

Firebug

by E.S. Strout

Dragonfly: a flying insect characterized by large multifaceted eyes and, two pairs of transparent wings. Wikipedia

PART I

1.

Huntington Beach, California, Wednesday 6 May 2015. 1615 hours:

Fifteen year-old Claire Mayfield, a sophomore at Marina High School, was a gangly tall blue-eyed intense girl with short curly blond hair. She wore a Huntington Beach Aquatic Club polo shirt over blue Levi's and red sneakers. Claire chained her bike to a lamppost at Chris Carr Park on Springdale Street. In her basket she carried an insect capturing net and alcohol filled killing jar. She smiled. "Good spot for the bug I need."

Claire's science project was to collect and categorize the insect population of the local area. "A dragonfly will get me an A-plus," she murmured quietly to herself. "Right there," she whispered as she zeroed in. "Dragonfly perched on a leaf right by the water." Claire quietly unfurled the capture net, grasped its handle in her right hand. The net swooped and a twist of her wrist closed it. "Gotcha," she exalted. There was a sudden sharp tug on the net, strong enough to pull Claire off balance and force her to plop both feet in the shallow pond to keep her from falling in. The net twisted and pulled for a couple more seconds, then flopped loose, empty. "Oh darn, it got away."

Claire shed her soaked sneakers and dried her bare feet on dry grass. "Where did it go? I had it secure in the net." Then she noticed something odd. There was a four-inch tear in the strong nylon netting. "How could it do that? I saw it get tangled up in my net, and then it took off real fast. I've never seen a bug fly that fast."

She began to refold the damaged net "Rats. Take me a week to fix it. Wait a sec. What's this?" There was a blink of sunlight off something in the folds of her torn net. A centimeter piece of translucent wing structure was caught at the edge of the tear. She loosened it carefully and held it on a fingertip. It was diaphanous and translucent in the afternoon sun. There were branching vein-like structures throughout. Claire pressed gently. "This isn't from any insect I know."

"What do you do now, Claire Mayfield?" she muttered. "Show it to my Dad, I guess. But what could an Economics Prof at Golden West College possibly know about bugs?" She nodded. "Maybe he knows somebody at U.C. Irvine."

2.

MicroSystems, Inc. 3651 Alton Pkwy, Irvine, California. 1620 hours the same day:

A nondescript gray 1985 Chevy van sat in its assigned space in the lab's parking lot. It was packed with complex electronic gear. A number of antennas extended from its roof. In the cramped space inside, Len Taggart, a short compact man with shaggy dark hair and a blue U.C. Irvine Anteaters t-shirt looked up from a computer screen with a startled expression. "What the hell just happened, Moe? Picture's gone. Did we lose the satellite link?"

"No way. I'll run the visual and audio playback." Sanchez, a thin, 35 year-old Hispanic man wearing Levis and a dark green polo shirt tapped computer keys. "Look here, Lenny. The landing was perfect. Wait one." Clicking of more keys. "Here's a replay." A multifaceted eye view of the shore of a small pond with lily pads and waterfowl appeared. "There's the leaf. We saw Firebug land, then something happened to knock it off." Its multifaceted eye view went dark. Moe pressed more keys. "I'm trying to reacquire it. There. Got video and audio back. Lot of picture breakup and distortion. Firebug may be damaged. I'm telling it to circle a hundred feet overhead and focus on that leaf and surrounding area."

As the overhead view came in, they saw a teenaged girl holding a butterfly net with a tear in it.

"Damn," Taggart muttered. "Tried to grab it. For some kind of science project?"

Moe mopped his brow with a sleeve. "Thank Christ, Firebug escaped." He tapped keys. "I'm telling it to come home."

"I've got some audio from the overhead shots," Lenny said. "Very faint and some distortion. I'll amp it up. There. I can hear a name. Claire. Yeah, she's talking to herself. Claire Mayfield. There's more. Says her Dad is a faculty member at some junior college. He knows somebody at the U.C. Irvine campus. That's bad news, Moe."

Sanchez nodded. "We may have another problem, Len. If the word gets out about our project there could be some unwanted attention. My other clients would be awfully nervous."

"Yeah, Lenny agreed. "Your friends from the desert. MicroSystems could kick us out on our asses if they found out Firebug wasn't just another nanospy creation."

There was a sudden rustling sound at a small open window of the van. "God be praised," Moe Sanchez muttered under his breath as Firebug settled delicately on its foot-square pine wood launch pad. Its damaged wing hung askew at its side. "Lenny, get me the tools and the scanning scope."

Both men peered through twin binocular eyepieces. Complex fine molecular wires interconnected with microscopic transistors and a tiny light powered energy source. “The visual and audio systems, GPS navigation, satellite access and target acquisition mode appear to be intact. I’ll run internal systems evaluations now.” He presses another series of keys and data columns scrolled slowly down the screen.

“Oh hell,” Len said with a soft sigh of frustration. “That busted wing won’t detach when Firebug goes supersonic. The slipstream imbalance with hypersonic wind velocities will destroy it in seconds. It must be replaced.”

“This is a major setback Lenny. Our first operational test won’t go off as promised. Lotta bucks riding on this. How long to test a replacement? “

“Two weeks, Moe. Replacement components are scarce as hell, and we’ll need approval from MicroSystems management for a lot more money. What about your friends?”

“Maybe. I’ll ask MicroSystems first. They have government contracts for nanobot spy devices. They want new ones badly. I’ll hit them up for enough for five or six more Firebugss.”

Lenny said, “We should stockpile more spare parts, too.”

“Later. I’m more concerned about that damn kid right now, Lenny. Get busy on that wing while I get some searches going.”

Moe’s capability in computer hacking rewarded him. Claire Mayfield was a student at Marina High School in Huntington Beach. “We need to keep an eye on her Dad and see if he does contact some Prof at U.C. Irvine.”

3.

A sophisticated phone tap of Moe’s own design revealed that Mayfield did, in fact, discuss Claire’s finding with Professor of Entomology William Reinhold. A meeting was scheduled for 1600 hours Thursday 28 May. “I’ve got the building and room number, Lenny. This is a job for one of our flybots.”

Thursday 28 May. 1540 hours:

The minuscule video system aboard the common housefly nanobot showed a clear view of the little spy’s route from the Alton Parkway location to Professor Reinhold’s second floor office window in the Life Sciences building on the U.C. Irvine campus. It was a warm spring day and windows were open. The mesh metal screen was no problem for the little invader, which melted a tiny opening with a laser flash lasting less than a millisecond. The intruder was not noticed as it settled next to the Professor on the gray flexible shaft of a lamp on his desk. It waited.

4.

Thursday, 28 May. 1605 hours:

“Cut in the audio now, Lenny. I’ve got good video.” Papers rustled on the Prof’s desk. He was a middle-aged black man wearing a dark jacket over white shirt and crimson tie. His intercom buzzed. The Prof listened. “Send them in, please.”

Edward Mayfield was a tall, rail-thin man with light brown hair showing early pattern baldness. He wore a tan jacket over a white v-neck shirt. The two men shook hands. “Why aren’t you out there at SeaCliff bashing golf balls, Ed?” the Professor asked.

“I wanted to, Bill. Claire can be very persuasive. When she told me what had happened, I was hooked. I brought her along.”

Claire smiled. “Hi, Professor. I convinced my Dad to let me in on this ‘cause I saw it happen.” She reached into a pocket of her plaid shirt and produced a sealed plastic specimen sleeve. She handed it to the Professor. “I don’t think this is a piece of dragonfly wing, sir. It’s plastic.”

As Claire related her story, Reinhold eyed the specimen with increasing curiosity. “Give me a few minutes, Claire.” He booted up his desktop Mac and spent several minutes clicking on nanobot websites as Claire looked on. He then opened a deep desk drawer and removed a scanning microscope. He opened the plastic container, removed Claire’s specimen carefully with a fine forceps and set it on the microscope stage. “Claire, you can look through the other set of eyepieces.” He moved the specimen across the microscope stage, millimeters at a time. After a minute or two he sat back and clasped his hands behind his head. “I’m impressed. You’re right. It’s thin plastic polymer. Those internet sites you see have photos of nanobot insects, flies, wasps and mosquitoes. Yours is a real one. Very sophisticated. It’s a piece of a nanobot dragonfly’s wing. Incredibly fine detail.” He scratched his head. “But for what purpose? It’s big for a nanospay device, Claire.”

“Who would be making something like this?” she asked. “And what was it doing in Huntington Beach?”

“Maybe a test run that was interrupted by you, Claire. There is a company here in Irvine called MicroSystems, Inc. They have contracts, both civilian and military. Let me see what I can find out. They are very secretive, but I’ll give it a try. Maybe the FBI or Homeland Security knows something. May I hang on to your specimen for a while? I’ll get back to you as soon as I find out anything.”

5.

1720 hours, the same day:

“Goddamnit,” Sanchez swore. “Damn kid, her father and that UCI Prof who knows too much. We’ve gotta do something about them.”

Taggart blinked. “Like what, Moe?”

“Like making them disappear. That nosy Prof, for one. You heard him. Homeland Security. That kid and her father might talk to others.” Sanchez made tight, clenched fists that made the coiled diamondback rattlers of his tat sleeves coil in menace. “Our project must continue without interference.”

Eyes wide, Len backed away a step. His words tumbled out, strung together in a high-pitched screech. “For Christ’s sake, Moe. What the hell are you talking about? Knocking off some college bug chaser? A high school kid and her old man. Moe, you can count me out. This is insane.”

Sanchez’s voice exploded with wrath. “You volunteered, goddamnit. You better get your priorities in order, Len. Our frat brothers at UCLA and my desert friends are with me on this. World wide recognition when we achieve our goals.”

Taggart mopped his brow with a sleeve.

“What does that mean, Moe?” he asked as perspiration began to trickle down his face. “What goals?”

“Goals I have set. Firebug will be a big step forward. The speed configuration and nanofuel and explosive components we tested in the Mojave Desert are ready for some real action.”

Len pointed an accusatory finger. “We had a lot of fun testing in the desert, Moe. I didn’t volunteer to be a murderer. Count me out,” he yelled. “I’m cluing Mr. Millhouse in on Firebug.” The van’s rear door slammed behind him.

Moments later a dragonflybot followed across the parking lot and up the stairs into the MicroSystems building.

6.

“You shoulda stuck with me, Lenny,” Moe Sanchez raged quietly as he watched the C-band satellite link for line of sight tracking. He caressed the trackpad of his computer keyboard with agitated but concise fingertips. The multifaceted video feed from the dragonfly nanobot’s eyes was sharp and clear on his screen as it lifted off from its small pine wood launch pad.

A minute later its four wings, feet and multifaceted eyes stripped away, revealing a narrow needle-nosed projectile with minuscule horizontal and vertical fins for flight control accelerated as it approached its target.

7.

“Please come in, Mr. Taggart,” MicroSystems CEO Rudy Millhouse said. “Tell me what’s got you so upset.”

“It’s bad, sir. I’ve got some information that you need to have. Firebug isn’t just another spybot. It’s a . . .”

Len uttered a surprised gasp, grabbed his chest and collapsed flat on his face on the CEO’s expensive Oriental rug.

Paramedics responding to Millhouse’s 911 call were mystified. 38 year-old Len Taggart was remarkably fit in appearance but did not respond to standard CPR procedures or defibrillator paddles.

The pathologist at U.C.I. Medical Center was equally baffled days later. Taggart’s autopsy showed a perforation of the aortic arch and cardiac tamponade due to the sudden effusion of blood into the pericardial space. Rupture of a congenital defect in the arterial wall was the conclusion of the pathologist’s report. A small skin defect on Taggart’s upper back that had been obscured by the scrapes and abrasions caused by the vigorous CPR efforts went unnoticed. The track of the killer dragonflybot also was not detected. Dust sized particles of plastic polymer, titanium oxide and nitrate explosive residue from the murder weapon were strewn throughout the arterial, venous and capillary structures by the final pulse of Len Taggart’s heart. The pathologist ordered routine testing of blood for alcohol and drugs. All test results came back negative.

PART II

1.

Friday 29 May. 1030 hours:

FBI agent Todd Brookshire, a tall 40 year-old sandy haired man wearing a dark suit, white shirt and blue striped tie arrived at the MicroSystems, Inc. complex to question Sanchez, the CEO and employees. There was a problem. Sanchez and his computer files had vanished overnight without a trace. Credit cards, bank accounts and personal information had vanished. Also missing was his old Chevy van.

“Certainly you have copies of his files,” Agent Brookshire said.

The flustered MicroSystems CEO said, “Those files are confidential, sir. We had an agreement with Mr. Sanchez that we would not reveal any such information. We were

hesitant at first, but when we saw the quality of his finished products and the amounts the U.S. Government offered for his nanospies, we agreed.”

“This disappearance of a key employee involved in the development of your spy nanobots, closely following the mysterious death of his associate is suspicious as hell. It raises the possibility of a threat to national security, wouldn’t you agree, Mr. Millhouse?” Agent Brookshire asked.

A chastened Millhouse turned over everything on flybot production on disc and hardcopy files. Agent Brookshire asked, “Does this include his current projects?”

Millhouse entered a fourteen-digit password on his computer and pressed a key. One word sprang to the screen. FIREBUG. “It’s a larger spybot in the form of a dragonfly. The project is still incomplete.” He thought for a moment, then said, “This is very odd, Agent Brookshire. Just before Mr. Taggart collapsed, he said, ‘Firebug isn’t what you think’ and then he died.”

“Give me everything you have on Moe Sanchez,” Brookshire insisted. “This situation is becoming more ominous.”

MicroSystems, Inc. personnel records revealed that 35 year-old Moe Sanchez was a naturalized American citizen born in Venezuela. He had graduated from UCLA in 2005 with advanced degrees in physics, communication and nanotechnology. He had been employed by MicroSystems, Inc. since July of 2006. There was a page with two paragraphs heavily redacted with black marking pen. “What the hell is this?” Agent Brookshire demanded.

Millhouse nodded. “One of Mr. Sanchez’s requirements.” He stepped to an office safe hidden behind a print of a Degas ballerina scene and removed a hardcopy file in a manila folder. “I kept this.”

Brookshire took a seat next to the CEO’s desk and read for several minutes, then looked up. “He conned you, Rudy. Moe Sanchez was an active member of a radical group of UCLA students back in the nineties. They plotted acts of terrorism against our government. He and several others were arrested in 1995 for a riot and destruction of university property. They also were alleged to have some Middle Eastern ties.”

“He told us he had outgrown such nonsense and become a patriot. We believed him after consulting UCLA sources and after he passed a background check. We were willing to overlook any glitches in order to gain his expertise in nanotechnology,” Millhouse said.

Agent Brookshire scratched his chin. “What was so different about his expertise?”

“He and Mr. Taggart tested his insect nanobots in the Mojave Desert using satellite telemetry. They could achieve supersonic speeds and great distances with very small amounts of fuel. We were impressed, and so was the U.S. Government.”

Brookshire nodded. "One of our agents has interviewed Professor William Reinhold at length. He has provided us with helpful background information.

"Reinhold is who?" Millhouse asked.

"A Professor of Entomology at U.C. Irvine. He interviewed Claire Mayfield, a teenager who had retrieved a piece of an insect wing from her capture net as she worked on a science project. Reinhold identified the fragment as part of a dragonfly nanobot's wing. He became suspicious called our Sacramento office. That has led me here."

"What can I do to help?" Millhouse asked.

Agent Brookshire handed him his card. "Anything else you can recall, please call me at once."

2.

Sanchez sold the van for scrap and spare parts, then moved to another apartment under an alias. A forged drivers license and cash allowed him to purchase a 1990 black Ford Econoline van.

3.

By July, Sanchez was ready for Firebug's first critical trial. His van was parked near Michelson Drive in Irvine, a short distance from the John Wayne Airport. Its roof antennas were disguised by a plastic luggage rack. Moe accessed the MicroSystems K-Band frequency for a communication satellite parked in geosynchronous orbit, then pressed a key. The dragonfly nanobot lifted off, sped northeast and leveled off at 18,000 feet where it circled and waited.

4.

Santa Ana, California. Friday, 10 July. 1450 hours. John Wayne Airport tower transmission:

"Emergency. JWA tower, this is Bombardier Learjet 45 x-ray romeo. Blown portside engine, unknown cause, instrument failure, hydraulics damaged. Please clear a runway for us," the pilot calmly requested.

"Copy, Learjet. We have you on radar, 65 miles out. Come left six degrees, use runway 1L/R19. You will be landing downwind. How are your control surfaces?"

"On manual, tower. Nose wheel won't deploy."

“Roger that. Maintain nose-up attitude if possible, you have over a mile of runway. Flaps at your discretion. Emergency vehicles standing by. Retardant foam being laid down now. NTSB notified and on their way.”

“Airspeed 140 knots. Full flaps. Runway in sight. Touchdown in 30 seconds.”

The white and silver company jet came down with its tail scraping the runway. Sheets of foam retardant flew in all directions as the plane used up three quarters of the runway. The nose wheel deployed with the shock of the landing. The emergency crew unloaded more foam over the plane’s engine housings. There was no fire. Pilot, copilot, flight attendant and three relieved but shaken passengers were escorted to safety by the emergency crew.

“Damn,” Moe cursed under his breath. “Pilot was lucky.” He started up the van and drove away slow, avoiding the flood of curious onlookers. He smiled. “Time to gas up and head for San Diego.”

5.

“This aircraft is less than a year old,” 42 year-old Captain Ross Simmons, a former Air Force jet fighter pilot told the NTSB investigators. “All instruments were in the green. There was no forewarning.”

Inspection and maintenance records on the LearJet were meticulously reviewed as Simmons fidgeted. One investigator asked his situation at the time of the explosion.

“We were at 17,500 feet, beginning our approach to Palm Springs International, bearing east-southeast, speed 330 knots. We were able to assume glide status after the engine blew up. John Wayne was the closest airport. We wouldn’t have made Palm Springs.”

6.

Thursday, 16 July. 1645 hours:

Ross was surprised by a call at home from the head of the NTSB Go Team. “Captain, there’s an unusual finding regarding your charter service’s LearJet.”

He hesitated for a second, took a deep breath. “How do you mean, unusual?”

“When we reassembled the fan jet engine there was a two centimeter perfectly circular defect in the portside engine cowling, directly into the combustion chamber. A projectile of some sort. At first we thought the trajectory indicated it was from directly to port, like from another aircraft. We checked that possibility. No other aircraft were within a hundred fifty miles of you at the moment of impact. We did a recalculation. The Lear’s

black box showed you made a routine course correction by banking to port just before impact. That means the angle of attack was different. The projectile came from the ground.”

“Dammit to hell. Did you get a location?”

“A parking space in a lot less than a quarter of a mile from John Wayne Airport, near some businesses on Dupont Circle. We investigated, somebody thought an older van might have been parked there.”

7.

Friday, 17 July. 1132 hours: Breaking News flashed across Fox News Channel and CNN screens.

One of the twin jet engines of a U.S. Navy F-18 Hornet fighter jet exploded shortly after its takeoff from the Miramar Marine Corps Air Station, near San Diego. It had reached an altitude of 1500 feet when the pilot ejected safely. Navy and Marine Corps personnel are at the scene and awaiting the arrival of the NTSB Go team. Stay tuned for further updates.

“Dammit to hell,” Sanchez fumed as he sped north. “Another lucky pilot.” Then he smiled. “Two successful trial runs. Gotta blow up something really big now. I need two or three hundred passengers.” At his new location, Sanchez’s fingers danced across the keyboard, then he leaned back, stretched his arms behind his neck and smiled. “Good as gold. Qantas. Sydney to Los Angeles. Boeing 747-8. Capacity 457 passengers and crew. Flight 2118. Arrives Los Angeles 1530 hours Monday August 24. Firebugs will hit it far enough off the coast so no recovery would be possible. Megabucks coming to me for this one.”

8.

It took time for the NTSB Go Team to reveal preliminary findings on the John Wayne Airport and the Miramar Marine Corps Air Station to be correlated. The findings in the F-18 incident were ominously similar. When the starboard engine cowling was reconstructed, a similar two-centimeter defect was identified. The source of the missile was calculated and located less than a mile from the base in a small residential tract. Intensive search revealed nothing.

9.

Agent Todd Brookshire’s secretary said, “Mr. Millhouse from MicroSystems on line one, sir.”

He grabbed the phone. "You found something, Rudy?"

"Your person of interest, Moe Sanchez, is still using satellite telemetry. The account was never closed."

"How the hell could that happen?"

"Sanchez and Mr. Taggart had authorized use of the telemetry C and K bands, that is, both line of sight and satellite link. During the confusion following Mr. Taggart's death and Sanchez's disappearance, I neglected to close the account."

Brookshire was quiet for a couple of seconds. He took a deep breath and asked, "by any chance are there time and date stamps of recent usage?"

"Yes, Agent Brookshire. I've made copies of everything."

"Lock them in your safe and I'll see you tomorrow morning."

10.

0935 hours the following morning:

As Brookshire reviewed the discs, CEO Millhouse said, "Those from 2006 to 2011 are related to Firebug tests in the Mojave. There have been three recent additions."

"1635 hours Thursday 14 May. C-band transmission. 14 minutes. Location not identified," Agent Brookshire read. "Mean anything to you, Rudy?"

Millhouse exhaled a tremulous breath. "That one was about the time Mr. Taggart died."

Brookshire nodded. "These next two are most critical." He read, "John Wayne Airport Friday 10 July, 1450 hours, MCAS Miramar. 17 July, 1130 hours." He stopped and massaged his temples with his fingertips. His voice was soft in quiet resignation. "Oh hell, Rudy. Sanchez is using his Firebugs to attack aircraft."

"I'll shut down the link right now," Millhouse said as he reached for the phone.

Brookshire said, "Wait. Let's check on something. Could we access Sanchez's transmissions without alerting him?"

Rudy grabbed the phone and had an agitated conversation. During a pause he nodded to Brookshire and whispered, "FCC says yes. The satellite routinely follows the GPS track of each transmission and records it. If we have the proper electronics we can access it in real time."

“Good. What’s on the track?”

Millhouse asked the question and listened. “Encoded flight control instructions to the Firebug.”

Brookshire said. “I think Moe is after something bigger. I’ll ask the NSA to watch for any transmission from Sanchez. In the meantime I’ll be going over the track of his last three with someone who can help.”

11.

At 0730 hours the following morning a white Dodge cargo van with multiple antennas sprouting from its roof drove up to MicroSystems, Inc. It was driven by a young woman with long dark hair styled in a ponytail. She wore metal-rimmed John Lennon glasses, Levis and a blue UCLA Bruins sweatshirt. Her passenger was Todd Brookshire.

CEO Millhouse met them in the parking lot. “Wow. What’s in the van?”

“Some help, like I promised. This is April Constanza. I borrowed her from NSA to give us a hand. April is an expert in satellite telemetry and decryption of encoded transmissions.

She shook his hand. “Todd has brought me up to speed on the Firebug problem.” She opened the rear doors of the van to reveal lots of sophisticated electronic gear. “Please come in. It’s a bit crowded but I think we can manage.”

Millhouse and Brookshire peered over her shoulder as she booted up one of the computers and clicked keys. “This is the murder event.”

Both men watched a series of spikes of varying heights crawl across the screen as Constanza explained. “Encoded instructions to Firebug over the C-band, culminating in the attack on Mr. Taggart. I heard something weird, thought it was static at first, then I isolated and amplified it. It’s audio feedback that spilled over.” She tapped more keys. It’s faint, but listen.”

Both men sat close and cupped their ears. “Oh, wow ” Millhouse whispered. “That’s Moe Sanchez’s voice.”

Constanza nodded. “He says, ‘*You shoulda stuck with me., Lenny.*’ I assume that’s Mr. Taggart.”

“Damn,” Millhouse swore.

“It gets better. She pressed another key. “This is the Sanchez transmission from the John Wayne Airport incident. More audio spillover. Interference by faint ground traffic and airport noise leakage but here’s that same voice again. *‘Damn pilot was lucky’*. Then more cursing.”

“And the MCAS Miramar incident?” Brookshire asked.

April shook her head. “Nothing. The impact and crash noise spillover was minimal but no Sanchez voice.”

“Please continue to monitor Sanchez’s frequency 24/7 April? We think his next attack will be very soon.” Agent Brookshire said. He handed her a key card “I’ve arranged with Rudy for you to use the MicroSystems facilities.

“Thanks. I’m on it. His launch window will be very small,” Constanza told them. “And if he doesn’t vocalize, we’ll be in big trouble.”

“Is there any thing you can do about his encoded transmissions to Firebug? Maybe shut them down?”

She crossed her arms and took a deep breath, exhaled a tremulous sigh. “Doubtful. Perhaps locate his transmission site. Aside from that I just can’t say. I will be working on a couple of things.”

12.

Friday 17 July. 1316 hours:

In back of a hot dog stand just off Melrose Avenue, near Los Angeles International Airport Moe. Sanchez parked his van and checked his watch, grinned. Four heat-seeking Firebugs were arranged on their flat wooden launch pad, awaiting instructions. He muttered quietly to himself. “Very soon now.”

Todd Brookshire’s computer beeped. “Moe’s K-band link’s just gone active,” he yelled.

“I’m on him,” Constanza responded. “Somewhere on Melrose, close to LAX. There’s so much air traffic, we’ve gotta get lucky. Come on, Moe, talk to April.”

“Darnit,” she screamed. “He’s launched a Firebug. It’s tracking west-southwest. Oh you’re so slick, Moe, but so am I. I can hear you.”

13.

1450 hours:

In his van parked behind the hot dog stand, Sanchez smiled as he launched the second Firebug. “You Aussies ready for a nice salt water bath?”

“Todd,” Constanza screamed. “Aussies. Look for anything from Australia or New Zealand, inbound. We’ve only got seconds.”

Brookshire pounded keys. “Yes. Qantas flight 2118 from Sydney. 747-8. 475 passenger and crew capacity. Arrive LAX 1530 hours. Do you have it, April?”

‘Copy. Got them on screen. Big 747. First Firebug is targeting right outboard engine. I can’t stop that one. Please help them, Todd.’

Brookshire pounded keys, accessed the Qantas cockpit crew. He identified himself with emergency code word JINX and instructed the pilot to shut down the target engine. “You are being shot at by small drone explosive jets by a terrorist. No questions. Just do it.”

Sanchez sat upright. “What the hell?” Seconds later, his van exploded in a fiery blast that took the roof off the adjacent hot dog stand.

Brookshire and Millhouse gaped at Constanza’s computer screen. “What happened, April?”

She took several deep breaths and mopped perspiration from her face with the sleeve of her sweatshirt, “Remember, I had decrypted Sanchez’s instructions for controlling the Firebug. I was too late for the first one. I deflected the second one’s course and splashed it. For the last two I had a few seconds to enter Sanchez’s recall code.”

The cause of the explosion on Melrose Avenue was not revealed. Damage was confined to Moe Sanchez’s van and the roof of the Melrose Avenue hot dog stand. Sanchez was identified by DNA and dental records. His computer was recovered, partially shielded by his body.

Epilogue

Nieuport 17 Restaurant in Tustin, California six hours later:

Brookshire took a long swallow of his Glenlivet single malt scotch. “The first Firebug did impact the 747’s outer starboard engine. The pilot got it shut down with seconds to spare, thus there was no fuel in the combustion chamber to explode. We got lucky.”

Rudy Millhouse pointed to a TV screen where CBS channel 2 was showing the Qantas 747 landing safely on three engines in a white spray of fire retardant foam. “April, you need to lean on Todd for a promotion.”

She smiled, took a sip of her Stolichnaya and lime twist. “Thanks, guys. All in a day’s work for me. Any medals should go to Claire Mayfield and Professor Bill Reinhold. Without their curiosity and persistence we’d still be chasing Moe Sanchez.”

Sanchez’s damaged computer hard drive provided MicroSystems and the U.S. Air Force with more advanced nanobot technology. Any connection between Sanchez and suspected terrorist organizations was not recovered.

The End