

Chapter 1

Tuesday, April 15, 1986: 0015 local time

The chill night air was thick with a sense of foreboding danger; but Major John “Smitty” Smith couldn’t tell whether it was intuition or imagination. He didn’t linger on the question, as he watched Lieutenant Gordon Blake using hand signals to deploy four of his combat control team (CCT) operatives around the base of the old water tower. They disappeared into the gloom, taking up positions to establish perimeter security. A dog began barking somewhere nearby. Every member of the team froze in position. The sound of a slamming door was followed by a furious shout in Arabic, then the door slamming again. The dog gave one last defiant bark and grew quiet.

Smith motioned to Blake, *follow me*. The two men ran lightly from the thicket where they had been hiding to the tiny pump house at the bottom of the tower, and melted into the shadows. The major scrutinized his surroundings one final time then slung his weapon over his back and began climbing the rusty ladder, followed by the lieutenant. When they reached the top both men lay on the flat roof, facing their target.

Major Smith was just minutes from calling down fire from heaven, only it wasn’t the wrath of God but the retribution of an angry civilized world, and it wasn’t going to be brimstone but 8000 pounds of laser-guided high-explosives. Ten days earlier a nightclub in West Berlin had been bombed by terrorists, and all available intelligence pointed to the Libyans. The President of the United States had come to the decision that just *carrying* a big stick was not making an adequate impression on the world’s trouble-makers. He was going to swing that stick, and hard.

The USAF combat control team was about six kilometers south of the perimeter fence surrounding the Tripoli International Airport, a facility that was shared with the Libyan Air Force. *They're just about to regret that decision to colocate*, the major thought to himself. He could see the rotating beacon on the airport control tower from where he lay. Two hours earlier the final civilian flight for the evening had landed, and the night had grown quiet. The only sounds were the creaks and groans of the steel in the old water tower as it adjusted to the cooling evening temperatures. A moist chill was blowing off the nearby Mediterranean, but Smith ignored the cold. The pleasant scent of nearby citrus groves wafted on the breeze, mixed with the salty aroma of the sea.

Three hundred meters west of him was the compound that served as the Libyan headquarters for *Fatah*. An intelligence intercept had indicated that the leaders of the organization from Gaza, Lebanon, Syria, Iran, and Yemen were to be in-residence this week. Planning had already been underway for the retaliatory bombing of Libya, known as *Operation El Dorado Canyon*, when the CIA Deputy Director of Operations (DDO) had suggested that as long as they were going to break things and kill people, they might as well take the opportunity to degrade Abu Nidal's *Fatah* terrorist organization. It was a unique opportunity to even the score, and the President had jumped at the chance.

"I see three possible entrances, Smitty. There's what looks to be a recessed underground entrance just beyond that deuce and a half, to the left of it. To the left another 40 meters are some vents on some sort of revetment, with what looks like another entrance. And there is the very obvious one, beyond and to the right of the truck. That's all," whispered Blake, as he studied the target through night-vision binoculars. Somehow Blake had earned the nickname, "Fat Boy," or

more often, “FB.” He was squat, built like a tank, rock-hard, and did not carry an ounce of fat on his short, broad-shouldered frame, despite his nickname.

“Yep. I agree, FB.” The major topped out at a lanky six feet two inches. Like the rest of the team, his face and exposed skin were blackened. Between the darkness of the night and their battle-dress uniforms, the operators were virtually invisible.

Major Smith flipped the switch on the secure satellite uplink, and said quietly, “Goldilocks is green.” He checked his watch, and began setting up the tripod for his laser designator.

“Showtime in five minutes, Blake. Let’s get the stage lighting set up.”

Operationally, Major Smith knew this mission was a nightmare: insufficient planning based on inadequate intelligence, and no training. The CIA had the proper address for the headquarters complex, but had not been able to discern the floor plan, so to speak. The DDO’s plan was simple: insert a CCT with laser designators, start the air raid, and let the boots on the ground watch which hole the rats disappeared down. Light it up with laser designators, send in the F-111 *Aardvarks* with their GBU-10 Paveway bombs, and, poof! One layer of terrorist leadership incinerated. The extraction plan was equally simple. Since the US was going to be delivering a rather obvious message, if the covert extraction went sour just go in fast, hard, and hot with a few elements of an Army Ranger unit attached to the Carrier Strike Group presently floating off the coast, and rescue the combat control team with overwhelming force. Simple for everyone except the members of the CCT, who felt like they were strapped to the front bumper of a New York cab in rush hour.

Fourteen inbound F-111s swept over the coast at 100 feet. The first flight divided into three sections, popped up, and began hammering their targets. The Libyan air defenses responded immediately, and surface-to-air missile (SAM) sites around Tripoli began lighting up the intruders. As soon as the Libyan targeting radars began to paint the incoming aircraft, a flight of Navy A-7s unleashed a volley of high-speed anti-radiation (HARM) missiles. Each rocket followed the enemy's radar beam directly to the installation and blew it to pieces, destroying the eyes of the air defense network.

Air raid sirens screamed at military installations all around Tripoli. Within minutes, the combat control team could hear, and feel, the detonation of bombs cratering the runways on the nearby airport. Smith and Blake ignored the distraction of the attack, and concentrated on their target. The door on the enlisted barracks was flung open, and a stream of men began sprinting for the right-most bunker entrance. Immediately after, a line of running men emerged from the officers' quarters, headed for the entrance farthest on the left.

"Bingo," muttered Smith, as he focused his laser designator on a vent pipe of the left-most air raid shelter.

"Sure wish we had enough stuff to take 'em all out, sir," whispered Blake, as he locked his laser onto the same target. The Paveways would pick up the sparkle of the lasers reflecting off target and drop right on it, so long as the F-111 strike team released the weapons in the proper trajectory window.

"Me too, FB. But cut off the head and the snake can't strike. We've got this opportunity, let's make double-sure we cut off the head." He keyed the satellite link once more and spoke into the mic, "Goldilocks says the fox is Alpha-Whiskey-Romeo."

The encrypted signal was received by a geostationary satellite locked in orbit 22,236 miles above the equator, then retransmitted from satellite to satellite, until it was beamed down to Langley and routed to Washington. After a 500-millisecond delay, Smith's voice came over the speakers in the Situation Room below the West Wing of the White House. All heads turned to look at the President.

“Do it,” he ordered without hesitation.

His Chief of staff, Ralph Kepplehof, was standing behind the President with a puzzled look on his face. He motioned to one of the officers present, and whispered, “General, what does ‘Alpha-Whiskey-Romeo’ mean?”

The man chuckled, and then replied quietly, “It’s a bit of black humor, Ralph. It means that the tangos have entered ‘Allah’s Waiting Room’. We’re about to usher them into his presence, if you get my drift.”

One minute later four more *Aardvarks* crossed over the Libyan coast. Two of the aircraft were armed with HARM missiles and electronic counter-measures. The other two were each carrying a pair of GBU-10 2000-pound Paveway laser-guided bombs. The first two F-111s popped up and drew the attention of the remaining Libyan air defense systems. The second two entered into the flight profile that would enable them to put their bombs on target.

As soon as the F-111 flight leader heard the Paveway’s laser acquisition tone in his headphones, he released the bombs then transmitted, “The package is delivered, Goldilocks.”

Smitty alerted his team, and each dropped to a prone position, covering their heads. A few seconds later, four tons of bunker-busting ordnance sent fourteen men to an appointment that did

not include seventy-two virgins.

Smith and Baker dismantled their equipment, and then clambered down from the top of the water tower. Flitting through the darkened fields and orchards like shadows, the team headed north for the airport security fence. The air raid sirens continued to wail into the night but the bombs had stopped falling. Portions of the skyline to the north were illuminated from fires caused by strikes on other targets. The smell of acrid smoke and cordite lay heavy on the night air.

Ironically, the primary extraction point deemed safest was at the airport. The south apron of the main north-south runway was farthest from the terminal and the airport security forces and had been designated as the landing zone. As mission planners had predicted, the Libyans had extinguished the runway and taxiway lights as soon as the air raid began. The darkness worked to the team's advantage and they arrived at the extraction point without incident.

"Goldilocks is at grandma's house," Major Smith informed the mission controllers. His small team secured the LZ and set up an infra-red beacon. At this point things began to unravel. An armed Libyan patrol had been dispatched to evaluate the damage to the runways and was approaching rapidly.

"Hey, boss, we got visitors. Two armored personnel carriers approaching from the north. Both vehicles have a weapon mounted." Blake paused, studying the approaching vehicles through his night-vision binoculars. "Looks like they're both fifty-cals."

"Okay, listen up!" Smith said into his whisper mic, addressing the whole team, "Stay out of sight and hold your fire. Maybe they'll go right by without seeing us."

The six members of the CCT hunkered down. Equipped only with light weaponry, they had nothing that might take out an armored personnel carrier (APC), much less two of them. The major contacted the controllers to let them know the landing zone was compromised. Too late! He heard the incoming Pave-Low chopper just as he keyed the mic.

The MH-53J came in fast and low, its door gunner concentrating fire on one of the APCs, setting the vehicle on fire. But the second APC was scoring hits with armor-piercing rounds and the helicopter began to fly erratically. The door gun was silenced. The chopper smacked roughly onto the tarmac and the combat control team sprang from their hiding places and raced toward it, screaming the running password, “GRANDMOTHER, GRANDMOTHER, GRANDMOTHER!” As they ran they sprayed the second APC with small arms fire, suppressing its gunner and causing him to duck into the vehicle for cover.

As they raced up the ramp into the chopper, Major Smith shouted forward to the cockpit, “GO, GO, GO!” But there was no response. The inside of the helicopter was spattered in blood. Both door gunners were hit hard, the flight engineer was dead, and Smith dreaded what the situation might be in the cockpit. Assessing the situation instantly, he barked out commands. “Santini,” he shouted, addressing one of his team members, “as soon as we lay down suppressing fire, get on the door gun and destroy that vehicle! Atkins, Morris, see to these wounded! Lieutenant, check on the cockpit. Jonesy, grab your rifle and follow me.”

Smith rammed a fresh magazine into his CAR-15 rifle, lay down on the ramp and began peppering the gunner on the APC to give Santini a chance to set up. Jones laid down suppressing fire on the troops that had disembarked from the first APC. Soon the chopper’s door gun was chewing pieces out of the second Libyan vehicle and it, too, finally caught fire.

“Jones, go forward and support Santini. You! What’s your name?”

“Reed, sir, crew chief,” replied the only uninjured airman from the chopper’s crew.

“Well, Sergeant Reed, raise this ramp and get us buttoned up. I’m going forward to the flight deck.”

“Major?” Lieutenant Blake called from the cockpit, speaking into his whisper mic. “We’re hosed. Gotta go to plan B. Pilot and copilot both bought it. Without a stick jockey, this crate isn’t going anywhere.”

“I’ll see what I can do, Blake. Get everybody settled back here, then come back to the cockpit. I’ll be needing you.”

“Unless you can raise the dead or fly, boss, not much you *can* do,” Blake muttered.

The firefight had slowed down, as most of the attackers were dead or injured, although Smith knew that Libyan reinforcements would show up soon. He moved onto the flight deck and shook his head grimly. Both pilot and copilot were dead and blood was everywhere. He muscled the bodies out of the cockpit, sat down in the left-hand seat, and buckled in. The instruments were intact but the radio was dead. He scanned the gauges, increased power, and the craft lifted off the ground. Smith checked out the flight controls and the helicopter responded properly. Ignoring the shouts of surprise and fear coming from the back he throttled up to cruise power and soon they were racing over the ground, headed for the coast.

Blake came into the cockpit soon after and squirmed into the right-hand seat. “Who taught you how to fly, Smitty?” he asked nervously.

“My momma, Fat Boy. Now shut up and listen! The radio is shot to pieces. Get on my

satellite link, explain our comm situation. We need an escort back to the carrier. Let ‘em know we’re bringing casualties. Don’t mention anything about the pilots or what I’m doing. Nothing! Got it?”

Four hours later the combat control team was on an Air Force transport bound for Fort Bragg, outside of Fayetteville, North Carolina. Gordon Blake put a mug of hot coffee in John Smith’s hands and then strapped himself into the webbing seat next to him. The rest of the men were snoozing back toward the tail.

“You don’t have any kids, do you, Major?” Blake said. It was more of an observation than a question.

“No, Lieutenant, I don’t. I’m not married. But I’m curious; why are you asking?”

“Well, sir, you chose the passwords and unit names for this mission, didn’t you?”

Smitty nodded.

“You butchered a couple of fairy tales, sir. You confused *Goldilocks and the Three Bears* with *Little Red Riding Hood*. Any self-respecting four year-old would have taken you to task, sir.”

Blake laughed. “My daughter would be highly offended that you confused her favorite bedtime stories.”

“Just tell her it was for operational security.”

“Oh, yeah. Right.” Blake looked at the crude webbing seats across from them, and grunted. “Once, just once, I wish they’d fly us first class,” he grouched. Smith smiled but didn’t respond, so Blake continued, “You’ve been holding out on us, boss. When did you learn to fly? When you

set that big Pave Low on the deck of that carrier I got the distinct impression you'd done it many times."

Major Smith nodded, "I guess we all have our secrets, Gordon."

Blake stared at him thoughtfully for a moment before responding, "Maybe some more than others. Major, you've deployed with my team three times. You've clearly been special-operations trained. General Reynolds tells me that you're attached to some weapons development project at the Pentagon. Well, okay, I can buy that: all three deployments have involved an airstrike with Paveways. Maybe you're doing some sort of work with the laser designators, or another part of the guidance package. Except for one big problem."

"What's that, Lieutenant?"

"After our last mission I wanted to send you a case of Corona; you really pulled our butts out of the soup when the insertion got so screwed up. So I called a buddy of mine at the Pentagon, asked him where I should ship the beer." Blake paused and slurped his steaming coffee.

"And?" Smith asked, knowing what was coming.

"He'd never heard of you. In fact, no one at Fort Fumble knows anything about you. So I got to thinkin' . . ."

"C'mon, Fat Boy," Smith interrupted, trying to redirect the conversation, "You know what they say about that!"

"No, sir. Enlighten me," the lieutenant responded.

"You don't get paid to think, soldier!" Smith rasped, with mock harshness.

“Oh, right,” Blake replied sarcastically, “Ours is not to wonder why, ours is just to do and die.”

“There you go.”

Unsatisfied, Blake continued. “Are you really a major in the Air Force, sir?”

Smith laughed, “Yes, Gordon, that I really am.”

“Why are they sending a field grade officer on these missions, sir?” When Smitty did not respond, Blake tried again, “Is your name really John Smith?”

Smith just smiled, but still didn’t answer.

“Well, who are you, Major?”

“Gordon, I need you to do a couple things. First, make sure nobody talks about the fact that I flew the chopper. It wasn’t supposed to happen and I don’t want to lose my day job. Remember the story: *the pilot was gravely wounded, but managed to fly it back to the ship, dying just after he set it down. The man deserves a medal.* Make sure the other men have the same story. Got it?”

“Yes, sir, if you say so.”

“Second, don’t be asking questions about me. Unpleasant people might start knocking on your door and I don’t want that to happen. We’re both on the same team, playing for the good guys. That’s all you need to know. And you don’t need to tell anyone what you might suspect. If all goes well, maybe in a couple of years I can tell you where to ship the beer.”

Chapter 2

Two years earlier

Monday, April 16, 1984: 0837 local time

Edwards Air Force Base air traffic control (ATC) gave the incoming F-16 a straight-in approach for runway 22L, as it was a slow day and there was no traffic at the moment. The pilot adjusted his glide slope to 2.5 degrees, throttled back, and allowed his speed to bleed off as he raised the nose of the sleek fighter, increasing the angle of attack.

Major Jacob “Jake” Kelly had wanted to be a fighter pilot since his tenth birthday, when his dad had given him a picture book on military aircraft. The dream not only persisted, but grew in intensity and sophistication. By the time the young man entered his junior high years his goals were cast in stone: he wanted to snag an appointment to the Air Force Academy in Colorado Springs. He pursued the dream with a single-minded intensity that pleased his dad and worried his mom. Jake sought to ace every mathematics and science class in school. He began to spend time in the weight room and on the track, and played football all four years of high school. And finally his dream came true. After being nominated by a member of Pennsylvania’s congressional delegation, Kelly was accepted into the elite school.

His parents were Clancy and Galina Kelly. Clancy’s heritage was Irish. One of his ancestors had been a track layer on the Union Pacific Railroad, and was present at the golden spike ceremony in Promontory, Utah. Galina’s parents had escaped Stalin’s Soviet Union and immigrated to the United States, settling in Idaho. They never did learn to speak English. Jacob spent every summer with them in his youth, roaming the mountains, fishing and camping. He

also became fluent in Russian, a fact he managed to obscure in his Air Force files with the willing complicity of family members. He'd heard that flight spots became mysteriously unavailable to cadets who spoke Russian, while Air Force intelligence positions were wide open. Jake didn't want to fly a desk (or a satellite), so his fluency in Russian remained unknown to the Air Force, even when they vetted him for advanced security clearances.

By the time he graduated from the academy in '77, Kelly was both a skilled athlete and an academic star. He got the pick of the litter in flight slots, eventually winding up with the 34th Fighter Squadron. Within five years, he was a two-time alumnus of the Air Force's Red Flag exercises, where he'd gained near-perfect ratings.

But the young man had had his share of sorrows, too. His dad, Clancy, had passed away from an aggressive form of cancer in 1983, and Galina from a heart attack in 1984. As an only child with neither parents nor grandparents nor aunts nor uncles he felt very much alone in the world.

Kelly's F-16 settled onto the runway, the nose wheel dropping lightly onto the centerline. Twenty minutes later the lanky officer was waiting outside the office of General James T. Franks, known covertly by his subordinates as "Captain Kirk," though no one dared call him that in his presence. Franks was a *Star Trek* fanatic and had the hull number of the Starship *Enterprise*, NCC-1701, tattooed on his right forearm.

"The general will see you now, Major Kelly." It was Kelly's tenth trip to the general's office in two months, and the secretary knew him by name.

The major strode into the office and saluted, and Franks returned the gesture. "Take a chair,

Jake,” he said. “How was your flight?”

“Good, sir.” The squadron insignia on Kelly’s flight uniform identified him as belonging to the “Rude Rams,” the 34th Fighter Squadron stationed at Hill AFB, Utah. Kelly sat and waited on the general, who seemed to be busy with some papers. Finally he looked up.

“Major, you’ve successfully passed all of our vetting. Security clearances, duty record, flight proficiency, medical records, the whole shootin’ match, not to speak of all the tests and exams we’ve put you through. You’ve done quite well.”

“Thank you, sir.”

“Up until today, you’ve not been told why your commanding officer has released you on temporary duty to my command. You’ve just known that we’ve given you everything but an anal exam. Well, I don’t know, I suppose the flight surgeons might have done that, too. Did they?”

“Um, no, sir.”

“Anyway, I think it’s time to fish or cut bait. Jake, I’d like to offer you an assignment. I’m in charge of a development project here at Edwards, a project involving the F-16. I’m in need of a test pilot. But there’s a catch, and it’s a big one. The test pilot I need is going to be doing things in addition to flying an airplane. Dangerous things. *Very* dangerous things.

“If you sign on with me, you’ll be detached from the 34th for the duration of this project. Now, the difficult thing is, I can’t say anymore about the job ‘til you sign on the dotted line. If that seems unfair, too bad. The Air Force doesn’t do fair. So what do you say? Are you willing to take a gamble?”

Kelly hesitated, studying General Franks. The senior officer was built like a weightlifter

who'd not spent much time in the gym lately. Franks tended a little to the short side of normal and was a bit heavy. He remained silent under Kelly's studious gaze, his brown eyes giving nothing away. Finally Kelly asked, "How long, sir, do you expect this project to take?"

"Three years, Major, at most."

"It's not going to get me away from flying, is it, sir?" The tall pilot would rather fly than eat. He wasn't about to take on a project that would keep him on the ground, or worse yet, in a lab with a bunch of civilian contractors.

"Not really. It's going to require some extra training in, ah, specialized ground tactics. You'll have some . . . ground assignments, or more accurately, missions. But, no, it won't get you away from flying. It *will* change the kinds of missions you're flying. You've been doing air-to-air stuff. This project involves strike missions, air-to-ground. That's all I can say."

Jacob Kelly was silent for a moment, pondering. On the one hand it was an honor to be singled out. On the other, he didn't want to be out of the air combat milieu.

"Sir, can I ask you this? When your project is complete can you get me back into an operational air combat wing? I don't want to fly a desk, sir, no disrespect intended."

"Major Kelly, I will personally guarantee that you are placed in the air wing of your choice at the conclusion of this project. I think I've got that much pull."

"Then I'll sign up, sir. Thank you for giving me this opportunity."

Franks nodded, and picked up the phone, "Susan, get me the base JAG in here, pronto . . . no, not him, the other one, the one with top security clearance . . . yeah, him. Major Kelly has some papers to sign."

After the paperwork was complete, Franks dismissed the military lawyer, rang for some coffee, and beckoned the major over to his conference table.

“Jake, everything I’m telling you from here on out is top secret and is to be discussed with no one, and I mean *no one*. Now, what is your assessment of the relative balance of tactical power between the NATO and Warsaw Pact air and ground forces in Europe?”

“They have more men than we do, but ours are better trained, have better morale, and are more loyal. We have an edge in aircraft and avionics. They have a large edge in armor and probably artillery. We own tactical nuclear. Their supply lines are shorter and simpler. Our manufacturing is better.”

“That’s a fair assessment, Major. A few years ago the National Intelligence Estimate put the numbers of Warsaw Pact medium tanks at 45,000. That’s a big edge. Hitler showed us forty years ago what can be done with a bunch of well-commanded tanks.

“I am leading a project entitled *Hydra* whose goal is to erase that edge. By the way, officially *Hydra* does not exist and I’m not just talking about the project, I’m talking about the name, *Hydra*. You do not use that name with anyone, understood? It never gets written down. It never gets typed into a computer. The only people who should ever hear that term pass between your lips are folks who are *part of the project here at Edwards!* No one else, and *nowhere else*. Got that?”

“Yes, sir.”

“Good. You are familiar, Major, with the PAVE systems?”

“Yes, sir, the precision avionics vectoring equipment. We carry PAVE Pennys on the Falcon, sir, for use with our Paveway ordnance.”

“Right, laser-guided munitions. Ground troops, including our Air Force Combat Control Teams, illuminate a target with an encoded laser; the PAVE system in the aircraft picks up the sparkle and the bomb locks on. As long as the aircraft releases the ordnance in an acceptable trajectory window, the guidance system in the bomb will put it right on the target.

“What the *Hydra* project is supposed to accomplish, Major, is a cluster release of Paveway ordnance in a target-dense battlespace—simultaneous releases of up to thirty-two Paveway bombs carried on multiple aircraft, each bomb locking on to a separate target. This is, of course, predicated on thirty-two different ground pounders all using laser designators at the same time.

“In the few seconds from release to impact, the *Hydra*-modified munitions will establish a radio network and elect one of the bombs as a master controller, which will then hand out specific target designations from all the currently illuminated ground targets, taking into account the trajectory of each separate bomb. All the intelligence and control will reside in the avionics contained in the bombs themselves. It’s a ‘fire-and-forget’ system; once the bombs are released the pilots can skedaddle.

“If *Hydra* is successful, Jake, just four of my airplanes can smoke three companies of Ivan’s tanks faster than you can say, ‘Mother Russia.’ That skews the balance of tactical power in Europe between NATO and the Warsaw Pact forces to where it belongs: in our favor.

“There’s just one catch for you, Jake. In order to be the chief test pilot for this project you must be thoroughly familiar with battlefield conditions on the ground, and the difficulties ground

troops will face using the targeting lasers in combat situations. That's going to require your participation in some ground missions, Major. I have some rather exotic training in mind for you . . . ”

Kelly returned to Hill AFB later that afternoon and began the series of tasks associated with his change of assignment. That evening he had dinner at the Officers Club with his squadron commander and his wingman, then returned to his base quarters and packed up his gear, all of which filled just three duffle bags. He sat down at the table in the tiny kitchenette, popped open a beer, and decided that there was one more phone call he had to make. He wanted to talk to Bill Jensen.

Bill had been a friend of the family since Jake's high school days. Jensen's association with the Kelly family had come about through a mere chance association (Jensen always referred to it as “providential”). The Kelly family owned a summer cabin near the Snake River. Jacob and his dad had been fly-fishing on a tributary of the Snake River one beautiful August day, and had rounded a bend of the river just in time to see another fisherman slip on the rocks. The unfortunate man struck his head on a knot of granite and fell unconscious into the river. The Kellys pulled him to safety, and took him to their cabin. He stayed long enough to recover from the nasty blow on the head. From that chance encounter a friendship developed. Within two years, the families had grown very close. Jake's dad and Jensen discovered a common love of the outdoors, books, military history, and a host of other topics. It was as though the two men had grown up as twins.

When Jacob's father had died in '83, Bill had flown back from a vacation in Australia to be at

the funeral. His calm presence and unqualified assistance in every area had been a great comfort to the family. Since those days the major had grown as close to Jensen as his dad had been, and the family friendship had continued, even beyond the death of Jake's mother in '84.

Jensen was an independently wealthy academic, teaching occasionally at Georgetown University. His area of specialty was International Relations. His knowledge of countries around the Pacific Rim in particular, was encyclopedic. He was a fascinating conversationalist, and had become something of a surrogate father for Jake.

"Hi, Mr. Jensen, it's Jake Kelly."

"Hello, Jacob! Great to hear from you. What's it been since we last talked, three months?"

"About that, sir. I guess things have just been really busy."

"Yeah, here too. I've had a heavier teaching load this semester, and between that and renovating our basement, I've just not had much time."

"What are you doing to your basement?"

"Remember that big snow that Maryland got in late January? Well, it was followed immediately by heavy rains. Our basement flooded, and I've had to tear all the carpet and drywall out. So I've been remodeling down there, starting with the sump pump."

"Sounds like a mess."

"Got that right. So what've you been up to? Still enjoying driving Falcons on the taxpayers' dime?"

"Love it, Mr. Jensen. As long as you're willing to foot the bill, I'm willing to burn the gas."

That's why I'm calling. I've been transferred to Edwards, and I wanted to give you my new address and phone number."

"Edwards Air Force base in southern Cal'? That's exciting—you'll get to watch shuttle landings, you lucky dog! What will you be working on at Edwards?"

"Can't say, Mr. Jensen. But I'm looking forward to it."

"I'll bet you are. So, how are you doing since your mom died, Jake? Susan and I really miss your parents."

"Okay, I guess. I miss 'em. Don't feel like anywhere is really home anymore. Even though I've still got the house on the Susquehanna, and the cabin on the Snake, they're just empty buildings now with mom and dad gone," Kelly said. He swallowed hard, trying to get rid of the lump in his throat.

"I know they were very proud of you, Jake, and so am I. Look, Susan and I are planning another trip to the Snake River in September. Why don't you come? We'd love to see you again. Besides, I want another chance at our 'largest-trout' competition."

"Love to! If I can schedule the time, I will."

The two men talked for a few more minutes, then Jake signed off and turned in. There was an 0400 transport to Edwards leaving in the morning, and he and his duffle bags had to be on it.

Chapter 3

Monday, January 6, 1986: 2330 local time

Alexey Kozlov was having trouble focusing his eyes. It might, he thought, have something to do with the fact that this was the sixth time that Chernikov had refilled the scientist's large coffee mug with vodka. *By all that's holy, how I hate that man*, Kozlov thought to himself. Thankfully he was still sober enough to not say it aloud. The diminutive scientist stood just under five and a half feet with his boots on, and he was intimidated by the presence of the larger man.

"So, Alexey, we have missed our development deadline again. That makes three straight months in which you have given me bad news. When shall I have good news to report to my superiors?" Colonel Nikolai Pavlovich Chernikov had not attempted to keep pace with the red-faced man's vodka consumption. He was quite sober, the vodka from his first mug untouched.

"Come, comrade Colonel! It's not like making cheese, you know. We've been working hard to create a mathematical model of fluid dynamics," Kozlov slurred, "that approximates the environment of a propeller in sea water. Different depths. Different temperatures. We need it to progress with our design work. It's just not coming. You haven't given me mathematicians, Colonel Chernikov! You have not given me scientists! These men are working hard, but they are only engineers. They can prototype and test a design; they can fix a good design to make it better, but they cannot invent a wholly new one."

Chernikov was neither a scientist nor an engineer. He was an officer who had originally served with distinction in the Soviet Union's elite 106th Guards Airborne division in Afghanistan. When his commanding officer, General Valeriy Patrikeyev, had been recalled to

Moscow and placed over the Ninth Directorate of the *Glavnoye Razvedyvatel'noye Upravleniye*, the Main Intelligence Directorate (GRU) of the General Staff of the Soviet Army, he took Chernikov with him. Because Chernikov had displayed a remarkable ability to accomplish difficult tasks, the colonel had been placed over a development effort aimed at quieting an already dangerously silent class of diesel submarines, the *Project 877* boats, known to NATO as the Kilo class submarines.

The colonel knew nothing about submarines. The titular head of the development project was a three-star navy captain who'd been transferred from a promising submarine career because an auto accident had left him heavily dependent upon a cane. On paper the captain ran the show. In actual fact, he was responsible only for the naval outcomes of the project; Chernikov possessed the day-to-day operational authority.

Beyond general administration, Chernikov's duties included ensuring the secrecy of the project, protecting the scientists, and guaranteeing that the scientists were at their productive best, a task that occasionally required firm "persuasion and encouragement." Try as he might, the colonel's team was nonetheless missing the development deadlines and milestones laid out for him by his superiors.

"Always complaining, Alexey, you are always complaining. Perhaps your wife and children would find Chersky more to their liking? It can be arranged." Chernikov's gray eyes were fixed impassively on the nervous scientist. He'd already decided that this development project would be a success, with or without the little man across the table.

Kozlov paled. Chersky was a tiny outpost on the Kolyma River in northeastern Siberia, and was at one time part of Stalin's gulag. It was not uncommon for winter temperatures to sink

lower than fifty below zero. “We are trying, comrade. These men will not be more productive if you add to their worries.”

“I do not add to your worries, comrade Kozlov, out of idle cruelty. I take no pleasure in such threats. But you forget, Alexey, that I have my own masters to please in Moscow. We’ll all be spending the winter in Siberia if your team is unable to produce.”

Kozlov put his head in his hands. He knew what had to be done, but he detested it with every fiber in his body. He had no religious inclinations, he was pragmatic to the core, but he did have his professional pride and that was what he was wrestling with at the moment. But the threat of Chersky was simply too much. He sighed, looked down at the table, and said, “Robert Alton.”

“What?”

“Robert Alton has what we need. He’s a British mathematician at Cambridge. He developed a mathematical model to study the flow of water around the turbine blades of high performance hydroelectric generators. I saw his work at a convention in West Germany three years ago. It could be easily adapted to our needs.”

“How does that help us? Does this look like Cambridge? We do not have his model,” the colonel responded. He knew what the scientist was suggesting, but wanted the satisfaction of hearing the man say it. It would represent a complete victory over the smaller man’s pride, and Chernikov was not above occasionally humiliating his subordinates.

“If you can arrange things, comrade Colonel, could you not persuade the KGB to steal it?”

Chernikov studied Kozlov's face, looking for the slightest hint of reproach or sarcasm, but the scientist’s visage remained guileless. *And I was beginning to think the mouse had teeth*, he

thought to himself, *but, no, the man is too frightened even for sarcasm. And well he ought to be; it would have gone ill for him had he disrespected me.*

“Steal it, Alexey? How can you even suggest such a thing? Are there no professional ethics among scientists?”

It was sleeting when Chernikov left the scientist’s quarters. The tightly guarded research compound was about 40 kilometers south of the Admiralty Shipyard in Leningrad. A massive low-pressure system over Finland was scooping buckets of moisture off of the Gulf and dumping it all over the Leningradskaya Oblast.

The colonel wrestled with his thoughts as he trudged through the nasty weather to his waiting car. Something Kozlov had said was seeking to burst forth as an idea in his mind, but he could not pin the thought down. It was like awakening after a wonderful dream of which you were unable to recall any details.

Chernikov opened the door and slipped into the back seat of the warm, waiting refuge offered by his Zil-115 armored limousine, one of the many perks he enjoyed as a member of the *Nomenklatura*, the Communist Party-favored upper-class of the classless Soviet society. That he belonged to the highly secretive GRU was a fact known only to other GRU members. In years not too long before, were a citizen even to utter the acronym “GRU” they would soon disappear. They would be mercilessly interrogated until they coughed up where they had heard of the organization, and then *that* person would disappear and be likewise interrogated, until the entire chain of the leak was discovered and eradicated. As the existence of the elite military intelligence

organization gradually became known over the years, their tactics for preserving their secrets became somewhat less lethal, but it was still spoken of only in whispers and great fear among the population, if at all.

“Take me to my apartment, Yuri, then you can go home. No one should be out on a night like this,” he directed, as he pulled off his *ushanka* and beat the icy sleet off of it. Though he was six feet three inches tall with broad, muscular shoulders, he fit comfortably into the back seat of the roomy Zil.

“Very good, comrade Colonel. What time shall I pick you up in the morning, sir?” his driver asked, knowing the answer. Like Chernikov, the driver was dressed in civilian clothes with no military insignia to betray the fact that as the colonel’s driver and bodyguard, he was a sergeant in the Spetsnaz.

“Five, Yuri, as usual.”

“Very good, sir.”

The colonel chuckled to himself as he replayed his conversation with the diminutive scientist, *he wants me to get the KGB to steal the model? Those bumbling fools! Well, at least he does not realize that his lord and master is the GRU.* Still, he was unsettled. Just beyond his mental grasp lurked the answer to the project’s roadblock. He simply could not make the thought take shape.

His apartment was dark and empty when he arrived. Rather than moving about the country with him, his wife Kira maintained their home in Minsk. Colonel Nikolai Pavlovich Chernikov was the son of tea merchants who, despite the Soviet system (or perhaps, because of it), had

managed to accumulate substantial wealth. As a result, the colonel and his wife were easily able to maintain two residences, in addition to their *dacha* south of Moscow.

Nikolai changed into his pajamas then slopped some vodka into a tumbler and sat down at his kitchen table for a nightcap. He noted that his nightcaps had begun requiring about a quarter of a bottle of the fiery liquid lately. *Enough of this, Kolya. You are not going to turn yourself into a drunk!* The self-rebuke turned his thoughts in an unpleasant direction, one that he usually avoided, but a direction he seemed drawn to tonight. The colonel rarely allowed himself to think beyond the immediate physical world; he was quite cynical about religion and those who claimed to believe in a god of some sort. But he was also beginning to realize that he had become just as cynical about his atheism, and it bothered him. *Cynical about religion and disillusioned about atheism . . . so what am I? A nihilist?* He refilled his glass, surprised that it was already empty. *No, not a nihilist. I find my purpose in serving the State, Mother Russia, with all her faults. And I find my pleasure in power. So is that good, Kolya? What is "good?" What is "goodness?" And does it matter anyway? After all, no One is watching.* He swallowed his drink and poured another. *You're quite the philosopher tonight, Niko. The GRU would not approve. But they do not know, do they?*

He fixed himself a small snack, and began to think once again about his conversation with his chief scientist. The man had reluctantly admitted that the British scientist, Robert Alton, had developed something that Kozlov's small stable of Soviet researchers had been unable to reproduce: a mathematical model that would enable the development of a screw producing greatly reduced cavitation, hence, a quieter submarine. If only they could steal . . .

Suddenly the thought took clear form and shape, like a longed-for friend walking out of the

fog. It was what the subconscious portion of his brain had been tugging at all evening, ever since leaving Kozlov. Setting up an espionage operation to steal the model could take four or five months and was fraught with danger, so *why not just steal the mathematician instead?* That could be accomplished in a month's time and with far less expense and trouble. And, it would have the salutary effect of retarding British weaponry development while it accelerated Soviet efforts.

When administered with a sufficient quantity of vodka, any idea can sound like a good one. So it was that Colonel Nikolai Pavlovich Chernikov of the GRU landed upon a plan that would earn him an early promotion to Major General, but which would also purchase a pack of trouble, trouble that would eventually threaten all for which he had labored.

Three days later, Chernikov made a trip to the *Aquarium*, otherwise known as the GRU headquarters located at the Khodynka Airfield in Moscow. His patron and immediate superior was Lieutenant General Valeriy Patrikeyev, commanding the Ninth Directorate of the GRU and tasked with acquiring and exploiting foreign "materials" related to weapons development. It was a fortuitous connection, considering the colonel's idea.

Patrikeyev listened patiently as he explained his idea, but offered no comment at the moment. Chernikov left uncertain of how his superior had received the proposition. But two weeks later, Chernikov was summoned back to GRU headquarters.

"Please be seated, Colonel Chernikov," Patrikeyev requested. His tone remained formal, his expression serious. The colonel began to wonder whether his recommendation to kidnap Alton

might have been a mistake. Patrikeyev remained silent and held Chernikov's eyes in a stern stare. Sweat broke out on Chernikov's forehead, but he dare not look away or display any weakness. Though quailing inwardly, he managed to maintain his demeanor of outward calm, and met his general's challenge with a cool gaze.

"Congratulations, comrade Colonel," Patrikeyev offered, though his bearing remained stern.

"Sir?"

"Relax, Kolya," the general said, breaking into a wide smile, "your plan has been approved by the *Politburo*. Prepare Alton's quarters and arrangements, and have a selected guard of Spetsnaz available. Security is to be airtight. Impress upon your men, Kolya, and Kozlov as well, that violations of security shall be met with a swift and certain death."

"Very good, sir," Chernikov replied, "what unit do you recommend that I task with the scientist's kidnapping?"

"That, Kolya, is out of your hands."

"Sir? I don't understand."

"I'm sorry, but the only way that our dear General of the Army, comrade Anatoly Geredin, would approve of the operation was if the KGB did the snatch. As a junior member, I did not have enough clout to overcome his objections. Consequently, the KGB will deliver him into your hands in less than three weeks. Be ready."

"A partial victory, then, comrade Lieutenant General."

"Yes, Kolya, partial. But with the KGB in the ascendancy right now, I'll take whatever I can get," admitted Patrikeyev.

The Soviet government did not function by trust. As a government of men and not of laws, no single organization outside of the Communist Party itself was allowed to become too strong, lest the October Revolution happen again. The Soviet Ministry of Internal Affairs (MVD), the Committee for State Security (KGB), and the GRU were intrigued against one another. The Central Committee first (until it was weakened) and then the Politburo used the various entities as a check and balance against one another. Had there been only the MVD, a secret coup might be planned and carried out. But with *both* a KGB and an MVD, the left hand could not plot without the right hand finding out about it. Fittingly, power in the Soviet Union was maintained by a series of chess moves; the long-suffering citizenry were the pawns, the security services and the military were the bishops and knights, and the Politburo functioned as king and queen. Essential to the strategy was maintaining distrust and fear at all levels.

“But listen, Kolya, when Alton is delivered into your hands, the role of the KGB ends. You are to tell them nothing. They are never to find out of your successes or failures, nor where the bodies are buried. Do you understand?”

Robert Alton was in the business of making predictions; ironically it was his own predictability that was his undoing. He was a senior research professor of mathematics at Cambridge and was making history with his sophisticated mathematical models of fluid dynamics. The value of his model, to Alton, was the sheer artistic elegance of the formulas. The value to his benefactors was that his model predicted with uncanny accuracy the flow patterns and turbulence caused by the rapidly turning turbines of hydro-electric power generators. The applications were myriad: early indications showed that an eight percent increase in efficiency

could be made in existing turbine-generators simply by a redesign of the blades. It did not take a genius to realize that there was also an application for the screws of a nuclear fast attack submarine. The Royal Navy, having an understandable penchant for silent submarines, was funding Alton's appointment, plus some, on the premise that they would be the sole beneficiaries of his research. On this day, however, Robert Alton was about to get a new partner.

Immersed in an idea about how perturbation theory might solve a particular anomaly in his model, the slightly-built, clean-shaven Alton did not notice the two men following him as he left his office on the Cambridge campus. Turning on to Benet Street, the scientist made his daily pilgrimage to the Eagle Pub for his regular pint of bitter. Alton's imagination was reserved for his mathematical ponderings; he wasted none of the precious mental energy on his daily schedule. Consequently the bartender at the Eagle always glanced at the clock over the bar whenever the mathematician walked in, to make sure the clock was correct.

While the bartender might have had cause to be thankful for the fact Robert Alton's routine was as unvarying as a solar cycle, it was the KGB surveillance team watching the professor that was really appreciative. They had completed their work in half the regular time.

As Alton walked toward the pub, a tall old woman being helped out of a minivan fell to the pavement, crying out in pain. Her companion, almost as feeble, crouched down to help her regain her footing. He looked up as Alton approached.

"Can I help you, sir?" Alton asked with genuine concern.

"Here's a good bloke, Mary. He'll help you up," the man said to the fallen woman. "Aye, sir, we could use a hand here. Lift 'er up by the shoulder there. That's right. Now help me sit her in

the car.”

Alton guided the woman toward the minivan. As she climbed in, the mathematician leaned in to get her situated. Before he could resist or cry out, the “old woman” grabbed his lapels with two incredibly strong hands, and, helped by the tails who had by now caught up, hauled him bodily into the van. Another hand clamped a handkerchief soaked in ether over his mouth and nose. The “feeble” old man slammed the side door of the van shut and jumped into the front passenger side. The whole snatch had taken less than fifteen seconds, and there were no witnesses. Had there been they might have noticed as the van pulled away that it had no license plate.

Meanwhile, the bartender looked at the clock and wondered where Robert Alton was.