

## Chapter 1

Rain drizzled on the windscreen of the waiting man's car. He had parked his red subcompact between two of the tall pine trees that lined the winding road connecting the Aron Heights residential area to the city below. It was not even 11 pm and yet it appeared as if the small neighborhood built on the stretching hillside was fast asleep. Most of the private homes with their adjoining gardens sported only token illumination of front porch or lawn. Compared to the gloom of the small community, the metropolis it overlooked was ablaze with lights. Its skyscrapers appeared like an oasis of stars against the murky night sky. Tiny specs of light moved to and fro inside the urban canyons.

The man turned away from the sight and resumed watching the entrance of the wooden house on the other side of the road. A single room on the second floor was illuminated and he could see a man moving within. His features were obscured by the drawn curtain. The watcher rolled his shoulders and reached for the pack of cigarettes in his blazer pocket. At the same moment, the lights in the room went out. The man paused. It was time.

Smoke forgotten, he turned to the array of electronic tools spread out on his car's passenger seat. The tap of a button woke the laptop computer from its sleep and another brought the connected radios online.

Half a minute later, the front door of the house opened and a man in his forties emerged. He was wearing a casual jacket and a pair of jeans. The top buttons of his shirt were undone despite the November cold. There was an eager spring to his steps as he walked over to a silver sedan parked on the gravel in front of the porch. He showed no signs of having spotted the man who was watching his every step. The observer wasn't concerned that he would – even in broad daylight, a subcompact looking like thousands of others would not arouse suspicion. He turned back to his computer, watching the last program complete its initialization. After weeks of preparation and practice, there was little need for manual intervention. Still, seeing the messages scroll down the screen calmed him. The neat package of scripts on the ultraportable computer would do most of the work for him tonight. All he had to do was pull the digital trigger and keep his car in range.

On the opposite side of the road, the other man climbed into his vehicle and started its engine. A few lines of text appeared in one of the command interpreter windows on the observer's laptop screen.

`'Wakeup event registered: TPMS sensor IDs received.'`

He nodded to himself, put his hands on the wheel, and watched the silver sedan roll onto the road. As the other vehicle passed his parking spot between the trees, he turned the ignition key. He then waited for a few seconds before pulling onto the street as well.

It was a 3-mile drive from Aron Heights down into the city but the winding road and weather conditions would draw it out quite a bit. But then, the watcher had no intention of merely following the other man to his destination. He waited for the sedan to pass the first two switchbacks before reducing the distance. Thanks to his thorough preparation, there was actually no need to get closer than half a mile, but he did not want to take any chances. It was always wise to have a contingency plan. The man reached over to his laptop and hit a few keys. The simple distraction almost cost him his life – a gush of water from an overhanging

crag suddenly obscured his view and even the furiously laboring windscreen wipers could not cope. He instinctively yanked his steering wheel to the right to circumvent the rest of the small waterfall. The maneuver brought the subcompact dangerously close to the roadside ditch and a 100-foot plunge down the mountain. Only the driver's last-moment corrections and his car's ESP saved him from crashing through the guardrail. He was breathing hard after he had finally stabilized the vehicle. He accelerated to catch up with the sedan once more. A quick glance at the computer screen confirmed that one of the connections was still active. It was time to begin. The pursuer reached over to his laptop and hit the confirmation key.

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'Sending RF activation signals on low frequency band.'
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The sedan came back into view, brake lights flaring as it approached the third hairpin bend.

```
'Wakeup successful: Tire pressure sensor ID information received.  
Start final.py? <y/n>'
```

Compressing his lips, the man in the red subcompact tightly gripped his steering wheel. There was no need for any more intervention. Even the final transmission was nothing more than a reassurance. He had coded his scripts to trigger once he was in range of the tire pressure sensors that were communicating with the sedan's control module that was responsible for both monitoring and door lock controls. All he had to do now was watch. His preparatory work, a few more lines of code, an amplifier and his universal computer-controlled radio would do all the rest. It was almost too easy.

```
'Connection established. Received HELLO from telematics unit. Loading  
on-board diagnostics port emulator...'
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The sedan passed the switchback and vanished around an overgrown bluff. The man in the red car followed. He felt calm now that it had begun. Even if he reconsidered now, he would not be able to stop what he had set in motion. Not anymore. The silver vehicle came back into view.

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'Diagnostic access to controller network established through  
DeviceControl service.'
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The road ran relatively straight down to the fourth and last switchback. The sedan picked up speed again. On the left and below, the lights of the city were much closer now. Even though the drizzle had turned into an outright downpour, the glamor of the city refused to be entirely obscured.

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'Unlocking Electronic Brake Control Module...'
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The monotonous sound of the windscreen wipers was only accompanied by the constant hammering of rain and the low hum of his car's engine. A hundred feet ahead, the sedan was fast approaching the bend.

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'Disabling all brakes.  
Disabling Anti-lock Braking System.  
Initiating delayed module reboot.  
Self-erasing from telematics unit...  
Connection closed by remote host.'
```

The car ahead was still speeding towards the bend. This time, no brake lights flared up. The man in the red compact reached over to his computer and pressed a single button. 'Y' for 'yes'.

```
'final.py: started.'
```

He didn't smile. He didn't even feel the expected satisfaction. The only thing he felt was dread at how easy it was to seal the fate of a man with only a few commands to a machine.

The silver sedan swerved to the left in an attempt to negotiate the switchback without braking – but to no avail. The car slammed into the outer guardrail. The metal barrier was torn from its bracings and plunged down into the chasm beyond. One heartbeat later, the sedan followed. Another heartbeat later it was gone. All that was left behind was a gaping hole in the crash barrier and a line of text gleaming on a computer screen:

`'All tasks completed successfully.'`

## §

"So the guy was in a hurry to get to his mistress and ran his car down the ravine," Detective Nathaniel Pierce surmised. "Not the first time that happened. Question is: why am I here?"

The investigator was standing next to the missing segment of the guardrail, tugging close the collar of his coat. It was a feeble attempt to keep the wet away – ever since he had left the precinct in the morning it had been raining cats and dogs. Nathaniel sighed as a rivulet of water trickled down his spine. His short brown hair was plastered to his skull like a drenched mop.

The man opposite of him was not an officer of the homicide department like Nathaniel, but a regular traffic cop.

"So, what's wrong?" Nathaniel asked again. "You guys think that it wasn't an accident? Somebody helped to send the poor bastard down there?"

The younger man adjusted his cap before replying.

"We aren't certain, detective. Thing is, there weren't any skid marks worth the mention. Sarge told us to call you to take a look."

Nathaniel nodded and glanced over his shoulder. There were marks on the wet road, but they were uncharacteristically short and aligned at an odd angle. He didn't consider himself an expert in the area, but it looked like the driver had tried to take the bend at a good 40 mph, perhaps more. Needless to say that it hadn't worked out. The victim, a 39-year old executive of a local tech firm, had died on impact.

Nathaniel stepped closer to the edge and peered down. Two pine tree heights below, several policemen were scouring the wreck of a silver sedan for evidence. Firefighters were standing by to secure the vehicle for transport. There was not much Nathaniel could do to help so he stepped away from the precipice. The other police officer cleared his throat and approached Nathaniel.

"Perhaps you would like to investigate the scene, sir?"

"Like to? No. But I am already here, am I? So I might as well take a look."

Something about the youngster annoyed him. Perhaps it was his prim and proper uniform or the fact that he seemed unperturbed by the rain. Before he could regret his snappy words, Nathaniel lowered himself onto the first of many rocks that had tumbled down the ravine over the years. Under normal circumstances it would not have been a difficult climb but the rain had made the stones slippery. He was thankful for the rope that had been affixed to one of the sturdy reflector posts as it made the treacherous climb a lot more manageable. It still took him two minutes to reach the place where a tree had stopped the car's plunge.

As expected, there was not a whole lot to see. The sedan's chassis was warped almost beyond recognition. The impact had literally crushed the driver. The body had been lifted out and placed on a stretcher but there was still blood on the dashboard and driver's seat.

"No airbags?" Nathaniel wondered aloud. Around him, uniforms were collecting parts of the car's shattered body. It was one of the firefighters who answered.

"Airbags didn't inflate. And the doors were all locked when we got here. Had to cut them open."

Nathaniel frowned and lifted the grey plastic sheet that had been draped over the victim's body. It was not a pretty sight.

"Technical malfunction?"

The firefighter shrugged.

"I wouldn't know. But it's unlikely that he'd have survived even with the airbags. It's called Death Road for a reason. We had half a dozen fatal accidents around here this year alone. Mr. Renner was lucky number seven."

"You knew the fellow?" Nathaniel asked, putting the plastic sheet back in place. The firefighter nodded.

"Sure did. Charles Renner donated fifty grand to the department each year. He was some big shot at that tech firm, Arklight Technologies. It's a shame, really. Always gets the decent ones."

Nathaniel crossed his arms and pondered the information. He would take a closer look at this case after all. There was not much to work with, sure, but it was enough to pique his interest. That, and his gut feeling telling him that something just wasn't right. He turned to one of the uniforms canvassing the area.

"Send everything to the forensic lab on Third Street. Let's see if we can get to the bottom of this."

From the outside, the District Police Forensic Lab did not look like much. Situated in downtown, the building had been erected some 70 years ago and, even after two renovations, retained all its postwar charm. Four stories high, it was a square block of concrete and cross-barred windows. Nathaniel parked his convertible on his designated parking spot across the street right next to the main entrance of police headquarters. The architectural style of the main building stood in stark contrast to the lab structure. Only built recently, it more resembled a contemporary arts museum than a public institution. The five-story building featured a black glass front, arced entranceway and an asymmetrical slanting roof split in half by a helipad. On the small plaza in front of it was a sizable fountain whose water jets supported a marble block inscribed with the building's name and purpose. A skywalk on the third floor connected the headquarters to the forensic lab on the other side of the street.

Nathaniel always had to shake his head when he saw the ultramodern structure. It was hard to imagine that the taxpayers approved of such vanity. The detective climbed out of his car and crossed the street to the double doors of the forensic lab. As usual, they were locked. As usual, it took the card reader three attempts to read his ID and admit him. Inside, a small unadorned lobby greeted him. Grey corridors branched in all directions, each labeled with cryptic abbreviations hinting at the nature of the departments housed in that particular part of the building. Over the years those departments had significantly grown in number.

There was a lab for drug analysis, toxicology, DNA and fingerprint analysis as well as a firearms and toolmarks laboratory, a computer analysis department and a tire track and vehicle forensics section. Since prolonged on-site investigation on the hillside had not been feasible, Nathaniel had had the evidence sent here. The lab occupied by the vehicle forensics team was where he was headed now.

As its nickname suggested, the 'garage' was located in the basement. It was grey-walled like the rest of the building and featured a chamber for image analysis, a computer room connected to the vehicle registration database and a spacious chamber for the actual evidence examination. For the Renner case, those pieces of evidence were the remains of the victim's silver sedan and a few dozen high resolution images.

The car had been jacked up in the center of the main hall. Nathaniel strolled over to the wreck, taking in the carefully arranged debris. A Hispanic woman in her thirties and a boy in his late teens perused the wreckage. The powerfully built woman wore her black hair in a functional bun while the young man had had his hair cropped short. Both were wearing protective glasses and white lab coats.

"New intern?" Nathaniel asked the woman as he approached. Both lab technicians looked up from their work. The woman nodded a greeting. The boy straightened and offered his hand.

"Bobby Malloy, detective. Pleased to meet you."

Nathaniel just raised an eyebrow, making no move to take the other's hand.

"Gladis, please tell me you instructed the rookie in workplace hygiene."

To the young man he added, "Do you have any idea how much evidence you carry around under your fingernails alone?"

The intern blanched, stuttering an apology. Gladis rolled her eyes.

"Please stop harassing my employees, Nate." She patted the younger man on the shoulder.

"Don't mind the grumpy detective. He is only good company to people who have been recently murdered."

As the intern scampered off, Gladis turned back to Nathaniel who was stifling a laugh.

"So, what can I do for you today? To forestall your question: no, I am not done yet."

Nathaniel eyed the wreckage and picked up a pair of gloves.

"I am sure you can tell me *something*." He knelt down next to the warped front bumper and added, "You didn't label them yet?"

Gladis tapped her right cheekbone. She always did when she had to explain something that was obvious to her. It happened quite a lot when Nathaniel was talking to her. He had long since decided not to hold it against the technician.

"AR, hun. We do AR nowadays."

Nathaniel sighed and began searching his pockets for his augmented reality glasses. Even though he hated wearing them, he could not deny the advantages of the technology. Companies advertised it as a means to have all information right where you needed it. In the case of AR, that meant digital projections floating around in front of you. Gladis had once explained that the glasses you had to wear projected an overlay into your field of vision like a heads-up display did in a fighter jet. Ever since the technology had made the mass market, it was revered as *the* must-have gimmick for media consumption. To Nathaniel, all the well-

dressed people staring into space or talking to their glasses were not a sign of progress, but proof that humanity could be coaxed to worship pretty much everything. Provided that 'everything' had a capable marketing department.

The vehicle forensic lab had been equipped with positioning sensors allowing technicians to put AR objects wherever they wanted – they could even be 'attached' to, say, a fragment of debris. If a piece of evidence was picked up or moved round, the digital tag followed it. There was a simpler method that included physical anchor tags that could quite literally be stuck to any surface. They came with a limited amount of persistent memory and were independent from costly sensors. To Nathaniel both practices were basically an expensive and impractical way of labeling things.

The detective finally found his pair of slim AR glasses and put them on. As he took a look around, semi-transparent windows popped up all over his vision. Each fragment and component of the car now sported textual descriptions. Some even had pictures attached, others had been augmented by 3D animations.

"Yeah, fancy. So what have we got?" Nathaniel took off the glasses. He could not help but feel ridiculous wearing them.

"Something of a puzzle," Gladis admitted. "You know that most cars these days are equipped with a number of computers, right?"

Nathaniel grunted. The lab technician continued, ignoring his lack of enthusiasm.

"Each of these so-called control units is basically responsible for a specific function like airbags, lights, door controls, ignition timing, brakes, or even the radio. You name it."

She raised her hand, forestalling Nathaniel's question as to how all that was relevant.

"There is also a module responsible for telematics. In case of the sedan that means handling external data connections and storing a log of recent events. Long story short, that log has a gap around the time of the crash."

"You mean somebody went down to the wreck and tampered with one of those computers?"

Gladis shook her head. "There's more. Remember that the airbags didn't inflate? The locked doors?"

Nathaniel frowned. "Let me guess: more computers?"

"You bet." Gladis nodded at the remains of the sedan. "At least three control units are involved. Sure, they are all connected to each other, but it's still damn peculiar. I mean, it *could* have been a technical glitch..."

The detective crossed his arms.

"But you don't think it was," he surmised. Gladis reached over to a small table and picked up the cup of coffee that had been sitting there.

"There are safeguards against such failures. They will kick in unless..."

"Unless someone disables them," Nathaniel finished her sentence. "Can we prove that somebody messed around with those modules?"

Gladis took a sip from her cup.

"Not yet we can't. It's not exactly my area of expertise, you know. I talked to the computer guys upstairs and they promised me they'd take a look. But let's face it: they are used to recovering questionable porn from some deranged geezer's laptop, not playing

around with ECUs. What we need is a car technician or some other kind of computer wizard.” She shrugged. “You could even try talking to the manufacturer, I guess.”

Nathaniel tossed the unused gloves back to Gladis.

“Alright, I’ll see what I can do. Let’s keep it under wraps until we find something more substantial. The last thing we need is the media spinning this into a scare story. Send me everything you...”

He was interrupted by his cellphone’s ringing. Excusing himself with a quick gesture, Nathaniel turned towards the exit and accepted the call.

“Pierce.”

“Sergeant MacDowry here. I’m with the traffic department. My boys told me that you were at one of my scenes earlier? Well, there’s been another strange accident.”

The rain had somewhat eased off as Nathaniel and Gladis left the forensic lab to drive over to where the accident had taken place. The technician had instructed her team to follow in the van that doubled as a mobile lab. For a Monday afternoon, the traffic in downtown was light – Nathaniel did not even bother to put up his blue light.

“What did MacDowry say, exactly?” Gladis asked when they were underway. She was fiddling with the heater controls of Nathaniel’s thirty year old convertible.

“Not much. Car was driving down Fifth Avenue when it suddenly swerved to the right for no reason and ran into a group of pedestrians waiting at a crossing. A family among them, by the looks of it.”

Gladis grimaced at his words.

“Dead?”

Nathaniel didn’t reply. He turned at the next intersection and continued towards a part of the road that had been cordoned off. Blue and red emergency lights illuminated the scene. As the detective drove closer, he could see a number of body bags lined up under a white tarpaulin that had been erected as makeshift rain shelter.

“They never had a chance,” he said in a low voice. “Car crushed them against the wall.”

Nathaniel pointed to where a yield sign had been knocked over. White markings outlined the place where the pedestrians had been killed. The sidewalk there was barely five feet wide and ran alongside the marble wall of a bank building. Even from where he parked his car, Nathaniel could still see blood splatters on its grey surface. He climbed out of his convertible and steeled himself for the gruesome task ahead. Gladis walked over to join the forensics team that was preparing their van for field work. They had somehow managed to arrive at the scene before them. Nathaniel looked around for the officer who had called him. He spotted the hard-faced sergeant instructing a group of uniforms who hurried to comply.

“Where is he?” Nathaniel called out as he walked over to MacDowry.

“Detective,” the addressed greeted him with a grim nod.

The report of the traffic sergeant had entailed another detail: the driver was still alive. And Nathaniel intended to pump the fellow until he got some answers. Something in his gut told him that this accident was no coincidence either.

“Up there, sir.”

Nathaniel's gaze followed the man's hand to the top floor of the bank building. It took him a few moments to spot a young man huddling at the edge of the roof. One step away from certain death. He could not clearly see the driver's face at this distance, but he knew by the man's posture that he was in shock.

The detective cursed and turned back to MacDowry who was bellowing orders into his handheld radio. A quick glance confirmed that the uniforms the sergeant had been talking to earlier were no longer on the square. He had probably sent them up to the building's roof to stop the jumper.

"How the hell did that happen?" Nathaniel snapped. "How did he get up there?"

The sergeant was still watching the top of the building in question as he answered.

"The car was abandoned when we arrived. Everything looked like a hit and run. We spotted him up there the moment you showed up, detective. Not surprising really," he added in a cold voice, "the bastard killed four people. A kid among them."

Nathaniel could not resent the man for his anger. But there was still the question of how exactly it had come to the accident – a question that only the driver could answer.

"Get him down from there alive, sergeant."

For a moment, the detective considered going up to the roof himself to try and dissuade the man from committing suicide. But the memory of a similar situation was still too vivid in his mind. At that time, he had failed miserably to stop someone from going to her death – no, he had actually brought it about. For a moment, the anguished face of the woman flashed before his eyes. A woman whose husband Nathaniel had been forced to shoot in an arrest gone awry. She hadn't said anything before stepping over the ledge – just looked at him with those eyes, silently telling him that her reason to live had been taken away from her. The wordless accusation had hurt more than any bullet could ever have.

Nathaniel briefly closed his eyes to clear his head of the disturbing images of the past. There were plenty of those haunting him on a regular basis. Ten years of working as homicide detective could do that to a person. But this wasn't the time to reminisce about past mistakes. He took a step towards the bank's entrance. That very same moment, the man above took a step forward.

"No!" Nathaniel didn't even realize that he had called out. But there was nothing he could do but watch the young man plummet to his death. The body slammed into the sidewalk with a sickening thud. Paramedics immediately moved in, but there was nothing they could do either. For a long minute, Nathaniel stared at the young man's broken body. When the detective finally turned away, there was determination on his face. He walked back to where Gladis was working, trying to shut out his emotions as best as he could. He was here to do his job and he intended to do it thoroughly. There would not be any more deaths.

"All I can tell you is that one of the front brakes locked up and that ABS failed to compensate. I don't know how and why – not yet."

Gladis knelt next to the driver's door of the damaged car which had been pulled back onto the road. She was working a laptop computer connected to a data port hidden underneath the dash. Nathaniel nodded impatiently.

"Keep me posted."

Just as he was about to resume studying the wreck, one of the uniforms guarding the perimeter beckoned him over. It looked like the officer had been arguing with a woman on the other side of the police line. Nathaniel groaned. The last thing he needed was the press snooping around and asking questions he could not answer. Determined to chase her away, he walked over to the barrier.

"Look lady, I can't let you in. Letter or no letter," the policeman was telling the woman when Nathaniel arrived. "You have to wait..."

"...until the cows come home." Nathaniel finished his colleague's sentence. "Or try the press conference later on."

The detective had expected protest. Instead, the woman just studied him with a calculating expression. He returned the favor. She was around thirty, on the slim side, and wore her light brown hair in a ponytail. Everything about her – suit, stance and expression – screamed corporate management. That woman was not a journalist. Why hadn't he seen that earlier?

Before Nathaniel could open his mouth, she reached out and offered him a business card.

"Detective Pierce, I assume? My name is Eryn Veela – I'm with Arklight Technologies." There was an unspoken challenge in her ambiguous smile. "I am looking forward to working with you."