Traitor

"You’re a fucking traitor. You know that?"

Cameron tried to shake off the echo of the words as he pulled the 30-pound case from the back of the SUV. This was the opportunity he had been looking for, and he needed to concentrate.

He put the case on the ground and clicked open the latches, unfolding the eight carbon fiber booms and locking them in place. His movements were practiced and efficient as he spun each of the eight rotor blades onto their hubs. The threads would tighten further with the rotation of the motors.

He snapped in one of the fresh 20,000 hour lithium polymer batteries he always kept fully charged. He hoped this would not get Duke in trouble as well. The last thing he wanted was to hurt Duke.

He inserted the Streambox Drone downlink module and pressed on it to ensure that it made a good connection. He closed the lid and set the now fully assembled octocopter microdrone on top of it. He flicked the gimbal from which the camera was suspended to satisfy himself that it moved freely on each of its three axes.

Strapping the transmitter console around his neck, he was ready. He glanced around as more and more police cars from different jurisdictions filled the parking lot of the shopping center, now allowing the cacaphony of sirens and shouts to enter his consciousness.

It all started with happenstance. There had been some slack at the end of his course in new photojournalism technologies, and his professor, an exuberant man in his 60s, had, on the spur the moment, invited the CEO of Dreambox to talk to the class.

"The days of erecting those unwieldy microwave towers and threading camera cables through fire hoses are gone," the guest said. “Amateurs do it at home. Why shouldn't professionals be able to do it in the field?" He had given an impassioned pitch for his company's new product line, a combination of digital modems and cell phone antennas that he referred to as "bonded cellular." It allowed high definition video—4K UHD--to be streamed from a location back to the station’s TOC. No need for a $500,000 ENG truck– trucks that Cameron had gone to school to learn how to operate—or operate *from*; he was going to be behind the camera, not in front of a video screen inside the truck.

And then, he had flown with Duke.

Initially, it was kind of a lark. Cameron had nabbed a freelance photojournalist position with two stations, and once they saw his work, they kept him more than busy. He was a contractor who got called out to cover particular breaking news. However he covered it was up to him, as long as the station was happy with the shots. If they were unhappy, they’d just stop calling him. He had a lot more flexibility than if he were enmeshed in the bureaucracy as an employee.

One of his classmates had gone to work for a helicopter contractor that flew for one of the stations, and started to badger Cameron to become a helicopter “photog,” too. Cameron was intrigued, but then found out how little the classmate was paid. He was earning twice that working on the ground as a freelancer. He deflected his classmate’s competitive bragging, but agreed to fill in occasionally.

He found most of the pilots and most of the photogs complacent and bitchy about their jobs –it was just a job to them. Show up for a shift, shoot a few shots of vehicle accidents and traffic jams, and make sure to get back on the ground by the end of the shift. The photogs were incurious about the helicopters, and the pilots couldn’t care less about the technology in the back seat.

Duke, however, was different. He was a good bit younger than most of the other pilots, just as Cameron was younger than all of his co-workers.

Enthusiasm and excitement spewed out of Duke. There was no technology or piece of hardware that did not fascinate him, whether it was a subsystem on the helicopter or something in the tangle of cables and control boxes that defined Cameron's “office” in the back. He peppered Cameron with questions about the equipment – questions which showed he already had a better than average understanding of how it all worked.

Cameron began to look for opportunities to fly with Duke.

"Wow! Look at that!" Cameron said, just as he was about to ask the TOC’s permission to power down.

"What?" Duke said, the barest ghost of alarm in his voice.

"The sunset. Look."

Duke nudged the nose of the helicopter to the left, revealing the orange globe of the sun just beginning to dip its lower edge beneath the horizon. The buildings of downtown Boston sparkled around the edges of their silhouettes.

"Can we linger here for just a couple minutes? I’d like to try to get some good shots of this. This is a stunning picture."

“I'll see what I can do. They're going to have a fit."

"About the fuel level?"

“No. We have plenty of fuel. About meandering around here in Boston's class B airspace.”

"Well, as long as they don’t shoot us down."

Duke laughed. "I think we can be out of here before they get the jets scrambled—although you do take forever to set up one of your ‘beauty shots.’"

"Boston Tower, Chopper Six would like to orbit here just over the eastern edge of the airport at one-point-two.”

*Chopper Six, continue northbound. We’ll have a response to your request in a moment.*

“Damned aviation," Cameron said, “Always getting in the way of journalism."

"Damned journalism," Duke said. "Always getting in the way of aviation safety. He jerked the cyclic to the right, and the helicopter lurched

"Hey!" Cameron said. "That would've been perfect. Now the sun is getting too low. The station is going to think we had a midair. "

“You’ll know it if we have a midair--briefly, you’ll know it," Duke said, jerking the stick to the left.

"I know," Cameron said. "Why don’t you give me some helicopter lessons? Then I can fly the helicopter and operate the camera. I can provide a steadier platform than you. That’s for sure."

"Nah. You don’t have what it takes to be even a marginal pilot. We’d be wasting our time. The robotic camera taxes your capabilities, and it does almost everything automatically.”

The station must have used 10% of its news budget for the evening news, lingering over the shot at the end of its broadcast. And then they ran it again the next morning and put it at the top of the video clips on their website.

It was impossible for Cameron not to be proud of it. He and Duke exchanged high-fives afterwards.

And then, they had somehow gotten into the subject of drones. Cameron said something about being interested in trying one of the smaller ones out from an ENG truck. Duke responded with a torrent of facts and figures about what he referred to as "microdrones."

"You seem to be a whiz on this stuff," Cameron said. "Do you know what's on the market now? What capabilities do they have – payloads, cameras, camera gambles downlink and capabilities, all at stuff? "

"What would you like to know?"

With Duke’s advice, Cameron figured out what kind of drone-mounted camera he wanted try out on some of his freelance assignments for the two stations. They pooled some funds and bought a suitable microdrone kit for a little over $1,000.

They flew the drone together several times and got reasonably proficient.

“I think I’m ready to try it,” Cameron said.

“Try it where?”

“On an assignment.”

"Really! Let me know what I can do to help. Just don't talk too loudly about it."

“It's a deal. Stealth partners in a clandestine enterprise –" Cameron laughed. "Actually, it can't be all that clandestine. The whole purpose is to get stuff to be broadcast to televisions all over the Boston area.”

Cameron flew the drone a couple of times, getting some overhead shots of police cars at shootings and accidents. He sent the imagery to the stations, and they intercut it into their broadcast stories without any particular comment or reference to how it had been captured.

“Hey, man,” Duke said. “I didn’t think you were really going to do it.”

“Why wouldn’t I? I told you I was.”

“You’re going to get yourself into trouble,” Duke said, even though he, more than Cameron, had been the fount of all kinds of ideas on how the microdrone could cover a breaking news event.

“Why?”

“It’s illegal—flying drones for commercial purposes.”

 “On, ridiculous,” Cameron said. “People are flying microdrones all over the place.”

“Yeah, and the FAA is going after them, imposing fines, sending threatening letters.”

“I don’t give a shit about the FAA.”

“I do,” Duke said. “They hold my future in their hands. I have a pilot’s license that they can revoke.”

“Some of the best things I do as a reporter are not, strictly speaking, legal,” Cameron said. “Cops and regulators of all kinds wish journalism itself was illegal. It would make their lives a lot simpler if it were.”

“I have to care about the FAA,” Duke said.

“Okay, okay. I understand, man.” Cameron shook his head. “But this stuff you introduced me to is way cool. I really would like to explore its potential.” He looked at Duke with concern, and then chortled. “Tell you what: quit your helicopter job before they lay you off, and come fly newsdrones with me.”

“No thanks,” Duke said. I much prefer being in the air.”

“Away from the action,” Duke said. “I understand. Bravery comes in many different forms. You dodge the geese. I’ll dodge the bullets.”

“And we’ll both dodge the drones,” Duke said.

“So . . . what should we do with the one we already have? Couldn’t we get some kind of special permission?”

"You could talk to station or the network and get them to apply for a special airworthiness certificate from the FAA, which claims it’s opening the doors to specialized drone-flying in well-defined areas."

Cameron laughed. “I can just imagine what the reaction would be. That’s a colossally bad idea. I told you about the station director – William Sears Stanton.”

“Oh yeah, I think so. The fat guy, right?"

"Bigger than a house. Anyway, after the first time they ran something I shot with the drone he called me in and called me a ‘traitor.’ He was serious.”

“Oh, shit," Duke said. "I'm afraid I'm going to get the same thing."

“What’s been the reaction on your side?”

“They don’t really know now involved I am. The subject occasionally comes up but I don't press it, and I’m careful not to seem too enthusiastic."

“And you pretend you don’t know me—the traitor.”

Duke laughed. “I just don’t tell them about your treasonous activities.”

“I act like I don’t even know you. Duke? *Duke*? What a ridiculous name. I’d surely remember it if I ever met him.”

“No more ridiculous than ‘Cameron.’ You just adopted it for the nickname ‘Cam,’ cameraman.”

“You could always use the nickname ‘Chop.’ It would be better than ‘Duke.’ Let’s see, what would your actual name have to be for ‘Chop’ to be a diminutive . . .*Chopin*, maybe . . .”

“The first syllable of *Chopin* is not pronounced ‘Chop,’ you fool. We gotta be careful—“

“I don’t see why we should be scared to talk about it,” Cameron interrupted. “It’s the future. To shrink from this would be kind of like having refused to learn about digital photography because you thought your film-based cameras skills might be in jeopardy or – I don't what the right aviation analogy is –maybe being opposed to helicopters in the 1950s if you were an airplane pilot worried about your job. Helicopter operators with their heads screwed on right should jump on the drone bandwagon so they can offer a full menu of options for their customers.”

“Maybe that's right. But I don’t think any of them are going to do it. You don’t know how conservative they are. And your fat guy is their customer."

“So what do you think I should do?”

"I suppose you could tell your news director that the overhead footage was taken from a new high-resolution satellite."

"I'll try that."

This was much, much bigger. This time he wouldn’t use the drone just to supplement coverage of events after the action had mostly died down--overhead shots of police cars and fire trucks with their flashing lights, firemen pulling up hoses after the fire was out, cops milling around, impatient to leave. This one was in full bloom, dozens of evacuees still running from the complex, police SWAT team still setting up their perimeters, at least one police helicopter just arriving.

Cameron hurried to finish setting up his drone.

This was not a time for caution, whatever Duke thought. He activated the camera and looked at the screen to make sure everything was in order. As he zoomed the lens in and out, the screen showed surprisingly sharp detail of the plastic surface of the case and then expanded to show the rear bumper of his SUV and a couple of police cars beyond.

It was still not completely clear to him what was going on. He was listening to the police scanner, of course, but the cops also were confused. Apparently, there have been several 911 calls reporting a man with a gun inside the mall, and that had triggered the evacuation and the heavy police response. But he had heard no gunshots, and none had been reported. He launched the drone and flew it closer to the entrance to the shopping center, carefully, keeping it 50-60 feet above the ground.

Cameron knew the shopping center well, although he was not very enthusiastic about spending lots of time shopping. It really was more like a series of open courtyards linking the different businesses than a more typical mall, where everything was inside.

He glanced down at his screen. He could see over the exterior wall into the first courtyard area now. Customers and employees were still being herded out by policemen and firemen.

After the microdrone crossed the wall, Cameron was glad that it had autonomous hover capability. It was keeping him busy to shift his focus back-and-forth between the control console and the iPad screen from which he controlled the camera. He should talk to Duke about whether there was some way the camera controls could be mounted directly on the same console from which he flew the drone.

Another possibility, of course, was a separate camera operator. That would be even better. Duke could fly the drone while Cameron operated the camera – just like in the helicopter.

He was further inside the mall now, and things were eerily still. He flew down the corridor, reducing height so that, now, he was flying with reference only to the camera, which he made sure was pointing forward.

This was harder than he expected, and he climbed one or twice so he could see the vehicle visually to get better spatial reference. He and Duke had flown it only—mostly-- with reference to the streaming video image, but it was a lot harder to do in unfamiliar surroundings, without being able to cheat a little by occasionally glancing upward at the drone.

He dropped it down again, wondering how he was going to find the shooter’s location. He had assumed that would be no problem, but the fucking mall was a maze. Things were quiet, and the mall seemed completely empty. It was huge. One storefront after another flew by on the edges of the video display: Nordstrom’s, Abercrombie & Fitch, Brighter Image, Apple Store.

Then, a shadow darkened the screen.

Shit! He had flown underneath something. He flipped the switch for automatic hover and tilted the camera upward. He couldn't tell what it was. Everything overhead was a tangle. The mall was advertised as an architectural icon: steel arches, palm trees, and artificial waterfalls in children’s playgrounds, and food courts. Maybe this was some kind of pedestrian pathway connecting the upper levels. He tilted the camera down again. It looked brighter ahead, but he wasn't sure

He needed a moment to think about his options.

Only about ten more minutes of battery life before he needed to start bringing the drone back.

Shit. What was he going to do if he didn't know where he was? He could, of course, climb, but he wasn't sure that was a good idea. It would not be easy to avoid all the trees and other architectural adornments. And he was encountering more and more overhead obstructions. The angle of the sun was such that shadows made it even more difficult for Cameron to tell when he was under an obstruction and when there was only open air above him.

He tilted the camera up again and saw various protrusions from the storefronts. It was hard to tell what they were.

The voice in this headset interrupted his efforts to formulate a plan. "Mobile Six. "What are you're looking at? We can't make any sense of it here. Hold the camera steady. "

"Inside the mall," Cameron said into the boom mic that drooped from his headset to his lips. "Looking for the suspect."

"You're *inside* the mall?" The news desk voice was incredulous. "Oh," it said, “with that thing."

"Right," Cameron said. "I should have something for you in a minute or two."

He hoped so.

He eased forward 20 or 30 feet and encountered a dead-end. Should he turn right or left?

Wait a minute!

"Is Chopper Six in the air?" he said into the mic.

“Yep,” the voice said. "Right overhead. Getting some great shots."

“Is it Duke?"

"Yes, it is."

Thank God! "Is there a way to patch him into my IFB?" It would've been better if they had direct radio communication, but it had never occurred to Cameron to bring a handheld radio capable of communicating on the aviation frequencies.

"We might be able to do that," the voice said. "We're conferring about it here. Give us a moment."

He hoped they'd be able to figure it out. He glanced at the console. Seven minutes until the automatic return-to-home feature would be triggered by the low battery on the drone. He had no idea how that would work inside the mall with its labyrinth of stores and corridors—and palm trees and playground equipment. The drone would probably just aim directly at its launching point and smack into one of the storefronts or a waterslide. *Come on, come on*. *Let me talk to Duke*.

"Chopper Six," the voice finally said, "we have Mobile Six on your IFB. He wants to talk to you."

"Cam?" Duke’s voice said.

"Duke!" He had to be careful. Half the world was listening – or at least everyone at the station.

“I want to propose a little teamwork here," Cameron said. He hoped Duke wouldn't just blow him off or razz him. Maybe the edge that he felt in this voice would communicate the urgency of the situation.

"Sure. What do you suggest? We're right overhead-- in fact, I can see you in the parking lot with your console.”

"Can you zoom your camera in and see if you can pick up a shot of the . . . uh . . . *it* inside the mall?"

"Great idea!" The news director’s voice broke in. Great idea! Finally something interesting to air.” Cameron couldn’t see the image being downlinked from the helicopter to the station

"We don't see it,” Duke said. “Where is it? What part of the mall?"

Cameron wished he knew. He yawed the microdrone left and right and panned the camera. It looked a little brighter behind him, so he rotated the drone and flew in that direction.

"I think we got you," Duke said. “Southeast corner, near the food court. Yeah. We can see the red and blue LEDs, now.

"Excellent," the news director said. “I see it, too, now. Fly that thing around more actively, Cam, like you're looking for the suspect."

Cameron looked down. Three more minutes, before the return-home feature triggered. He manipulated the sticks and flew toward one of the storefronts, aiming the camera through the plate glass window. Then he flew it to the other side, dropped down and aimed the camera for a shot under the tables in the food court.

“You should be good to come up, now,” Duke said. “There’s nothing above you for a good fifty feet.”

Releasing a breath, Cameron pulled back on the collective. In a moment, he could see the drone, now at about 400 feet, above the roofline of the buildings. The numeric display on his console was counting down the seconds. He flipped the return-to-home switch and watched the little aircraft hesitate for a moment, and then fly toward him. He caught it before it attempted to land on the lid of the case. Maybe that was asking too much.

“Channel 6 news team helps find mall shooter!” the teaser said, leading up to the ten o’clock news.

The show began with a twenty-second segment with imagery from the helicopter and the drone intercut, showing an aerial view of the mall with the police cars and fire trucks surrounding it, cutting to a closer shot of a swat team in full battle gear, waiting and watching behind a barricade, then to a still closer shot of the microdrone’s own imagery, peering into the store and under the tables in the food court, and then back to the helicopter camera, slowly zooming out to show the area where the drone flew, its red and blue LEDs pulsing.

Cameron and Duke looked at each other and clicked their beer bottles together.

“Traitor!” they said, more or less simultaneously, and laughed.