surface, an oblong, greenish stiletto of a satellite fired a small thruster and nudged itself into a slightly higher orbit. It had rather an odd appearance for a communications satellite: long and needle-like, with three dangerous-looking protrusions at the nose. There were no solar reflector panels, or even any obvious antennae. It was difficult to understand exactly what this orbiting beastie was designed to do; that is, if one looked at it as a communications satellite. If, on the other hand, one were to think of it as, say, a hunter-killer robot designed to destroy other satellites, the task of comprehension required considerably less effort.

The method that this killer satellite employed was quite simple. It closed rapidly on a victim, matched rotational velocity with it, injected a fast-drying expanding foam into any maneuvering thrusters to shut them down, then grabbed some component of the satellite with its nose-mounted pincers and applied a sharp twisting motion to it, simultaneously firing its own thrusters to compensate for the tendency to rotate in the opposite direction. The victim spins away out of control, with no way for controllers on the ground to regain a functional orientation. No debris, no fuss, no signal.

At the moment, this orbital bushwhacker was stalking a U.S. intelligence satellite whose job it was to coordinate encrypted communications between field units and headquarters in the suburbs of Washington, D.C. The ultimate goal of this hunt was to disable the communications link just before a major multi-pronged terrorist action took place, this would hamper efforts by intelligence officials trying to correlate the multiple attacks and prepare for additional hostilities.

The killer satellite was now in an orbit just a few hundred feet lower than that of its target. At NORAD in Colorado, the folks who track satellites were curious about this one, but they hadn't yet realized the full significance of its sudden drastic change in orbital altitude. Still, it was close enough to IntelCom 3 to warrant investigation. The duty officer ordered tracking and computations to run a reverse plot of its positional coordinates to see where it had originated, and thereby identify its owner and purpose. Meanwhile, the killer satellite, having spotted and locked onto its target, settled into a stable synchronous orbit and waited for the signal to move in.

---

Jake snapped the odd-looking card into the backplane of a test bed computer in his office. He had to dig an older main board out of storage because the card he had removed from Merv's workstation used the obsolete ISA bus, rather than the more modern PCI. The card had been functioning in Merv's system as an Ethernet network interface, and had the requisite RJ-45 jack and connectivity status LEDs on the exterior mounting strip. However, it didn't look like any NIC Jake had ever seen. There were components soldered into that circuit board that seemed far in excess of those traditionally needed for the typical NIC. Jake didn't know precisely what they did, but he had a pretty strong hunch they constituted some sort of radio frequency transmitter, probably with built-in hardware encryption. All of the other components in Merv's box were standard name-brand units that Jake recognized immediately. The weird NIC was the only wild card in the lot, and this was what led Jake to remove it as the probable culprit. He was a little puzzled that the feds hadn't taken it themselves, but all they had seemed interested in was the hard drive. That was fine: he would solve this little mystery all by himself.

---

Ian rubbed his eyes and swung reluctantly out of bed. He had a physics test today: that was the first coherent thought that hit him, and it very nearly made him flop back down on his nice soft comforter. Two years ago, maybe even last year, he would have devoted a lot of thought to devising a plan for getting out of the test. Now he just resigned himself to the inevitable and got dressed. He *had* studied for it: perhaps not as much as he should have - but he felt reasonably confident that the test at least would not present him with any material he hadn't seen somewhere before. This was a far cry from his former test preparation methods, which consisted mostly of making up excuses beforehand for the poor performance he knew was coming. In point of fact, Ian's performance was usually at least fair even when he hadn't

cracked a book. He was naturally gifted with a quick intellect, and was widely read, at least where science and math were concerned.

He stumbled down to the kitchen and made himself a bowl of cereal, topped with dried apricots covered in sugar. He had favored this combination since he was a toddler, and it never failed to open his eyes. Most people found caffeine to be the most effective morning stimulant, but for Ian it was the particular combination of acidity in the apricots and raw horsepower of the sucrose that kicked his brain over into drive.

Blood sugar levels now approaching the saturation point, Ian practically teleported himself to the bus stop, buzzing like a bumblebee on steroids.

When he stepped off the bus that afternoon, Ian was tired but elated. He probably hadn't aced the physics exam, but he felt certain he had pulled at least a 'B.' To top it off, a new girl who had just moved into his school district from Vermont made it quite plain at lunch that she found him attractive. They had set up a movie date for Friday night. At last, things seemed to be going his way. Life didn't get much better than this.

Rounding the corner a block from his house, Ian suddenly stopped in his tracks. He was dead sure that something was wrong. He could sense it. The abrupt and undeniable feeling of impending danger caught him completely off guard; the unexpected prescience itself seemed more threatening than whatever it was warning him about. He ducked behind a tree and scanned the scene by peeking around the trunk for brief periods every thirty seconds or so. He didn't have the faintest idea what he was looking for, but he knew that something or someone was waiting for him.

He was right, of course. Two OSI (Office of Special Investigations) agents had tracked him down and were waiting in a white sedan across the street from his house. They weren't hard to spot. He slid down with his back against the tree trunk and considered his options. He didn't have many. He could walk into the trap, or run. After a moment's reflection, he realized that there wasn't much point in running. There was enough incriminating evidence on his computers to get him locked up until sometime after the next Ice Age. He could dodge them for a while, but not forever. Better to get it over with now, while he was still a juvenile. Maybe he could get one of those legal aid groups like the Electronic Frontier Foundation to help him with his defense.

Having made up his mind to face the music, Ian stood up, brushed off his pants, and turned to make his way to his house. As he did, the two agents stepped out from behind a fence and scared the living daylights out of him.

---

Douglas stared at six two-digit numbers printed on an otherwise pristine sheet of white paper. They were the product of two full hours of Bellatrix CPU time—by far the most extensive test yet of the system, and definitely also the least authorized. He couldn't stop staring at them. Were they really the numbers that would be drawn thirty two hours from now in the next lottery drawing? How could any computer, even a quantum one, predict the results of a random drawing? The jackpot for the upcoming drawing was 28 million dollars. Did he have the key to that fabulous wealth sitting here in front of him? If so, what were the ethical implications involved in his capitalizing on that knowledge? The whole episode was giving him a headache. Douglas folded up his sheet of paper, closed his briefcase, and headed home for the day.

He didn't go straight home. He needed time to think. He drove to a small lake up in the hills northwest of the city and sat there on a boat dock, staring at the blue-green water and watching the ring-billed gulls swirl around the pier like leaves in an autumn whirlwind. It wasn't really as though he were stealing. Since it was supposed to be impossible to predict the outcome of a random event based on any past record of random events, whatever method he used to come up with numbers to play was as ethical as the next. Employing Acme's (and the DoD's) computer to generate his lottery numbers was an unauthorized use of the equipment, yet he was engineering project leader and responsible for testing Bellatrix under every conceivable operational mandate. This lottery problem was a rigorous workout for the system, and it had performed brilliantly. At least he hoped it had. He realized that he could never tell anyone about it, if he won. It would have to remain his secret forever.

After several hours of this sort of rumination, Douglas reached a philosophical impasse with himself. He decided that this was as close to a moral victory as he was going to be able to achieve, and headed for home. On the way, he stopped and bought a lottery ticket.

---

Jake sent one last e-mail message racing on its digital journey and switched off his PC for the night. It was time for bed—tomorrow would be very busy. He had figured out what the mysterious card he'd found in Merv's computer was doing, and had arranged to share his

findings with the feds in the morning. His mind was spinning with dozens of anxieties, questions, concerns, and doubts, but above them all floated a disconcerting mixture of euphoria and gnawing uncertainty about his date with Deanna the following evening. It was going to be a very eventful night for both of them, if things went the way he hoped. He fingered the little velvet-covered box in his coat pocket, turning it over and over in his hand.

No doubt about it, tomorrow was shaping up to be a pretty big day.

To read **Episode Fifteen: End Game**, click [here](#).

*Robert G. Ferrell, CISSP, is a Systems Security Specialist in San Antonio, Texas. He is also active as a [Perl Monger](#), an Internet Technologist, and a [literary humorist](#). He has been involved with (primarily Unix) systems programming, administration, and security on and off since 1977.*

#### Relevant Links

[Chasing the Wind Episode One](#)

[Chasing the Wind Episode Two](#)

[Chasing the Wind Episode Three](#)

[Chasing the Wind Episode Four](#)

[Chasing the Wind Episode Five](#)

[Chasing the Wind Episode Six](#)

[Chasing the Wind Episode Seven](#)

[Chasing the Wind Episode Eight](#)

[Chasing the Wind Episode Nine](#)

[Chasing the Wind Episode Ten](#)

[Chasing the Wind Episode Eleven](#)

[Chasing the Wind Episode Twelve](#)

[Chasing the Wind Episode Thirteen](#)

[Privacy Statement](#)

Copyright 2006, SecurityFocus