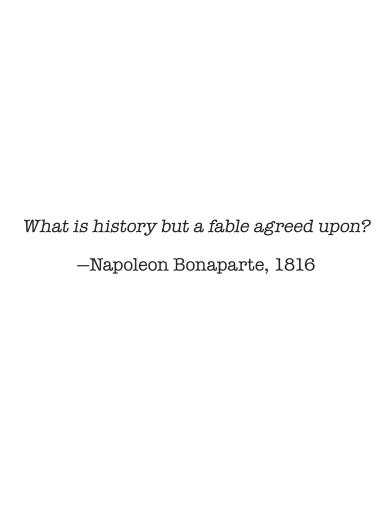
### **ARMAGEDDON**

Book III of the First Strike Series

THOMAS J. YEGGY

This is a work of fiction. Characters, places, and incidents are products of the author's imagination, are used fictitiously, and are not to be construed as real. Any resemblance to actual events, locations, organizations, or people, living or dead, is purely coincidental.
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### ABOUT THE AUTHOR



Thomas J. Yeggy is a graduate of the University of Iowa College of Law and practiced law in Davenport, Iowa, and Rock Island, Illinois, for many years. He served as the mental health and substance abuse judge for Scott County, Iowa, for more than 25 years. In that position he developed a keen understanding of the difficulties that everyday life presents regardless of social or economic status. As a judge, he authored more than 1,500 opinions, and only one

was reversed by the appellate courts. He was also a licensed Series 7 broker at Beyer & Company Investments in Davenport, Iowa, for more than two decades.

Yeggy's interest in the development and control of nuclear weapons goes back to images he once saw of the nuclear destruction of Hiroshima and Nagasaki. With his keen insight into the nature of mankind and their proclivity to use violence as a problem-solving mechanism, he wondered how we had made it through crisis after crisis without destroying ourselves. In 1992, when Robert McNamara stated that we had made it through the Cuban Missile Crisis with "just plain dumb luck," Yeggy decided to investigate just how lucky we have been. He explains what he found in this *First Strike* series. We have been very lucky, but it may not continue.

Yeggy currently resides in Pensacola Beach, Florida, with his wife, Eileen, and spends summers in Davenport with his grandchildren, Jeff and Ashley Brown. You can usually find Thomas and Eileen at Emeis Park in Davenport on a late summer afternoon running with their granddogs, Otis and Emme. The author's photo is from Fort Pickens Road in Pensacola Beach, courtesy of Eileen Yeggy.

### **AUTHOR'S NOTE**

This book is a work of fiction, but much of the history is based on fact. During the Cold War, US civilian and military leaders often turned to the scientific community for answers to questions concerning the United States' vulnerability to a preemptive strike by the Soviet Union. Many scientists produced answers, laboring in obscurity in organizations such as the RAND Corporation. Other scientists produced essential reports such as the Lincoln Project and the Gaither Report. But there were also many so-called Caleb Youngs, our composite fictional character, in these and other scientific organizations, relegated to obscurity by mainstream historians who elevated others to fame beyond their contributions. This book and the first two in this *First Strike* series are fictional insights into those in the scientific community who dedicated their lives to the defense of freedom. It is intended to put them in their proper place in history.

Caleb Young's parents emigrated from Hungary to the United States in 1919 to teach chemistry and physics at the University of California, Berkeley. In 1939, Caleb graduated from Princeton University with a PhD in physics and then took a position with the State Department, only later to work on the Manhattan Project. In 1948, he became the chief science officer for the newly formed Central Intelligence Agency (CIA), eventually advising Presidents Truman, Eisenhower, and Kennedy on nuclear policy.

During the Truman administration, Dr. Young, in his position at the CIA, managed an operation called Anaconda that was designed to make the Soviets believe that the B-36 was an accomplished intercontinental bomber capable of carrying nuclear weapons deep inside the Soviet Union to counterforce targets.

Dr. Young was also an accomplished civil aeronautics engineer who took an active part in the development of the F-86 and then the U-2 planes. During the Eisenhower administration's eight years in the White House, Dr. Young assisted Richard Bissell in developing and implementing the U-2's twenty-four missions over the Soviet Union and the Warsaw Pact. Recognizing the massive 17–1 advantage the United States enjoyed in deliverable nuclear weapons, Dr. Young—in an effort

to stop a first strike by US military hardliners—found it necessary to mislead the National Security Establishment into believing the Soviets had a formidable deterrent. Along with Dr. Carl Kaysen of Harvard University, Dr. Young presented President Kennedy with an alternative to the Single Integrated Option Plan (SIOP) developed by the Joint Chiefs of Staff in 1960–1961. It was this deception, his knowledge of covert paramilitary actions, and his criticism of the Warren Commission that landed him squarely in the sights of William Forde of the Justice Department.

When Kennedy took office on January 20, 1961, he faced many problems. Eisenhower had already sunk millions of dollars into the Bay of Pigs project and had balanced the budget on the back of the military, leaving the United States and NATO without a sufficient conventional response to the pressures Kennedy would face in Berlin. Kennedy exacerbated those problems by insisting on going to meet Khrushchev in Vienna on June 4, 1961, for a summit concerning the Berlin situation. At the summit, Khrushchev threatened to cut off the allies' access to West Berlin by concluding a separate peace treaty with East Germany. In response and in an address to the nation on July 25, 1961, Kennedy announced a massive conventional buildup. The Joint Chiefs of Staff maintained that the Soviets would interpret the conventional buildup as a denial of the will to employ our nuclear deterrent and advised Kennedy that the United States could clearly prevail if it struck with nuclear weapons first. The Berlin problem continued to fester until it seemingly would lead to World War III.

In Berlin on October 27, 1961, Soviet and US tanks faced off muzzle to muzzle at the Friedrichstraße gate for 17 hours in a tense situation that became known as Checkpoint Charlie. But once that situation was resolved, Kennedy became even more dissatisfied with his military options of all or none. His civilian advisors, Dr. Caleb Young and Dr. Carl Kaysen, modified the military's massive SIOP to minimize civilian deaths by only targeting a counterforce instead of countervalue targets. But then came the Cuban Missile Crisis.

Because of the U-2 flights and the Corona satellite photos, the US military was keenly aware that the United States had a massive 17–1 advantage in deliverable nuclear weapons. The Soviets knew it

too. Roswell Gilpatric, the assistant Secretary of Defense, had given a speech to the Business Council on October 21, 1961, letting the Soviets know we had a huge advantage. Despite this shortfall or maybe even because of it, Khrushchev surreptitiously sent medium-range nuclear missiles to Cuba. The situation came to a head on October 28, 1962.

Just a few hours before the United States was set to bomb and invade Cuba, resulting in tens of thousands of casualties on both sides, Khrushchev broadcast his agreement to remove the missiles. The world had temporarily avoided disaster. But as a result, Kennedy made many enemies, both foreign and domestic, which resulted in his assassination by two gunmen on November 22, 1963, in Dallas, Texas.

Conflicts among nuclear powers can be contained for only so long until the day comes when the nations' leaders respond to escalation with a superior show of force—with the apocalyptic nuclear weapons they've been harnessing and harboring. The escalation ladder ran out of rungs in 2028.

Thomas J. Yeggy

### **PROLOGUE**

The memories burn through the brain . . .

- ... vivid and poignant
- A motorcade . . .
- . . . Cronkite overcome with emotion
- . . . a riderless horse chuffing in protest about the boots reversed in the stirrups
- ... a saluting toddler
- ... a bloodstained Chanel suit

November 22, 1963 . . .

- ... the assassination of the President
- ... the assassination of hope

### 1

# August 1964 DOJ Conference Room

France joined the club on February 13, 1960," Caleb Young began as he looked in the eyes of Assistant U.S. Attorney William Forde, the primary interrogator in this months-long inquiry. "Almost the moment they detonated their nuclear device, the likelihood of a Soviet offensive in Western Europe receded."

"Wouldn't make sense to conquer Paris but lose Moscow in a nuclear exchange, I guess," Forde said.

"Correct," Caleb said.

"Dr. Young," Forde looked uncharacteristically sympathetic, "we have to talk about the President."

Caleb had never noticed how the morning light reflected off his Princeton tie bar, but it was suddenly the most fascinating thing he had seen in a long time. He fiddled with the little silver clasp, bouncing the reflection off one surface and then another.

"Dr. Young, we've been at this for months now."

"I know," Caleb said, "but it's still raw, isn't it? Still unbelievable. I knew him."

"I assumed you had met Mr. Kennedy," Forde said. "You were still the ranking Science Officer with the Central Intelligence Agency."

"No," Caleb corrected Forde. "I *knew* him. He invited me to the Oval Office about once a week. We sat and sipped Scotch—well, he did. I never developed much of a taste for it myself, but who in the world would turn down an invitation for a private audience with the President—especially that President? My God, he was perspicacious."

Forde blinked as a flash from Caleb's tie bar caught him in the eye. "Yes, he was," Forde said. "Young, charismatic, energetic."

"And smart," Caleb added. "He couldn't do math to save his life, but his grasp of concepts—theoretical, philosophical, theological—was

almost unmatched. He knew sports—even knew who George Glamack was, the . . ."

Forde interrupted. "I know. The National Player of the Year from North Carolina who you trounced in basketball every time you played." "Told you that, have I?" Caleb smirked.

"You have, and you know you have," Forde said. "But I didn't know you and the late President were . . . uh . . ."

"Friends," Caleb said. "That's what makes this so damnably hard. I knew FDR. He was a giant. Truman was a grinder, a hard worker, a bulldog. Eisenhower never ceased to be the Supreme Commander of everything he surveyed. But John Kennedy—Jack—he was my friend."

### 1961 Khrushchev and Kennedy

The situation in Berlin in 1961 could best be described as toxic. General Lauris Norstad (SACEUR and USCINCEUR) had prepared plans to test another blockade with a battalion-sized probe. By January 1961, the Soviets' bellicose rhetoric on Berlin had pushed the tripartite governing powers to instruct Norstad to devise a scheme for a division-sized thrust along the Helmstedt-to-Berlin Autobahn.<sup>1</sup>

Late in February 1961, Khrushchev threatened—once again—to sign a separate peace treaty with East Germany so he could cede control over all Berlin's access routes to the East German government.<sup>2</sup> Kennedy, who had been President for only a month, appointed former Secretary of State Dean Acheson to analyze the Allied options. On April 3, Acheson recommended boldness as the best course. He wanted to employ a battalion-sized probe to test Soviet resolve.

On April 28, 1961, the Joint Chiefs of Staff (JCS) sent Defense Secretary Robert McNamara an analysis. It stated that the East Germans alone could stop (but not destroy) a two-division force. McNamara vehemently disagreed but conceded that the Soviets could if they were of a mind to help.<sup>3</sup> The Soviets already had one division at Magdeburg, East Germany, that could avoid combat only by withdrawing after any probe commenced.

Khrushchev sensed an impending crisis. On May 12, 1961, he invited President Kennedy to meet with him in Vienna on June 4, ostensibly to discuss a test ban treaty. The Berlin issue continued to simmer. On May 26, Khrushchev told the Presidium that the Western Powers could be pried out of Berlin with little risk of war. He doubted the Allies would support US escalation if the East German Peace Treaty were concluded and/or if a substantial Western force were required to reopen the Autobahn.

Prior to Kennedy's June 4 meeting with the Russian Premier, the JCS gave Kennedy a memo:

In your conversations with Premier Khrushchev . . . be assured that you speak from a position of decisive military superiority in any matter affecting the vital interest of the United States and our Allies. . . . It is the considered judgment of the Joint Chiefs of Staff that the military forces under your command . . . can achieve decisive military victory in any allout test of strength with the Sino-Soviet Bloc to the extent that the United States will retain the dominant power position in the world. Thus, in your discussions, be assured that you may represent the national interest with confidence and without fear or reservation. . . . The military forces of the United States reaffirm their dedication to your command and wish you Godspeed in your mission. <sup>5</sup>

Kennedy's mission failed miserably.

### August 1964 DOJ Conference Room

"Jack was out of his political depth," Caleb went on.

"Pretty bold statement for a physicist," Forde said.

"He'd been warned," Caleb said. "Llewellyn Thompson, the Ambassador to the Soviet Union, and former ambassador Charles Bohlen had advised Kennedy against accepting Khrushchev's open invitation. But Jack was never short on confidence—you know, the old Haa-vaard spirit and PT 109 and all that—so he charged in face first. It was a meat grinder."

"How so?"

"The President was all about the future—the New Frontier and all that. He wanted to look forward. Khrushchev moved him into a discussion of the ideological differences between Marxism and capitalism. It was an axe fight, and Jack didn't have an axe. He looked naïve as if he lacked any understanding of past Western imperialism. The Soviet Premier demolished him. Then the President made it worse."

"How?"

"Kennedy declared that he felt the Sino-Soviet forces and US—Western European forces were equally balanced. Everyone was furious—the entire National Security Establishment of the United States, NATO, the Joint Chiefs. They felt Kennedy had emboldened a bombastic dictator. If Khrushchev was surprised, he didn't let on. He pressed his advantage. Look at Appendix XIV."

Forde adjusted his glasses and read.

If the United States challenges the Soviet position in divided Berlin over the execution of the peace treaty, the USSR must respond, and it will respond. It is up to the U.S. to decide whether there will be war or peace.<sup>6</sup> "Might not have been so bad if Kennedy had just stopped talking," Caleb continued.

"He made it worse?" Forde asked.

"Yes," Caleb said. "He mentioned how war was different now, how in the span of ten minutes, 70 million lives could be lost. Khrushchev's response was a shrug of his shoulders and a blank stare into Jack's eyes. Then he said, 'And why is that a problem?'"

"Mother of God!" Forde removed his glasses and wiped his brow. It was the first time Caleb had seen anything close to apprehension on his face.

"The response stunned Kennedy. How could a leader of an entire ideological movement with hundreds of nuclear weapons not recognize the utter devastation of an atomic conflict? Or how could he not care about the outcome? Kennedy concluded that the Soviets would strike first if an escalation over Berlin developed to the point where tactical nuclear weapons, or TNWs, were employed. Perhaps they would not wait if the United States followed a two-division probe that so many had suggested. Khrushchev might read the

action as step one of a nuclear attack and just start pushing buttons. And there were folks on the Russian side who were more unhinged than the Premier."

"Seriously?"

"Yes," Caleb said. "Vershinin and Zhukov liked the first-one-in-thewater theory."

"Meaning he who fires first has the advantage?"

"Precisely." Caleb drank some water. "Kennedy was deeply disturbed after the conference. British Prime Minister Harold Macmillan met with Kennedy at the Admiralty House in London on June 5, 1961. He insisted the Russians could do what they liked about a treaty but needed to understand that any attack on access to Berlin would be met with all the force of the Western Powers Command. French leader Charles de Gaulle was not surprised by Khrushchev's rhetoric but was concerned about how it had shaken America's young leader. It took about ten days for the US national security establishment to arrange a meeting to discuss damage control.

### June 14, 1961 – 0816 Hours National Communication Control Center The Pentagon, Washington, DC

The JCS called Acheson, along with Supreme Allied Atlantic Commander Admiral Robert Dennison and General Norstad, to the Pentagon to discuss how they might best face a more confident and dangerous Soviet military in East Germany in light of Kennedy's ill-considered statement regarding force of strength. They believed the President had all but destroyed the nuclear deterrent that had held the Soviet military in check for nearly two decades. They needed remedial action; they needed to send a clear message to the Soviets.

A week later, they sent a formal written study to Defense Secretary McNamara recommending several substantial changes in US policy required to reestablish the credibility of the nuclear deterrent. Those recommendations included the following:

The U.S. could clearly prevail if it struck first in a nuclear confrontation. If the Soviets were to strike first, the degree to which we are successful in prevailing is dependent upon the timeliness of our response. Our strengths are adequate to deter enemy deliberate and rational resort to general war and, if general war eventuates, to permit the United States to survive as a viable nation despite serious losses, and ultimately to prevail and resume progress toward its national objectives.<sup>8</sup>

Acheson sent a series of questions to the JCS involving force levels for a conventional confrontation over Berlin. The JCS replied:

A balanced force of seven divisions and four Tactical Air Wings could break through an East German blockade and defend itself against Soviet and East German attacks for 5 to 15 days. . . . After 30 days of fighting, the Soviets could concentrate 128 divisions in Central Europe; the NATO Powers could muster only 50 divisions in 120 days.<sup>9</sup>

According to the JCS, the next step would involve using nuclear weapons against purely military targets to underline US determination and seriousness of purpose. The problem with the conventional buildup (in Acheson's opinion) was the possibility that the Soviets would underestimate US willingness to use nuclear weapons to prevail in Berlin.

Khrushchev was perplexed, not by the US military but by the political decision-making apparatus. It had taken a firm line in Lebanon and Taiwan but vacillated in Laos and Cuba so far that year. Basically, what the JCS wanted from Kennedy and McNamara was a clear answer to the escalation question. One of them asked, "Are we all in on Berlin if it comes to the employment of nuclear weapons?"

They would not get a clear answer anytime soon. On July 25, 1961, Kennedy addressed the nation on television and indicated the serious nature of the Berlin situation. He announced the following steps:

- 1. A request of Congress for an additional \$3.2 billion for the Armed Forces, about half of which would be used for the procurement of conventional ammunition, weapons, and equipment.
- 2. An increase in the total authorized strength of the Army from 875,000 to 1 million men.

- 3. An increase in active duty strength by 29,000 for the Navy and 63,000 for the Air Force.
- 4. An increase in the draft call, doubling and tripling the number of draftees in the coming months.
- 5. Activation of several Reserve units and the extension of tours of duty for soldiers, sailors, and airmen scheduled to leave the service in the near future.
- 6. A postponement of the mothballing of older ships and aircraft, which included delaying the deactivation of several B-47 bomber and aerial refueling wings.
- 7. Introduction of an additional troop force of 1,500 to augment troop strength in Berlin.<sup>10</sup>

Shortly after the televised address, McNamara announced that 50 percent of the Strategic Air Command's bomber wings would be placed on fifteen-minute ground alert. It was called Operation Chrome Dome. Additionally, three of the Army's divisions still in the United States would be relieved of training duties and prepared for emergency deployment to Europe. The Administration appeared to be all over the map, conceding the ongoing division of Berlin while ramping up in case of a global fistfight.

Even prior to the July 25 television address, McNamara had been meeting with Henry Kissinger, a Harvard professor and part-time consultant to the National Security Council, concerning the Berlin situation and the use of nuclear weapons. On July 7, Kissinger had sent a memo to McGeorge Bundy, Kennedy's National Security Advisor. The memo was called "General War Aspect of Berlin Contingency Planning." Kissinger wrote:

The Acheson report correctly points out that the President must make an early decision about his willingness to risk nuclear war over Berlin. . . . before he makes the decision, he has to know what is meant by nuclear war. It would therefore seem to me essential that the nature of our nuclear options be defined now. The Pentagon should be asked to submit a plan for a graduated nuclear response. <sup>11</sup>

Caleb Young and Carl Kaysen, a respected national security expert, had written quite a long paper on the situation for Bundy's consideration. Caleb looked forward to his response.

# 2

# August 1964 DOJ Conference Room

Forde's broad brow evidenced a patina of sweat. All the theoretical stuff was becoming very real to him.

"Not so much fun when we attach reality to a doomsday scenario, is it?" Caleb asked.

"You guys play rough," Forde said. He was beginning to recover. "So did you talk to Kissinger?"

"Frequently," Caleb responded.

"As smart as everyone claims?"

"Well, as the saying goes, he's no Einstein."

Forde spit a little bit of his coffee onto the table. "Very good, Dr. Young. You've been waiting to use that one?"

"It's something comedy has in common with nuclear attacks," Caleb snickered. "It is all about timing."

"Touché," Forde said. "How long was your paper?"

"Not long by DC standards" Caleb answered. "Thirty-three pages. But let's keep going on the other thing."

"Okay. You're driving."

"Everyone advised me to contact a systems analyst at RAND, a gentleman named William W. Kaufman. We discussed the possibility of a disarming nuclear first strike against the Soviets' missile sites and bomber bases. But in July 1961, the President had only one fully integrated nuclear response—SIOP-62. It called for destroying 3,729 targets at 1,077 DGZs by 2,258 vehicles carrying 3,423 nuclear bombs. The attack was designed for twenty-eight hours. Anticipated damage to the Soviets and Chinese is outlined on the pages with the red tabs." Caleb pointed. "There . . . there . . . and there."

Forde looked over the numbers. The color drained from his face. "Fifty-four percent of the Soviet population and 16 percent of the Chinese in seventy-two hours? That's mass murder."

"Mr. Forde, it's now called modern warfare. And remember, those are estimates from three years ago. We've developed better mousetraps by now."

Forde opened his mouth. Nothing came out.

"All told," Caleb said, "Eastern Bloc countries would suffer more than 200 million deaths within three days. Estimated casualties in the United States would total about 16 million. Kennedy demanded a flexible nuclear response plan, something more appropriate for a situation where a seven-division US force engaged in a firefight along the Autobahn was facing defeat. The main debate within the Administration was the size of the force America and its allies would commit to the Autobahn should the East Germans attempt to restrict access to Berlin. General LeMay assured Kennedy that NATO's Air Forces were strong enough to support a ground probe with tactical, non-nuclear action, but everyone knew coordinating and timing such an initiative was problematic at best." 13

Caleb paused to give a little recuperative time, but Forde motioned for him to continue.

"It's like castor oil," Caleb said. "Might as well get it all down in one gulp. It's going to taste awful regardless. The Joint Chiefs did not believe NATO could reopen ground access to Berlin if they had to battle the Soviets on a large scale despite a troop buildup to fifty divisions during 1962. As the situation grew more intense, foreign ministers from the United States, the United Kingdom, France, and West Germany met in Paris in August. British intelligence knew the East German government had placed large orders for barbed wire, with English companies no less."

"A guy's gotta make a buck," Forde said.

"Or a pound in this case," Caleb added. "Regardless, between 5,000 and 10,000 East Germans were fleeing to West Berlin every month. Khrushchev was determined to stem the tide. Wall construction began on August 13, 1961. The Soviet 10th Guards Tank Division and the 19th Motorized Rifle Division moved—one to the north of the city and one to the south. Soviet tanks and troops entered East Berlin to quell any uprising. There would not be a repeat of Poland or Hungary. While building the wall took the Allied Powers by surprise and infuriated

German statesmen Willy Brandt and Konrad Adenauer, Kennedy was relieved."

"A wall is better than a war, right?" Forde asked rhetorically. "Yes."

### August 1962 Washington, DC

The August 17, 1962, White House meeting had been contentious. JCS Chair General Lyman Lemnitzer recommended sending a one-battalion force to the Autobahn from Helmstedt to West Berlin. Despite protests from Secretary of Defense Robert McNamara and Secretary of State Dean Rusk, Kennedy approved the probe and sent Vice President Lyndon Johnson and General Lucius Clay to Berlin to receive the battle group.

On the morning of August 20, 1962, 350 vehicles and 1,600 men of the First Battle Group, the 18th Infantry Regiment, set its course for West Berlin down the Autobahn. At Babelsberg, the Soviets stopped the probe. The US Provost Marshal demanded for them to release the convoy and gave them fifteen minutes to comply before the heaviest vehicles would crash through the barrier. The Soviet officer in charge went to his communication officer. Thirty minutes later, he emerged and released the convoy. When the troops rolled into West Berlin, they were met by Vice President Johnson and General Clay and a jubilant crowd, including German statesman Willy Brandt. Still, the Soviets played their game of gradual escalation and dominance.

Three days later, in response to accusations that the air corridor had been utilized for transportation of "all kinds of revanchists, extremists, saboteurs, spies, and diversionists" from West Germany into West Berlin, <sup>17</sup> the Defense Department mobilized an additional 76,600 men (46,500 Army, 23,700 Air Force, and 6,400 Navy personnel). The Navy mobilization proved particularly prescient. US fighter aircraft were given authority to pursue harassing aircraft into hostile airspace and, subject to Norstad's command, attack enemy batteries firing on Allied planes in the air corridors. The narrow margin of error continued to shrink.

On August 30, 1962, the Soviets announced the resumption of atmospheric nuclear testing. Two days later, President Kennedy authorized the movement of twenty B-47s to Spanish bases, the redeployment of three F-100 squadrons to tactical areas, and the deployment of four F-100 squadrons to bases in France and West Germany. Another 73,000 reservists had received activation notices in the middle of the month. Still, there was no unanimity regarding the buildup. The JCS opposed it; Kennedy, McNamara, and Taylor approved it. Norstad saw the moves as playing into the Soviets' strengths.

Norstad knew the Russians would fight a war of attrition and use Eastern Bloc armies as cannon fodder until NATO forces were in disarray. He doubted the Allied ability to withstand a massive conventional attack for more than thirty days. Consequently, he spent all of October 2nd with McNamara and the JCS where he pounded on the "high probability of explosive escalation" under the current plans. "If we had knocked down the wall when it was first put up, there would have been strong protest, but probably no other action and the wall would not be there today.<sup>19</sup> Now the Soviets doubt our will to fight and especially to employ nuclear weapons if we are facing an overrun of Western Europe."

Kennedy continued the conventional buildup and began to consider what types of nuclear response might be appropriate and when. He wanted a full range of nuclear options short of the massive retaliation of SIOP-62.

The 3rd Armored Cavalry Regiment was sent to Germany within the month along with eleven Air National Guard squadrons with 275 aircraft. Equipment for one armored and one infantry division was prepositioned in Germany. Battle groups of the 4th Infantry Division arrived as substitutes for the 101st Airborne Division, which was subject to immediate recall to Europe. Kennedy sent a letter to Norstad outlining the Administration's position—unless the Soviets were convinced of NATO's readiness to become engaged on a lesser level of violence, they would not realize the great risk of escalation to nuclear war.

General Norstad thought the President's letter overflowed with clichés and jargon that Washingtonians were familiar with and said so

to Kennedy's face. The General said the policy statement was poorly drafted, ambiguous, and contradictory. In its present form, he could not use it as a basis for instructions to his planners.

#### **DOJ Conference Room**

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"No guts, no glory, I guess," Forde quipped.

"True," Caleb said. "Kennedy was reluctant to remove General Norstad as SACEUR—stability, optics, and all—but the General wasn't making a lot of friends."

"Can we back up a minute?" Forde asked. It was perhaps the only time he had not pushed forward.

"Regarding?"

"Refresh me on SIOP-62."

"Yes. SIOP—Single Integrated Operational Plan," Caleb reiterated. "In August 1960, President Eisenhower and Defense Secretary Gates had recognized the lack of a unified plan for either a retaliatory strike or a preemptive strike utilizing US nuclear weapons. Gates created a new military organization called the Joint Strategic Target Planning Staff (JSTPS), which was to be headquartered at Offutt Air Force base near Omaha, Nebraska. The JSTPS was responsible for creating a target list called the National Strategic Target List (NSTL) and a plan designating priority and kilotons of TNT for each Designated Ground Zero (DGZ). The infighting between the services for control of JSTPS was some of the worst Eisenhower had ever experienced."

"And he had to put up with Montgomery's mammoth ego during the war," Forde said.

"Precisely," Caleb said. "Ike finally settled on Thomas Power, the Commander in Chief for the Strategic Air Command (CINCSAC), as the first Director of JSTPS. Power, if you will remember, even frightened LeMay by defining victory as a war where two Americans survived versus one Russian. In fact, when Eisenhower received SIOP-62 in December 1960, he said it frightened the devil out of him. He wasn't alone."

#### ~ Thomas J. Yeggy ~

There was an uneasy stillness in the room—like the moment just before some monster jumps out from behind a curtain in a horror movie. Forde's breath was shallow.

Caleb went on. "I knew I would bear some responsibility for the hundreds of millions of deaths in the Soviet Bloc in the event of a nuclear encounter because I had intentionally overestimated Soviet abilities in hopes of avoiding any preventive or preemptive action on the part of the United States. Other scientists and service heads were aware of my reservations about SIOP-62. The Soviets knew everything would come out of Washington, conciliatory or aggressive, and as the summer faded into early fall, Soviet intelligence operatives warned about unrest in the American military and potential plans for a strike."

# 3

### October 14, 1961 – 0700 Hours KGB HQ Lubyanka Square, Moscow, Russia

A lexander Sheplin was surprised to see Ivan Serov. "What brings the Former Chairman of the Committee for State Security (KGB) to my office so early on a Saturday?"

When Minister of Defense Rodion Malinovsky also stepped through the doorway, Sheplin gulped. "Am I to be arrested?" He forced a weak smile to signal a joke, but his stomach was in knots.

Serov was head of the GRU military intelligence, an agency locked in a constant struggle with the KGB for preeminence. A third man, Viktor Cherkashin, Head of Counterintelligence for the KGB, walked into the office. Cherkashin had contacted Sheplin the previous week from Washington, DC, where an asset had picked up on a plan for a US first strike against the Soviet Union. The source was a university economics professor. Sheplin had dismissed the plan as a CIA hoax.

Serov didn't agree.

"The plan I outlined is gaining traction, comrade," Serov said. "It is to be carried out by B-52H bombers at altitudes below 500 feet, too low for radar detection. They would take out our rocket forces with cruise missiles and leave us with less than one hour of response time."

Sheplin was still trying to control his breathing.

"It is doubtful that they could take out all our intermediate-range missiles," Malinovsky stated, "and they can do nothing about our tactical nuclear weapons. We could retaliate against the Americans' NATO allies here in Europe, but if we did so, we would face the second wave of American bombers and missiles. There would be devastation. And all of this is because of the ruckus we are raising in Berlin. It's not worth it."

Sheplin nodded. "What do you need from me?"

"We must convince Comrade Khrushchev to get control of Walter Ulbricht before there is a chain reaction we cannot stop," Cherkashin said. "Presently, despite what the young American president says, we are at a terrible disadvantage when it comes to tactical, theater, and strategic nuclear weapons. But the Americans do not know about the underground submarine base at Balaklava. If they attack, they will surmise they have destroyed all our offensive weapons and not be on guard for the fourteen missile submarines that are impervious to nuclear attack."

"Even if they know, is that sufficient to deter them if their military is in charge?" asked Serov. The feeling was returning to his face.

Cherkashin shook his head. "I fear they may strike us without warning. I have been cross-checking my sources, and I am getting the same information from various American assets. The scheme is well past the planning stages and may be an active plan just waiting for things to go badly for NATO in West Berlin. The Americans are serious about this. The political powers are at loggerheads with the JCS, many of whom favor a first strike without warning against the communist world."

The conversation went on for several hours before the group determined that Malinovsky and a much-relieved Serov would speak with Khrushchev.

### October 14, 1961 – 1445 Hours Senate Building, the Kremlin Moscow, Russia

Khrushchev listened and then called Ulbricht and told him not to take any provocative actions against the Western forces without first consulting Moscow. Then the Premier arranged to address the Politburo. After his presentation, the governing body unanimously agreed to drop the December 31 deadline for turning over East Berlin to the GDR and the demand for withdrawal of NATO forces from West Berlin by that same date.

But the trouble for Khrushchev and Kennedy was far from over.

# 4

# October 16, 1961 – 0800 Hours JCS-NSC Joint Meeting The Situation Room, the White House Washington, DC

Major General Frederick L. Weisman, Deputy Chief of Staff Plans, and Major General John W. Carpenter II, Deputy Director of Plans, looked at the other members of the Joint Strategic Target Planning Staff (JSTPS). Weisman took the lead.

"We have a paper here from Dr. Caleb Young and others." He nodded to Caleb Young at the end of the table.

No one said anything. Dr. Young produced papers and opinions like cherry trees spread pollen in spring.

McNamara sat up. "Read it. Can it be done?"

Carpenter nodded. "It's not only possible but it also has a high probability of success, and it's a damn sight less punitive than SIOP-62. The efficacy of the plan depends on the accuracy of our intelligence from the U-2 flights and Corona. As you know, the first successful Corona launch (Mission XIV) was on August 19, 1960. When we recovered the capsule a day and a half later, we had more coverage of the Soviet Union than all preceding U-2 flights combined. Since then, we have located all Soviet intercontinental ballistic missile, or ICBM, launch sites and heavy bomber bases."

General Norstad was in a typically combative mood. "How long are we going to wait on Khrushchev to respond before sending in the second wave of bombers and launching our missiles at other counterforce targets? And what are we to do about conventional attacks on our forces in West Germany and Berlin? Are they going to be authorized to use TNWs, and if so, under what circumstances? And if not, why not? Most of our units are outfitted with either the M31 or the M50 Honest John. As you know, the M50 has a range of just over

30 miles and carries the W31 warhead with yields between 2 and 30 kilotons. The MGM-Corporal missile delivers the W7 nuclear warhead to targets over 75 miles away with yields up to 61 kilotons. We have six battalions in West Germany outfitted with these TNWs. We also have the M110 and M115 howitzer delivering W33 nuclear shells over a maximum distance of 18 miles. And then there are the M-28 and M-29 Davy Crocketts delivering the M-388 warhead and the MGR-3 Little John free-flight rocket delivering the W54 nuclear warhead."

"Damn, General!" It was McNamara. "These are nukes, not bottle rockets for the Fourth of July. Calm down."

"I'm not recommending anything," Norstad said. "We have other weapons as well—tactical nuclear fighter-bombers and such. My point is that there's no way to control all these weapons once the shooting starts. The East Germans will not stand down and await instructions from Moscow if we're blowing the hell out of them. My point is that we go big or go home. SIOP-62 is the best option if we're going to fight. Otherwise, we're looking at a free-for-all. Remember, the Davy Crockett is under field command."

Kennedy's Massachusetts twang cut through the air. "What is the Davy Crockett?"

Weisman answered. "Mr. President, the Davy Crockett is a tactical recoilless rifle with a maximum range of 2.5 miles and a maximum yield of 20 tons of TNT equivalent, but the fallout from even this small of a surface burst is potentially very deadly. Anyone within 500 feet will be exposed to 10,000 rems and die within hours. Anyone within 1,300 feet of the surface explosion will die within days from about 600 rems of exposure over a short period of time. Testing is still ongoing, but several are deployed in V Corps with the troops defending the Fulda Gap. Although they're still testing, the 3rd Armored Division V Corps has more than 500 of these devices spread throughout West Germany along with all the other TNWs."

"They sound delightful," Kennedy said. His disgust was unmistakable. "What about Soviet TNWs, General Norstad?"

Norstad never referred to any notes. His memory was legendary. "The Soviets can deploy tactical and theater nuclear weapons. They are listed on the last page of Dr. Young's report. The Frog series is launched

from a 2P16 mobile truck unit. The truck has a top speed of 24 miles per hour, and the missile has a range of 120 miles. Consequently, the launch vehicles are difficult to neutralize."

Norstad waited until the President looked up from the report before continuing.

"The Soviets also have Front Cruise Missiles (FKRs). They have a range up to 100 miles and can carry a 30 kiloton nuclear weapon. They are highly accurate with a normal cruise time of five to seven minutes. They would most likely be used in conjunction with tactical ballistic missiles carrying a 20 kiloton warhead or higher to destroy Honest John and Corporal battery sites. TNWs are also carried aboard Ilyushin-28s. Several hundred of those planes are available for any type of operation the Soviets may choose to launch. In short, escalation dominance, if played out by both sides to a logical end, will leave Germany and probably all of Central and Western Europe uninhabitable for years. Our calculations from our 1956 military exercise Operation Carte Blanche where our forces launched 355 TNWs show that in two days' time, there will be 1.75 million dead and 3.5 million injured in Germany alone. In the last five years, Soviet military strategy has evolved to embrace the massive use of tactical nuclear weapons in direct response to any utilization we make of field nuclear weapons, even something like the Davy Crockett. We have obtained a copy of Military Thought, the Soviet scientific military journal published by the Soviet Ministry of Defense. It's been distributed down to the level of division commander."

Without prompting, Norstad began reading.

In order to destroy a full battery of atomic artillery and its firing position, with the guns and personnel located in shelters, it is necessary to have one cruise missile with a nuclear charge of 15 kilotons or two tactical ballistic missiles (SCUDS) with a nuclear charge of 20 kilotons each. In order to destroy the launching mounts and rockets of an Honest John battery firing position, which encompasses an area of 1 x .3 km, it is necessary to use one cruise missile with a 10-kiloton nuclear charge or one to two tactical ballistic missiles, each with a 20-kiloton nuclear warhead.

To put out of action completely the launching mounts and missiles of a Corporal Battery and its firing position, which encompasses an area of  $1.5 \times 2$  km, it will take one FKR with a 30 kt nuclear charge, or five Operational Tactical Missiles (OTRs) each with a 40-kiloton nuclear charge.

One cruise missile with a 20-kiloton nuclear charge can destroy all the cruise missiles and launching mounts of a squadron of matador or mace cruise missiles and their launching zone which has an area of 3 x 2 km. To fulfill this same mission, it will be necessary to expand six operational tactical ballistic missiles, each with a 20-kiloton nuclear charge, or two missiles with 100-kiloton nuclear charges.<sup>20</sup>

General Edelman took over. "Clearly the Soviets are embracing the use of tactical nuclear weapons in coordination with their overwhelming conventional forces. Marshall V. D. Sokolovsky, Chief Military Strategist for the Soviet ground forces, has written in his military strategy papers that 'the next war will be fought in Europe and will be a nuclear one.' In conjunction with this change in strategy the Soviets have launched Operation Buria, a joint Warsaw Pact operation involving several of the Eastern Bloc countries. It discounts a Soviet treaty with the German Democratic Republic, a blockade of the Autobahn, conventional escalation, tactical nuclear weapon engagement, and a massive retaliatory tactical nuclear weapons barrage by the Warsaw Pact involving more than 1,000 TNWs by the Warsaw Pact and 1,200 by NATO. I refer everyone to the folder labeled Operation Buria, Table VI."

Operation Buria – Assumed Force Levels	NATO	Warsaw Pact
Troop Levels	682,000	1,000,000
Fighter Planes	1,314	1,500
Bombers	1,500	1,000
TNWs	1,200	1,000
Nuclear Bombers	800	100

Edelman continued. "If we launch SIOP-62, the Soviet field commanders will anticipate tactical nuclear launches by NATO and preempt with their own TNWs without consulting the Ministry of Defense in Moscow, which I presume they would be unable to contact

anyway. Any launch of their TNWs would yield the following in my opinion:

- The Warsaw Pact TNW attack will include 1,200 stationary NATO targets, 422 of which are located in West Germany. Warsaw will also attack 400 mobile targets such as troop concentrations and nuclear weapon launching sites with various nuclear weapons. Expect the Federal Republic of Germany to be paralyzed for eight to ten days. Almost three-quarters of the tactical nuclear weapons and 90 percent of the radar stations and airfields in West Germany will be immediately destroyed.
- Warsaw also expects that 40 percent of the troops against whom nuclear weapons are used will be killed or incapacitated with losses of weapons and equipment running up to 60 percent. In response, NATO will detonate sixty-eight surface explosions of nuclear weapons behind Warsaw Pact lines to interdict strategic reserves. Overall, 140,000 square kilometers will suffer radiation of at least 100 roentgens per hour. Regardless, Warsaw Pact troops will storm through the fallout and attack Paris. They will reach Calais on the tenth day. Keep in mind that all this will be in an area about the size of the state of New Mexico.
- Based on the foregoing, it is my considered opinion that any use of tactical nuclear weapons by one side against the other will result in an uncontrolled and uncontrollable escalation the result of which will be a full-scale general war. Even a Davy Crockett will bring about a massive tactical nuclear weapon response from the Soviets. I am not even considering MRBMs such as the R-12 Divina, a/k/a SS-4, with a range of 1,290 miles that can carry a 2.3 megaton warhead.<sup>21</sup>

In a room full of people who loved the sound of their own voices, no one spoke. The General took a breath to let everyone recover.

"Let's assume SIOP-62 works and takes out the ICBM sites and long-range bombers," he resumed. "I believe the Soviets will launch MRBMs from the five regiments deployed in Central Europe and Western Russia. Before the dust settles, every European NATO city with a population of more than 150,000 people will be destroyed. The warheads carried by these missiles are more than 100 times more

powerful than what we dropped on Hiroshima and Nagasaki. Finally, without going through the hundreds if not thousands of other tactical, theater, SRBMs, MRBMs, and IRBMs the Soviets may employ, let's consider our own SRBM, the PGM-1 Redstone. It will be deployed to stop Soviet reinforcements on the Western front and target Soviet troop concentrations. It has a range of just over 200 miles and carries a mammoth 3.8 megaton warhead. We have more than a hundred of them deployed all along the Western European Front."

Sweat peppered the General's brow. His Adam's apple twitched like a worm on a fish hook.

"I cannot validate any argument that involves the use of nuclear weapons," he continued. "The old Soviet Party line trumpets Russia's ability to win a general war after a nuclear exchange. It was adopted by the communists after Georgy Malenkov, the Chairman of the Council of Ministers, was sacked in March 1954 for saying a new world war fought with nuclear weapons would represent the end of civilization. Russian scientists concur, at least in private, but the politicians love to beat their chests and trumpet the superiority of their conventional weapons and troops. They will never surrender even if the Young Plan is executed to perfection. They have already sent their soldiers into areas with heavy fallout. The results were disastrous, but they proved their willingness to institute irrational, macho maneuvers."

General Edelman looked around the room. He had everyone's attention even though some people were furtively dabbing at their eyes and thinking about friends and loved ones in Europe. There were no theatrics. The General had never once raised his voice or struck the table. An air of despair coated his every word like the omnipresent stink found in a junior high school boy's locker room.

"If we continue the brinksmanship game for dominance of the Autobahn," he said, "someone will eventually start something no one will be able to stop."

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Caleb Young watched the room transform slowly but inexorably. At the conclusion of Edelman's sermon-like presentation, not one person supported SIOP-62, and they all agreed that it was nothing short of a worldwide murder-suicide pact. Caleb knew better than anyone in the room. He'd seen almost every test and analyzed the data from the handful he'd missed. If anything, the General had understated the devastation.

But it didn't take long for the mood to shift from somber to hyperpatriotic. They were Americans, by God. They controlled the world's destiny. They were not a bunch of atheistic Bolsheviks. Firing weapons armed with megaton warheads seemed like a bad idea in theory, but America was Floyd Patterson—if it hit first, its opponents would be so punch drunk that they could not possibly respond in any appreciable fashion. Beating someone to "the nuclear button" would end every threat and save America, General Motors, and the New York Yankees.

"General Edelman!" It was President Kennedy. "Take control of every Davy Crockett. They are to be operational only on Mr. McNamara's command."

That's no solution, Caleb thought. You might as well give the keys to Grandma's house to the Big Bad Wolf.

One by one, the expressions of horror Caleb had seen only moments before hardened into pictures of grim determination—and fierce nationalistic pride.

The east wall of the Situation Room had several large maps with numerous key legends below each one depicting each element of SIOP-62. On the other side was a display of the plan Caleb had devised with Carl Kaysen—a projected strike of limited proportions. SIOP-62 looked like a paint-by-numbers attempt to copy Jackson Pollock with all the lines and blotches of color dominating the wall. There were statistics everywhere. Even the most cursory assessment of the graphs revealed the presumption of 285 million dead in the first seventy-two hours (assuming all the weapons were delivered on target and on time).

Marine Commandant General David Shoup raised his hand. "What happens if Beijing is not fighting? Is there an option to leave Chinese targets out of the attack plan?"

SAC Commander Thomas Power responded. "This is not a menu, sir. You don't get one from Column A and one from Column B. It's all in. The cross-targeting is intentional and irrevocable. It's like a watch—take out one little cog, and nothing works right."

"So we're going to eradicate 100 million Chinese nationals even though they are not involved in a war?" Shoup asked. "Doesn't seem very American. Besides, the concept is contrary to JCS 2056/220 approved by the Eisenhower Administration in 1959."<sup>22</sup>

McNamara, always cognizant of any shift in the wind of opinion, joined the criticism. "General Power, this plan obliterates Albania."

Before McNamara could gain traction, Power responded. "If you know anyone there, Mr. Secretary, I suggest you get them out. Albania is home to one of the largest Soviet air defense radar systems in the world. We'll take it out to protect our bombers. I offer no apology for safeguarding the lives of American service personnel. I will not jeopardize the lives of our brave men because of some bleeding heart humanistic qualm." He surveyed the room. "Gentlemen, this is war, and the objective is to vanquish our enemy. Anything less is unacceptable and leaves us open to counterattack where millions of American lives are at stake."

Caleb raised his hand. Power recognized him with a faint do-I-know-you nod.

"General, I'm Dr. Caleb Young." Power immediately acted like he knew who Caleb was. "I sat in on numerous conferences with weapons analysts at the RAND Corporation when SIOP-62 was extensively revised. Now, as then, I take exception to several provisions."

"Do tell," the General said. He could not have shown more disdain if Caleb had been wearing a Soviet Army cap.

"On March 1, 1954, off Namu Island in Bikini Atoll, we conducted a thermonuclear test called Castle Bravo," Caleb began. "We exploded a 15 megaton surface burst bomb called the Shrimp. The resulting fireball was approximately 4.5 miles in diameter. It created a crater over 6,500 feet in diameter and 250 feet deep. The mushroom cloud reached 47,000 feet with a diameter of 7 miles—all in one minute. Nine minutes later, the cloud was 130,000 feet and 62 miles in diameter. It expanded at more than 100 meters per second. The blast—just a single nuclear weapon, mind you—contaminated more than 7,000 square miles of the surrounding Pacific Ocean.<sup>23</sup> Measurable fallout was detected in such faraway places as the southwestern United States and Australia. Crew members on the *Daigo Fukuryu Maru*, a fishing vessel sailing approximately 200 miles east of the explosion, experienced severe radiation sickness. Some died.

"Since that test, warheads we have developed are smaller but more powerful. You seem very proud to ask this Administration to approve SIOP-62, a plan designed to rain a cascade of nuclear weapons with more than 500 times the nuclear explosive power as the Castle Bravo test. You are discounting the devastating effects of the weapons the Soviets will undoubtedly fire at us, all this because you fear the Russians will block a freeway."

The vein on General Power's forehead looked like a fire hose close to rupturing. "No, Dr. Young, I am not recommending anything. I am a soldier. I assess and report. The President is free to utilize whatever tools he has at his discretion."

If his intent was to intimidate Caleb, it didn't work. "General Power," Caleb said, "I have attended every Pugwash Conference on Science and World Affairs since 1957. I just returned from the latest Conference on Disarmament. Here's a brief summary. If we go forward with your plan, fatal fallout will blanket the entire United States and most likely the entire Northern Hemisphere. Both the United States and the ozone layer will be destroyed. Even Nobel Laureate Soviet Physicist Andrei Dmitrievich Sakharov, who designed the Soviet hydrogen bomb, acknowledges that a nuclear war on the scale you propose will end civilization. If you want specifics, I am more than ready to present them."

Power made a great show of bowing—a mocking gesture designed to throw Caleb off track. It did not.

"General, if you've been listening, you are aware that the bombs in your plan are 50 to 250 times more powerful than anything ever deployed in combat."

Power's irritation grew. "Your point, sir?"

"Just after SIOP-62 was approved, Admiral Robert Burke sent a note to the Joint Chiefs of Staff stating that the damage criteria are solely based on blast estimations and fail to consider the thermal and radiation effects. He expressed great concern about the fallout effect on friendly countries and US forces and requested an analysis of worldwide contamination resulting from both US and Soviet weapons. That report was given to your staff more than three months ago but has failed to surface. Apparently, Secretary McNamara knows nothing about it."

Caleb looked at McNamara's face. He was right. McNamara had never heard of the report.

"Furthermore," Caleb went on, "SIOP-62, at least according to a cable on October 29, 1960, from the Joint Chiefs of Staff Liaison Officer General Berton E. Spivy, contains a plan for a preventive or preemptive strike bearing similarities to the one Professor Kaysen and I devised—a plan you totally deleted from the final version of SIOP-62. Isn't that correct?"

Power looked at Caleb like he was something unpleasant on the bottom of his shoe. "Dr. Young," he said, "half-assed, theoretical plans like yours are what get men killed. Have you ever served a day in your life as a soldier? No, you ducked out of the draft. You had political connections. So you took your slide rule and slinked out into the desert at Los Alamos. You've never sat in the left seat of a B-29 in MiG Alley while half the planes in your wing got cut up by flack and fighters. No, but you are a goddamned expert when it comes to dealing with the commies, aren't you? Why don't you get some combat experience before you and your cadre of upper-crust Ivy League boys come in here and try to tell me how to defend this country?"

McNamara was on his feet. "Stand down, General, or you'll be walking a post in the Aleutian Islands by twilight!"

Power looked like he'd been slapped. McNamara took a moment to calm down by wiping his wire-rimmed glasses. He looked at Caleb in a conciliatory manner.

"Dr. Young is correct," McNamara carefully responded. "SIOP-62 is a monstrosity. It will leave the entire Northern Hemisphere uninhabitable for decades. The plan is inflexible. It gives the President only two options. We either leave our fighting men on the Autobahn to be cut to pieces or we destroy the world. Neither of those is acceptable. Surely you can come up with something better."

General Power regained his composure. He straightened his uniform. "Secretary McNamara, when and if this starts, you are not going to be afforded the luxury of sitting back and selecting what is appropriate at a given time during the heat of this battle. Communications will be nonexistent, and unless our forces are ready to go, the Soviets will kill most of the US population. While far from perfect, SIOP-62 utilizes our advantages and will deal a death blow to the Soviet Union and China. Yes, it is a monstrosity but if there are better plans, I have not seen them. The plan from our *distinguished* scientists (he gave a backhanded flip to the scheme on the north wall) could well get us all killed."

"It is very precise," Caleb said calmly.

"Exactly the problem," Power said. "Helmut von Moltke of Prussia said, 'No battle plan ever survives contact with the enemy.'<sup>24</sup> I am sure the good *doctors* have game-planned their little scheme relentlessly, but war is not a surgical instrument. It is a hammer. And I am not willing to gamble American lives on a theory."

He had recovered his belligerence but continued in the same excited tone. "And for another thing, all this stuff about the 'defenseless Chinese' is a load of crap. Hell, they think Khrushchev is too soft on us. They walked out of the last conference in Moscow due to a lack of aggressiveness in West Berlin. You think those back-stabbing sons of bitches won't grind us into powder if they get a chance? They are dedicated to eradicating capitalism and the American way of life. They've already conquered half the world as it is. If the cost of saving democracy is the blood of 100 million Chinese, I can face my God with a clear conscience."

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Caleb let Power finish his guns, guts, and God speech. There was no arguing with him. Something behind Power's eyes told Caleb that rational thought had left the building. Power was so paranoid about the Red Stain that he was willing to throw out the baby, the bath water, and the entire tub. When Power finally stopped, Caleb counted to ten—slowly.

"SIOP-62 is certainly sound," Caleb said, "if the intent lies in destroying communism and everything else in the world." Power smirked. "Dr. Kaysen and I have deliberated with some of the finest minds in the world as we put together our plan. Its goal is the same as SIOP-62's. We want to stop Russia's aggression. But we are not willing to pay the price of global destruction. Our plan is intended as a sound alternative to the preventative-preemptive part of SIOP-62. That plan is mammoth, and any element of surprise is impossible to achieve. Besides, SIOP-62 relies on ICBMs. Those missiles have a very high circular error of probability (CEP). We cannot count on the destruction of Soviet offensive weapons. In addition, the casualties we inflict will be massive, a number so high that it will make any concessions by the Russians impossible. They will feel required to seek blood for blood, regardless of the cost. There are six hours between the point of control (POC) and bases in the United Kingdom, the Middle East, and Okinawa. They will reach their POC six hours before B-52 bombers based in the United States. If the Soviets bluff and we pull back our alert forces in the air, we won't be able to strike for as long as fourteen hours. That delay could prove to be a difference-maker. Our follow-on forces would have to change to the alpha targets, and by the time they reached them, it may be too late. The Soviets could launch, given the extra time the follow-on forces would need to reach the primaries. This situation enhances the value to the Soviets of a feint and exacerbates an already tense situation because we will be reluctant to differentiate between a real strike and a feint."

Caleb had lowered the temperature in the room. Everyone was listening. President Kennedy seemed both interested and relieved.

"Both sides want control in Berlin," Caleb added. "One side moves; the other counters. We are slowly increasing the pressure. And, like squeezing a boil, eventually something will rupture, and what comes out will be—to use a technical, scientific term—icky."

There were smiles. Now Caleb knew he had them and boldly continued. "We do not want to move from local to general action, but if we do, should we use SIOP-62 or find another way? If we implement SIOP-62, our alert force will eliminate 37 percent of the population of the Soviet Union in the first three days. I know, I know, the only good commie is a dead commie, but we are talking about a lot of noncombatants—women, children, elderly people. If we destroy three-quarters of Russia's floor space, imagine the rebuilding efforts. It will make the Marshall Plan look like a Sunday school picnic."

Several heads nodded. Caleb went on.

"So the question is this: What is the appropriate next step after the repulse of a three-division attack across the zonal border between East and West Germany?<sup>25</sup> Circumstances there require something quite different from anything we have ever encountered. No, I have not occupied a cockpit in a dogfight. I have not seen friends die in battle. But more than anyone in this room, I have studied the long-term effects of radioactivity and the devastation brought on by a nuclear blast. Gentlemen, the world will not survive the hell you are apparently prepared to unleash."

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The President looked at Caleb for a long time. His eyes betrayed a man in deep torment, someone in a situation for which no one in history had ever been prepared. Yes, Cyrus, Genghis Khan, Alexander, Julius Caesar, Napoleon, Hitler, and countless others dreamed of and tried to achieve world domination. But no one had ever held the power to end most—or all—of life on the planet.

"The floor is still yours, Dr. Young," Kennedy said. Caleb could hear the weight of history in the President's voice.

"Thank you, sir," Caleb said. "I am respectfully requesting that the following plan be developed by the JSTPS and CINSAC. Let me start with what weapons cannot be considered for a preventive first strike. We cannot count on ICBMs. We only have 189 available weapons. The Soviets see these as a major threat because they are capable of killing hundreds of millions of people and devastating cities. In addition we have sixty A-1 Polaris missiles with a maximum range of 1,100 miles and a CEP of 5 miles. The A-1 Polaris has an EC47 warhead with a 600 kiloton yield. We also have forty-five Jupiters with a range of 1,500 miles, a 1.44 megaton warhead, and a CEP of less than .5 miles. The thirty we have in Italy and the fifteen we have in Turkey are under joint control. So even though highly effective for our purposes, they lack the elements of both secrecy and surprise. The HGM-25A Titan I has a large W-38 3.75 megaton warhead and a CEP of only 1.4 kilometers but only a 66 percent successful launch rate. Similarly, the SM-65 Atlas D with a W-49 warhead yielding 1.44 megatons is unsuitable for our planned preventive strike because it has a CEP of 3.7 kilometers."<sup>26</sup> "If we can't use our biggest cannon, what's left?" Kennedy asked.

"Bombers, particularly the B-52G Turbojet and B-52H Turbofans and overseas-based carrier aircraft, as well as the B-47 for delivery vehicles. Recent advancements in low-altitude bombing systems, or LABS, and terrain avoidance radar make them particularly well-suited for a minimum warning attack. We now have nearly 200 B-52 G models and approximately twenty B-52 H models, and all of them are equipped with Terrain Avoidance Radar Systems, or TARS. They carry as many as eight ADM-20 Quail decoy cruise missiles, as well as the new Guided Air Missile, the GAM-77, a supersonic, turbojet-propelled, airlaunched cruise missile with a W-28 nuclear warhead that has a yield up to 1.45 megaton and a range of 500 miles. Just to clarify, President Kennedy referred to the GAM-77 as a Hound Dog air-to-ground missile in his October 18, 1960, speech at an American Legion Convention in Miami. Each B-52 carries two Hound Dogs. Satellite photos have identified 600 Soviet air defense installations utilizing the deadly SA-2 Guideline missiles. These installations are relatively easy targets since the Guideline has a range of only about 25 miles. The typical SA-2 site utilizes the P-12A Spoon Rest as the acquisition radar although some of the more recent sites are using the P-14 Tall King 1RL113 2D VHF radar.

"In addition, in 1958, an upgraded P-12, the P-12M, came out. All radars are set up to acquire planes at an altitude that cannot be exceeded by our bombers. In search mode, the P-12s are locked into a wide beam configuration with a 7.5 x 16-degree parabolic-shaped main lobe section, the intent being to maximize detection volume while accepting poor angular accuracy. Transmissions are at a low PRF of 828 to 1448 hertz, and the pulse duration is extended to maximize pulse energy. The maximum range for detection by the P-12 radar is 200 kilometers, and the maximum range for detection by the P-14 radar is 400 kilometers.

"Because we know the location and the range of the radar, our B-52s will be able to engage the TAR at the appropriate time. Even if the plane is detected by the acquisition radar, its location and direction have to be handed off to the engagement radar, which is the Fan Song A, B, or C a/k/a RSNA-75, RSNA-75M, or RSN-75 whose transmissions are

in a high PRF range, normally between a PRF of 1,656–2,880 hertz with a short pulse duration. If the Fan Song acquires the target, and it may do so at a maximum range of 145 kilometers, the B-52 has a wide range of evasive maneuvers. Keep in mind that even if a target is acquired by the Fan Song and the correct targeting information is fed to the SA-2 missile, the range of the SA-2 is less than 50 kilometers."

Power was not about to remain quiet. "Well, *sir*." His condescension was evident. "What about the MiGs?"

"Glad you asked," Caleb said. "The Russians have a formidable number of MiG 17s, 19s, and 21s, but they cannot intercept our B-52s for several reasons. All the MiGs are clear-weather, daylight-only fighters. The MiG-21F—the F stands for Frontline—is armed with NR-30 millimeter cannons, only 60 rounds, and unguided rockets. It has no radar and no guided missiles. The 21F-13 is an improved model with a top speed like the original MiG 21F of Mach 2. It also has a capable NR-30 millimeter cannon with 60 rounds and two K-13 air-toair missiles. The K-13 uncooled infrared seeker is merely a reengineered AIM-9B Sidewinder that the Soviets acquired from the Chinese when one of ours hit a Chinese-piloted Soviet plane in 1958 but failed to explode. It is only viable as a tail chase missile. The improved 21F still lacks any radar. It cannot find a B-52 flying at night 300 feet off the deck. The 21F-13 has an extremely limited combat radius of 205 miles. Even if the MiG gets lucky and finds the B-52, the ECMs and tail guns will divert or destroy any missile launched from inside 4,000 feet. The tail guns on the G model B-52s are quad, 50-caliber machine guns, while the H model employs a single M61 20 millimeter rotary cannon. I anticipate it will be another two years before the Soviets can load radar-guided rockets on their MiGs."

"You willing to bet American lives on your guess?" Power asked.

"It's not a guess, sir," Caleb said. "My conclusions are based on solid, ground-acquired intelligence gathered by brave American assets."

That shut the General up for a moment

That shut the General up for a moment.

"The bottom line is that each plane carries four bombs with 4 megaton, Mark-39 warheads," Caleb explained. "They will get through to their targets. Depending on their assignment, some B-52s and B-47s will carry MK-41, 25 megaton nuclear bombs designed to

obliterate a circular area with a 12-mile radius. Although various analysts have a list of around 150 DGZs, our comprehensive study indicates that if we can destroy eighty-eight of them, we will have eliminated or paralyzed the nuclear threat to the United States sufficiently to permit subsequent attacks for mop-up purposes or for the elimination of other targets such as bomber-capable airfields and nuclear storage sites that might provide the basis for a later attack on the United States and intermediate-range ballistic missile bases that threaten Europe."

Caleb waited. No one had any questions. He went on. "From the time the plane is released from the point of control, over 80 percent will release their bombs in less than four hours. The bombs will be dropped with delayed fuses from an altitude of less than 500 feet. Some of the targets are close enough together that one bomber can get to two targets within fifteen minutes. Most of the bombers will carry four bombs. At a minimum, we estimate that 165 B-52s will make it to target—a 25 percent attrition rate. All the penetrating bombers will go to their POC after refueling over the Mediterranean, Alaska, the Atlantic, and the Western Pacific and then turn back as they always do so the Soviets will think all is normal, only to drop below 500 feet for penetration to the target. Global information suggests that Soviet heavy and medium bombers are normally located on a maximum of forty-six bases. There are about twenty-six bases from which they could stage to fly missions against the United States.

"The bulk of the Soviet heavy bombers appear to be based to the south, while the Badgers are deployed on the Western and Eastern frontiers. Consequently, the Badgers present a targeting challenge, but since they are not deployed for offensive action, they might be kept out of the war by elimination of the northern staging bases."

Kennedy was sitting on the edge of his chair. "What about Soviet missile sites?"

"At the moment it seems safe to say that there are at most eight missile sites. The Corona photos have corroborated MI6 sources and our own intelligence on this matter. Oleg Penkovsky has been telling British intelligence that the U.S. Air Force's claims of 50 to 100 ICBMs is wildly inflated."

#### ~ Armageddon ~

Caleb saw a few Air Force generals shift in their seats. He was about to add how they only inflated the numbers to get more Department of Defense money but decided not to ruffle any feathers. "Allowing two targeting points for each site gives us 16 DGZs," Caleb added.

"Dr. Young, how much lead time do the Soviets need to launch their ICBMs?" Kennedy asked.

"Five to ten minutes if the crews are on alert, the electrical equipment is warmed up, and missiles are fueled and topped. If missiles are unfueled, launch will take between fifteen and thirty minutes. If crews are on routine standby, the equipment is cold, and missiles are unfueled, which is normal, it's three hours. If the KGB has to release the warheads and they have to be transported and then armed, we have a full day."

Kennedy looked pleased. "Please continue," he said.

"Thank you, sir," Caleb said. "Our best intelligence says there are fewer than forty Soviet ICBMs that could be fired in less than the four to five hours it will take our planes to reach them. The warheads are jealously guarded by the KGB, and all Soviet ICBMs are liquid fueled. They are not filled unless they are on a heightened alert status."

"Why not keep them fueled?" Kennedy asked.

"The fuel is corrosive," Caleb answered. "Over time, the missiles become useless. The Soviets won't fuel them unless they know they are going to launch."

"What else?" Kennedy asked.

"Submarines," Caleb said.

## October 16, 1961 JCS-NSC Joint Meeting The Situation Room, the White House Washington, DC

President Kennedy's brow furrowed. He was preparing a question when Caleb jumped the gun.

"They could be in pens, in transit, or on station and ready to make an entry into war. I will yield to Admiral Anderson on this matter."

Kennedy nodded, and Anderson stood. Ramrod-straight, white-haired, and sharp-eyed, Admiral George Whelan Anderson instantly commanded the room, even in the presence of the President."

Kennedy and McNamara had their heads together. Caleb was sure the Defense Secretary was expressing his justifiable concern about the Russian subs.

Anderson's voice reverberated throughout the room. "Given our heightened awareness, I believe it would be very difficult for a Soviet submarine to deliver nuclear or conventional weapons against any of our cities or SAC bases. There are four classes of Soviet submarines. Please turn to the green tab to see their specifications."

Everyone turned to the indicated pages.

"There are four Echo class vessels," Anderson said, "though one may not yet be operational. They are assigned to Russia's Pacific Fleet. Each one has six, short-range cruise missiles that take more than thirty minutes of prep time and can only be fired from the surface. These submarines are nuclear powered and easy to track. Based on our advancements in anti-sub warfare techniques, we do not see these as a particular problem. The second class, the Foxtrot, is also largely irrelevant. There are seventeen on active duty. The Foxtrot is primarily an anti-shipping vessel. While it can stay submerged for ten days, it has limited speed. It carries twenty-two torpedoes and has ten firing

tubes. With three screws instead of two, it is also very easy to detect and track."

There were a lot of relieved faces.

"The 929 and 929-A Golf Classes are a different breed," Anderson continued. "Only half of them are on active duty, but the Russians are accelerating their sub program and should have the other ones up and running within 18 months. Each passing day increases the chances that one of their subs might sneak past our defenses."

Concerned murmurs bounced around the room. Anderson ignored them and continued. "A submarine with a nuclear warhead takes one to two hours to prepare for launch. We presume all the prep time will be while submerged. Once the sub comes up top, it takes an additional four minutes per missile to prepare each of its three missiles. During that time, the craft can proceed at 15 knots. The Office of Naval Intelligence does not believe the Russian subs carry nuclear warheads on routine patrols. Currently, we believe there are ten of these submarines in the Northern Fleet and three in the Pacific Fleet. The other ten have been laid but not launched. All twenty-three are expected to be on active duty by the end of next year. The subs are equipped with a D1 or D2 launch system. By the end of 1963, the D4 launch system will be ready, and the R-21 missile will be aboard."

A voice came from the back. "Does the sub have to surface?"

Anderson's face showed he was not a man who was accustomed to being interrupted. He glared until the questioner slithered as far down his seat as possible.

"Please allow me to get to every detail seriatim," Anderson said. "The R-21 changes the game. It has a 1,400 kilometer range and can be launched while submerged up to 16 meters. It will take several years to update all the submarines. By early 1964, only a few will be equipped with the D4 system. At this time, we do not know if our ASW assets will be able to stop such an attack."

Anderson surveyed the room for anyone brave or daft enough to interject. When he was sure there would be no more intrusions, he continued. "The last vessel is the Soviet Hotel Class. There are a few that are active, but most are still on the drawing board. We believe there were issues with the reactor on the sub designated K-19. Our reports

indicate that the portside pump gave out in July, which resulted in twenty deaths. But make no mistake. This is a formidable weapon of war. Questions?"

Anderson pointed to someone in the middle of the room.

"Admiral, what can you tell us about our ASW capabilities?"

"Good question," Anderson said. "We have an extensive system of seabed acoustic hydrophones that allow access to a deep-water sound channel. We can trap and focus low-frequency sound waves over thousands of miles. We utilize a sound fixing and ranging channel, or SOFAR, which is enhanced by improving the signal-to-noise ratio. We can recognize the broadband nature of the submarine noise signatures. We have also developed the low-frequency analysis and ranging system, called LOFAR, thereby dramatically improving the processing gain system. The Soviet Hotel and Echo classes, collectively referred to as the HENs, produce tonals caused by their propulsion turbines and propellers. There is a relatively fixed ratio between these two tonals. LOFAR has recently tracked the SSN USS George Washington across the Atlantic all the way to the United Kingdom by the Sound Surveillance System, or SOSUS, cable all over the ocean floor along the US East Coast that detects subs hundreds of miles away. The threat produced by the HENs is relatively negligible considering the other ASW weapons we can utilize. We can also acquire the diesel-electric guided missile and ballistic missile Soviet submarines, but the range is less than 300 miles. If the target submarine is snorkeling to do an air exchange and recharge its electric battery, the acquisition distance is improved. The main question here today is what to do about the diesel electric Soviet subs. There are about a dozen active Golf 629 and 629A SSBMs, six modified Zulu SSBMs, and eight to ten Whiskey class SSGMs. I do not believe they constitute a threat to the CONUS."

"Why not?"

It was Kennedy, who was now standing. This time, the Admiral did not glare.

"First, Mr. President, all Soviet submarine bases require long transits in shallow water to operating areas. More than 75 percent of the time, we know where twenty of the thirty Soviet subs are. When they leave their bases, we know through spotters, acoustics, and satellite imagery.

Second, even though we know all the Soviet submarines' ballistic missiles and guided missiles are propelled by storable liquids, which means they are not using liquid oxygen as an oxidizer but probably red fuming nitric acid or nitrogen tetroxide N2O4, they will only fuel the missiles in a time of crisis. The propellant can only be stored for a relatively short period of time. As you know, the United States uses solid fuel for our subs' ballistic missiles."

Kennedy nodded.

"It is doubtful," Anderson added, "that the warheads have been released to the Russian Navy by the KGB or GRU. They know all too well that we have a significant nuclear advantage, and they do not want some trigger-happy sub commander to start an accidental war. As I explained, we have the advantage of detection and tracking by sonobuoys and the P2V-J Julie/Jezebel ASW units. When SOSUS detects a Soviet sub, we can drop two pairs of buoys around the sub and use a correlation and detection ranging system, or a CODAR, to pinpoint the sub's location and bearing. The Russians know we can deploy torpedo planes or entire Hunter-Killer Groups at a moment's notice."

Kennedy was fully engaged. "Anything else, Admiral?"

"One last thing, sir," Anderson said. "We have developed a group of ASW platforms that include submarines such as the *Tullibee* and the *Thresher*. They utilize passive acoustics to identify targets at 100 miles and active SQS-23 systems to acquire targets at 10,000 yards where they can utilize the Mark-45 torpedoes with a range of 14,000 yards, a speed of 40 knots, and an 11 kiloton W-34 warhead. The Soviet counterparts cannot compete at even half that range on active acoustics or torpedo range or yield. Their nuclear-powered, missile-bearing submarines will have very little chance to evade a submarine in the Thresher class where the top speed is near 33 knots. In short, gentlemen, the Navy feels we can neutralize the Soviet subs and has the will to proceed with Dr. Young's plan."

The moment he sat, Kennedy stood again and spoke. I'll see Secretary McNamara, General Lemnitzer, and General LeMay in the Oval—now!"

#### October 16, 1961 – 1143 Hours Oval Office, the White House Washington, DC

The President's famous calm demeanor was not present in the room. "Gentlemen, is this or is this not a viable plan—Dr. Young's idea?" General LeMay was never rattled by the young President. He considered the New Englander out of his depth and uninformed. He'd never believed all the PT-109 stuff and thought the primary reasons for Kennedy's election were Joe Kennedy's ability to manipulate election officials and the young man's stunning wife, a significant upgrade from Eleanor Roosevelt.

"Today it is," LeMay said. "Next year, not so much. No one can tell with any certainty what the hell will happen once something like this starts. I'd make some modifications."

"Such as?"

"I'd use our Polaris missiles to take out Soviet ICBMs and MRBMs in Europe because those will be launched reflexively. Only about half of the thirty-four spots are hot, and each one is in Polaris range. The Russians' best chance to hit us is with their KH-20, AS-3 Kangaroos launched from a Tu-95. It can carry a 3 megaton bomb and has a range of 370 miles, but it takes twenty-two hours to prepare the missile, which uses non-storable propellants and requires manual guidance that can easily be jammed. Assuming we hit all their bomber bases, this problem goes away."

Lemnitzer, less of a hawk, looked worried. "I'm not at all confident about neutralizing the Soviet submarines nor do I believe we will limit civilian deaths in the Soviet Union as Dr. Young suggests. We could very possibly end up with Washington, DC, New York, Philadelphia, and other East Coast cities being hit with 500 kiloton hydrogen bombs from SLCMs or SLBMs. That would mean 10 million dead Americans. I recommend exhausting every possible diplomatic avenue and every

conventional military operation before we put something like this on the table."

McNamara's eyes were as shiny as his slicked-back hair. He stated, "Assuming we escalate to a corps level force to support a probe attempting to open the Autobahn and the Soviets and East Germans respond in kind, the preventive strike might be our best option. I do not think we should dismiss it. Certainly, anything resembling SIOP-62 will result in a series of nuclear exchanges—hundreds of millions of deaths long term. Hell, it might even be the end of civilization if some of the scientists are correct. Or we might not see the sun for a decade. I think it's unlikely that Khrushchev will continue pushing the envelope in Berlin, so I think we should revisit Young's plan and contemplate its use. After all, the Soviets will see our alert force bombers reach their point of control and turn around. Once it is beyond Soviet EWR, the force will descend and commence the bombing run."

"Khrushchev does not want war," Kennedy said, "but I want to make our strength perfectly clear to him. He needs to know we are strong enough to decimate his country with a nuclear exchange. I believe Roswell Gilpatric is the perfect person to deliver such a message. Do you agree, Secretary McNamara?"

McNamara nodded. "None better."

"Then it's settled," Kennedy stated. "Roswell will talk to the Premier and make sure the Russians know we are not to be trifled with in Berlin.

Lemnitzer's voice was trembling a little. "And if they don't back down?"

For the first time, LeMay thought Kennedy looked every bit like a commander-in-chief.

"They will wish they had," Kennedy said.

### October 22, 1961 – 1830 Hours Friedrichstraße to Brandenburg Gate, aka Checkpoint Charlie West Berlin, Germany

hat are you doing? I'm late for the opening curtain as it is." E. Allan Lightner, Deputy Chief of the US Mission in West Berlin, was in no mood to play games with the East German police.

"Sorry, sir," the driver said. "There are a dozen officers here. I can't just plow through.

The argument lasted fifteen minutes during which Lightner tried everything short of calling down the wrath of heaven, but in the end, he was sent packing back to West Berlin. The East German/Soviet harassment expanded over the next three days to include American military forces. The maneuver outraged U.S. Commandant General Albert Watson who communicated his umbrage to Soviet Commandant Colonel Solovyev. Things might have gone smoothly, but the Americans stationed ten M-48 Patton tanks near the crossing to the checkpoints to assure smooth passage. After an ass-chewing from Walter Ulbricht, First Secretary of the Socialist Unity Party of Germany, Solovyev called General Watson. There were no pleasantries at the beginning of the conversation.

"General," Solovyev said, "I am authorized to state that it is necessary to avoid actions of this kind. Such actions can provoke corresponding actions from our side. We have tanks too. We hate the idea of carrying out such actions and are sure you will reexamine your course."<sup>27</sup>

On October 27, 1961, the Patton tanks rumbled onward. Hours later, almost three dozen T-55 Soviet tanks approached from the direction of the Brandenburg Gate. U.S. Army Lieutenant Vern Pike, platoon commander at Checkpoint Charlie, and Major Thomas Tyree, commander of the M-48s assigned to Friedrichstraße, were having

a smoke inside the drugstore at the corner of Friedrichstrasse and Zimmerstrasse Streets. Tyree looked to the east.

"Damn, Lieutenant," he said. "Those are Russian tanks. Hear 'em? They're coming this way. Get the lead out, and find my tanks. Get them back here on the double!"

Twenty minutes later, Pike, with his MP vehicle siren blasting, roared through rush hour traffic followed by ten tanks. By the time he reached Checkpoint Charlie, the Soviets had withdrawn a short distance down Unter den Linden to a vacant lot. Pike and his driver, Sam McCart, were ordered to determine if the tanks were manned by Soviets or East Germans. They crossed the border and in plain sight crawled into the tanks. Russian newspapers littered the floors—significant because if they had been manned by East Germans, there would have merely been a treaty violation. Soviet occupation could trigger World War III. Earlier in the year, President Kennedy had sent General Lucius Clay to defuse the tension. Instead, he escalated the rhetoric with Soviet Commandant Andrey Soloviev who repeated to Clay what he had told General Watson—"We have tanks too."

The two commanders ordered their tanks into an aggressive posture. A few minutes later, the tanks were pointed at each other over a distance of about 75 meters.

The wheels began to turn in Moscow and Washington, DC, about an hour after the Soviet tanks moved into firing position. At that range it was all about who shot first and how fast they could reload. Maybe it was just a coincidence, but the Soviets assembled a total of thirty tanks within tactical range of Checkpoint Charlie even though they had hundreds available. Thirty just happened to be the same number the United States had based at Tempelhof. First Lieutenant Tyler Willison was in the lead tank closest to the opposing Soviet tanks and awaited orders from Major Thomas Tyree.

"Do not fire unless fired upon," Willison laughed aloud in his tank. Some of the men in his tank were sure he had suffered a head injury playing defensive end for West Point.

"What's so funny, Lieutenant?" asked Private Wing.

"Well, Private, if that T-55 fires first from 75 yards, you ain't gonna be returning any fire."

JFK had assembled a team to deal with the impending crisis a mere six hours after the tanks began their face-off. But plans were already unfolding at Tempelhof that could just as easily light the fuse of World War III.

#### October 27, 1961 – 1833 Hours HQ 6th Infantry Regiment – 39th SFOD West Berlin, Germany

As U.S. Major Maltese addressed the group, Staff Sergeant Heidelberger started to realize this was not an ordinary drill. Heidelberger had five men under his command, all former Green Beret soldiers who had volunteered without knowing they would end up in West Berlin. They all spoke the language and were highly trained in the use of chemical explosives. Heidelberger was aware of several similar units, although he did not know there were fifteen, all under the command of Captain Barton and collectively referred to as Detachment A. Their mission was to disrupt the flow of men and material to the front lines should hostilities start in Berlin. Each group was specially trained in underwater demolition and scuba diving. Everyone wore civilian clothes and blended in with the public.

"A situation has developed at Checkpoint Charlie," Maltese stated. "I have received orders from General Clay that we are to proceed to our dispatch points in East Berlin and await word. This is not a drill. You are to carry live fuses and retrieve the C-4 from the stash locations. You are not to demolish any tracks or bridges over the Spree unless your section leader orders it. At this time, you will have to use your alternate routes since access to East Berlin has been temporarily cut off. Anyone who needs diagrams of the sewer systems and the location of our tunnels can see me when we are done. Captain Barton will assign each group a liaison coordinator. Specified radio frequencies will be changed every half hour. Your sergeants have read the orders. H-hour is 0230 hours. Break into your groups—now."

Heidelberger headed back to his barracks to brief his men. He had the three Schmidt brothers—Bernard, William, and Carl—along with Hans Klausman, an irregular who had served with the German Army near the end of World War II. Carl, the youngest of the Schmidt brothers, had been in Germany for only three weeks. He asked the question no one else dared.

"Sergeant Heidelberger, where is the extraction point?"

"There isn't one," Heidelberger said. "We are to destroy more than 3 miles of track. Every inch is heavily guarded. Assuming you survive, I advise you to head for one of the rendezvous points in the sewer where we have caches of weapons and supplies. It is very likely that anyone remaining in the city will either be dead or incapacitated from radiation sickness before your supplies run out. The Russians will send in the Eastern Bloc armies to do the bulk of the fighting when the initial TNW exchange is in progress. The regular Red Army will follow. There will be a gap from the time the East German forces are cut up and the Russian forces arrive. We might have a chance to escape in that interval. We clear?"

"Yes, Sergeant."

#### October 27, 1961 – 1700 Hours Situation Room, the White House Washington, DC

President Kennedy was beginning to regret his decision to send General Lucius Clay to Berlin. Willy Brandt, the mayor of West Berlin, had requested that the General reinforce West Berlin's public perception of the Americans' resolve to oppose the peace treaty between the German Democratic Republic and the Soviet Union. Kennedy had appointed Clay as Military Governor of Germany. Other commanders in the area such as General Watson in West Berlin and General Norstad at NATO had a challenging time reining in some of General Clay's enthusiasm for aggressive actions like the one resulting in the confrontation at Checkpoint Charlie. Clay had been surreptitiously practicing knocking

down cement walls at a remote area where he thought the Soviets wouldn't notice. They did.

Clay had arrived in Berlin on August 19, 1961, along with Chip Bohlen, former Ambassador to the Philippines, to help temper Clay's bellicose nature. He did not.

Clay's ultimate plan was to conduct a raid in force where M-48 Patton tanks equipped with scraper blades would knock down the wall separating East and West Berlin and be followed by armored troops. Even Norstad, who blistered Kennedy for allowing the wall to be built, was in favor of "nudging" it in hopes of tumbling a few sections. When Under Secretary of State Robert Lovett heard about Clay's plan, he called it "silly." No one wanted a war over egress issues. Kennedy and Khrushchev had been corresponding with the understanding that neither would choose war without an event like a highly provocative raid in force. Everyone was on alert, especially the media. CBS news reporter Daniel Schorr was at Checkpoint Charlie on October 27, 1961, and reported via radio:

The Cold War took on a new dimension tonight when American and Russian fighting men stood arrayed against each other for the first time in history. Until now, the East-West conflict had been waged through proxies – German and others. But tonight, the superpowers confronted each other in the form of ten low-slung Russian tanks facing American Patton tanks less than a hundred yards apart.<sup>28</sup>

Joining Kennedy in the Situation Room were National Security Advisor McGeorge Bundy, Attorney General Robert Kennedy, Secretary of State Dean Rusk, Secretary of Defense Robert McNamara, Advisor on Foreign Affairs Roy Kohler, and Chairman of the Joint Chiefs of Staff Lyman Lemnitzer. At about midnight Berlin time, Kennedy placed a call to General Clay who was in the map room at the command center. As the telephone rang, Kennedy put his feet up on the desk and looked up at the ceiling.

In a booming voice meant to quiet the map room, General Clay answered the phone. "Hello, Mr. President."

"How are things up there?" Kennedy asked.

"Everything's under control, sir. We have ten tanks at Checkpoint Charlie, and the Russians have the same number. Everything's even-steven."

An aide handed General Clay a note.

"Mister President, I have to change my figures," Clay said. "I've just been told that the Russians have twenty more tanks arriving, which would give them exactly the total number of tanks we have in Berlin. So we'll bring up our remaining twenty. Don't worry about it, Mr. President. They've matched us tank for tank. This is further evidence to me that they don't intend to do anything."<sup>29</sup>

Kennedy was not so sure. It was easy for the Soviets to add to their tank numbers and impossible for the United States to match them if the game escalated. Kennedy's gaze came down from the ceiling and scanned his advisors' anxious faces.

"Well, that's all right. Don't lose your nerve," Kennedy told Clay. Rusk and McNamara looked at each other in disbelief.

General Clay was anything but timid. "Mr. President, we're not worried about our nerves. We're worried about you people in Washington."<sup>30</sup>

Kennedy's calm demeanor belied his anxiety. One twitch by either side, intentional or not, could lead to hundreds of millions of deaths within hours. The President had already contacted Llewellyn Thompson, his Ambassador in Moscow, to talk with Soviet Foreign Minister Gromyko and Soviet Ambassador Dobrynin in an attempt at a direct diplomatic solution. That failed. Gromyko categorically rejected any reproachment. He demanded that US military forces stop escorting US civilians past the VOPO (police force). Secretary McNamara had raised the alert level of the US garrison in West Berlin and then NATO and the U.S. Strategic Air Command.<sup>31</sup>

Only the President knew that Robert Kennedy was on his way to the Embassy in Moscow to talk with Colonel Georgi Bolshakov, the resident GRU spy, who would then contact Khrushchev and his advisors.

#### October 27–28, 1961 Senate Office, the Kremlin Moscow, Russia

In anticipation of Georgi Bolshakov's call, Khrushchev had summoned Gromyko, political advisor Leonid Ilichev, Foreign Advisor Valentin Folin, Chief of the Main Operations Directorate Rodion Malinovsky, and his two top military advisors, Colonel General Semyon Ivanov and Marshal Ivan Konev. The first message they received from Bolshakov seemed like a threat.

President Kennedy hopes Premier Khrushchev recognizes that it is in his interest to help his American counterpart during this difficult period. Soviets and Americans should avoid any action in Germany or Berlin that could lead to a sad incidence. If Premier Khrushchev gives similar instructions to his forces President Kennedy will do the same.<sup>32</sup>

Marshal Konev spoke first. "Premier Khrushchev, we have been watching the Americans build up their forces in West Germany over the last four months. Other NATO countries are following suit. General Clay has been practicing knocking down cement walls with his tanks. The Under Secretary of Defense Roswell Gilpatric has all but called us out saying they can destroy our country with their powerful weapons. President Kennedy has embarked on a program of civil defense that emphasizes staying in fallout shelters for two weeks. Now they are warning us by saying that if we place tanks opposite theirs at various checkpoints, 'sad incidents' could happen. I think all of this is bluster and that we need to dictate terms to the Americans in Berlin. Unless we take a firm stand against their military convoys at the various crossings in East Berlin, they will perceive us to be very weak and continue with their show of force. We will lose face with the people of East Berlin. I have moved three armored divisions within 20 kilometers of East Berlin, and they can overrun NATO forces there in less than one day."

Khrushchev knew that Konev was not aware of the huge disparity in ICBMs and intercontinental heavy bombers in favor of the United States. Konev was an excellent field commander who had put down the Hungarian revolt with great efficiency once he was turned loose. Most everyone kept quiet, but Malinovsky, who was privy to the latest intelligence and a savvy political figure, spoke up.

"Premier Khrushchev," Malinovsky began, "I can sense a bit of desperation in Kennedy's message. They will not strike us over a simple border dispute that can be resolved in our favor. I propose we make the following demands:

- 1. Kennedy agrees not to knock down our wall.
- 2. All US military will be in uniform when crossing into East Berlin.
- 3. All civilian officials crossing over into East Berlin will submit to screening by the VOPO.
- 4. There will be no more military escorts of civilian vehicles into East Berlin."<sup>33</sup>

Malinovsky added, "In exchange for Kennedy's agreeing to these conditions, we will turn our tanks around, and if their tanks are gone in half an hour, our tanks will not return. Kennedy will take this bargain because it makes it look like he has won."

Valentin Folin turned toward Malinovsky. "Comrade Malinovsky, your short-term solution for this stand-off has some excellent points. I don't believe we will have a major problem implementing such a settlement. But such a solution may beg the larger question, which is whether the United States will launch a first strike against us in the near future. Our intelligence sources have been extremely prescient up to this point in predicting American actions based on robust intelligence gathering. They believe such a strike will be forthcoming within the next year. I have met with Comrade Serov, our GRU head, and many of his top agents share my beliefs. He is not alone in his views since they are shared by Comrade Sheplin and Comrade Vladimir Semichastny who heads our State Security. Our problem is not with Kennedy. He does not want war. But let's look at the broad picture, and then we can determine what is going on in America."

Everyone in the room was listening.

Folin continued. "First, the United States has a massive arms buildup, conventional and nuclear, that our economy and technology cannot match. Second, their satellites have done what their planes could not do—count our ICBMs and intercontinental bombers. Third, consider the Deputy Secretary of Defense's speech barely a week ago and what the military establishment in the United States is saying."

Folin opened his folder and distributed a copy of Gilpatric's speech. He had underlined pertinent sections. "Now let's read what the Deputy Secretary of Defense of the United States of America said."

We therefore plan to obligate, in this current fiscal year, about 50 billion for military readiness and civil defense.

The U.S. has today hundreds of manned Intercontinental bombers capable of reaching the Soviet Union, including 600 heavy bombers and many more medium bombers equally capable of Intercontinental operations because of our highly developed, in-flight refueling techniques and worldwide base structure. The U.S. also has six Polaris submarines at sea carrying a total of 96 missiles and dozens of intercontinental ballistic missiles. Our carrier Strike Force and landbased theatre forces could deliver additional hundreds of megatons. The total number of our nuclear delivery vehicles, tactical as well as strategic, is in the tens of thousands, and of course, we have more than one warhead for each vehicle.

We have accelerated deliveries of Polaris submarines and hastened the development schedule for a greatly improved version of the missiles they carry. We have expanded the development of the Minute man, our solid fuel, land-launched missile, and enlarged its production capacity. . . .

It does not rule out the use of tactical nuclear weapons in a limited war if our interest should so require.

We have at the same time started to draw on available manpower for substantial increases in the armed forces totaling today at about three hundred and twenty-five thousand men by extending active-duty tours, stepping up the draft, and recalling reservists to active duty. These immediate measures are concerned chiefly with Berlin.

Thus, if the clouds over Berlin should darken further between now and winter, the defense establishment could move to Europe, on short notice, six or more divisions, more than doubling, if need be, the potent American fighting forces assigned to NATO. Meanwhile, large amounts of military equipment and supplies are being pre-positioned overseas.

For its part, the Navy is improving its amphibious transport, taking action to permit the assignment of a third carrier to the 6th Fleet in the Mediterranean, and extending anti-submarine patrols on the North Atlantic Sea Lanes.

Nuclear submarines are entering the fleet in increasing numbers; guided missiles are replacing guns on destroyers, frigates and cruisers, and Mach 2 speed aircraft are operating from attack carriers.<sup>34</sup> "Consider this carefully," Folin warned.

Khrushchev broke his silence. "Kennedy is a weak president hoisted on his own petard. He ran for president on a platform steeped in slogans like the bomber gap and the missile gap. What Eisenhower feared has happened. The military-industrial complex and the oligarchs have taken over the United States. The fact that Kennedy went ahead with the Bay of Pigs operation despite its obvious deficiencies tells me we are in serious jeopardy from a US military establishment that is in charge of a weak president.

"Any rational leader the likes of Eisenhower would have never agreed to such a fiasco or would have seen it through rather than suffering a humiliating defeat. The very wealthy are the ruling class in the capitalist system that infects the United States, and they are the state. The big money people and others on Wall Street are in charge. War is possible. They can unleash it. There are more stable situations in England, France, Italy, and Germany.<sup>35</sup> Yet Kennedy has placed Thor and Jupiter missiles in England, Italy, and Turkey whose only purpose can be offensive in nature."

No one was going to interrupt the Premier.

"We must find similar bases for our IRBM or they will attack us with impunity like all other imperialist powers. The Kennedy Administration has embraced a civil defense program with fallout shelters, which can only mean he is preparing for war. If Kennedy draws back from the brink, he will be called a coward. Kennedy is too much of a lightweight, and the state is too big and powerful. Just look at who Kennedy appointed as Secretary of State—Dean Rusk, the President of the Rockefeller Foundation from 1952 to 1960. There is too much money to be made

by the capitalist corporations in wartime, with even more being made in preparation for war. My talks about the Black Sea with John McCoy, arms negotiator and Wall Street man, earlier this year do not seem to have done any good because it appears that America is still preparing for war."

After several more hours of discussion and messages back and forth between Khrushchev and Bolshakov, who met again with Robert Kennedy at 1130 hours Washington, DC, time, the parties reached an agreement. It contained the four conditions Malinovsky advocated earlier but were never made public. The Soviet tanks backed off and headed back to their bases at around 0930 hours on October 28 Berlin time. The US tanks withdrew from Checkpoint Charlie on the same day about 1030 hours. The men on both sides of Checkpoint Charlie were exhausted after being on full alert with live ammunition for seventeen hours. The soldiers in each command post at Checkpoint Charlie hung up their phones and disconnected their calls to their respective war rooms in East and West Berlin. The calls ended. The tanks withdrew. The meetings in the War Rooms disbanded. The siege was over.

Not a single shot was fired.

No one knew how close the world had been to a nuclear engagement. But soon, everyone would know.

#### April 8, 1962 – 1341 Hours Khrushchev's Dacha on the Black Sea Varna, Bulgaria

As Malinovsky kicked the sand on the beach, he pointed to the southwest toward Turkey. "If the Americans are allowed to deploy intermediate range Jupiter missiles in Turkey, they can hit us in less than ten minutes. Why can we not have bases close to America?"

Khrushchev, who had been mulling over in his mind ways to stop the Chinese from making inroads with their brand of communism in Cuba, gazed across the Black Sea. He scratched his bald head and pursed his lips.

"Let's explore the idea with General Gribkov," he said. "I'd like nothing better than to put one of our hedgehogs down the Americans' trousers." 36

Thus began Operation Anadyr, one of the greatest covert military operations in the history of the Cold War.

#### June 12, 1962 – 0805 Hours Kremlin Lower-Level Bomb Shelter Moscow, Russia

"General Gribkov, I have reviewed the plans you and two members of your staff have drawn up," Malinovsky said. "They have been approved. There will be only one copy of these plans, and I will always have them in my possession. All orders are to be handwritten, and any orders given to anyone for transporting material will be opened only after they have been out to sea for twelve hours."

Malinovsky was pleased with the progress Khrushchev had bought into the plan. America would soon be quaking in its boots.

Malinovsky continued. "General Sergey Biryuzov, the head of our rocket forces, has returned from Cuba and assured Premier Khrushchev we can disguise the missiles as palm trees. The operation is named after the Anadyr River. Your main missile force will consist of five regiments. Three will be armed with R-12 medium-range missiles and two with R-14 intermediate-range missiles. Each regiment will be equipped with eight launchers. The most experienced and lead regiment will be from our 50th Rocket Army. In addition, we will employ two regiments of FKRs and one cruise missile equipped with sixteen launchers and eighty tactical nuclear warheads. You will also transport and set up two antiaircraft divisions, a fighter regiment equipped with forty MiG-21s, four motorized rifle regiments each with its own tank battalion, and a brigade of twelve missile boats. Six Il-28 bombers will be deployed along with six 407H nuclear bombs. Three Luna battalions equipped with a total of twelve type 3 3N14 nuclear warheads will also be supplied to support our 43,000 ground forces in the event of an invasion by the United States."37

Malinovsky turned his attention to the transportation issue and the role of the Soviet Navy. He had ordered Admiral Sergey G. Gorshkov, the Commander in Chief of the entire Soviet Navy, along with Admiral Vladimir A. Kasatonov, the Northern Fleet Commander, to brief Vice Admiral Georgi Abashvili who was to be in charge of Naval operations for Anadyr.

#### June 25, 1962 – 0723 Hours Headquarters, Main Navy Staff Griboyedov Street, Moscow, Russia

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Malinovsky was on a roll. "Vice Admiral Abashvili, you have been assigned the transportation logistics and the selection of the contingent of warships and submarines to defend Mariel Bay and the Cuban coast from invasion by US forces. Please share your plans."

Abashvili was ready. "Defense Minister Malinovsky, we have eightysix transports to deploy. They can carry missiles, troops, launchers, and warheads. We have recently received nine Leninsky-Komsomol class cargo ships with a top speed of 20.5 knots. Those vessels and another seventy-seven blockade runners will carry all 43,000 troops in a series of voyages from Baltiysk, Liepaja, Sevastopol, Feodosiya, Nikolayev, Poti, Murmansk, and Kronstadt. We also have thirty-four ships from the Baltic, Murmansk, Latvian, and Far East shipping companies.

"We will unload troops and cargo at eleven ports in Cuba with military cargo offloaded at night. For our Naval presence in Cuba, we will deploy six surface ships, two Sverdlov class gun cruisers, two gun-armed destroyers, and two guided missile destroyers equipped with eight of our latest P-35 anti-ship missiles. They have a range of 277 kilometers and carry a large 1,100 kilogram warhead. Those missiles are in testing now, but they are much better than the P-1 and P-7 versions previously in use. I am sure the Americans are unaware of their increased range and accuracy. The Grozny, our first Kynda class missile cruiser, will join them shortly. In addition, in early August, we plan on sending to Cuba twelve Komar missile boats that will have at least two P-15 Termit anti-ship missiles. Finally, we will send seven 629 Golf diesel electric ballistic missile submarines armed with R-13 missiles with a range of 600 kilometers. They carry a 1.2 megaton warhead and four Foxtrot attack submarines armed with a 5 kiloton warhead torpedo. A tanker will accompany the fleet."

Admiral Gorshkov stepped forward. "Defense Minister Malinovsky, all the Vice Admiral's plans will be carried out in the utmost secrecy with orders only being opened when the ships are well out to sea. The Americans have no defense against the P-15 or the P-35, but our entire fleet in Cuba needs to remember that it must stay under the umbrella of our MiG-21s."

Khrushchev gave the go-ahead on July 7, 1962. By July 25, two cargo ships a day were arriving in Cuba. The CIA knew that Sergey Biryuzov, Chief Marshal for the Soviet Rocket Forces, had traveled to Cuba under the alias Petrov. Nevertheless, Kennedy's administration chose to rely on Khrushchev and Ambassador Dobrynin's assurances that only defensive weapons were being deployed to Cuba. The Americans were duped enough to suspend U-2 overflights from September 5 through October 5 on the advice of Dean Rusk and McGeorge Bundy. When the U-2 flights resumed over Cuba on October 14, 1962, it took Air Force Major Richard Heyser only twelve

minutes to confirm SS-4 missile batteries at San Cristobal. President Kennedy was notified at 0845 hours on October 16, one day after the film of the scene was developed.

On October 20, a U-2 flight confirmed four SS-4 sites with sixteen operational launchers. In addition, there were two SS-5 sites and at least one nuclear warhead bunker under construction. Two months before the resumption of the overflights, Caleb Young told CIA Director McCone that the buildup was underway, based on Penkovsky's information, but the Administration preferred a "see no evil, hear no evil, speak no evil" approach.

#### Caleb Young and Oleg Penkovsky

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Caleb Young had met Oleg Penkovsky at the Lac Beauport Pugwash Conference in March 1958. They had attended eight of the conferences together, but their conversations during the sixth one in Moscow in November 1960 convinced Caleb that any confrontation between the United States and the Soviet Union would result in the destruction of all civilization. At every subsequent meeting, Penkovsky had passed on to Caleb secret information he had been sharing with his MI6 contacts.

Director Dulles discounted everything. He thought Penkovsky was part of a misdirection campaign. After all, everything he gave Caleb outlined how ill-prepared for war the Soviet Union was. That was obviously a trick to deter a US arms buildup.

Director McCone held a different opinion and begged Secretary of State Dean Rusk and National Security Advisor McGeorge Bundy to take Penkovsky's Anadyr information seriously. At the tenth conference in London from September 3–7, 1962, Penkovsky handed Caleb the location of proposed sites for the R-12 MRBM and the R-14 IRBM. There was also information on Operation Kama, the deployment of four Foxtrot submarines to Mariel Bay in Cuba. In meetings at GRU headquarters, Penkovsky met flotilla commander Vasily Arkhipov. They discussed Roswell Gilpatric's speech as well as their latest information on SIOP-63 that had replaced SIOP-62.

Their conclusions were grim.

Even though the KGB and GRU were fierce rivals for prestige and power, they sometimes worked together when the stakes were very high. Operation Andyar and Operation Kama brought them together.

GRU Director Ivan Serov had handpicked his KGB successor, Vladimir Semichastny, when he left the KGB to become the GRU chief. It took three years to unseat the interim director, Alexander Shelepin, but by November 13, 1961, Serov and Semichastny effectively controlled all state security and foreign intelligence in the Soviet Bloc. Colonel Penkovsky was one of Serov's closest confidants. Penkovsky had summoned Vasily Arkhipov, the flotilla commander for Operation Kama, to GRU headquarters on September 10. When he arrived, Arkhipov was astonished to see Serov and Semichastny in Penkovsky's office.

After greetings, Penkovsky got right to the point. "Comrade Arkhipov, as flotilla commander you will have to agree with Captain Savitsky before utilizing any of our nuclear torpedoes. You cannot grant him permission to use them or any other weapons because to do so could mean the end of the Soviet Union, the Warsaw Pact countries, and China."

Serov picked up the conversation. "You are not to sink any American ships without specific orders from my office. Do you understand?"

The Commander nodded, and Serov continued. "You have read the Gilpatric speech and reviewed our information on SIOP-63. At the present time, we are hopelessly outgunned. After the eight K63 MRBMs and eight K65 IRBMs become operational, we will begin closing the huge gap in ballistic missiles and warheads. We have no way of stopping hundreds of B-52s. We have only 100 bombers capable of reaching the United States and then only in ideal conditions. That will not be the case in two to three years, but because of our mishap on the R-7, we have temporarily fallen behind the Americans."

Arkhipov nodded again. "I understand there will be no torpedoes unless the GRU authorizes them. But those orders are contrary to Admiral Leonid Rybalko's, and he is Commander-in-Chief of the Soviet Navy's Fourth Submarine Squadron in Polyarny."

Serov grinned. "Yes, but he knows we are changing those orders. He did not like what he had previously been told. In fact, Comrade Rybalko came to us. He was visibly upset because he realized his submarine commanders might set off World War III on their own."

Penkovsky joined the conversation. "We have talked with Captain First Rank Nikolai Shumkov who, as you know, has fired special weapons at Novaya Zemlya. The concussion from those weapons can rupture your hull if you are within 12 kilometers of the 15 kiloton explosion. That is another reason not to fire the special weapon. The communication codes are all set. Here they are." He handed Arkhipov a list. "They will come at the end of your 1,600-hour communication session with the Ministry of Defense and will be parallel on low frequency schedules and high frequency single sideband modalities, which, of course, means that one of the four submarines will have to be at periscope depth to pick up the HF signals. Is that clear?"

"If the pace of our shipping continues to draw the attention of the U.S. 2nd Fleet, it will be very difficult to go to periscope depth without risking detection," Arkhipov said.

Serov was unmoved. "You have four submarines. One of them should be able to surface undetected. It is a large ocean. You are the only person with permission to give the order. I will give you written orders from our Minister of Defense Marshal Rodion Malinovsky under his seal. Once out to sea, you are to inform the other submarine commanders of your special orders. If one of the four fires the special weapon, all of you will follow suit because the first firing will set off a general war. But remember, the decision to fire is not yours. We will make that decision here at the GRU."

Arkhipov sat silently for a full thirty seconds and then looked up. "Is that all, Colonel?"

"Yes."

"One final question," Arkhipov said. "Why was I chosen for this briefing?"

"You were aboard the minesweeper in the Sea of Japan in 1945," Serov said. "You witnessed the devastation at Hiroshima and Nagasaki. You also were in charge of the K-19 and were instrumental in saving its reactor from a meltdown. Your family is in a vulnerable spot. If the

missiles and bombers from the United States start coming, none of you will survive."

"Thank you, comrade," Arkhipov said.

Serov noticed that Semichastny had been unusually quiet, perhaps because of his lack of understanding regarding submarines. But the next day, Semichastny called, and things got clearer—and more ominous.

"You were quiet, my friend," Serov said.

"I was unwilling to say anything for fear it might be passed on to our enemies," Semichastny said.

"You should explain your comment, comrade, or I might be offended."

"Oh no, no," Semichastny said. "You are not the leak, and I apologize for any inference. Our colleague Penkovsky is being watched. Apparently he has very close ties to a British businessman. We must be circumspect in our conversations around him until the matter is resolved."

"Thank you," Serov said. "I will be more careful."

When the conversation ended, Serov called his head of security. He explained the situation. "I want you to feed misinformation to Comrade Penkovsky," he said. "We must see if we have a rotten apple in the barrel."

#### Khrushchev and Caleb

Even though he denied it, Khrushchev had worked himself into a corner. He demanded Naval escorts for the merchant and military ships hauling missiles and warheads to Cuba. The U.S. 2nd Fleet was very evident, and the Premier wanted a show of force. Unfortunately, though he denied it, Khrushchev had mothballed more than 300 blue water fleet ships in favor of subs and coastal defense vessels. He insisted on the escort until Gorshkov made two salient points.

A large Russian flotilla would alert the Americans that something more than agricultural equipment was being shipped. And should the United States desire, because of a lack of air cover, the Russian Navy would be on the bottom of the ocean within two days. Irritated but not irrational, Khrushchev retracted his demand and instead settled for a submarine escort despite their abysmal safety record.

In January 1961, a Project 613 Whiskey Class diesel attack sub (S-80) had sunk to the bottom of the Barents Sea after suffering a snorkel failure. In July of that same year, the K-19, a new Hotel Class ballistic missile submarine, was conducting exercises off the coast of Greenland when it suffered a catastrophic meltdown of its nuclear reactor. Seven members of the engineering crew died. Within two years, fifteen additional crew members died as a result of radiation. Arkhipov was the deputy commander of K-19 and credited with creating and supervising the engineering crew's improvised device, linking one of the submarine's freshwater tanks through the reactor for cooling.

In January 1962, the Foxtrot submarine B-37 exploded while resting at the pier in Sayda Bay when it was bringing its systems online. Hydrogen accumulation caused the explosion when the electrical systems came alive. The resulting fire detonated some of the torpedoes. The explosion killed fifty-nine crewmen, nineteen men aboard an adjacent submarine, and fifty-four more on shore. The B-37 had been scheduled to make the final test of the new special T-5 nuclear torpedo in February 1962.

But it wasn't all bad news on the submarine front. The Soviet Union had been testing the T-5 torpedo since 1957 when a single 10 kiloton device produced a shockwave that destroyed a ten-ship target group of mothballed ships. In October 1961, the Russians had tested a 15 kiloton device with similar results.

The warhead was interchangeable and could be affixed to the tip of any similar torpedo. If the Soviets hoped to mount a challenge to the U.S. Navy, it would have to be with long-range, stand-off weapons. The K-10 anti-ship missile launched from a Tu-16 Badger with a range of more than 100 kilometers, the P-15 Termit with a range of 40 kilometers, and the P-35 (soon to be activated) with an extended range of 400 kilometers were cruise missiles set to challenge the U.S. Navy's blue water dominance in any showdown, provided the launch vehicles had adequate air cover to come within range. Since the Soviet Union did not possess any aircraft carriers, Khrushchev wisely chose to return his ships to littoral areas where they had land-based air cover.

## October 1, 1962 – 0000 Hours Sayda Bay, Kola Peninsula, Russia

As they shuffled into the shack to get their final instructions from the admiral, the four Soviet submarine captains knew they were not going on a routine patrol. The "special weapon" on their crafts, along with a low-level KGB officer, told them as much. Captain Rurik Ketov knew they were likely headed to Cuba but had not shared the information with Shumkov, Savitsky, and Dubivko. A sailor stoked the potbelly stove in the corner. Ketov could see the stern expressions on the faces of the brass in the room.

Admiral Vladimir Kasatonov was Commander-in-Chief of the Northern Fleet, but Kontr Admiral Leonid Rybalko took charge of the final instructions for the captains of the 69th Brigade of Foxtrot submarines. Once they arrived at the Caribbean island, the four Foxtrots would be combined with the seven Golf Project 629 diesel-powered ballistic missile submarines to form the 20th Special Squadron. Rybalko was young for an admiral, having achieved the rank before his fortieth birthday. He was a rising star.

Rybalko started the briefing. "Your primary mission is to assure safe passage of all our shipments in the Atlantic. You may be challenged by the United States Navy's anti-submarine Warfare Hunter-Killer Groups, but we are not aware of any increase in their activity at this time."

Shumkov glanced at the other submarine captains who all looked bewildered. Rybalko continued. "Your orders have been sealed, and you will only open them after you have submerged in the Barents Sea. Should hostilities break out, you are to first utilize the special weapon per your instructions from Captain Shumkov who has fired the weapon at Novaya Zemlya. I want to emphasize that you do not have to strike the American carriers. Detonate the weapon within 10 kilometers of their location. The shock wave will inflict severe damage to the entire fleet. Do not be eager to employ offensive tactics. If you

initiate hostilities, you will likely start a general war between the Soviet Union and the United States, which will result in heavy damage to both countries. The special weapon will be fired only when the captain and the political officer agree to do so. If you are in contact with Vasily Arkhipov, the overall commander of the flotilla, you will obtain his permission before firing the special weapon. Otherwise, the firing of the special weapon may only be done with the permission of Admiral Gorshkov and Admiral Fokin. Are there any questions?"

Captain Ketov rose to his feet and looked around the room with a sheepish expression. "What are the circumstances or rules of engagement under which we are to employ the special weapon?"

There was a lengthy pause. Admiral Rossokho, the Northern Fleet Chief of Staff, stepped out from the shadows. No one had known he was present. Rossokho was a legendary figure. His most notable feat was uncovering a shorter northern route through the Arctic Circle, which enabled the Northern Fleet to join the Pacific Fleet. "I want to make myself very clear on this matter," Rossokho declared in his resonate voice. "Put this in your log books—word for word. You will not use the weapon unless you are attacked and damaged, unless war has been declared, or unless you have direct permission from the flotilla commander or Moscow."

No one had any questions. The meeting was adjourned. The soon-to-be 20th Special Squadron was ready to set sail. Under cover of darkness and fog at 0400 hours on October 1, 1962, the B-59 commanded by Captain Second Rank Valentin Savitsky pushed off to begin traversing the narrow straits of Sayda Bay to the Barents Sea. They were followed by the B-36 commanded by Captain Second Rank Aleksei Dubivko, the B-130 commanded by Captain Nikolai Shumkov, and finally the B-4 commanded by Captain Ryurik Ketov. As was the custom, each captain manned the bridge. The moonlight cast ghostly shadows into the dark water surrounding the submarines. They proceeded on battery power at 6 knots separated by 2 kilometers. Visibility was less than 3 meters.

It wasn't until the B-130 passed the entrance to Aral Bay that Shumkov felt comfortable enough to go below. A few hours later, after submerging to 120 meters, Shumkov went to the curtained-off navigation cubicle at the Central Command Post (CCP). The submarine was heading due west at 9 knots.

It was time to open the sealed orders.

At a table surrounded by his Executive Officer, Political Officer, Communications Officer, and Senior Navigator, Captain Shumkov opened the red striped envelope and read aloud.

The mission of the submarines in Operation Kama is to reconnoiter the approaches to Mariel, to log the acoustic conditions in the outer approaches accurately, and to enter Port Mariel to prepare for the arrival of the seven ballistic missile submarines from the sister division of Polyarny's Fourth Squadron. The overall mission of the internationalist intervention on behalf of the Socialist Republic of Cuba is to equip the country with sufficient Soviet armed support to deter further aggression by the anti-Soviet Bloc led by the United States of America, and to thwart a repeat of the ill-fated invasion of Cuba attempted in 1961 by anti-socialist, anti-Castro lackeys supported by the American CIA and Navy. Shumkov continued with the rules of engagement. They did not sound anything like what Admiral Rossokho had said in the shadows of the shed prior to departure.

Weapons during transit will be in combat readiness for use.

- 1. Conventional weapons are to be used as directed by the main Navy staff except they may be used in the discretion of the commanding officer in case of attack against the submarine.
- 2. Torpedoes with atomic weapons may be used only as directed in instructions from the Ministry of Defense or the main Navy staff.

Shumkov could not hide his concern. The contradictory orders for engagement did not bother him as much as the deployment of the seven Project 629 Golf diesel ballistic missile submarines. Ketov, Savitsky, and Dubivko had said something was odd about this mission because all their submarines had been docked for unscheduled repairs six months earlier. But Shumkov, still basking in the reflection of the medals he'd received for the T-5 nuclear torpedo test, had been too self-absorbed to pay them any attention. He had been the one selected to test-fire the new super-weapon.

A note scribbled inside the envelope from First Deputy Chief Admiral Fokin made Shumkov's skin crawl. They were ordered to arrive in Mariel, Cuba, by October 20. The required speed would almost surely vitiate stealth. Five knots allowed them to remain virtually undetected. At the 9 or 10 knots they were required to maintain, they might as well raise a balloon with a large arrow pointing downward and a sign that says, "Russian submarines here."

The plan worried Admiral Rybalko as well. He knew the Soviet Navy was less than a second-class power compared to the U.S. Navy. Khrushchev and Gorshkov had put a great plan together in 1955—one designed to outpace the Americans. But Russia lacked one essential ingredient—money. Consequently, the Soviet Union spent Naval dollars on cruisers and smaller boats and ships equipped with anti-ship missiles as well as submarines. Still, the products were beyond pitiful from a quality standpoint. Rybalko watched from the submarine tender *Dmitri Galkin* 150 miles northeast of Polyarny as three ancient Skorry class destroyers churned along with the four subs for a few hundred miles in the Barents Sea. But the decrepit crafts had to turn back because, like almost every other surface ship in the Soviet Navy, they could not withstand the rigors of such an arduous voyage.

This is a sorry situation, thought Admiral Rybalko. Only one of my captains has ever fired a T-5, and he damn near destroyed his sub in doing so. Now we have three more that are on their way to Cuba along with a convoy of missile-bearing ships. Has anyone thought through what happens if—more likely when—President Kennedy discovers our duplicity? We are about to start a war we absolutely can neither win nor survive.

## October 8, 1962 – 1800 Hours The B-36 Iceland/Shetland/(Faroes) Gap, aka GIUK

The easy part of the mission was over. The B-36 had averaged 7 knots per hour at night. It surfaced every day at 1600 hours to receive any news from Moscow. Per Brigade Commander Vasili Agafonov onboard the B-36, communication between the subs was limited to daily radio checks at designated times on the UHF frequency using a series of clicks. The clicks alerted each sub in turn to come to snorkel depth to recharge their batteries, but only two at a time were allowed to be near the surface.

Then a storm rolled in, and the seas became choppy. To make matters worse, the B-59 had picked up enough radio intercepts to know the subs were the objects of a search, find, and surface operation. Even before the subs reached the GIUK, in the Northern Atlantic, US leaders had been embroiled in a full-fledged argument about them—and Cuba.<sup>38</sup>

### August 25, 1962 – 1330 Hours Office of CIA Director John McCone CIA Headquarters Langley, Virginia

Secretary of State Dean Rusk and National Security Advisor McGeorge Bundy had advised President Kennedy to allow the Soviets to place defensive armaments in Cuba. After all, making an issue of it would only dredge up the Bay of Pigs fiasco. But CIA Director John McCone had studied all the aerial surveillance data and was convinced the Soviets were going to be placing surface-to-surface IRBMs and MRBMs on the island. McCone summoned Rusk and Bundy to hear a report from CIA

Deputy Director General Marshall Carter and Chief CIA Analyst Ray Cline. It was Cline who began the briefing.

"Our SIGINTs indicate that Soviet vessels bound for Cuba are making false port declarations and listing less than their cargo capacity. The NSA also reports an 80 percent increase in cargo ships arriving in Cuba from the Soviet Union. The Soviets are making it exceedingly difficult to ascertain the port of origin for these vessels that have shipped from more than seven ports as far as we can ascertain. And they load under the cover of darkness.

"When the vessels arrive in Cuba, they are dispersed to more than ten ports and unloaded—again, at night. Our reconnaissance planes indicate that about 70 percent of the cargo is under tarps. The only visible items are old, rusted tractors and other inoperable farm machinery. These cargo ships are riding way too high in the water to be carrying additional farm machinery."

Secretary Rusk spoke with his customary certainty. "We fully expect the Soviets to deploy defensive armaments in Cuba to prevent a US invasion. That will include some of their latest surface-to-air missiles. But Khrushchev, Ambassador Dobrynin, and GRU officer Colonel Georgi Bolshakov have assured us there are no offensive weapons in Cuba. Bolshakov has met several times with the Attorney General. Bobby is convinced they are telling the truth, so the President feels the same way. Even if they try to hide something untoward, our U-2 overflights will show if they are assembling an MRBM site. Cuba's terrain is too open to hide anything for long." 39

Director McCone spoke in his customary direct manner. "Yeah, and that's all worth about a warm bucket of piss. Bolshakov is a conniving little bastard. Wasn't he the one who asked for our recon planes to stop harassing their ships? Bullshit! They are going to be moving missiles into Cuba if they haven't already, and then it will be too late. The Navy must stop and search one of those vessels. Let the Agency decide which one. We'll make sure it has missiles. There are several that are going to dock within the next week. What in hell are we going to do if they start putting them up? Bomb them? All I am asking you to do is have the Navy stop one ship. The *Omsk* is a good bet. It won't get there until September 3rd. By all indications, she is carrying SS-4s."

National Security Advisor McGeorge Bundy got up to leave. "Look, Director, if we interdict one of their ships, we will have an international incident on our hands. Who knows what the Russians will do in Berlin? I will take your request to the President, but don't hold your breath."

Rusk and McBundy left. Four days later, a U-2 mission confirmed the presence of at least eight SA-2 Guideline missile sites in Cuba. Another overflight on September 5, 1962, showed further evidence of the buildup. Kennedy waffled and claimed the missiles were defensive and not a threat to CONUS. The President was also aware of the arrival of the latest MiG-21s and Il-28s. Again, he claimed they were no threat. Throughout the month of September and even into early October, Dobrynin and Gromyko continued to assure Washington of the defensive nature of everything going to Cuba.

The Russians called it *maskirovka*—deceit and deception. Khrushchev compared it to the Americans' denial of the U-2 overflights. The Soviets were ready to start the buildout of the MRBM sites on September 8 but were not convinced that Marshal Sergey Biryuzov's idea of topping the missiles with palm tree fronds would succeed. "Only a fool and someone inexperienced in military matters could believe otherwise," was First Deputy Prime Minister Anastas Mikoyan's comment. 40 Besides, the sensitivity of the Kennedy Administration to any mention of the Bay of Pigs and other external events would obviate the need for extensive camouflage to hide the missiles.

#### September 9, 1962 Smirnynykh Air Base 49" 44'18 N/ 142"51'36 E Sakhalin Island, East Asia

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When Commander Krutov's report of the nine-minute incursion by the U-2 over the Smirnynkh Air Base came into the Air Ministry, TASS launched a propaganda offensive in which it claimed the United States had violated sovereign Soviet air space again. On September 9, 1962, a U-2 flown by the Taiwanese Air Force was shot down by a SAM over western China. International opinion, even by the United States' staunchest allies, turned sour. Within the Kennedy administration were calls for the suspension of Cuban overflights. There were eight known SAM installations in Cuba. No one wanted another "Powers incident."

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#### September 10, 1962 Oval Office, the White House Washington, DC

The CIA argued for continuing the flights. A Cuban base was a logical extension of Soviet strategic power, and any objective look at the facts supported the assertion of offensive weapons on the island. Deputy CIA Director General Marshall Carter was in charge while McCone was in France. He pointed out several inconsistencies with the stated Soviet buildup of "defensive weapons" in Cuba.

- 1. From January through July, an average of fourteen dry cargo ships per month had called on Cuban ports. In August, the figure had more than doubled. It was on pace to double again in September. In addition to Russian ships, twenty-nine Soviet satellite dry cargo transports and four tankers had entered or were scheduled to enter Cuban ports during the first nine months of 1962. The rate of shipping went far beyond the Soviet buildup in Iraq, the United Arab Republic, and Indonesia.
- 2. By and large, the ships were unloaded in secret and under heavy guard. The cargo was placed on trucks, covered with tarps, and transported at night.
- 3. The configurations for the SAM sites were exactly like the ones previously observed in the Soviet Union around surrounding ICBM and MRBM sites.
- 4. The number of technicians who had departed from Russia and arrived in Cuba far exceeded what was needed to construct and operate eight to twelve SAM sites.
- 5. The Navy's reconnaissance planes had been fired on by Cuban patrol vessels in international waters. Two Key West S2F patrol planes on a routine patrol flight had been attacked by MiG-21s.<sup>41</sup>

McNamara and Rusk were unmoved. They were convinced that the risk of losing a U-2 over Cuban airspace was too high a price to pay for an insurance policy. Secretary McNamara knew the strategic imbalance the Soviets were facing, even with missiles in Cuba. It was ten to twenty times in favor of NATO.

McNamara was direct in his assessment. "It is such a gamble given the strategic imbalance in nuclear weapons between the Soviet Union and NATO forces that such a reckless course of action on the part of the Soviets would surely be unthinkable. If they were to install such weapons in Cuba, they would only be useful for a first strike because in any preemptive or preventative strategic action on our part, those weapons would cease to exist, and they know that. In addition, it takes six hours to fuel them, and they can only stay in that ready status for a relatively short period of time. Unless they can install more than 100 of those weapons in Cuba right under our noses without us noticing, they will not constitute a sufficient number to even be a first strike threat. They would have to cover every SAC base and our surface-based ICBMs, and even then, the damage to the Soviet Union by residual NATO forces would be catastrophic. If they did install them and bring about a first strike threat, arguments would have to be entertained that we initiated action against the Soviets in a preemptive manner. Surely they must understand this."

And he wasn't finished.

"If we do find MRBMs in Cuba, Dr. Young's plan for a preventive strike would be recommended to the President. The President has indicated to me that this preventative plan would be considered over SIOP-63 because SIOP-63 is just SIOP-62 with more megatonnage and does not have the flexibility he demanded."

Dean Rusk was equally agitated with the CIA. Turning to Deputy Director Pat Carter, Rusk said, "How do you expect me to negotiate on Berlin with all these incidents?" 42

Carter, however, would not back down. "You fellas are taking a hell of a chance that McCone and I are reading this all wrong."

McCone had been adamant in a previous meeting with the two secretaries on August 21 and at a meeting attended by the President on August 23 just before McCone left for France on his honeymoon.

McCone held that the uptick in shipping combined with the increased number of technical support personnel in Cuba was for more than defensive purposes.

Carter continued to push. "Just today, DCI McCone cabled me. He said, and I will read directly from the cable."

Difficult for me to rationalize extensive costly defenses being established in Cuba as such extreme costly measures to accomplish, security and secrecy not consistent with other policies such as refugees, legal travel, etc. Appears to me quite possible measures now being taken for the purpose of ensuring secrecy of some offensive capability such as MRBMs to be installed by Soviets after present phase completed and country secured from overflights. Suggest Bureau of National Estimates (BNE) study motives behind these defensive measures, which even seem to exceed those provided most satellites.<sup>43</sup>

Robert Kennedy, always conciliatory, jumped in to cool the room temperature. "We will table future U-2 flights over Cuban airspace until we receive the National Intelligence estimates on September 19."

Inexperienced, idealistic, and gullible, RFK had been bamboozled by Gromyko and Dobrynin. He would continue to be wrong about almost every facet of the Cuban Missile Crisis until "the nuclear moment of truth."

# August 1964 DOJ Conference Room

hat elements were used to derive the national intelligence estimates?" Forde asked Caleb Young.

"I'm surprised you don't know."

"I do," Forde said. "I'm just making a record."

"I'm relieved," Caleb responded.

"Despite what you may suspect, Dr. Young, I am not an escapee from some village that is now searching for its pet idiot."

"Never thought you were, Mr. Forde. So to the business at hand. The estimates were the product of several agencies, including the intelligence apparatus of the three branches of the armed services—the Department of Defense Intelligence Division, the United States Intelligence Board (USIB), the Bureau of National Estimates (BNE) headed by Sherman Kent, and primarily the CIA."

"Sherman Kent?" Forde's tone indicated that he didn't know who he was.

"A Yale history professor who provided input from the BNE."

"So you gave an assessment of the Cuba situation?" Forde asked incredulously.

"We did"

"And you were wrong."

"We were," Caleb admitted.

"How in the world did that happen?" Forde asked with an obvious smirk.

"Your sarcasm aside, Mr. Forde, intelligence analysis is not an exact science. It is, in many ways, like theoretical physics. You observe—you form hypotheses. For the record, no one agreed with Director McCone. Our consensus was built on a belief that the Soviets were not willing to ramp up the tension by placing offensive weapons in Cuba. We

knew the USSR could derive considerable military advantage from the establishment of medium- and intermediate-range ballistic missiles in Cuba or from the establishment of a submarine base there. We felt the sub base would be the more likely of the two. Either development, however, would be incompatible with Soviet practice of the time since it would have indicated a far greater willingness to increase the level of risk in US-Soviet relations than previously displayed and would have important policy implications with respect to other areas and other problems in East-West relations. We opined that the overall composition of the Cuban military establishment would remain essentially defensive in character."<sup>44</sup>

"So you were wrong."

"As an attorney, you know that any opposing counsel would object on the grounds that I have already been asked that question and have answered it."

"I know, Dr. Young, but I like hearing you say it."

"Gloating does not become you, sir."

"I take my wins where I can get them, Doctor."

Caleb ignored the last jab and went on. "You will notice that McCone did not register his dissent in a footnote. The midterm elections were approaching. McCone was a Republican, and the Republicans were mounting a campaign issue through Senator Kenneth Keating from New York. He would later publicly state on October 10, 1962, that he knew of six active medium-range ballistic missile sites in Cuba. His information was uncannily accurate. At one point in a secret meeting with the two Kennedys about the SAMs, McCone grew inpatient and said, 'Well, they're not putting them in to protect the cane cutters.'"<sup>45</sup>

Forde asked, "Kennedy eventually capitulated, correct?"

"He had no choice," Caleb answered. "McCone continued working back channels. By October 9, Kennedy could no longer ignore the Republicans and McCone, so he consented to limited overflights of Cuba. Inclement weather delayed the next scheduled overflight until October 14, at which time the excrement collided with the rotating climate control device."

"You do have a way with words, Dr. Young."

#### October 1, 1962 – 1600 Hours Pentagon Conference Room 207 Washington, DC

General LeMay was his normal bombastic self. "Bob," he said. He knew McNamara despised being called Bob in public. "You are saying that the Defense Department is ready to blockade, bomb, and invade Cuba because Khrushchev has sent in a couple of squadrons of old Il-28s? You know those dinosaurs won't be ten minutes off the runway before we shoot them down. I suspect this is more about what Director McCone has been saying regarding the increased shipping, technicians, and unsubstantiated reports of increased security and secret unloading of 75-foot missiles onto lowboy trailers. You're coming around to his point of view, aren't you?"

McNamara, though inwardly seething, maintained his façade of sleek nonchalance. "General LeMay, we need to be prepared for all contingencies. However far-fetched it may seem to some of the people in this room, Khrushchev may be placing surface-to-surface mediumrange and intermediate-range ballistic missiles in Cuba."

LeMay licked his lips. "Then why in the hell don't we go take a look-see?"

Geez, this guy is always looking for a fight, McNamara thought. But he said, "General, you know as well as I do that there are now fifteen SA-2 Guideline emplacements that may or may not be active. We simply cannot have another U-2 incident."

LeMay released a sarcastic laugh. "So Rusk has his hands around the President's nuts so tight that we're going to risk tens of millions of American lives just to avoid upsetting the Ruskies? Why don't we just send Soviet Defense Minister Malinovsky a copy of SIOP-63? Hell, with all the spies and registered commies Rusk has in the State Department, Malinovsky probably has his office walls papered with it. Let's quit dancing and just tell Old Baldy in Moscow about the twenty Minuteman missiles we have aimed at Moscow. That'll loosen his bowels."

McNamara took a breath. He held unsophisticated people in great disdain, but now was not the time for a fight. "I'll take your suggestions under advisement, General. Now, if we can move along, we have more productive things to do than demonstrate how crude we can be."

LeMay began to rise from his seat. A quick right jab to the jaw would shut up this Harvard pantywaist. The officers on either side put a hand on his thighs and scowled. "Not the time, Curtis," one of them whispered.

McNamara looked across the table. "Admiral Anderson, I understand you and the other Joint Chiefs have some plans."

Anderson, who appreciated LeMay's fighting spirit but disliked the man intensely, nodded. "Yes. If you would open your blue folders, I will run through them." Each man, even LeMay, perused the documents.

- OPLAN 312 covers how Air Force and Navy fighter bombers will carry out air attacks on the various target zones. Early indications are that we will have three plans to choose from, each with an increasing degree of intensity. Category 1: Firehose targets fifteen SAM sites only. Category 2: Shoeblack adds southern targets such as airfields, troop concentrations, and shore-based cruise missile sites. Category 3: Scabbards levels the entire island.
- OPLAN 314 outlines a large-scale invasion after eighteen days of preparation and includes forces from both the Army and the Marines.
- OPLAN 316 features an air assault. After only five days of preparation, it will be followed with an amphibious landing with Marine forces only.<sup>46</sup>

The bruhaha between McNamara and LeMay seemed a thing of the past as the men in the room stared at the reality of putting the lives of American service personnel in harm's way.

"Under our Unified Combatant Command Rules of Engagement," Anderson said, "U.S. Strike Command (STRICOM), Continental Army Command (CONARC), and Tactical Air Command (TAC) forces deployed to the Caribbean will be consolidated as CINCLANT under the command of Admiral Robert Dennison. His command will be augmented by the Commander of the 2nd Fleet, Admiral John M. Taylor and the Commander of anti-submarine warfare in that area, Admiral Edmund B. Taylor."

#### ~ Armageddon ~

McNamara wiped his glasses, something he did when he was thinking. "Admiral, as you and I have discussed with the President, increased aerial surveillance for Soviet submarines along with deployment of the *Essex* and the *Randolph* are to be part of this plan. The President is very wary of Soviet submarine activity in the Caribbean given the lack of Soviet surface escort ships."

"With good reason," Anderson said. "I have already addressed the situation with Admiral Taylor, and we have increased aerial surveillance in the Caribbean and Western Atlantic. Lajes Air Base in Terceira, Naval Air Station Bermuda, and airfields at Roosevelt Road in Puerto Rico, Guantanamo, and several other places in the continental United States will put more than 150 ASW planes in the air. In addition, the *Independence* (CV-62) will be stationed south of Cuba. The *Enterprise* (CVN-65) will join it as soon as it returns from deployment in the Mediterranean."

The meeting was adjourned. McNamara went to his office and began composing a letter to General Maxwell Taylor who had just been named Chairman of the Joint Chiefs of Staff.

## October 3, 1962 – 0600 Hours Headquarters, Atlantic Fleet Norfolk, Virginia

Admiral George Anderson met with Admiral Dennison, Admiral Edmund B. Taylor, and Vice Admiral John McNay Taylor, Commander of the 2nd Fleet, to discuss the contingency plans initiated two days earlier by the Joint Chiefs. Anderson was concerned about a Soviet submarine base being established in Cuba. Admiral Dennison was well-prepared and presented the preliminary plans for Task Force 135 (*Enterprise* and *Independence*) and Task Force 136.2 (ASW).

Admiral Edmund B. Taylor gave his report. "In addition to our land-based, long-range reconnaissance planes, we will be deploying the USS *Essex* (CVS-9) from Guantanamo Bay as the Hunter-Killer Group (HKG) Bravo along with her four destroyer escorts that are departing from Newport, Rhode Island, to join her. In addition, HUK Alpha spearheaded by the USS *Randolph* (CVS-15) will take up a position north-northeast of Cuba. HKG Bravo will be approximately 300 miles southeast of the *Randolph*'s location. All these forces will make it extremely difficult for any Russian submarines, especially if they are diesel electric powered, to cause harm to any of our ships should we decide to implement a blockade. Here's what we know about the Russian ships." He handed over a chart.

Anderson was impressed with the plan and the speed with which it had been brought together. Admiral John Taylor's presentation was subpar and moved Anderson to replace him with Vice Admiral Alfred Ward. Meanwhile, the difficulty for the Foxtrots was growing exponentially even before implementation of Task Force 136.2 since they had encountered increased landbased ASW planes.

Under the best of circumstances, life aboard a Foxtrot submarine was difficult. Operating in the North Atlantic where the cooling systems and ventilation were only effective enough to keep the heat and toxic fumes from reaching lethal levels was one thing. But operating in tropical waters where propulsion cooling systems and ventilation proved only marginally effective was another. Everyone on board was aware of the Norwegian, British, and American maritime patrol aircraft. Combined with rough seas from two storms and faulty equipment such as the snorkeling systems, existence was hellish.

At times, the Foxtrots experienced temperatures of 60 to 65 degrees Centigrade in the engine compartments. The cooler parts of the boats still hovered between 40 and 45 degrees Centigrade. In addition to their regular officer and crew complement of seventy sailors, the B-59 had nine members of an elite special forces unit designated to man the SIGINT stations in Cuba. Water provisions and crew quarters were very tight. The Foxtrots were clearly headed for trouble.

But the real question was what the subs would do when pressed to the wall. Being forced to surface would disgrace them in the eyes of their peers and countrymen. They and their families would be subjected to severe ridicule if not punishment.

The contest between the US ASW forces and the Foxtrots had all the makings of a nuclear fuse. Clearly, the numerous squadrons of P-2E Neptunes from Lajes and Argentina, SP-2E Neptunes from Keflavik and Sigonella, P-3A Orions from NAS Bermuda, and other Neptunes from Leeward Point and Roosevelt Roads in Puerto Rico were going to limit both surface and snorkeling recharging time for the Foxtrots. The radar and detection systems on the Neptunes and Orions could detect a surfaced Foxtrot more than 200 miles away. Once a Foxtrot's radar detected an incoming ASW plane at about 25 miles away, it dove deep to avoid monitoring by the ASW planes' various sonobuoys. The planes had Julie-Jezebel systems and Magnetic Anomaly Detection systems that the planes would drop in the water where a sub was last detected in an attempt to track it. If a sonar contact was made, the Foxtrot had to try to shake the signal through decoys or, if sea temperature conditions

#### ~ Armageddon ~

were right, by going below the thermocline line where the water was much colder. That caused the sonar's angle of deflection to change significantly.

The surveillance was tighter than a growing boy's shoe. Captain Dubivko onboard the B-130 reported submerging six times in the course of one night. Once the ASW S-2F trackers on the *Essex* and S-2A trackers along with the SH-34J Sea Horse and SH-34A Sea King ASW helicopters were factored into the equation, the Foxtrots stood little chance of reaching Mariel undetected.<sup>47</sup>

But on October 15, 1962, everything changed.

## October 15, 1962 – 1045 Hours Headquarters, Main Navy Staff Griboyedov Street, Moscow

First Deputy Admiral Fokin could see that the Chief of General Staff Marshal Matvei Zakharova was obviously upset.

"Admiral Fokin, I don't know why you have called me here to discuss a change in the Foxtrots' orders when the B-75 successfully escorted the special ammunition cargo on the *Indigirka* to its docking on October 4 at Mariel Bay in Cuba. Are the Foxtrots unable to avoid detection like the Zulu submarine did?"

Fokin fingered the bill of his hat like a schoolboy who had been caught with a nudie magazine. "Comrade Marshal Zakharova," he said, "the surveillance has increased, and the American U-2s are now overflying the exact areas near San Cristobal where we are placing our R-12s. If the Foxtrots proceed to Mariel, they will be seen. Surely Minister Malinovsky does not want to risk such an event until the R-12s and R-14s have been delivered and set up."

Zakharova clicked his teeth, biting his tongue. "I will brief the Minister and have an answer to you in four hours."

Malinovsky and Fleet Admiral Gorshkov punted to Khrushchev. Neither man wanted to be part of the calculus on either side of the decision. The risk of political and possibly literal fallout was undeniable. Anastas Mikoyan, First Deputy Prime Minister and an important Politburo member, had opposed Anadyr from the beginning. He shared Marshal Anatoly Gribkov's opinion that "only someone not experienced in military operations would think Anadyr could be done secretly."

Foreign Minister Andrei Gromyko warned Khrushchev against putting the American President in a corner. "His only way out may be to destroy Cuba. What would our next step be? Berlin? Then how would the American President respond?"

Khrushchev thought Kennedy was weak. The Americans were sick of war and would avoid it at all costs. But the opponents to Anadyr had scored one point. Did Khrushchev understand that the R-12s and R-14s were only good in a first strike scenario? Was he willing to take such action—a first strike—when even with the Cuban missiles they were facing annihilation?

The first sign of a crack in Khrushchev's panache was his willingness to order the Foxtrots to patrol Sargasso Sea to protect the merchant ships rather than push on to Mariel Bay. He still had options. The Americans did not know of Russia's intention to establish a subbase in Cuba. Unfortunately, not all the Foxtrots got the news on the same day. Captain Ketov received his revised orders on October 20, 1962, and by that time he was only one day from the relative safety and comfort of Mariel Bay.

The U.S. Navy had intensified its efforts to surface the Foxtrots. To the United States, war looked like an inevitability. The only question was whether it would be a traditional or tactical engagement. The Atlantic Fleet forces stood on high alert. The Foxtrots' mission was further complicated by Admiral Dennison's directions to have twelve destroyers from Task Force 136 prepare to form a quarantine line northeast of Cuba should Kennedy order one.<sup>48</sup>

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Forde looked at Caleb with the quizzical expression of a Golden Retriever fascinated by a revolving door.

"Why didn't we just bomb the hell out of the missile sites?" Forde asked.

"A lot of people asked Jack Kennedy the same thing," Caleb said.

#### October 16, 1962 – 0945 Hours The Cabinet Room, the White House Washington, DC

Kennedy was in a foul mood. "Damn fool," he said. "I'm a damn fool!" "I'm sorry, sir." It was one of the Secret Servicemen. "I didn't catch that."

"Nothing, Clint," Kennedy said. He reminded himself against his tendency to talk aloud. He was seething about ignoring his Naval intelligence and being duped by Khrushchev. He remembered McGeorge Bundy's face, LeMay's condescending sneer, and the horror in the U-2 pilot's eyes. He kept hearing the same phrase over and over—"There are nuclear missiles in Cuba."

He kicked himself one more time for the idiotic comment he'd made to Bundy. He had asked, "Why would Khrushchev put them there? It's like if we put MRBMs in Turkey. Now that'd be goddamned dangerous, I would think." <sup>49</sup>

It was all Bundy could do to keep from falling over in shock. He responded, "Well, we already did that, sir."

#### August 1964 DOJ Conference Room Washington, DC

Forde interrupted. "Dr. Young, where were you during all this madness?"

"Well, I was in a lot of meetings," Caleb said, "with both Kennedys, McNamara, and more generals than you can count."

"What did you discuss?"

"Mostly my alternative to SIOP-62, which was SIOP-63 by that time. We made refinements to the plan such as substituting Minuteman missiles for some of the B-52s."

#### ~ Thomas J. Yeggy ~

"So more about the delivery vehicles than the targets?" Forde asked. "Absolutely," Caleb said.

"Well, I know the President was facing a sort of nuclear moment of truth, but Dr. Young, why would he go with your plan?"

"What part of the 300 million fewer dead did you miss?" Caleb asked.

Caleb expected Forde to bridle, but he sort of waved his hands in surrender.

"No," Forde said, "I got that. I didn't mean why would he choose *your* plan. I mean, if we had to push the button and unleash hell, your plan was a lot less—well, terrifying. I mean, everyone else opposed your idea—LeMay, Power, Gates, everyone."

"There were other factors," Caleb added.

"Okay," Forde said. "Continue, please."

## October 19, 1962 – 0945 Hours Cabinet Room Washington, DC

The generals felt they had the upper hand. The President seemed unsure of himself. His usual cockiness had melted away in the face of the impending end-of-the-world scenario. General Taylor led the charge.

"We are in agreement among the Chiefs," Taylor said. "Three steps: continued surveillance, a blockade to bar reinforcements to Cuba, and a surprise bomb attack against the known missile sites."

Kennedy, though shaken, knew he was still in charge. He'd faced adversity before and persevered. "Here's the problem as I see it," he said. "Why did the Russians do this? Because it gave them options? If we let the missiles remain, they have slapped us on the world stage, and we have done nothing. Our prestige will take a huge hit. If we attack the missiles or invade Cuba, they can respond with a run on Berlin, which has been Khrushchev's primary objection since 1958. A blockade of Cuba justifies a Russian blockade of Berlin, something the citizens there may not tolerate. They will be furious with us for allowing history to repeat itself. We cannot, of course, do nothing because the Berlin problem is not going away."

"We recognize the issues, Mr. President."

Kennedy glared at Taylor's patronizing tone.

General LeMay rushed in to save his colleague. "A blockade simply gives the commies more time to hide the missiles," he said.

"Well," Kennedy said, "we all know how well the last invasion went, don't we?" His Irish temper was on full display. His nostrils flared, and his eyes narrowed. "What do you think the Russians will do when our Marines storm their beaches, General?"

Never great at reading the room, LeMay kept digging a hole. "They will not respond," he said. "They're a schoolyard bully. You call their bluff, and they will back down. They need to know we are willing to punch them in the snoot. Anything short of a show of force will be as bad as the

appeasement at Munich. Looks like you're in a pretty bad fix with all your public statements about the Soviets not putting offensive weapons in Cuba."

If the others in the room had been wearing pearls, they would have clutched them. The direct insult to Kennedy's father who had advocated isolationism when he was Ambassador to Great Britain prior to World War II was as blatant as it was foolish. Everyone expected an explosion. Instead, the President lowered the temperature of the room.

"General you and I are in the same boat. Gentlemen, if we attack, if we kill a lot of Russian soldiers, Moscow will be forced to retaliate in some fashion. Make no mistake, we will not—I will not allow American lives to be jeopardized by the presence of offensive weapons in Cuba. But taking Adlai Stevenson's admonition that no situation is ever so bad that we cannot make it worse, I am committed to focusing on diplomacy because it will make it easier for Mr. Khrushchev to back down. That is all."

One by one the members of the Joint Chiefs of Staff filed out of the Oval Office. When everyone but Taylor had left, Kennedy touched Taylor's elbow.

"Yes, sir?" Taylor said.

Kennedy's voice was the low growl of a Bengal tiger preparing for the kill. "General," he said, "I expect every man in the room to express his opinion and defend it with all his vigor."

"Yes, sir," Taylor said.

"But you make goddamn sure that *Mr.* LeMay understands if he ever insults my father again, he will be digging latrines in the Philippines from now until the Lord Jesus decides to return. Am I clear?"<sup>50</sup>

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### October 21, 1962 – 1130 Hours The Oval Office, the White House Washington, DC

It had been two days since the last meeting, and they were together again. Kennedy had not reached a decision. He'd heard Taylor's case

for invasion. He'd listened to another rant by LeMay about "bombing them back into the Stone Age." He'd considered McNamara's plea for quarantine. He turned to General Walter Sweeney, Head of the U.S. Air Force Tactical Air Command, the man who would lead the airstrike on Cuba.

"General," Kennedy said, "are you confident your forces can destroy all the Soviet missiles being deployed in Cuba?"

"Mr. President, the plan calls for 1,080 sorties on the first day," Sweeney said.

"I've read the plan," Kennedy said. "I asked for your opinion."

"We have the finest Air Force in the world, Mr. President. If we can't do the job, nobody can. But can I guarantee there is no chance that one or two missiles and nuclear warheads might still be operational and can still be fired after the attack? No, Mister President, I cannot." <sup>51</sup>

Kennedy put the question to a vote. Dean Acheson, Jack McCloy, and most of the other advisors voted in favor of the airstrike. But Kennedy was adamantly opposed to anything that might lead to a nuclear exchange. His stance alienated him further from "the brass hats" and his top advisors. Kennedy told McNamara, "The sad part about this is that no one will be around to tell the brass hats they were wrong."<sup>52</sup>

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"But he was right, wasn't he?" Forde asked.

"He was beyond right," Caleb said. "An attack would have forced Khrushchev's hand. He would have decimated Europe, and if we had failed to eliminate all the missiles in Cuba within the first six hours, ten million Americans would have died."

#### October 22, 1962 – 1900 Hours The United States

President John F. Kennedy addressed the nation at 7:00 p.m. Eastern Time. By the time he finished, most Americans were terrified. There were Russian missiles in Cuba. Kennedy was somber. His gaze never swayed from the camera, and his words sounded confident. He told the American people the details of what was happening in Cuba and stated the United States' seven-step course of action. He laid out the first step, which would catch the attention of the Soviets.

First: To halt this offensive buildup, a strict quarantine on all offensive military equipment under shipment to Cuba is being initiated. All ships of any kind bound for Cuba from whatever nation or port will, if found to contain cargoes of offensive weapons, be turned back. This quarantine will be extended, if needed, to other types of cargo and carriers.

#### The President ended with this:

The cost of freedom is always high – but Americans have always paid it. And one path we shall never choose, and that is the path of surrender or submission. Our goal is not the victory of might but the vindication of right – not peace at the expense of freedom, but both peace and freedom, here in this Hemisphere and, we hope, around the world. God willing, that goal will be achieved.<sup>53</sup>

Jon Verner, a nineteen-year-old sophomore at Georgetown, looked at his roommate. "You know what he means, right?"

His roommate, too busy cramming for a quiz, shrugged. "I guess. What do you think he means?"

Verner looked out his dorm room window. He knew Cuba was about 1,200 miles to the south. "He means we can just bend over and kiss our asses goodbye."

#### October 22, 1962 – 2030 Hours Soviet Submarine B-59, Sargasso Sea

Communications Officer Vadim Orlov looked beat. He stared up at Ivan Maslennikov, the sub's Political Officer. "Get Captain Savitsky," he said. "He needs to listen to this 'all-American voice of America' broadcast. Kennedy has just addressed the nation and said we are in the middle of a firestorm."

"What does 'quarantine' mean?" Maslennikov asked. "Is the situation going to get worse? Should I get Captain Arkhipov as well?"

"Yes. He will understand what the American President meant when he said 'quarantine.'"

Minutes later, Savitsky and Arkhipov crowded into the cubicle. In deadly silence they all listened to the rebroadcast of Kennedy's speech while one of the SIGNET communications officers translated it into Russian.

"So we are placing missiles in Cuba like the United States has placed missiles in Turkey and Italy, and the American President wants to make war over this?" Savitsky was irate. "Now I understand why we have the special weapon."

"We need to follow our instructions from Moscow," Arkhipov reminded Savitsky. Arkhipov knew more than he admitted. As Vice-Chief of Staff for the 69th Brigade, he had sat in on strategy sessions and knew that quarantine meant that at least two Hunter-Killer Groups from the American 2nd Fleet would be trying to force their sub to the surface—or destroy them. The submarine would have to constantly monitor American communications. Going up to periscope depth in daylight to get instructions from Moscow would expose them to detection. In addition, it would be hard to recharge their batteries with several hundred planes hunting for their snorkel.<sup>54</sup>

Similar conversations were taking place on the other three Foxtrots. Ryurik Ketov, Captain of the B-4, was thinking along the same lines as Admiral Rybalko. *The Soviet Navy is in such poor shape, the best we can do*  is four Foxtrot submarines against the entire American 2nd Fleet. It is going to be a rough week.

Nikolai Shumkov, Captain of the B-130, and Captain Alexei Dubivko, Captain of the B-36, felt somewhat betrayed. Neither knew their mission was subject to change, but they were professionals. The new assignment was escorting ships through a quarantine consisting of destroyers, ASW carriers, and whatever else the American Navy could throw at them.

In the meantime, U.S. Navy low-level photo reconnaissance flights were scheduled over Cuba at 1500 hours, and the Joint Chiefs of Staff increased the alert level to DEFCON 3.

#### October 23 – 0800 Hours Key West Naval Air Station Key West, Florida

Under orders from Admiral Anderson, Commander William B. Ecker and his wingman Lieutenant Bruce Wilhemy led a contingent of six F8U-1P photo reconnaissance planes across the Florida Straits. Ten minutes later, they entered Cuban airspace at 350 knots. They were 400 feet off the ground. They recorded the scene in less than thirty seconds and banked for home without incident.

Ecker was ordered to proceed immediately to the Pentagon with his F8U-1P. He landed at Andrews Air Force Base and was taken by helicopter to the Pentagon. Ecker was still in his flight suit when he was led into a high-security area where he was greeted by General Maxwell D. Taylor, Chairman of the Joint Chiefs of Staff, and Admiral George W. Anderson, Chief of Naval Operations. The three men went to "the tank"—the JCS meeting room. Ecker apologized for being sweaty and smelly. General LeMay never looked up. "Goddamn it, son, you've been flying an airplane now, haven't you? You ought to sweat and smell. Sit down."<sup>55</sup>

Ecker covered all the details of the mission. He'd seen a mass of equipment most of which was camouflaged. His account would be the

first of many. All of them eventually confirmed the rapid buildout to make the MRBMs operational. Time was ticking.

Kennedy knew Khrushchev would either change course or that there would be airstrikes. The bigger question in the President's mind was whether he should order a simultaneous first strike as outlined in Dr. Young's plan. The Thors and Jupiters could be ready in less than fifteen minutes. Unbeknownst to their NATO allies, the American contingent had full control of the missiles. The Air Force had programmed the missiles to fire solely on a second key held only by American personnel. The B-47s based in Europe gave the Russians nearly an hour to prepare and retaliate. In the event of a missile strike, the Soviets would have less than five minutes' notice.

Kennedy knew Berlin would disappear. But so would London, Paris, and Rome. The Soviets had even siloed many of their MRBMs. There was the possibility of destruction in New York, Washington, DC, and other cities along the Eastern seaboard if the Navy was wrong about the whereabouts of the Soviet ballistic missile subs. One Zulu that was unaccounted for could prove devastating to the United States. Those who would be affected would take little consolation in the destruction of Russia. And as Ike had said, "What do you do with a radioactive Russia?"

As a student of history, President Kennedy knew about Leopold the Butcher who had massacred 10 million in the Belgian Congo. He would look like a saint compared to any American chief executive who unchained the nuclear dragon.

#### October 23, 1962 – 2300 Hours Ministry of Defense Khamovniki District Arbatskaya Square Moscow, Russia

Khrushchev was in trouble, and he knew it. The quarantine was set to go into effect in eleven hours, and he still had nineteen ships en route to Cuba. Many were carrying R-14 missiles, launchers, and warheads.

Kennedy had called his bluff, and the Russian Premier had squat for a hand. Pushing the United States any more was reckless. Khrushchev knew he would be called to answer to the Politburo at some point, but the pressing issue was how to extricate himself and his nation from the fiasco of his own making.

Anastas Mikoyan's face glowed red. "The ships with the R-14s will be turned back or sunk. Then what are you going to do?"

Khrushchev maintained a calm façade. Inside, he wanted to swallow an entire bottle of antacid pills. "We will instruct our ships to stop dead in the water and await completion of our R-12 MRBMs."

"Those missiles will not be ready until at least November 5th," Malinovsky said. "Do you think the Americans will wait that long before they launch air strikes?"

Again, showing a confidence he did not believe, Khrushchev responded. "The Americans do not know the operational status of those missiles at this time, and Kennedy will not risk even one nuclear warhead reaching a major US city."

Leonid Brezhnev stepped out from the corner of the room. "The Americans are flying more than a dozen reconnaissance flights over Cuba each day," he said. "They are shameless and fearless. Some of the planes are less than 300 meters from the ground. They are not stupid. They know it will take eighteen hours for us to fuel our missiles. They will not allow that time to pass."

Without waiting for Khrushchev to answer, other Politburo members voiced their displeasure with what they perceived to be Khrushchev's mess.

Emboldened by what he saw as political opportunity, Mikhail Suslov said, "Premier Khrushchev, I know I speak for Alexei Kosygin and Yuri Andropov. All of us in this room are concerned that we are on the precipice of a slippery slope. We cannot afford a nuclear confrontation with the United States. Before I came here, I talked with Vladimir Semichastny, and he confirmed my understanding that the United States and its allies have more than 300 intercontinental ballistic missiles and more than 2,500 nuclear bombers, including carrier aircraft. In light of these facts, what will your next step be if the Americans sink one of our ships or bomb and invade Cuba?"

#### ~ Armageddon ~

"Comrade Suslov, I have successfully led this country through crisis after crisis." Khrushchev made no attempt to hide his disdain for Suslov. "I will not allow this one to end up in war any more than the Berlin crisis of last year did. But I will push the Americans to the limit until I am convinced they will bomb or invade Cuba and then pull back. Yes, I will soften our position a bit as evidenced by my order to stop the ships as of 1700 hours tomorrow. But before we sing 'The Trisagion Hymn,' let's see what the Americans do between now and then. They may consider their losses in an invasion and cave."

Mikoyan was unconvinced. "Premier Khrushchev, even our foreign minister Andrei Gromyko who knows the United States the best has repeatedly said the Americans will react badly and resort to force. You are playing a deadly game. If Kennedy is pushed, he will choose his reelection over a few thousand American lives. I am afraid the situation will end badly if you continue to press a man who will lose his power and position if those missiles stay."

Khrushchev smiled like a cat with a canary. "I know Jack Kennedy. He will do more to avoid war when he does not know the operational status of our missiles."

Mikoyan spoke for the group. "For all of us, I hope you are right." 56

## October 24, 1962 – 0700 Hours Foxtrot B-59, Sargasso Sea 35 Miles East of Quarantine Line

44 Captain Savitsky, you will break off the present course immediately or I will relieve you of your command."

Vasily Arkhipov could tell that Savitsky wanted the American destroyers to spot him. While Arkhipov admired the bravado, the Captain's first duty was to escort the *Gagarin* and the *Komiles*. If the subs were detected, they would not be able to shake an American pursuit, and the end would not be pretty.

Savitsky glared and then broke off and took the Foxtrot depth to 230 meters. He set the sub on a course directly away from the quarantine line. He was sure he had shown up Arkhipov in front of the men. Arkhipov knew the game but wasn't worried about self-esteem. He was wondering if the toxic fumes, high temperatures, and lack of water had addled Savitsky's brain.

The B-59 had only twelve hours of battery time left before it would have to surface. Arkhipov was disgusted. Being sent into a combat situation without full disclosure was bad enough, but riding with a lunatic who wanted to force a search-and-destroy mission by a superior enemy was quite another. He knew it was only a matter of time before they could not shake a sonar contact and would be submerged for an unbearable time.

Does the Captain have a death wish? Arkhipov wondered.

Luckily, a storm temporarily grounded the ASW planes, which allowed the B-59 to recharge its batteries for further submerged operations.

#### October 24, 1962 – 1000 Hours The Oval Office Washington, DC

Earlier in the morning at about 0200 hours Eastern Time, Khrushchev had requested and been granted an audience with William Knox, a US businessman in Moscow. During the three-hour-plus meeting, Khrushchev had intimated that he would eventually give orders to sink any US vessel that was enforcing the blockade. He would not tolerate the interdiction of the Soviet ships. Since there were no Soviet surface vessels in the Atlantic, the threat implied submarine attacks.

McNamara told the Executive Committee that the Soviet ships approaching the quarantine line were showing no indication of stopping. The *Gagarin* and the *Komiles* were within a few miles of the line. A Soviet submarine had moved into position between the two ships.

JFK dropped his face into his hands. "Isn't there some way we can avoid having our first exchange be with a Russian submarine? Almost anything but that."

McNamara's countenance was implacable. "It's impossible to ignore the subs. The *Essex* will make the interception. We continue to broadcast surfacing instructions to the Russians. They know what we expect. If our orders are ignored, quarantine forces will drop four to five harmless explosive sound signals, which may be accompanied by the international code signal IDKCA, meaning 'rise to the surface.'"<sup>57</sup>

At about 1025 hours, John McCone sent a message to the Executive Committee.

"The Soviets have stopped dead in the water."

Dean Rusk leaned over to McGeorge Bundy. "We're eyeball-toeyeball, and I think the other guy just blinked."58

McNamara excused himself and headed to the Pentagon to consult with Admiral Anderson. The Secretary of Defense was not happy that McCone got the word before he did.

#### October 24, 1962 – 1400 Hours Chief of Naval Operations, Flag Plot Room Naval Command Center, the Pentagon Arlington County, Virginia

A few of the Russian ships had gone full stop. Others had turned and headed east. Secretary McNamara had not been immediately informed because Admiral Anderson wanted to see if a larger pattern was developing. As the day wore on, it appeared that sixteen of the nineteen ships on their way to Cuba had either stopped or were going home. A few continued toward Cuba, but most of those were tankers and not cargo ships.

The center of the Flag Plot Room was filled with about thirty Navy men and women who silently plotted on a large wall chart the latest positions of US and Soviet ships. Admiral Anderson did not want Secretary of Defense McNamara in the Flag Plot Room because McNamara was dissatisfied with the details he had received and had immediately launched into a cross-examination of Admiral Anderson in front of everyone.

McNamara pointed to one of the destroyers in the Walnut Quarantine Line. "Admiral Anderson, why is that ship out of position?"

When Anderson refused to answer, McNamara began peppering him with questions concerning communication protocols.

"Mr. Secretary," Anderson said, "there is no need to discuss it. The operation is the Navy's concern."

McNamara began wondering if the Admiral lacked the delicate touch required for the operation or if the Navy veteran would start World War III. Anderson suggested that they walk away from the Flag Plot Room to a more private sector. McNamara would not let up.

"Are there Russian language speakers aboard all the blockade ships?" McNamara asked. "What if the Russian ships had not stopped? What about the tanker *Bucharest*? It is proceeding toward the quarantine line. How are you going to stop it?"

"With due respect," Anderson said, "how the hell do I know who speaks Russian and who doesn't on our ships? We will communicate with flag and international symbols. If the Russians continue, we'll send a shot across the bow. If that doesn't work, we'll fire into the rudder. The ship you think is out of place is chasing a submarine. If you see a red symbol with a B on the board, it indicates a sub. A red C is a suspected sonar or radar contact with a submarine. But we do not place the red symbol on the board when we have an active pursuit."

McNamara studied the board. It looked like it had a case of the measles. There were twenty-nine C markers on the map.

"Mr. Secretary," Anderson said, "don't get excited. Those are not all verified."

Sweat peppered McNamara's brow. "You don't fire a single shot at a tanker without my express permission. Is that clear?"

Admiral Anderson waved a copy of the U.S. Navy regulations in McNamara's face. "The Navy has been conducting blockades since the days of John Paul Jones."

"I don't give a tinker's damn what Mr. Jones would have done," McNamara said. "I want to know what you are going to do."

Anderson's icy stare never wavered. "I'm going to go back to the Flag Plot Room and do my job. If you and your Deputy will go back to your office, the Navy will run the blockade just fine."

Never satisfied without the last word, McNamara said, "Admiral, don't start World War III over a tub of oil. Am I clear?"

"Crystal clear, Mr. Secretary."59

### October 24, 1962 – 1600 Hours Cabinet Room, the White House Washington, DC

McNamara tilted his head, a sure sign of his displeasure. "Mr. President, I wasn't gone very long. When did you decide to go to DEFCON 2? Don't you think you are cutting short any settlement chances? Soviet

satellites and information acquisition systems will tell the Russians we are on the verge of war."

President Kennedy looked baffled. "I didn't order DEFCON 2. I thought you and the Joint Chiefs had done that, and I was about to ask you the reasons. Let's be clear. I make the final decisions, not anyone else."

LeMay stepped forward. "General Power ordered the change this morning at 0400 hours."

Secretary McNamara looked like an angry pimple ready to pop. "Don't you think that's the President's decision? And broadcasting it over our network unencrypted is like giving the Soviets our SIOP documents. What the hell is he doing?"

"President Eisenhower once determined that the decision to go to DEFCON 2 belonged to the SAC," LeMay said. He sounded like a toddler blaming a broken dish on a sibling. "Power was letting the Soviets know we were going to destroy them if they don't take their missiles out. They know they don't have any chance to survive." LeMay stopped for a moment and then couldn't help himself. "They are hoping our politicians will save them."

"General, unless something has changed, DEFCON 2 is considered the next-to-last step to nuclear war," McNamara said.

LeMay always looked smug. Now he looked positively triumphant. "In the event of a Soviet attack, we will have less than four hours to get all our bombers off the ground. I don't want to guess how long it might take the Russians to land one of their ICBMs on one of our more populated air bases. We have bombers and missiles ready for launch and more than fifty B-52s at various distances from their POCs. I recommend we hold them at their POCs for the next hour. General Power and I decided it was prudent to have all our forces ready to go. Mr. President, you are the Commander-in-Chief. Do you want us to reduce our state of readiness?"

McNamara answered for the President. "No, but you damn well better check with us before you go to DEFCON 1. That is a direct order."

LeMay kept his eyes on Kennedy. The General's attitude was aloof and condescending.

"Copy that," Kennedy said.

#### October 24, 1962 – 1126 Hours Launchpad 4 Near Cigli AFB, Western Turkey

Colonel Robertson addressed his men. "The SAC has gone to DEFCON 2. Fuel the Jupiters, and ready them for a thirty-second notification launch. Lieutenant Baker, confirm targeting for Moscow. I expect the fueling to be completed in less than twenty minutes from now. I will be in the Line Shack with the Turkish officer assigned to launch duty. The site is on lockdown until further notice. Any questions?"

#### October 24, 1962 – 1126 Hours Launchpad 5 Near Cigli Air Force Base, Western Turkey

Colonel Donahue gave the same order to the 500 men under his command at Launchpad 5. All three Jupiters were fueled and made ready. Targeting was above his pay grade, but he knew the Jupiters' ST-90 all-inertial gimbaling navigation system designed by Ford Instrument utilized three gyroscopes, three accelerometers, and an onboard computer to position the missile in flight. The missile's reentry speed made it very difficult to intercept. Once launched, there was an 85 percent probability that it would hit the target.

#### October 25, 1962 – 0527 Hours Soviet Embassy Moscow, Russia

In the early morning of October 25, 1962, a cable arrived from Ambassador Dobrynin to the USSR Foreign Ministry in Moscow, Russia.

This night around 0300, our journalists were at the Press Club of Washington, a gathering place for correspondents. The bartender whispered that he had overheard a conversation of two prominent American journalists saying the President had supposedly made the decision to invade Cuba today or tomorrow night.

Our correspondent also had a chance to talk to Rogers, a correspondent of the New York Herald Tribune permanently accredited to the Pentagon. He confirmed the report.

There is other information that an order has been issued to bring the Armed Forces into maximum battle readiness including the readiness to repulse nuclear attack.

We are taking steps to verify this information.<sup>60</sup>

#### October 25, 1962 – 1537 Hours Soviet Embassy Moscow, Russia

Soviet Ambassador Dobrynin became increasingly convinced of the likelihood of US air strikes followed by an invasion. He believed more militant advisors, including Attorney General Robert Kennedy, held sway over the young and impressionable American President.

Another cable arrived from Soviet Ambassador Dobrynin to the USSR Foreign Ministry in Moscow, Russia.

The most militant line in the USA Administration is held by R. Kennedy, Bundy, McNamara, and military men who insist on a firm approach with the purpose of destroying the missile bases in Cuba, not even stopping at invasion of the island.

The President is vacillating now, but judging from everything, especially the principal direction of USA policy, he is heeding the first group, particularly his brother. A certain danger of the situation is that the President has largely engaged himself before the public opinion of America and not only America. In essence, he, as a hot-tempered gambler, has put at stake his reputation as a statesman and politician, and thus his prospects for reelection in 1964, which – being an ambitious man – he passionately seeks.

In general, it is necessary to say that different sources in the journalist and diplomatic corps in Washington agree that currently the probability of a U.S. armed intervention against Cuba is great. They consider that the Kennedy administration needs only a plausible excuse to justify such an action. In this regard it calls attention to the strong underlining (in the evening edition papers and radio transmissions) of the assertions as if in Cuba the construction of missile sites is rapidly proceeding.<sup>61</sup>

The cable sent shivers up Khrushchev's spine. He determined that if he intended to save Cuba, a diplomatic solution had to come very quickly. He had sent orders down the chain of command recalling sixteen of the nineteen ships en route to Cuba a day earlier, but the cable was still chilling. When the remaining three were searched and found to be "clean," he determined he would launch a media blitz.

In the meantime, work on the MRBM sites continued. Once Kennedy thought the missiles were operational, he would back down. But the cable from Dobrynin troubled him. If, in fact, Kennedy thought the missiles were operational, he might get antsy and preempt. Then what?

If Russia moved against the missiles in Turkey, Kennedy would undoubtedly invade Cuba. If so, there would be considerable American casualties. The Russians had TNWs on site in Cuba. If the American flag waved over Havana, the hardliners in the Presidium would demand West Berlin be taken. If Khrushchev refused, he would probably be replaced.

If Russian tanks rolled into West Berlin, would Kennedy use TNWs and short-range nuclear bombers to take out the five Soviet divisions around Berlin?

Khrushchev continued to stew. Should we fuel our ICBMs and load our bombers? he thought. The American satellites will see our activity and take out our Baikonur and Plestek sites with their missiles. They are already at DEFCON 2. Clearly they are not bluffing. If I remove the missiles from Cuba, can I get enough cover to save my position?

Khrushchev decided to call in his military advisors. He could always blame the retreat on them. He would say, *They told me we were not ready to repel the Imperialists. Hardly my fault.* 

#### ~ Armageddon ~

He knew he needed to determine if the idea of trading Cuban missiles for US missiles in Turkey was on the table. If so, the deal needed to be consummated before U.S. Marines rolled ashore.

The Premier looked at the wall clock. It was 2200 hours in Moscow on October 25, 1962.

Khrushchev would have been more worried had he known what was happening with the Foxtrots. If they were compelled to fire a nuclear torpedo and American lives were lost, any hopes of reproachment would also be lost, along with millions of lives.

#### October 25, 1962 – 1645 Hours Sargasso Sea

Savitsky didn't want the Americans to get visual confirmation of their radar detection of his submarine.

"Plane approaching, range 40 kilometers and bearing 277 degrees port side. Incoming at 540 kilometers per hour, closing fast. Dive. Dive!"

Savitsky was always the last man off the conning tower. He did not trust anyone else to seal the hatch. His men had been magnificent over the last five days. They continued to cut their preparation time below the all-important one-minute mark.

Savitsky barked orders to First Officer Kurinkenkov in the Command Center Room. "Input depth of 140 meters. Fill all the tanks. Extend the bow planes, and lower all masts. Steady as she goes."

Foxtrot subs were designed to dive and surface horizontally. Trying either maneuver at greater than a 30-degree angle would send the ship tumbling end over end to the bottom. Savitsky listened to the responses.

"Diesel engine throttle level to zero. Battery power engaged. Bow planes depressed. Stern planes pointed up."

"Depth below the keel?" he asked.

"It's 752 meters to the bottom."

"Take her down to 140 meters, and sound the diving alarm."

The aah-oo-gah blasted throughout the ship.

"Dive! Dive! Bow planes 10 degrees down. Open the flood valves."

The Master Chief sensed the dive was too fast. The boat was sinking. "Emergency procedures! All ahead full. Blow the forward ballast group. Zero the stern planes. Bow planes full up."

Air pushed water out of the forward ballast tanks through the bottom floodgates it had just entered. The Foxtrot began a deadly descent.

First Officer Kurinkenkov tried to sound calm. "Pushing through 50 meters—60—70. Fifteen-degree down angle. Engage the trim pumps."

The Chief responded. "Trim pumps engaged. Draining the forward trim tanks. Stern planes full up."

First officer Kurinkenkov announced, "Eighty meters—90 meters—14 degree down angle."

Arkhipov understood the danger. Wonderful, he thought. I survived a nuclear catastrophe on the K-19 only to die here because of Savitsky's antics.

"Passing through 150 meters, 10 degrees down angle."

At 200 meters, Arkhipov heard the boat start to creak. "Five degrees down angle," he ordered.

Valves started to spew as the boat reached 290 meters.

"Zero angle." The Chief could have been commenting on the weather. "We're 270 meters, 10 degrees up angle."

We might make it, he thought, if the boat doesn't break like a damaged yo-yo.

The boat rose to 170 meters. The craft was still intact, but no one knew if the structural integrity of the hull had been compromised.

Savitsky turned to the Chief. "Well done, Starshy Michman. Now investigate for damage."

The sub reduced to all ahead two-thirds, which slowed the effective lift. The tank level indicators had been damaged by the excessive salination of the Caribbean water. Savitsky ordered the chief to use only the flow meters to measure tank levels. The revised procedure worked, but the situation was still dire.

Arkhipov was disgusted by Savitsky's grandstanding. The batteries were at 70 percent. Arkhipov doubted they would have a chance to charge them again, and he imagined they would not receive any news from any source for at least twelve hours. Since they were bound to be hunted to oblivion and the radar had given away their position, there was no further harm to be done. They might as well engage the sonar and set a course away from the nearest ships. The Tamir 5L and Feniks bow-mounted, high-frequency sonar had a range of 120 kilometers. They picked up the *Sellers*, the *McCaffery*, and the *Summers*, all destroyers in the Q Line. The destroyers could see the B-59 headed north-northwest on a heading of 330 degrees. But there was something the B-59 did not know.

They were headed directly toward the Randolph ASW Task Force.<sup>62</sup>

### October 26, 1962 – 0300 Hours Khrushchev's Dacha, 32 Kosygina Street Moscow, Russia

Premier Khrushchev summoned several Politburo members, the Commanders-in-Chief of each of the five service branches, and Rodion Malinovsky, the Minister of Defense, to his private residence. They were going to settle the Cuba question. But time was short. To avert global disaster, Kennedy and Khrushchev would have to compromise.

Khrushchev stared at his large, walnut dining room table. He could hear everyone talking, but the sound was a drone, a low-pitched buzz. He had not been home for three days. What little sleep he had gotten had been in his Kremlin office. Even so, he roused enough to discern the deep discontent in the room.

Without warning, he pounded his fist on the table. "Enough!" he shouted. "We can debate how we got here at another time. I need to know what you believe we should do now. We have sixteen ships in the middle of the Atlantic loaded with IRBM missiles and warheads and eight MRBM sites in Cuba in various stages of development. What do you propose?"

Malinovsky went first. "About thirty-six hours ago, the SAC and the Air Defense Command went to DEFCON 2. The minute we start attaching warheads to those MRBMs in Cuba or fueling them, the rest of the American forces will follow suit. General Power, the Head of the SAC, did not even bother to encrypt the DEFCON elevation. He wanted us to know. If we go on alert, there will be a preventive attack by the United States on all our counterforce weapons. As it now stands, we have no first strike option, even with the missiles in Cuba because they, as well as our R-7 and R-16 ICBMs at Plestek, Tyuratam, Yurya, and Nizhniy Tagil, will be taken out by whatever means necessary.

"Those missiles are liquid fueled, and it will take us more than three hours to ready them for launch, which is more than enough time for the Imperialists to incinerate us. Even if we are able to launch, the Americans' EBWS will alert them thirty minutes before any missiles we manage to get airborne can hit anything. That is more than enough time for their alert forces to launch. Our long-range Tu-95 bomber bases as well as any M-3 and Tu-4 bases will be destroyed by their airborne alert forces from their POC on our borders before we can get them loaded and airborne. Our Tu-95s are equipped with Kh-20 ALCM with a 300-mile range and a 3.0 megaton warhead, but we do not have them on alert. Once airborne, they constitute our most potent retaliatory force. Once they are on alert, they can be airborne in ninety minutes—still not fast enough to avoid destruction from NATO's weapons. I yield the floor to Marshal Sergey Biryuzov, Commander of the Strategic Rocket Forces."

Though Biryuzov had a thoroughly professional and stunning military presence, everyone in the room could sense Biryuzov's discomfort. No one liked delivering bad news to Khrushchev.

"Premier Khrushchev," Biryuzov said, "we have a total of twenty ICBMs we can make ready for firing. From the time you give the command, it will take twenty hours for the four R-7As to be ready and three hours for the twenty R-16s. The navigation systems will take another twenty minutes. We cannot hide our preparation from the Americans. We will not get a single missile into the air. Once fueled, our missiles can maintain readiness status for thirty days and then must be drained and refurbished. This costs us both financially and in terms of readiness, which is why we have not gone to an alert status. I yield the floor to the Chief Marshal of Aviation, Konstantin Vershinin."

Vershinin's look of "gee thanks" was evident to everyone. His voice was a little croaky at first. He cleared his throat and started over.

"Premier Khrushchev," Vershinin said, "our intelligence is the most accurate in the world." There was a general murmur of disbelief, but no one spoke. "The Americans make no secret of their numbers. The folder in front of you indicates US superiority. It was prepared by Marshal Vladimir Sudets, Commander-in-Chief of the Air Defense Forces, and Anatoly Gribkov of the Soviet Army High Command."

"I do not need to look," Khrushchev said. "I am well acquainted with the numbers. If any of you are surprised, you should resign your commissions and become beet farmers."

No one so much as touched the folders.

"Our air defense will stop a great many of the bombers," Sudets said, "but the missiles will get through. The circular error probability of the missiles ranges from .2 kilometers for the IRBMs up to 5 kilometers

US Missile Capabilities				
Weapon/Class/Number	Range (km)	Max. Mt	Min. Delivery Time (Hours)	% Depleted
B-52/Bomber/630	12,000	50	alert 2–6	25–50
B-47/Bomber/880	6,400	20	alert 1–4	40–56
B-58/Bomber/76	4,830	40	alert 1–4	40–60
AGM-28/ALCM/547	1,260	1.4	0.58	10–15
Atlas/ICMB/142	10,080	1.44	0.58	10–15
Titan/ICBM/62	12,000	9	1	10–15
Polaris/SLBM/208	4,000	0.75	0.2	10–15
Thor/IRBM/60	3,120	1.44	0.15	10–15
Minuteman/ICBM/20	12,000	1.2	0.54	5–10
Jupiter/IRBM/45	3,120	1,44	0.13	10–15
Carrier/Bomber/252	500–900	1,4	2 – Jan	10–25
TNW/Sht. Ran./20,000	200	.0305	0.05	1–3

for Polaris missiles. The air-launched cruise missiles from the B-52s are very accurate and will take out SA-2 Guideline sites and other high-priority targets. The low-altitude bombing systems and terrain avoidance radar aboard the B-52s make stopping those planes problematic. We can expect attacks from all four directions unless we take out the Jupiters in Turkey and Italy. I did not even graph the hundreds of fighter bomber planes such as the F-84s and F-100s that are surrounding our borders and have nuclear gravity bombs."

Sudets pointed to the Commander-in-Chief of the Soviet Navy, Admiral Sergey Gorshkov.

Gorshkov took over the narrative. "Our thirty-seven ballistic missile submarines carry a total of sixty-four missiles, but our maximum range is 600 kilometers, and we must surface to fire those missiles. We will only get a handful within range of the US Eastern Seaboard. We do not have any submarines in range now because of the quarantine and

two Hunter-Killer groups operating in the Atlantic. In addition, there are continuous patrol planes with highly sophisticated equipment from four land bases searching for our submarines. We have four Project 641 submarines in the Sargasso Sea for convoy protection. They have nuclear-tipped torpedoes with a severe damage radius of 12 kilometers and a range of 19 kilometers. We had hoped to base the 641s along with seven Project 611 submarines carrying ballistic missiles to form the 20th Squadron at Mariel Bay, but the Americans formed the quarantine."

General Gribkov spoke. "The Americans can deliver more than 6,000 nuclear warheads to Soviet soil—total devastation. We will suffer more than 100 million casualties. We have about 300 warheads we can target for delivery to the United States, but, as mentioned, most of those will be destroyed before launch."

Khrushchev, who hated details, had heard enough. He dismissed the meeting with a promise to reconvene the political leaders at a new location at 1000 hours.

#### October 26, 1962 – 1000 Hours Ryabushinsky House Moscow, Russia

Sharaf Rashidov, an alternate Presidium member, had been friends with Nadezhida Peshkova for many years. When the meeting at Khrushchev's dacha had concluded, Peshkova suggested her residence as a meeting place to ensure secrecy.

"Sharaf, please come in," Nadezhda Peshkova said. "You have some friends coming with you?"

"Yes, Nadezhda, they will be along in a minute or two. Thank you. We have an informal government meeting that we didn't want to conduct in the Kremlin. It will not take very long."

"Nothing to worry about," she said. "I must go out for the day. Stay as long as you want."

Khrushchev arrived fifteen minutes later. Within an hour, the other eleven members of the Twenty-Second Presidium had arrived at the house and gathered in the dining room. One by one, they gave an opinion about extraction of the missiles. They passed a resolution, and Khrushchev was authorized to send a letter to Kennedy to save Cuba from invasion. The missiles were to return to the Soviet Union.

The *nyet* votes wanted Leonid Brezhnev, the Communist Party Secretary, to compose the letter for Khrushchev to sign. The Premier was dismissive of the suggestions, and a rift began to develop over who should write the letter. Most of them thought clarity of writing was not one of Khrushchev's strong points. Khrushchev prevailed, however, and got a glimpse of the dwindling support he would have once the crisis was over. The vote was eight to four.

The normally laconic and pusillanimous Nikolai Podgorny sharply rebuked Khrushchev as the Presidium closed their meeting. "Premier Khrushchev, we do not have any of our missiles or bombers on alert, yet you poke the bear in the eye?"

Khrushchev, like an elementary school teacher chiding a clueless student, said, "Comrade Podgorny, if we take perceived hostile action, will not the bear roar and devour us?"

Podgorny, who mistakenly thought he had the upper hand, persisted. "Still, you continue to work day and night on the operational status of the missiles in Cuba? Will that not lead to the death of many on that island?"

The others in the room cringed when they saw the color rise in the Premier's neck. "Comrade, Kennedy will not strike Cuba," Khrushchev countered. "He is not willing to risk even a few thousand American lives for missiles there. He fears some of our missiles in Cuba will withstand an air attack. Otherwise there would be a hole in the ocean even as we speak."

Podgorny insisted on the last word. "If you persist, the decision will not be Kennedy's but his hegemonic military junta."

Khrushchev stared until Podgorny shrank into his seat. The Premier took no further action. He was worried about pushing too hard and being replaced by a rival. He knew his operating margin was slim and ever shrinking. But he did respond to the challenge.

"Nyet, Comrade Podgorny. Mr. Kennedy is firmly in charge." Khrushchev scanned the room with a look that said. Just like me.

#### October 26, 1962 – 1642 Hours The Letter

When only Kozlov, Rashidov, and an ample supply of vodka remained, Khrushchev began his letter. By the time he finished, it was too long and rambling. But the pertinent part was clear.

Let us therefore show statesmanlike wisdom. I propose: We, for our part, will declare that our ships bound for Cuba will not carry any kind of armaments. You would declare that the United States will not invade Cuba with its forces and will not support any sort of forces which might intend to carry out an invasion of Cuba. Then the necessity for the presence of our military specialists in Cuba would disappear.<sup>63</sup>

The lengthy letter was delivered to the U.S. Embassy in Moscow at 1642 hours on October 26, 1962, by Khrushchev's two personal assistants, G. T. Shuiskii and V. S. Lebedev. By the time it was translated, encrypted, and sent to the State Department, it was 1800 hours. It took another three hours to decode it and type it because in the Embassy the letter had been divided into four parts. It had arrived out of order at the State Department where it was then transmitted to the White House. The Executive Committee reviewed it until 2300 hours. Kennedy was optimistic and sent everyone home.

The next day, everything began to unravel.

## October 26, 1962 – 1300 Hours Occidental Restaurant 1475 Pennsylvania Avenue Washington, DC

re you expecting another, Mr. Scali?" the waiter asked. "Yes, Juan. He should be along shortly."

That morning, ABC News correspondent John Scali had received a call from an unidentified man who claimed to be an official at the Russian Embassy. He had a matter of utmost importance regarding the current crisis in the Caribbean. When the man walked into the restaurant, Scali recognized him. The man had told Scali what he would be wearing.

The man sat down. He offered no introduction. He ordered crab cakes and a pork chop.

"War is on the horizon," the man said. "Something must be done." Scali played with his water glass. "Someone should have thought of that before introducing the missiles."

The man ignored Scali's petulance. "There might be a way out," he said. "What would you think of a proposition where we would promise to remove our missiles under United Nations' inspection and Mr. Khrushchev would vow to never introduce such offensive missiles into Cuba again? Would the President of the United States be willing to promise publicly not to invade Cuba?"

"I'm a reporter," Scali said, "not a diplomat. I have no authority to speak for the US government, but I am willing to try to find out. As you said, something must be done."

The food arrived. Without a word, the man began eating his crab cakes and pork chop. Scali got up, paid the tab, and left. <sup>64</sup>

Scali tracked down Dean Rusk early that evening and relayed the message. "The man was Russian," Scali said. "Not a doubt in my mind."

"What self-respecting Russian wears a white, double-breasted sport coat in October?" Rusk asked.

"Maybe he thinks it's hot," Scali said.

Scali met with the man again. He was very careful. "This is verbatim from Rusk," Scali told him. "I have reason to believe the US government sees real possibilities and suggests that the representatives of the two governments meet in New York to work this matter out with U Thant and each other. Time, however, is pressing."

The man, still in his unseasonable clothing, assured Scali he would get the message to "the highest Soviet sources," as he called them. It was already 0335 hours on Saturday, October 27, 1962, in Moscow.

Matters in Washington, DC, had escalated when a CIA memorandum reported that three of the four medium-range ballistic missile sites at San Cristobal and the two sites at Sagua la Grande appeared to be fully operational. The launchers could accept, fuel, and fire the weapons. McNamara ordered acquisition of the final targeting information for the MRBM sites in Cuba. His instructions required a lengthy, crisscrossing U-2 flight in anticipation of President Kennedy's command to take out the missile emplacements.

#### October 27, 1962 – 1000 Hours Cabinet Room, the White House Washington, DC

"Mr. President, we have another letter by cable from the Soviet Premier." "Read the pertinent part," Kennedy said.

I therefore make this proposal: We are willing to remove from Cuba the means which you regard as offensive. We are willing to carry this out and to make this pledge in the United Nations. Your representatives will make a declaration to the effect that the United States, for its part, considering

the uneasiness and anxiety of the Soviet State, will remove its analogous means from Turkey. Let us reach agreement as to the period needed by you and by us to bring this about. And, after that, persons entrusted by the United Nations Security Council could inspect on the spot the fulfillment of the pledges made.<sup>65</sup>

"Reasonable," Kennedy said. There was grumbling. "To reject it out of hand would alienate most of our allies who do not want to go to war over some obsolete missiles in Turkey."

George Ball elevated his mumbles to a full-blown objection. "Mr. President," he said, "withdrawing the Jupiters is an extremely unsettling business."

"George," Kennedy replied, "is it any more . . . uh . . . unsettling than what we've got right now? Khrushchev's got us in a pretty good spot here. Most people would regard this as a reasonable proposal."

McGeorge Bundy picked up the oppositional banner. "Who are most people?"

Kennedy's neck reddened. "I think you'll find it very difficult to explain why we are going to take hostile military action in Cuba when he is saying if you get yours out of Turkey, we'll get ours out of Cuba. I think you've got a very tough one here."

Bundy did not like to back down. The argument raged for some time until Kennedy came to a decision.

"I'm ignoring the second letter," he said. "Right now, Turkey is off the table. We will pledge not to invade Cuba in exchange for the removal of the missiles." 66

In the meantime, Robert Kennedy had met with Ambassador Dobrynin and all but pledged to move the missiles out of Turkey.

#### October 27, 1962 – 0710 Hours McCoy Air Force Base Briefing Room 10 Miles Southeast of Orlando, FL

Colonel Pelmammer looked at the pilot. "Major Anderson, you are to dodge in and out of Cuban airspace. Keep in mind that the SA-2

Guideline has a range of approximately 25 miles. We have identified fifteen SAM sites for you to avoid. You're no rookie, but this is by far the most dangerous assignment you have faced. You will be over Cuban airspace for an extended period. Watch your ass, son."

"Roger that, sir," Anderson said. He had volunteered for the mission.

Rudolf Anderson's U-2 entered Cuban airspace over Cayo Coco Island in Central Cuba at exactly 0900 hours on October 27, 1962. He was picked up by radar twelve minutes later. By 0920, Anderson was flying over the headquarters of the Soviet Air Defense Division in Camaguey in central Cuba. The major turned south to the town of Manzanillo before turning east toward Santiago de Cuba.

The Soviet Air Defense Forces grew restless. They wanted to shoot down the intruder before it photographed all their installations. But General Pliyev, the Soviet commander in charge, had standing orders from Rodion Malinovsky not to fire on any American planes. General Stephen Grechko, Chief of Staff of the Moscow Air Defense Region who had been called to Cuba to serve as General Pliyev's Chief Deputy in charge of air defense, was unable to contact Pliyev to voice his concerns. Grechko decided the plane's cameras would give away too much location information and, along with General Garbuz, gave the order to shoot down the plane if it reappeared over a SAM site.<sup>67</sup>

#### October 27, 1962 Banas, Cuba, SAM Site

Major Ivan Gerchenov was uneasy. He didn't want to be the one to defy Pliyev's standing order. Although he'd received Grechko's order at 1100 hours, Groom had not heard from Pliyev and wasn't sure the change was legitimate. He feared repercussions. The call he dreaded came. It was from his chiefs of staff Nikolai Antonets and Lieutenant Aleksei Riapenko.

"Major we have radar contact."

They all crammed into the cabin of the radar shack and followed the target on the screen. Without much enthusiasm, Major Gerchenov gave the order. "Prepare three missiles." Riapenko switched all three firing channels to beam-riding (BR) mode and pressed the fire button of the first channel.

"Target locked in."

Before Lieutenant Riapenko could report the results of the first missile, Major Gerchenov issued another order. "Fire two."

The Lieutenant pressed the second button while watching the screen where the first missile had exploded. A cloud appeared on the screen. "Target damage to report!"

After the second missile exploded, the Lieutenant reported, "Target destroyed."

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Kennedy and the ExComm staff were sure things couldn't get any more complicated than juggling conflicting offers from Khrushchev and a U-2 plane shot down over Cuba, but then McNamara informed them that Soviet airspace west of Wrangel Island off the Chukchi Sea had been violated by a U-2 piloted by Charles Maultsby. Soviet MiGs from the Eastern Soviet Air Defense Command were pursuing it on the southern coast of the Chukotka Autonomous Okrug. NSA listening stations had picked up the Soviet pilots' frustration. They could not achieve sufficient altitude for a shot.

Khrushchev, suspecting the beginning of a strategic bombing campaign, curled into a defensive posture. FBI Director J. Edgar Hoover reported that Soviet diplomats in New York were preparing to destroy all sensitive documents.

McNamara was unnerved. US F-102s from Galena AFB, Alaska, armed with nuclear air-to-air missiles, were engaging the Russian fighters. The Defense Secretary's voice was grim. "This means war with the Soviet Union."

Kennedy, back in the Cabinet Room fresh from his morning swim, smiled. "There's always some son of a bitch that doesn't get the memo," he said. 68

As the ExComm debated on how to respond to Khrushchev, events were unfolding in the Sargasso Sea—events destined to make the ExComm's decision by comparison rather meaningless in the moment.

# October 27, 1962 – 1434 Hours 350 miles Southwest of Bermuda

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Another submarine sighting designated the C-19 had appeared on the flag plot board at approximately 1538 hours on October 25. The C-19 was lost and reacquired two days later. A new P-3A Orion using experimental AN/APS-80 airborne radar that could detect snorkels and masts of submarines, as well as standard AN/APS-20 surface search radar, detected a submarine 350 miles southwest of Bermuda. A full complement of sixteen Jezebel Sonobuoys launched from each of several follow-up land-based P-2 Neptunes along with several Juliett detectors enabled the U.S. Navy to track the submarine. It was the C-19.

The USS *Randolph*, utilizing S-2A Trackers and AN/APS-38 periscope radar, narrowed the location area and confirmed detection with its AN/ASQ-8 Magnetic Anomaly Detectors (MAD). In addition, the SH-34J Seahorse helicopters helped pinpoint and hold the location through sonar dips.

The Randolph dispatched a trio of destroyers—Beale, Cony, and Murray—on a mission to utilize the surfacing signals approved by McNamara's Practice Depth Charge (PDC) plan to bring C-19 to the surface for identification. USS Randolph had initially completed an 11 kilometer radial search with S-2F Trackers to keep the carrier out of T-5 torpedo range before broadening its search. The Cony commenced closing on its sonar contact at 1631 hours at flank speed of 35 knots. It was closely followed by the Beale on a parallel course in case the contact decided to run. The Murray followed at 11 knots to detect the sub in case the Beale and Cony overran it. By 1641 hours, all three destroyers had sonar contact and were maneuvering at 3,000 yards in a counterclockwise pinwheel. The Randolph had not anticipated that the C-19 (later identified as the B-59) would come directly toward the

#### ~ Armageddon ~

carrier at top speed and close the gap to less than 13,000 kilometers while being encircled by three destroyers dropping practice depth charges. At 1759, the *Cony* challenged the sub via Gertrude by sending the international rise to the surface code, IDKCA. Still no response. The *Beale* then dropped five more PDCs. Unknown to the *Cony*'s skipper, Commander William Morgan, and his signalman Gary Slaughter, a struggle was going on 200 meters below them that would decide the fate of hundreds of millions.<sup>69</sup>

### October 27, 1962 – 1600–2100 Hours B-59, Sargasso Sea

Since the initial sighting on October 25, the hunt for the B-59 had been vigorous. Hundreds of ASW planes swarmed like bees and tried to find the elusive sub. The B-59 had surfaced after dark on the 26th, taking full advantage of a squall to obtain some much-needed hydration. The coiling system had been fouled by the higher salinity content of the Caribbean. The packing glands were leaking. The electric air compressors had broken down. The crew's desalination equipment wasn't working. Even though temperatures rose to 40–60 degrees Centigrade, each man was limited to one cup of water per day. Conditions exceeded what the human body can endure for more than a day or two.

The sub was forced to submerge again on the morning of the 27th by the arrival of another S2F-3 from the *Randolph*, this one piloted by LTJG William Moroney. The sub's batteries were still below a 15 percent charge, and the sub could only remain submerged for ten hours. It could not escape.

Decision time.

Savitsky knew they were going to face this moment of truth when one of the interpreters came to him on the bridge at 0400 hours on the 27th.

"The full force of the HUK Group Alpha spearheaded by the *Randolph* has pivoted in our direction."

Later, Savitsky's sonar men picked up the screw noise from the *Beale* and the *Cony*. The ships would be on top of them inside half an hour. Savitsky adjusted his course and steered straight toward them, almost directly in line with the *Randolph*. By the time the depth charges started at 1659 hours, Savitsky had the B-59 nearly positioned to make a major tactical strike for the Soviet Union. Savitsky barked out orders.

"Left full rudder. We'll circle and make them think we are running. We will dive and then go straight at them. We are at 20 kilometers now. I want to get to within 13 kilometers before we take out the carrier with the special weapon."

The B-59 slipped past the *Beale* and the *Cony*. At 35 knots, their sonars were virtually worthless. But the *Murray* caught the noise from the B-59's three screws, and by 1641 hours, the ships had encircled Savitsky who got a look on the attack periscope. The *Randolph sat* at 12,500 meters. The sonar was pinging at 235 decibels. The PDCs echoed like sledgehammer blows on an empty barrel. The B-59 went all-stop. Additional Juliets were in the water. They were so loud that they were indistinguishable from conventional depth charges. Savitsky was sure he was under attack.

"Battle stations!"

Arkhipov was satisfied that should war erupt, the captain had positioned the B-59 to inflict the maximum damage on the American fleet. The maneuvering had been brilliant. Still, there was no word from the radio about the outbreak of surface hostilities. Moscow was eerily quiet.

One thing was for damn sure. If Savitsky fired the special weapon and took out every American ship within a 12 kilometer radius, World War III would begin. Arkhipov remembered his session with Penkovsky at GRU headquarters. How much could he rely on what he had been told?

Arkhipov knew they were down to less than one hour of battery time. Men were falling like dominoes from heat exhaustion. Savitsky had endured his fill of the Imperialist.

"Bow torpedo room, assemble the special weapon. Captain Second Rank Arkhipov and Comrade Maslennikov, report to the bridge!" Savitsky barked.

Savitsky had to shout to be heard over five more depth charges and the continuing pings.

The torpedo room reported. "Captain, the purple-nosed torpedo is ready for loading."

Savitsky did not hesitate. Any moment a depth charge could obliterate his opportunity to take out the ASW Task Force.

"Bow torpedo room, load the special weapon in tube six, and flood tube six. Michman Mikhailov, set in a solution in the fire control computer tube six for the carrier. Detonate at 35 meters subsurface."

Arkhipov and Ivan Maslennikov arrived at the bridge at 2039 hours. Savitsky knew they were under attack. To him, the rattling and pounding on the hull sounded like fully loaded depth charges. The communications antenna was already damaged, and despite a report to the contrary, Savitsky believed the sub had sustained significant other harm during a nearly four-hour siege.

Savitsky shouted at Arkhipov, "The war has already started up there, and we are down here doing somersaults. We're going to blast them now. We'll die, but we will sink them all. We won't disgrace our Navy or shame the fleet."

Michman Mikhailov's voice rose over the din. "Fire control solution loaded and ready for torpedo tube six, on target for carrier range 12,465 meters ready for firing."

The captain turned to Zampolti Maslennikov. "Captain Third Rank Ivan Ivanovich Maslennikov, do you concur with my order to fire the special weapon?"

"Da, Captain Savitsky!"

Arkhipov remained mute. This was the moment in his life when he had to make his biggest decision. Then he spoke. "Captain, Comrade Rybalko said we were only to use the special weapon if the hull was ruptured or we were certain we were under attack."

Maslennikov whirled, indignant. "The captain is correct. We are under attack, and war has broken out. We need to stop the Americans from invading Cuba. Their intention is clear. They tried it just last year, and their military buildup has made it clear that they are going to do it again. We have soldiers on that island. They are depending on us to do our duty even if it means we go down."

Savitsky was no less irritated. "Captain Second Rank Vasily Aleksandrovich Arkhipov, Vice Chief of Staff for the 69th Brigade Commander Captain First Rank Vasili Agafonov, do you concur with my decision?

"Nyet!"

Savitsky grabbed the front of Arkhipov's uniform and shook him. "You have one minute to explain your answer before I have you removed from the control center."

Despite the surrounding furor and his captain's wrath, Arkhipov remained calm. "Captain Savitsky, do you not believe the Americans could have sent us to the bottom by now if they wanted to? They have been on top of us for four hours. They have our exact position. The depth charges are not fully loaded and are not meant to damage us. They are signals to surface. They are always dropped in a series of five and always explode more than 50 meters away. They have nuclear depth charges that could have torn us to pieces. We are not under attack and war has not commenced. The interpreters have not heard any declarations of war on American radio. Senior Lieutenant Orlov has been monitoring communications with the aircraft and the carrier indicating they are not to drop torpedoes or depth charges but merely to locate and surface what they are calling C-19, which is us. The instructions from Admiral Rybalko are clear, and we have not received any instructions from Moscow. Now, you will belay your order and have the special weapon taken out of torpedo tube six before you start something that will kill millions. Am I clear?"

Second Lieutenant Orlov seconded the reasoning. "Captain, our intercepts of all the American communications between the *Randolph* and its aircraft and destroyers confirms the Vice Chief of Staff's statements. They are not coding their messages. They want us to know their intentions. Captain Arkhipov is correct. Let us surface and fully recharge our batteries. Then we could lose the Americans. If they wanted us dead, we would be so already. Send out a single ping. Either that will silence them, or they will destroy us. It will also give you more accurate readings for fire control just in case. You have nothing to lose."

Savitsky hesitated, not fully processing the logic because of the deplorable conditions. Then he ordered, "Sonar, send out one full-powered, high-frequency ping."

The Michman asked for confirmation over the intercom.

"Yes, this is Captain Savitsky. Send out one full-powered, high frequency ping. Only one."

#### ~ Armageddon ~

The ping went out loud and clear. It was answered with the most beautiful silence anyone aboard the sub had ever heard.<sup>70</sup>



In the middle of this high-stakes standoff in the Sargasso Sea, the ExComm was struggling with the day's events, which included the second offer from Khrushchev. When coupled with the U-2 shootdown, many in the room saw an escalation from the Premier's rambling conciliatory first letter. Kennedy appeared distracted. When Ray Cline, Caleb Young, and Dave Powers appeared at the Situation Room door, Kennedy left the room.

## October 27, 1962 – 1945 Hours Oval Office, the White House Washington, DC

Rould not stay in his seat. "Mr. President, our U-2 radiation monitoring overflights of the Novaya Zemlya area east of the Barents Sea have led us to believe that the Foxtrots possess some sort of nuclear device. There are increased radiation signatures in the area. Admiral Anderson has three tin cans sitting on top of a Foxtrot just outside the quarantine line. It refuses to surface despite employment of the surfacing protocol that McNamara sent to the Soviets about three days ago. Admiral Anderson wants to know what to do if it comes to attack periscope depth and appears to be taking a bead on the *Randolph*.

"Isn't the *Randolph* maintaining a safe distance?" Kennedy asked.

"We have told Admiral Anderson about the nuclear possibility," Cline said. "We don't think the Soviets have a weapon capable of taking the *Randolph* out at more than 6 miles away and neither does Admiral Anderson. He wants to remain in a tactical position to assist the destroyers."

Kennedy turned to Caleb. "Dr. Young, you worked at the RAND Corporation and studied Soviet weapons systems. Is it possible that the Soviets have weaponized one of their torpedoes with a nuclear warhead?"

"That is the most likely explanation for the radiation monitored at Novaya Zemlya, sir."

"What type of warhead and yield are we looking at?"

Young had the answer ready. "Most likely an RDS-9 with a 3 to 4 kiloton yield. But it could be an ABS-30 with a yield closer to 10 kilotons. Our own Mark-45 outfitted with a W-34 nuclear warhead will have an 11 kiloton yield when placed in service next year. Our nuclear depth charges such as the Mark 101 Lulu with the W-34 warhead also have an 11 kiloton yield."

"Range and kill radius?" Kennedy asked.

"The likely range is close to 5 to 8 miles with a shock wave from a 35-yard subsurface explosion. If they get off a shot within 10 miles of our ships, most likely anything within a 5-mile radius will be sunk."

"Holy Mary," Kennedy said. He crossed himself out of instinct. "Why am I just now hearing about this? How long has the Agency been aware?"

"Dr. Young gave me a report outlining the threat back in July," Cline said. "I presented it at an NSC meeting in August. It likely got lost in more detailed reports on the increase in Soviet shipping."

"Those folks couldn't find their asses with both hands and a flashlight." Kennedy's jaw twitched.

The President dismissed Cline and Young. Before he returned to the ExComm meeting, he called Anderson at the Pentagon to warn him to back off the sub but keep track of it. Anderson was aware of the potential danger but didn't think it was likely that a Foxtrot was outfitted with any type of nuclear weapon. Kennedy was not in the mood for argument.

"Admiral," Kennedy said, "the *Randolph* will immediately recover planes and set sail for Norfolk. I don't want a carrier within 20 miles of any Soviet sub. That is not a suggestion. Do I make myself clear?"

Anderson grimaced on the other end of the phone. It was bad enough to endure the arrogance of a car executive like McNamara, but now the commander of a PT boat was giving him orders.

"Is that all, Mr. President?"

"Yes."

In the President's absence from the ExComm meeting, his brother Robert, the Attorney General, called Soviet Ambassador Dobrynin to his office at the Justice Department. They had met at 1945 hours.

"The missiles will come out of Turkey," Kennedy said, "but not if Mr. Khrushchev makes it part of the Cuba deal."

Dobrynin nodded, and the Attorney General continued.

"The President is losing control," Bobby Kennedy said. "He can't stop military action unless Mr. Khrushchev accepts the letter we have just released to the press. It guarantees no invasion or bombing of Cuba if the missiles are taken out and stay out. Otherwise, the sites and a good deal of the nation of Cuba will disappear as early as Monday."

#### October 27, 1962 – 2110 hours Oval Office

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Bundy could tell when the President was a little unnerved.

"Admiral Anderson is on top of a sub in the Sargasso Sea that may have nuclear weapons and refuses to surface despite our transmission of the protocol," Kennedy said. "I told him to back off but not to lose the sub. He is convinced it will have to surface soon."

"Foxtrot diesel?" Bundy asked.

"Yes," Kennedy answered. "It can't have much battery life left. In light of the downing of our U-2 and the second communication regarding the situation, I was to prepare for the worst. But I will not be forced into one of those damn SIOP-63 options. Even Option I of Task I SIOP-63 will leave tens of millions dead from the residual fallout."

McNamara cleaned his glasses, an irritating habit he employed because he thought it made him look thoughtful. "Mr. President, I

agree, but that was the least destructive alternative we approved in August."

Kennedy shot the Defense Secretary a glance. "I am well aware, Bob," Kennedy said. "And you are aware that the plan from Kaysen and Young accomplishes Objective I with B-52s and AGM Hound Dog missiles—much less fallout. The Polaris, Jupiters, and Thors will pound the Soviet MRBM sites trained on Europe. I am going to ready implementation of their plan tomorrow at noon with the JCS. If Khrushchev continues to escalate, we won't be caught with our thumbs up our asses."

McNamara loved the last word. "Well, the Kaysen and Young plan is based on a simultaneous attack relying primarily on Polaris, Jupiter, and Thor missiles, as well as the B-52s in the initial plan. Those missiles all have a flight time of 12 minutes or less and have been retargeted at the MRBM sites as well as the bombers and ICBMs in the Soviet Union."

"Dammit, Bob, don't tell me what I already know," Kennedy said. "You're supposed to be a brilliant analyst. Analyze, don't regurgitate."

McNamara nodded and slumped into silence.

Kennedy continued. "NATO will not be held hostage by those MRBM sites. I want them destroyed. We will hold back more than 2,000 nuclear armed aircraft and our remaining ICBMs until the Soviets and Chinese stand down. If one of their soldiers so much as cocks a rifle, we will rain the fires of hell on them. Am I clear?"

Kennedy circulated the plan. Over strenuous objections from Power and LeMay, the Kaysen-Young Plan was added as Option VI to SIOP-63. The alert time for the Thors and Jupiters had been reduced to four minutes, which required fueling in advance. The change was made when NATO nudged Kennedy—hard. The Soviets had installed 500 MRBMs at forty-two bases, which threatened the utter devastation of Europe.

~ Armageddon ~

SIOP-63: Option VI Minimal Strike Plan				
US SSBNs/SLBMs	Missile Type – Yield	Range (miles)	Launch Location	
George Washington	16 Polaris A1 – 500 kt	1380	Norwegian Sea	
Patrick Henry	16 Polaris A1 – 500 kt	1380	Norwegian Sea	
Robert E. Lee	16 Polaris A1 – 500 kt	1380	Norwegian Sea	
Theodore Roosevelt	16 Polaris A1 – 500 kt	1380	Eastern Mediterranean	
Abraham Lincoln	16 Polaris A1 – 500 kt	1380	Eastern Mediterranean	
Ethan Allen	16 Polaris A2 – 800 kt	1750	Eastern Mediterranean	
Sam Houston	16 Polaris A2 – 800 kt	1730	Eastern Mediterranean	
Tunny	2 Regulus I W27 – 2 Mt	575	North Pacific	
Barbero	2 Regulus I W27 – 2 Mt	575	North Pacific	
Grayback	4 Regulus I W27 – 2Mt	575	North Pacific	
Jupiter Missiles	45 Jupiters – 1.44 Mt	1500	Italy (30) / Turkey (15)	
Thor Missiles	60 Thor – 1.44 Mt	1500	England	
* B-52 Airborne Alert	132 AMG – 1.4 Mt	785	POC Perimeter USSR	
* 66 B-52 Airborne Alert				

Kennedy continued his argument for Option VI. "This plan covers all the counterforce targets with a 95 percent probability of destruction. It significantly reduces the number of civilian casualties and leaves the industrial capacity intact. Remember, West Germany is now our ally. We will need to send significant aid to Moscow once this is over. The entire world may be in danger of radiation sickness even with this limited plan. I am certain that any options involving over 15,000 megatons will lead to utter darkness on this planet. We may as well nuke DC if we use any of those. I will not be the person responsible for destroying four million years of life on this planet in four hours. Secretary McNamara

and General Taylor, you will order our forces to be ready to implement Option VI on my command tomorrow at 1800 hours."

McNamara and Bundy stared at each other in disbelief. Dean Rusk bolted from his seat.

"With all due respect, Mr. President," Rusk said, "I think this action is precipitous and not at all in keeping with ExComm procedures."

Taylor answered for the President. "Dean, the President is not ordering a strike. He is taking a prudent step toward eliminating a real threat. If Khrushchev has lost control, which is what I think is going on, and the shootdown of our U-2 is a prelude to Soviet submarines taking out half of our Navy, we need to be ready to preempt on terms the President will accept."

Kennedy's voice was uncharacteristically subdued. "Dean, I don't take this step lightly. But I need to be ready to respond in a manner that saves the most American and European lives if the Soviets fire nuclear torpedoes and sink our ships. We already have assets in place to deal with the Cuba situation. God willing, we will take out not only those but also the Soviet ICBMs and other counterforce targets in the Kaysen-Young modified plan. The Kaysen-Young plan does not deal with the threats to Europe, but we can't play step-by-step escalation dominance and hope the Russians will come to their senses while they are assembling thirty-six nuclear missiles within spitting distance of Florida. If we do, we won't have a country left. We need to strike before they ready those missiles for launch. Once those missiles are fully prepared, fueled, and armed with warheads, I have no doubt they will use them."

This time, no one spoke. No one leapt up.

Finally, McNamara decided to weigh in. "The submarines are a problem, but what if they aren't armed with nuclear torpedoes?"

"Wrong question," Kennedy said. "What if they are? How many are there? We have had twenty-nine potential sightings in the last ten days. How many of those are armed with nuclear missiles or nuclear torpedoes? Does anybody know?"

Every head shook.

"Who in Russia makes the decision to fire?" Kennedy asked. "If it's Moscow, they just authorized shooting down a U-2, which might

mean the missiles are being fueled and warheads are being mounted. We can't risk more pilots' lives without escalating on our part. When we amp up, does Moscow take out half of the 2nd Fleet? When they do, what's our response? Khrushchev has signaled a hard line. They are destroying documents at their Embassy. It's all adding up, and I don't like the math. If Khrushchev does not respond favorably to my letter from last night, we are taking out the missiles in Cuba. Once we do, he attacks ours in Turkey—or maybe Italy—or, God forbid, England. General Taylor is convinced that we either use them as outlined in the Kaysen-Young Modified Plan or we lose them. I am not making this decision lightly. But if they fire nuclear weapons in the Caribbean and sink our ships, it's Katie bar the door. That is all."

He looked at Rusk. "A word, Dean." When Secretary Rusk stepped over, the President spoke in a low voice. "Contact Andrew Cordier, former UN Undersecretary. Have him give another message to U Thant signifying our willingness to meet the Soviet proposal and trade our Jupiters in Turkey for the Russian ones in Cuba."

Rusk nodded. Kennedy looked at the people in the room. Suddenly he looked taller.

"The Russians continue to work day and night to make those missiles operational," Kennedy continued. "Once they are up, they can be fueled with warheads mounted in hours, not days. We can't keep B-52s airborne for the rest of our lives, nor can the Navy execute an endless blockade. Today we deal from a position of extraordinary strength. Two weeks from now we risk the lives of 100 million Americans, and the Russians will not take the missiles out of Cuba. Look at what they did behind the Iron Curtain to Hungary, Czechoslovakia, Poland, and wherever else they have found themselves with the upper hand militarily. The missiles in Cuba must go, and now. Right now."

#### October 27, 1962 – 2052 Hours USS Cony, Sargasso Sea

Afew anxious moments passed before the B-59 reached the surface in the middle of the circle formed by the *Cony*, the *Beale*, and the *Murray*. Ensign Gary Slaughter was with Captain William Morgan on the bridge of the *Cony*, which narrowly averted disaster. The OOD thought he picked up a range ping and alerted the depth charge crew to load fully charged barrels. They were stopped just in time. Before the hatch opened on the B-59, the *Cony* had spotlights on it and had moved within a couple hundred yards of it.

The Soviet sailors streamed out of the submarine like kids running out of school at the beginning of summer break, only they were not joyous and free. They looked haggard and awful. They stripped off their uniforms and prostrated themselves on the deck. A few plunged into the water but scrambled back aboard before any officer saw them.

The Captain surveyed the crew. "Ensign Slaughter," he said, "they look like they've been to hell and back."

The Captain handed Slaughter the binoculars. Many of the men on the B-59 were being helped onto the top side of the submarine. A few were being carried.

Captain Morgan explained. "Ensign, that Foxtrot was never meant to operate in these waters. Excess salt plugged its air exchanger. The temperatures down there for the last twenty hours had to be well over 110 degrees. Ask for identification and whether anyone needs assistance."

The Russian Captain responded, "Korbal ship X."

- "He isn't going to tell us," Slaughter said.
- "Inquire about his vessel's status." Captain Morgan said.
- "On the surface operating normally," the Russian said.
- "Do you need any assistance?" asked Morgan.
- "Nyet."

Morgan and Slaughter stared at each other and then both turned to see what was happening on the *Murray*. The crew had brought out a jazz band on the deck, and it was playing. The Russians were obviously amused. Then they asked for some whiskey. They probably didn't believe the Americans didn't have any alcohol on their ships.

Out of nowhere a P2V Neptune roared onto the scene and dropped several incendiary devices to activate its photoelectric camera lenses. The captain of the Russian sub thought he was under attack. He brought his bow torpedo tubes to bear on the *Cony*.

Captain Morgan was furious. "Ensign Slaughter, apologize for the intrusion to keep that Russian bastard happy."

The Russian acknowledged Slaughter's apology, closed his torpedo tube doors, and pointed his submarine due east. The *Cony* kept pace and switched to a northern bearing. It tagged along like a faithful bird dog. Before Slaughter ended his watch, the crew sent some bread and cigarettes to the sub by highline. A couple of days later, on October 30, the recharged Russian submarine disappeared and eluded all efforts to be located again.<sup>71</sup>

## October 28, 1962 – 1000 Hours Kremlin Conference Room 32 Kosygina Street Moscow, Russia

Rodion Malinovsky was in the hot seat for the U-2 shootdown. So were Sergey Biryuzov and Vladimir Sudets. An enraged Khrushchev led the inquisition.

"Comrade Malinovsky," Khrushchev began, "I hope you have some explanation for defying my direct order that no American planes were to be shot down."

Sudets, Deputy Commander-in-Chief of the Soviet Air Defense Forces, tried to come to Malinovsky's rescue. "Premier Khrushchev, General Pliyev, the Commander in Chief of Soviet Forces in Cuba, was not available while the American plane was photographing many of our missile emplacement installations. General Stepan Grechko decided the intrusion constituted a prelude to an air offensive to take out those installations. The Cubans grew tired of the American planes violating their airspace and demanded action. So in the heat of the moment, General Grechko made a field decision to shoot down the plane."

Khrushchev remained agitated. "General Sudets, Grechko's decision has not only put Cuba at significant risk but also the entire Warsaw Pact. Have you not read General Gribkov's document on the imbalance we have in nuclear weapons? We lost 150 of our top engineers in the Nedelin Disaster on October 24, 1960. We cannot provoke the Americans into a shooting war at this time."

The Premier had everyone cowering but did nothing to reduce the palpable anxiety in the room. When Admiral Gorshkov reported on the confrontation between the B-59 and the American destroyers, there was near panic. GRU head Ivan Serov reported that American airstrikes on Cuba would begin on Monday. The three TV networks were scheduled to broadcast an address by Kennedy at 0900 hours from Washington, DC.

"That's seven hours from now," Khrushchev said.

Serov said, "We have a communication from the bearded one in Cuba. He sent it without encryption."

"Damn revolutionaries," Khrushchev said.

"He recommends a preemptive strike against the US," Serov explained. "As a result, all the Jupiters in Turkey are fueled and armed."

Brezhnev came unglued. "This is pure madness! Who is in charge of the missile sites in Cuba? Marshal Malinovsky, are we going to have unauthorized launches of nuclear weapons from Cuba based on a guerilla fighter's analysis of a local situation?"

Malinovsky shook his head. "We are not. We are in complete control."

Brezhnev was unconvinced. "Doesn't sound like it."

Alexei Kosygin directed his comments to Khrushchev. "The Cuban forces outnumber our troops ten to one. They can take over our MRBM sites by force. This is going downhill fast. It needs to stop now before the Americans incinerate us."

"I believe the Premier understands the gravity of the situation." It was Anastas Mikoyan. "We have Kennedy's offer from earlier this morning. It is logical for us to accept it and withdraw our missiles from Cuba."

The room quieted when Khrushchev held up his hand. "The Deputy Prime Minister is correct," he said. "We will have saved Cuba and removed the naval blockade in exchange for removing our missiles. If we don't, I am convinced Kennedy will invade Cuba. We will then move on West Berlin and Turkey. It is hard to tell where the escalation will go."

Although many heads nodded, Gennady Voronov's was not one of them. He stated, "Comrade Podgorny, Comrade Shvernik, and Comrade Shelepin all agree with me. We should keep our missiles in Cuba. Otherwise, the US will continue to hold an insurmountable edge in deliverable nuclear weapons, and we will be humiliated around the

globe. No, comrades, the time to stand firm is now, and the Americans will do nothing. This is a big policy step. We need to vote on our course of action."

"We will catch the Americans in nuclear weapons," Khrushchev said, "but we are not dealing now from a position of strength. Had Anadyr gone off without a hitch, we would have had enough missiles in place to back them down. But now is not the time. We have solid fuel ICBMs in development. They will make us deadly, but we cannot have 50,000 Russian lives lost in Cuba and do nothing about it. It is better for us to remove the missiles, save Cuba, and catch up to the Americans in nuclear weapons. Therefore, I propose that I dictate a letter accepting Kennedy's offer from last night. We will broadcast it before his press conference."

They all voted.

Leonid Brezhnev, "Da."

Gennady Voronov, "Nyet."

Frol Kozlov, "Da."

Alexi Kosygin, "Da."

Otto Kuusinen, "Da."

Anastas Mikoyan, "Da."

Nikolai Podgorny, "Nyet."

Petor Shelest, "Da."

Alexander Shelepin, "Nyet."

Andrei Kirilenko, "Da."

Nikolay Shvernik, "Nyet."

Nikolay Podgorny, "Nyet."

Mikhail Suskov, "Nyet."

Dimitry Polyansky, "Da."

Nikita Khrushchev, "Da."

Khrushchev began to dictate a message. As usual, it had to be highly edited to get it into the parlance and vernacular of acceptable diplomatic standards. By the time the process was finished, the rumored US press conference was barely an hour away—the one erroneously reported to the Presidium by the GRU where Kennedy would prepare the American public for war. Communist Party Secretary Leonid Ilyichev who was responsible for mass ideology, raced at breakneck speed

through the streets of Moscow to the Headquarters of Radio Moscow, a forty-five minute drive from the Kremlin. His Kremlin limousine was waved through by a traffic policeman, and he arrived at 1645 hours, Moscow time.

The breath-holding world heard there would be an important statement on Radio Moscow at 1700 hours. The message from Khrushchev was broadcast at 1705 hours, Moscow time.

#### Dear Mr. President:

I have received your message of October 27. I express my satisfaction and thank you for the sense of proportion you have displayed and for realization of the responsibility which now devolves on you for the preservation of the peace of the world.

I regard with great understanding your concern and the concern of the United States people in connection with the fact that the weapons you describe as offensive are formidable weapons indeed. Both you and we understand what kind of weapons these are.

In order to eliminate as rapidly as possible the conflict which endangers the cause of peace, to give an assurance to all people who crave peace, and to reassure the American people, who, I am certain, also want peace, as do the people of the Soviet Union, the Soviet Government, in addition to earlier instructions on the discontinuation of further work on weapons construction sites, has given a new order to dismantle the arms which you described as offensive, and to crate and return them to the Soviet Union. . . .

I regard with respect and trust the statement you made in your message of October 27, 1962, that there would be no attack, no invasion of Cuba, and not only on the part of the United States, but also on the part of other nations of the Western Hemisphere,

#### ~ Armageddon ~

as you said in your same message. Then the motives which induced us to render assistance of such a kind to Cuba disappear.

It is for this reason that we instructed our officers - - these means as I had already informed you earlier are in the hands of the Soviet officers - - to take appropriate measures to discontinue construction of the aforementioned facilities, to dismantle them, and to return them to the Soviet Union. As I had informed you in the letter of October 27, we are prepared to reach agreement to enable United Nations Representatives to verify the dismantling of these means. . .

Signed: Respectfully yours, N. Khrushchev October 28,  $1962^{72}$ 

### October 28, 1962 – 0908 Hours The White House Washington, DC

McGeorge Bundy read the printout from the teleprinter and called Kennedy, who was getting ready for church.

"All exceptionally good, but I wonder what the catch is," Kennedy said.

There was no catch. The Russians had read their hand, determined they did not hold the cards, and folded. The Cuban Missile Crisis—or the Caribbean Crisis as the Soviets referred to it—was over. But the immediate danger from nuclear weapons that could be delivered in thirty minutes or less across continents was just beginning.

In Great Britain, Prime Minister Harold Macmillan and some of his ministers met at the Admiralty House. Khrushchev's announcement had pushed a cabinet meeting to that afternoon where a move to the precautionary stage—the military and official preparations for nuclear war—was on the agenda

Dean Acheson and Caleb Young met later that day at the Occidental Restaurant on Pennsylvania Avenue. Despite the great news, it was a somber meeting because deep down they both knew the world had just walked through the door to a new era in the nuclear age.

"Caleb," Acheson said, "I know your parents taught you a lot of philosophy in your earlier years. Are you still interested?"

"No," Caleb said. "All I saw in man was a deep, dark soul that can't be saved. In the end, I think Hobbes and Freud, as simple as their theories are, had it right. Man will live in conflict not only with his inner being, first-person consciousness, or whatever the flavor of the day is. The id will always want to destroy any impediment to man's perceived hedonistic goals. Nations are just collections of imperfect souls. They will enslave and take from the weaker around them. I may be wrong, history may lie, and maybe sans revisionist history is but a myth retold,

but we face a bleak future. Look at all the wars since man started to rule this planet. How can we be sanguine looking at that? I'm afraid that science has outpaced what little decency exists inside of us, and when tempers flare and there is no Kennedy at the helm, considering how many nations are armed with nuclear weapons, the outcome will be grim. Power and LeMay wanted to kill 300 million in 30 minutes. Who's to say they won't be the ones making the decisions in the future? There is an intense hatred of others because of differences in religion and politics. It's a wonder we have lasted this long."

As Caleb Young and Dean Acheson left the Occidental restaurant, they didn't know what was happening in Turkey. When the government realized it had been used as a sacrificial pawn to settle the Cuba issue, leaders sought to use the Jupiters before NATO could dismantle them with the help of the conspirators led by LeMay and Power. Caleb needed to go back to von Braun's surrender to the Allies to portray the proper background on the development of the plan. But make no mistake, the JCS thought they had missed a Rikki-Tikki-Tavi moment when Kennedy got out of the Cuban Missile Crisis. They thought they had a window in history where they could destroy the cobra before it got stronger.

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Two groups—the US military and the Turkish government—were unhappy with the way the Cuban Missile Crisis ended. When Kennedy met with the JCS to accept their gratitude for artfully threading the needle on a very delicate matter where hundreds of millions of lives were at stake, he was stunned by what took place. After explaining how Khrushchev had agreed to dismantle and remove the missiles in an unofficial exchange for the Jupiters, LeMay exploded.

"We lost! Goddamn it, we ought to just go in there today and knock 'em off."

Admiral Anderson was not less blunt. "This will go down in history as one of our nation's greatest defeats. Now we will have to deal with this nuclear cloud for the next hundred years. Mr. President, you have capitulated to a nation that forces others to succumb to its wishes at the

point of a bayonet. What is happening and has happened in Hungary will now spread to Indochina and beyond. This is a dark day for America."<sup>73</sup>

Kennedy thanked the assembled for their thoughts and returned to the White House.

The generals were correct from a military standpoint. Kennedy and his advisors continued to overestimate the Soviets' capabilities, especially their nuclear ones. It is highly doubtful that any Soviet nukes would have landed on US soil. Their command and control was not ready for a nuclear war, especially not one that would be decided within six hours. Their warheads were stored, not ready for deployment. Their ICBMs remained unfueled during the Cuban crisis. Their Tu-95 crews were not on even a twelve-hour alert. All planes would have been destroyed before they got off the ground. The missiles in Cuba would have taken twenty hours to ready for firing. At best, the Soviets might have destroyed parts of Europe. But air superiority and TNW would have shortened the Soviet surge into Western Europe. Whether the loss in lives in the Soviet Union, China, and North Korea would have been worth it never crossed the JCS's collective inhumane minds.

RFK and JFK had let the Soviets build Cuba into a monster and then tried to take credit for defusing the very situation they had created. Perhaps the most unsavory part of their behavior was JFK's lies to Truman and Eisenhower about the Jupiters and RFK's taking credit for what became known as the Trollope play when the reply to Khrushchev's two offers ignored the second one that included the Jupiter exchange. The ExComm stumbled its way into that decision and does not merit any praise for the JFK response letter of the 27th. Kennedy saved his political future, but he was given the benefit of the doubt by believing he was primarily motivated by, above all, avoiding war when everyone except Stevenson thought war was the only answer.<sup>74</sup>

#### May 1, 1945 – 0630 Hours Oberjoch, Bavaria

Us Private First-Class Fred Schneikert moved east down the dusty dirt road. He observed a man on a bicycle flapping a white towel. Schneikert, who spoke German, yelled at the man. "Halt! Komme vorwarts mit die Hände hoch!" ("Stop! Come forward with your hands up!").

The man dutifully got off his bike and raised his hands as he came forward, speaking very rapidly in broken English. "My name is Magnus von Braun. My brother invented the V2. We want to surrender."

PFC Schneikert knew the war was within a few days of being over. He wasn't going to die at the hands of some loon.

"I think you're nuts," Schneikert said, "but just in case you aren't, I'm going to turn you over to our captain."

Schneikert marched the man back to Captain Hunter who reviewed the man's papers, determined he was telling the truth, and became very interested.

"Where is your team located, and how many of you are there?" Hunter asked.

"Just twenty or so with my brother, but the rest of the research team is nearby. The SS General Kamler and his men have deserted. They left us alone. If you hurry, I think we can recover the entire team."

Although wary of a trap, Hunter knew if he let this opportunity slip through his hands, there would be severe consequences. He did not relish finishing his tour of duty by cleaning latrines with a toothbrush.<sup>75</sup>

"Let me check with HQ," Hunter said.

By the next day, Wernher von Braun and the entire Inner Circle were on their way to the American camp at Reutte, Austria. <sup>76</sup> Later that year, the US special agents from the Joint Intelligence Objectives

Agency through the Army's Counterintelligence Corps (CIC) captured about 1,600 German scientists pursuant to Operation Paperclip. The operation was overseen by a committee consisting of the Army's Director of Intelligence, the Chief of Naval Intelligence, the Assistant Chief of Air Force Intelligence, and a representative of the State Department. It was a huge success. Not only did the operation stop the Russians from getting the scientists' expertise, but it also advanced the US program that turned out to be behind the Russians' efforts for the next decade.<sup>77</sup>

Ten years later, however, the Russians were facing the same major impediment as the Americans, finding a non-cryogenic oxidizer to enable a missile to be fueled and left on the pad for a very long time. Both were using RP-1 as the fuel. The liquid oxygen accelerant provided a significantly higher impulse ratio than solid fuels of the same volume. By August 1957, the Bacher Panel recommended that research and development find an improved propulsion system aimed at the acquisition of storable oxidizers for liquid propellant systems. In its January 31, 1958, report to the Secretary of Defense, the Scientific Advisory Committee suggested that a program be undertaken to replace the present non-storable (cryogenic) liquid propellants of the Titan with storable liquid propellants. Similar studies carried out by the Director of Guided Missiles within the Secretary of Defense's office surfaced on February 26, 1958. The contractor responsible for development of a storable liquid propellant reported in a February 15, 1958, report to the United States Air Force that it could be done. Wernher and Magnus von Braun would play a significant role in fixing the problem but for neither the Army nor the Air Force.

The Navy had given up on liquid propellants, deeming them too dangerous to be used with submarines. The Air Force seemed to be more interested in the development of the Thor and Titan missiles. When General LeMay found out that Wernher von Braun might have a solution to the storable liquids problem, the US military would be able to place MRBMs on alert within striking distance of Soviet primary targets. A storable liquid propellant would allow the missiles to be

utilized in a retaliatory strategy because the preparation time could be reduced to less than four minutes.

Wernher von Braun and his team ended up in Huntsville, Alabama, at the Army's facility dedicated to the production of the Jupiter missile. Magnus von Braun landed a job as a chemical engineer with the Chrysler Corporation, which happened to be the contractor for the Jupiter missile production. Wernher von Braun presented the problem to Magnus von Braun, who had worked on the same issue while serving as a chemist in the V-2 program.

During World War II, the German military, based on Magnus's research, introduced red fuming nitric acid (RFNA) in some of its rockets. RFNA was 84 percent nitric acid HNO3 and 13 percent dinitrogen tetroxide. The remaining 3 percent was plain water. It was combined with an inhibitor such as hydrogen fluoride to keep the nitric acid from corroding the tank lining. Magnus went to work on the problem and produced two formulas. He asked Wernher to test them secretly on the Jupiter's SM-78/PGM-19 and the LR79-89 -S-3D rocket engines. The two non-cryogenic oxidizers were both just minor modifications of the S-Staff and SV-Staff fuels, but they both had reduced amounts of HNO3 with the addition of HF (hydrogen fluoride).

Wernher and Magnus realized the turbo pump valves and bearings

Makeup of MVBs' Proposed Solutions	HNo3	NO2	H20	HF
1	83.4%	14.0%	2.0%	60.0%
2	54.3%	44.0%	1.0%	70.0%

would have to be adjusted to increase the flow of the propellant into the combustion chamber, which would not alter the thrust but would reduce the range by 3 percent to 5 percent. Because of the intense rivalry between the Air Force and the Army, Wernher and Magnus chose to confer only with Air Force personnel they believed could keep their secret. Wernher met with General Power and General LeMay in late 1959 at the Huntsville facility.

# November 24, 1959 Army Ballistic Missile Agency Redstone Armory Huntsville, Alabama Office of Dr. Wernher von Braun

"General LeMay and General Power are here to see you."

"Thank you, Phyllis. Show them in," Dr. Wernher von Braun said. "Good morning, gentlemen," von Braun greeted the two generals. "Thank you for meeting with me on such short notice."

Power nodded and sat. "Well, Doctor, you and Magnus are two of the best scientists we have. As I told you, the GAO has been investigating the conduct of our missile-testing division, and the news isn't good. They have bungled missile tests, which resulted in several Titan and Atlas missiles being destroyed. It's getting costly. The Air Force has moved on to the development of the Minuteman that will utilize solid fuel." He stopped and winced. "Sorry, you probably know that already."

"I am aware," von Braun said. Sometimes he worried about the intelligence of American military minds.

"Anyway," Power said, "a couple of days ago we were briefed by the lead scientist who is working on a storable liquid propellant. He told us we should have storable liquid propellants by 1962. We understand from our contacts at the Chrysler Corporation that your brother Magnus may be able to outfit the Jupiter missiles with a storable liquid propellant much sooner."

"Yes," Wernher said, "but it's all theoretical at this stage, and even though we think it will work, the Army and Navy brass turned us down flat when we ran it by them. They did not want to interfere with the Titan, Thor, and Atlas projects. I suspect I stepped on some toes since Secretary Wilson put the Air Force in charge of anything with a range of more than 200 miles. The GAO report put the blame squarely on the Air Force for not retesting the turbo pumps, which resulted in the destruction of several missiles. In its haste, the Air Force needlessly destroyed millions of dollars in missiles, according to the GAO."

LeMay spoke with a cigar clenched in his teeth. "We know the Navy isn't interested in the Jupiter missiles or any derivative because they use liquid propellants. With the oxygen component required to be stored at -362 degrees Fahrenheit, they have given up on liquid propellants. They are working on something with less range, something propelled by a solid fuel so it can fit in their missile tubes on the Polaris submarines. LOX is too volatile. We think everybody from the Secretary of Defense on down is being a little shortsighted since you have a solution to the storable liquid propellant problem and your Jupiter missiles are the most accurate we have in our arsenal. Correct me if I'm wrong, but the studies I have read show that the circular error probability (CEP) is within a range of approximately 500 yards."

Dr. Wernher von Braun weighed his response. "It may be just a little bit more than that, General, but the Jupiter is very accurate and better than the Thors or Titans for several reasons."

LeMay continued. "Well, we think they are extremely useful for high-value targets such as missile launching sites or air bases. With ninety of these missiles scheduled for deployment in France, Italy, or Turkey within the next year or two, we think they'll be close enough to thwart any response the Russians might make to a US strike. If you can test these rockets with Magnus' storable liquid propellant, we'd be very interested in those results."

"Ah! I'd be happy to do anything you want in that regard, and maybe you'll find another spot for these missiles such as Denmark or Norway. But you have to thank Fritz Mueller for the accuracy of the Jupiters. He is responsible for dropping the warhead within 800 yards of its target over 1,500 miles down range. I understand that the other missiles are not as precise."

General Power shook his head. "We can't confirm that, but please know that we believe the Jupiters are an essential part of our first response arsenal. Getting them off the ground before a Soviet missile or bomber takes them out is essential, and from what we understand, we can reduce launch time to under four if we get a storable liquid propellant."

Wernher von Braun frowned a little bit. "I have not made the calculations, General," he said, "but if you have a storable liquid

propellant such as Magnus has suggested, the Jupiter should be ready to fire as soon as the warhead is armed and targeted. From there, it should take less than four minutes at most."

The soldiers stood. "Thank you for your time, sir."

Dr. Wernher von Braun watched the men exit his office and wondered what they were up to. "Well," he said, "security is not my department, and I am not reporting anyone. I had enough of that under Mr. Hitler. Best to forget about this visit altogether."

When General Power called to congratulate von Braun after six storable, liquid propellant Jupiters were installed in Turkey, he proclaimed the German brothers had helped stop the spread of communism. Of course, Power would declare victory in a world war where there were only three inhabitants left on the entire planet, as long as two of them were Americans. It was all good. Even LeMay, who took great pride in the firebombing of Tokyo where about a million people were burned alive, privately considered general Power to be an unhinged maniac when it came to his unadulterated hatred for the Russians.

#### April 26, 1963 – 1000 Hours Oval Office, the White House

**(4** They want what?" Kennedy looked at McNamara, Bundy, McCone, and Rusk in disbelief.

McNamara answered. "Mr. President, the Turkish government wants a pledge from you that you will station at least 50,000 US troops in the country and build a naval base to guarantee permanent missile protection from the Russians."

"This matter was settled last year," Kennedy replied.

Dean Rusk, who had railed against placement in Turkey two years earlier because of the unstable regime, said, "In February of this year, Colonel Talat Aydemir led a failed coup attempt but for some reason was not jailed, executed, or punished in any way. He is the commandant of the Ankara War College. Aydemir and about eighty of his students have taken over the last two Jupiter launch pads in Turkey that haven't been disassembled."

"I dug into this a little on the way over from the Pentagon," McNamara said, "and it appears the commanders of the last two Jupiter squadrons were under the impression we were leaving these six missiles as a compromise with the Turks. They claim that a Colonel Martin D. Wozniak on General Power's staff gave them the orders not to disassemble the pads because the missiles had already been fueled. I checked, and there has never been a Martin D. Wozniak who is a colonel in the Air Force, and there is no one on Power's staff with a name even close to that. But the launch crews and the security detail are apparently still there."

"The Air Force never wanted these missiles to begin with," Rusk said, "and now, with the Minuteman being deployed, they are ancient history."

"True," McNamara said," "but the Turks are threatening to launch the missiles if we don't give in and make a public statement in this regard."

Kennedy looked puzzled. "How in the hell can they launch the missiles without the codes?"

Secretary McNamara grimaced. "Those are the W-49 1.44 megaton warheads. They only require two keys to arm. My information says the Turks have all the keys for all six missiles."

Rusk looked sick. "They are giving us six hours before they start executing our personnel at the rate of one per hour."

McGeorge Bundy looked up and said, "I seem to remember that the Turks have a very active Special Forces Unit. They won't hesitate to follow through."

"Well, at least they did before the last regime change," McNamara said. "The word is out about Turkish control of the Jupiters. Rodion Malinovsky wants to hit both locations with conventional warheads. He promises minimal damage anywhere else in the country."

Kennedy was about to erupt. "How in the hell do the Soviets know about this and we just learned about it an hour ago?"

Secretary McNamara stayed on point to avoid the President's ire. "They have promised retaliation if the missiles are launched. But they don't want anything to become public knowledge. Khrushchev has already suffered an erosion of confidence in the Politburo because of Cuba. And to answer your next question, yes, all missiles are supposed to be out of Turkey in five days."

"Just what do the Soviets think will happen if they attack a NATO country?" Kennedy was somewhere between bewildered and furious.

John McCone had been uncharacteristically quiet. "I know Russian intelligence is good," he said, "but it's not that good. Something just doesn't add up. First, why are we getting six hours from the Turks? They must know they have allowed us a chance to stop them. That six hours is coincidentally the same amount of time it would take the majority of our non-alert forces to become launch-ready. And yes, I'm still bothered by General LeMay's outburst of 'We lost' when he heard we had reached a peaceful solution to the Cuban Missile Crisis. Someone wants the situation to escalate rapidly, so they tipped off the Russians."

Secretary Rusk looked on in disbelief. He watched McCone pace. "So you are entertaining a notion that the Turks are not behind this at all? You think it's our own Air Force Chief of Staff?"

There was a knock on the door. Robert Kennedy had been conducting a separate meeting in the Cabinet Room with Paul Nitze, the Assistant Secretary of Defense; Roswell Gilpatric, the Deputy Secretary of Defense; and General Maxwell Taylor who had been conducting his own investigation of the events in Turkey.

"I just got off the phone with the Turkish ambassador," Bobby Kennedy said. "They are denying any involvement in taking over the Jupiter launch facilities. They have located Colonel Aydemir and produced him at our Embassy in Turkey. Our ambassador has confirmed Colonel Aydemir's presence. I believe the Turks. I don't think they are behind this. I am confident in my belief. I hate to say it, but in our JCS meetings, General LeMay kept pounding away on our loss of strategic advantage."

John McCone had privately briefed President Kennedy concerning the undercurrent of growing dissatisfaction in the top Air Force officials after the Cuban crisis. President Kennedy slapped his palm on the desk.

"Right now I don't give a damn who's behind it," he said. "I don't want a thermonuclear war to start over these six missiles. What are our options, and I'm not going to be using nuclear weapons here. Secretary Rusk, you tell the Russians we are handling the situation. If they fire on a NATO country, that is the beginning of the end."

McCone suspected the President had forgotten the conference he and Dr. Young had held with him in late 1961 regarding the V-1000 Anti-Ballistic Missile System. Since then, the Russians had conducted thirty-seven tests with only five failures against warheads traveling at 3 kilometers. The reentry speed of the Jupiter would be faster, but depending on how many were launched, there was a good chance of intercepting some of them. He hadn't brought the matter up again because the system had become largely irrelevant in view of the increasing number of ICBMs and SLBMs.

Secretary McNamara and General Taylor had been in touch with a carrier group in the Mediterranean headed by the USS *Enterprise*. The Captain of the *Enterprise*, Vice Admiral de Poix, had developed a plan.

It gave McNamara and Bundy great pause, not because it wouldn't work but because if it didn't, the penalty could be a full-scale general war with Russia. McNamara laid out the details.

"Vice Admiral de Poix has a plan we should try first. If it fails and the missiles are launched, we may not be able to stop the inevitable. The Russians want to incinerate the western half of Turkey now."

Kennedy almost shouted his response as tension and tempers were rising. "Secretary McNamara, you tell them we will handle this within NATO, and we are not preparing for war with them."

Under Secretary of State George Ball added, "I'll tell you what I think. We can't let the Russians attack a NATO country. I don't think we can blow up one of our allies' bases on our own. Does anyone else know about this plan?"

"No," McNamara said. "It came to me directly from Vice Admiral de Poix."

"What is it?" Kennedy asked.

"You won't like it, sir," McNamara said. "He wants to send in six F-4 Phantoms per site below the radar and take out the Jupiters with Sparrow and Sidewinder missiles after they reach an altitude of 30,000 feet. The damage would be minimized."

"So do you think this is going to work, General Taylor?" President Kennedy asked.

"Yes," Taylor said. "These sites are protected by the AN/FPS-7 radar. It has not been upgraded and cannot pick up extremely lowflying objects. The F-4s can fly at Mach 1.2, 50 feet off the deck. No one will see them. Our newest version of the F-4s ordinance, the Aim-7 C/D Sparrow, has attained Mach 4 and can be fired from 14 miles away. The Aim-9 Sidewinder has a longer range of about 20 miles but a comparatively slower speed of Mach 2.5. From takeoff it would take them less than eight minutes to reach a point where they could take out the Jupiters shortly after launch. But they must fire their ordinance within ninety-five seconds of the Jupiters' lift-off and before the missile's acceleration exceeds the speed of the Sparrow and Sidewinder. I believe the Jupiters will be launched when the F-4s pop up to 500 feet, two minutes out from the launch site. I expect lift-off to take place thirty to forty seconds later. The F-4 has a rate of climb of more than 41,000

feet per minute, and they will climb with the Jupiter in a vertical plane about 10 miles away and hit the Jupiters when they reach 30,000 feet."

President Kennedy searched for other options. "What about taking the Jupiters out when they reach a lower altitude? Our paramount concern here is that none of the missiles head toward Russia even if we have some damage in Turkey."

Secretary Rusk answered. "Any damage to Turkey would be politically unacceptable. It would look like our Air Force is behind a coup. NATO could fall apart, and with the Russians already sending aid to Turkey, it is highly likely they would become part of the Warsaw Pact, along with Greece and Yugoslavia."

Kennedy looked around the room for more answers. "Where are these missiles targeted, and what will be the damage?"

Secretary McNamara responded. "It is our belief that they are targeted at Moscow or Leningrad."

Kennedy ended the debate. "We'd better be damn well sure we knock out all those missiles. We are to take no steps that would lead the Russians to think we are planning an all-out attack. All our bombers in the air are to return to base immediately. We are to open any available lines of communication with Russia and assist them with interdicting any missiles that make it through the Air Force attack."

Secretary McNamara had stepped out to meet a messenger. He reentered. "I have our latest Corona KH-4 feeds. The Soviets are opening their silo doors, scrambling their bombers, and amassing four armored divisions along their western front in Europe. NATO command in Europe wants to ready our tactical nukes in case the Soviets release their TNWs and try to roll over our defenses. Mr. President, I recommend we authorize the activation of our TNWs in Western Europe. Also, what do we tell our Navy to do if the Russian subs surface?"

President Kennedy could see the situation was rapidly going downhill. "Activate the TNWs in Europe. Have our ships warn the Soviet subs that if they surface and attempt to fire any missiles, we will take them out."

McCone thought it was time to discuss the V-1000. "Mr. President," he said, "a little over a year ago in one of our weekly meetings, Dr. Young and I discussed the V-1000 and how it had intercepted a warhead

launched by an R-12 missile at the Kapustin Yar test range. Since that time, we believe there have been several other successful intercepts of ballistic missile warheads. The main reason for success is that the RVs slow to about 2.5 kilometers per second after they enter the atmosphere. If we give the Russians all our information on the reentry vehicle, they may be able to intercept several of the incoming warheads."

Although McCone didn't mention it, during Khrushchev's 1961 UN address, he had boasted about Russian weapons capable of hitting "a fly in space."

Looks like he will get a chance to make good on that claim, McCone thought.

President Kennedy turned to Taylor and Maxwell and said, "Go through London if that is what it takes, but get all the Jupiter information to the Russians. Ask them for a timetable regarding their needs to redeploy their antiballistic missile systems. Have Vice-Admiral de Poix hold off until we give the Russians the time they require. Can we make any use of the teletype system being built at the Pentagon? I know it is not supposed to be ready because it's not encrypted yet, but if it works now, let's use it."

"It won't be completed for a few months," Taylor said. "The Russians have yet to install their receivers."

"Where is LeMay?" Kennedy asked.

"He is in Europe at a NATO meeting," Taylor said, "but Vice Chief of Staff General McConnell is on his way over from the Pentagon. He has a background in fighter planes and should be able to help us more than LeMay."

Rusk was the only person close enough to hear the President mumble, "Damn bomber jockey."

## April 26, 1963 – 2106 Hours Bunker 42, 50th Rocket Army Tagansky District, Moscow, Russia

The situation at the Kremlin wasn't any better. Defense Marshal Rodion Malinovsky and Chief Marshal of Aviation Konstantin Vershinin had correctly analyzed the situation. They determined that the Americans had lost control of the six remaining Jupiters in Turkey. The information had been relayed to them through the British Embassy in Moscow. The British Ambassador wanted to impress upon the Soviets that NATO was not behind the Jupiter threat and did not support what was taking place in Turkey. The Americans would neutralize the threat within three hours.

Marshal Pavel Batisky, the leader of the Moscow Air Defense District, was quick to act when he was told that sometime during the next three hours he should expect several incoming ICBMs from Turkey. He positioned everything the Russians had (from anti-aircraft artillery to the mobile SA-2 batteries) to intercept incoming warheads. He requested the anticipated altitude and speed information. It would come to him through various channels.

Batisky already had twenty-three V-1000 batteries in place on the southern side of Moscow. He ordered two more battalions of SA-2Cs and one battalion of the experimental, nuclear armed SA-2E SAMs to immediately redeploy from the west side of Moscow. The move gave him three full regiments of SA-2 Guidelines. The S-25 Berkut 40 kilometer and 80 kilometer rings around Moscow were already on high alert. Batisky had everything in place even before he heard how many warheads to expect.

When Marshal Nikolai Krylov, the newly appointed Commander in Chief of the Strategic Rocket Forces, arrived at the War Room in the Kremlin, all he could see were deeply worried faces. He decided to take an optimistic tone.

#### April 26, 1963 – 2109 Hours War Room, the Kremlin

Krylov strode into the War Room with a confident countenance. He set his briefcase next to Malinovsky and began to talk in a loud voice, which interrupted Khrushchev's conversation with Vershinin.

"I have exceptionally good news," Krylov said. "The American Jupiter missile has an outdated early model of the MK4 reentry vehicle. We can easily intercept it." He thrashed through his papers. "Premier, there is nothing to worry about. If the Americans do not take out the missiles, we can knock the reentry vehicles down. They will not harm anyone in the Soviet Union. The MK4 will hit the atmosphere at a high rate of speed, but it has such a low beta coefficient that the 50 Gs it will incur upon reentry will slow it down from 17,000 kilometers per hour at 100 kilometers in altitude to less than 4,000 kilometers per hour by the time it reaches an altitude of 25 kilometers. It will be easy for any of our V-1000s to intercept it. We have been given all the targeting information we need."

Khrushchev, though irritated by the intrusion, was relieved to hear some good news. He stared at Marshal Krylov and said, "No one else here is that hopeful. I hope you are right. You will stay here with Air Marshal Vershinin and his staff to telephone the results to the rest of us who are going to the bunker. Good luck. You do realize you may have six incoming warheads, correct?"

"Premier Khrushchev, do not worry. We can handle even more than that with our excellent rockets."

Khrushchev grunted "Da" and headed to the bunker with his staff.

#### April 26, 1963 – 2140 Hours Situation Room The White House Washington, DC

When President Kennedy and his staff arrived at the Situation Room, General McConnell was ready with his briefing.

"The burning time for the Jupiter is two minutes and thirty seven seconds with an acceleration rate of 13.69 Gs, which will give it a cutoff velocity of 8,984 miles per hour. In order for Admiral de Poix's plan to work, the timing must be precise," McConnell explained.

"What about taking out the missiles on the ground?" Kennedy asked.

General McConnell shook his head. "Inadvisable, sir. The blast and radiation damage would kill about 50,000 Turks. I believe Vice Admiral de Poix's plan will knock down some missiles."

"Some? What happens to the rest?" Kennedy asked.

General Taylor stepped in. "The Russians can knock down the MK-4 RV. I don't see how we can hit them on the ground when we know that the Turks are not responsible. NATO would be forever gone."

Kennedy buried his face in his hands." We'd better be damn well sure that none of them hit Russia or we will have millions of dead Americans."

#### April 26, 1963 – 2200 Hours Eastern Mediterranean Sea Briefing Room, USS *Enterprise* (CVN-65)

Vice Admiral de Poix had seen the look many times—men preparing for combat, a mixture of fear and exhilaration. "Gentlemen," he said,

"we've been ordered to take out six of our own missiles located between Cigli and Izmir. We do not know who is in charge of those missiles at this time."

The Admiral continued. "We can't use a cruise missile because it will be detected. Then we launch, and the Jupiters will outrun them. In addition, we do not want six 1.44 megaton bombs going off at these sites. We have to hit them just after launch. We have one advantage. The radar has not been updated to the AN/FPS-14, so you won't be bothered by the site's SAMs. You will be utilizing the ECM capabilities of your planes that have proven to be successful against the AN/FPS-7 radar in the past." He paused for a moment and watched the gravity of the situation sink in.

"I'm not going to sugarcoat it for you fellas," he said. "This mission is extremely dangerous, and you'll be fortunate to come back alive. You will only have one pass, and you'll need to come in from the directions we have indicated because the defenses are weakest at those points. I can't overemphasize the importance of this mission. If these missiles are not destroyed in the air, more than likely there will be a full-scale general war between the United States and the Soviet Union. The result will be more than 500 million deaths. We don't know the details, but we believe that an element of the Turkish Army led by Colonel Talat Aydemir, the Commandant at the War College, and about three dozen of his students have taken control of the missiles. They are keyed, not coded. They can be launched on a thirty-second delay. You are flying the F-4B, the best damn plane in existence. It gives you a fighting chance of taking out the missiles at above 30,000 feet. If, however, you see a launch and can hit the Jupiter before it reaches 30,000 feet with your Aim-7 Sparrow or Aim -9 Sidewinder, fire at will. Colonel Steinbrecher will go over the possible effects of your proximity to the detonation of the warheads on the Jupiters."

Colonel Steinbrecher began. "Thank you, sir. The worst case scenario involves the detonation of all three warheads simultaneously at each site. In that case, you will experience a fireball radius of 1.1 miles. Moderate blast damage measured at 5 psi of overpressure, which is enough to cause most residential buildings to collapse, will be experienced up to 7 miles. If you are within the radius, you

may experience structural damage to your plane and lose control. Thermal radiation severe enough to cause third-degree burns will be experienced 15 miles from the detonation. Finally, light blast damage of 1 psi of overpressure will be experienced 20 miles from the epicenter. Overpressure of this magnitude should have little effect on your plane but will break glass windows in residential buildings. Upon your safe return, you will be tested for radiation exposure, which I would expect to be less than 100 rems. Colonel Strabla will now give you the final preflight briefing."

Strabla looked like an angry bulldog. "The timing on this mission is critical," he said. "We want the Jupiters to be launched while we are still 15 miles out. At 25 miles, you will ascend to 1,000 feet and close the last 15 miles in approximately sixty seconds. Your radar intercept officer (RIO) will keep you 10 miles away while you follow the launch on a vertical plane. That coincides with the time between detection and launch. Let the Jupiters get to 20,000 feet. Within 10 miles, we should be assured of multiple hits. You know your jobs. Do them. Any questions?"

The *Enterprise* was approximately 90 miles west of the launch sites. It took about 15 minutes for a dozen planes to be in the air. Colonel Strabla was the commander of the group of six planes assigned to Launch Site Four. Lieutenant James Kron was the leader of the other group headed to Site Five. To some of the men it was surprising that Lieutenant Kron's group had drawn such an important assignment. Colonel Strabla knew Kron was the top pilot for the job. His only fault was that he knew no fear. *It'll probably get him in trouble someday,* Strabla thought. *Hope it's not today.* Leaving the briefing room, Lieutenant Kron asked, "Same bet, Colonel?"

"Same bet, rookie."

Colonel Strabla's group led Kron's group by the half-minute it would take to the target. Kron watched Strabla's group pop up to 500 feet about 25 miles from the target and then turned his attention to Launch Site Five. He didn't have to wait long.

"Birds are in the air. Let's go get them." He reported the launch of the Jupiters and began his climb at an angle to get to the 10-mile distance for firing. The critical part was up to his RIO officer, Jake Colbert, who had to decide on the optimum time to fire the four Aim-9 Sidewinders and the four Aim-7 Sparrows. The planes positioned themselves 10 miles away and waited for the rogue missiles to reach 20,000 feet. On cue, Kron's group fired their Sidewinders simultaneously. Three seconds later, they launched the faster Sparrows and then peeled off and hit Mach 2.25 away from the Jupiters. About eight seconds later, they felt the shock waves, and their electronics went dead for a moment. Fortunately, only one of the warheads exploded. Kron's group had hit the RV and not the booster because one of the Sidewinders had honed in on the booster signature and flown off course. Two of the missiles were knocked out by each group. That left two missiles headed for Moscow, each carrying 1.44 megatons.

The extra eight to ten seconds allowed the planes to put a total distance between them and the blast of nearly 12 miles. Kron didn't like it that one of the missiles had gotten away from his group because it was the first time he hadn't bested Colonel Strabla. He really needed some more cigars, but he knew that playing to a draw was the least of his worries.

#### Bunker-42 – 2316 Hours Air Strike Command Center Tagansky District, Moscow, Russia

Utilizing their Dnestr early warning radar, NATO designation Hen House, Air Marshal Vershinin was able to track the launch of all six Jupiter missiles. When four of the six Jupiter missiles were taken out by the F-4 Phantoms, he started to gain some confidence. The burn time on the Jupiter single stage booster was as he expected, about 2:40. The cutoff velocity of both missiles was approximately 15,000 kilometers per hour. The reentry velocity was a little faster than he anticipated at slightly over 17,000 kilometers per hour. That worked out to a little

bit over 4 kilometers per second. He watched anxiously as the friction from the atmosphere decreased the velocity over the next eight minutes to just under 4 kilometers per second. At that speed there was a good chance he could knock out both warheads.

Since they had been expecting a first strike to begin with the Jupiters in Turkey, the Soviet P-12MP radar network (with a 275 kilometer range, codenamed Spoon Rest by NATO) was networked for continuous tracking from Cigli to Moscow. The first regiment of SA-2 guidelines that would attempt an intercept contained three battalions located 330 kilometers south of Moscow. Vershinin knew each battalion had six missiles with intercept capability. The spacing between battalions meant the radio signals would not overlap and cause interference with targeting. Nine missiles would be controlled simultaneously by the Fan Song computers.

Spoon Rest handed off its early detection to the Fan Song targeting radar when the target was within the 45 kilometer range. The warhead was traveling at 3.5 kilometers per second, still extremely fast for a system designed to knock down planes traveling at about 2,000 kilometers per hour or less. Still, the SA-2 Guideline could travel at 1.35 kilometers per second, and at the top edge of its altitude, the blast radius from the SA-2's warhead that weighed 200 kilograms was 250 meters.

The regiment was commanded by Major M. R. Vorohov, and the Fire Control Officer was Lieutenant V. B Mogilin. Both men knew they had to anticipate the path of the reentry vehicle they had been assigned to knock down. The missiles were guided by radio signals from the guidance computers at the launch site. Still, the speed of the RV required firing the SA-2 Guideline system to acquire targeting data a full twelve seconds ahead of the time the Fan Song radar engaged the target. The run time was twenty-six seconds for the SA-2, by which time the reentry vehicle would be 33 kilometers past the SA-2 warhead. The commanders performed a manual override and fired a target SA-2 Guideline into the anticipated path of the reentry vehicle, a back-of-the-envelope calculation. They fired nine of the SA-2 Guidelines at the target SA-2 that was ahead of the RV's anticipated path. The last three ground-to-air projectiles they fired and detonated on their command

resulted in the mutilation of the MK4 without detonation of the warhead. They had taken out the Mk4 reentry vehicle from Launch Pad Four at an altitude of 25 kilometers.

The warhead fell harmlessly to Earth.

### System A Command Center – 2317 Hours 75 Kilometers South of Moscow

Marshal Pavel Batitskic reviewed the procedures and capabilities of the ABM V-1000 with his launch and detonation team. They had already located their target and were preparing to fire within the next few minutes.

System A utilized the Dunai-2 radar system developed by V. Sokolnikov, which came to be known as the NIDAR. The NATO designation code name for this radar was Hen Roost. The radar had a transmitter and receiver separated by 1 kilometer. The range of the radar was 1,200 kilometers. It picked up both Jupiter RVs about seven and a half minutes after the launch and fed targeting information to the three homing radars called RTN and RSVPR. The NATO code names for these homing radars were Hen Egg and Hen Nest. After the targeted reentry vehicle was located, the missile launcher tilted to the azimuth and angle to effect the intercept point calculated by the RSVPR. The three homing radar sites were situated in an equilateral triangle 150 kilometers apart. Together these radar systems picked up the location of the incoming Mk4 700 kilometers away.

Marshal Batitskic watched as the RTN system launched the V-1000. The onboard S2TA variant started tracking the reentry vehicle immediately after launch of the V-1000. The S2A model of the V-1000 used an onboard computer. It guided the V-1000 independently and also determined the detonation point for the 200 kilogram fragmentation warhead carrying 16,000 24 millimeter carbide-tungsten balls embedded in a TNT filling. Marshall Batitskic anxiously watched the radar screen as the two objects headed for the same point 100 kilometers above the

surface of Earth. At the point of impact, the sky lit up like it was high noon outside, and the electromagnetic pulse affected the entire city of Moscow.

### Turkey Launch Sites Cigli Air Base

The Marines with the USS *Enterprise* carrier group had landed about three miles from the launch sites, but before they could engage the sites, nearby Russian forces destroyed the sites with short-range mortars and other shoulder-launched projectiles. Captain Harris radioed for instructions. By the time he got his reply, the Soviet force consisting of fifteen soldiers per site had surrendered to the Turkish army that was taking them away in Turkish vehicles. Now the Soviets had POWs in Turkish prisons. The problem was short-lived. Lieutenant General Charles Paul de Cumont, Commander-in-Chief of NATO forces, ordered their release.

The Kennedy Administration blamed the Soviets, maintaining that the Soviet troops had invaded a NATO country and the missiles were prematurely launched because of the Soviets' action. The United States defused the situation through quick and decisive action on the part of Vice Admiral de Poix's plan, and the world owed a debt of gratitude to him. The incident simply faded into historical obscurity.

Kennedy was never able to link LeMay or Power to the decision to fire the Jupiter missiles. It was over.



President John F. Kennedy points to a reporter at a news conference, November 20, 1962. Credit: Abbie Rowe, National Park Service, courtesy John F. Kennedy Presidential Library and Museum, Boston), File# 110529-O-ZZ999-001; Source: U.S. Navy Photo: Public Domain



President John F. Kennedy and Soviet Chairman Nikita Khrushchev during their meeting in Vienna, Austria, on May 12, 1961 Credit: National Archives and Records Administration



October 25, 1961, US tanks move up to Checkpoint Charlie following a dispute with East Germany over American access to East Berlin. Checkpoint Charlie was the name the Western Allies gave the Berlin Wall crossing between East Berlin and West Berlin.

Credit: CIA
Photo: Public Domain, from the booklet "A
City Torn Apart: Building of the Berlin Wall."



U.S. Army tanks face off with Soviet tanks at Checkpoint Charlie, Berlin, Germany, October 1961.

#### ~ Thomas J. Yeggy ~



On October 13, 1961, East German masons work to heighten the wall between East and West Berlin.

Credit: CIA
Photo: Public Domain, from the booklet "A City Torn Apart: Building of the Berlin Wall"



Robert McNamara (1916–2009), U.S. Secretary of Defense from 1961–1968; supported Operation Chrome Dome, a mission where B-52 bombers armed with thermonuclear weapons remained on alert and flew to positions on the Soviet border. Credit: Library of Congress Photo: Public Domain



Air Force General Curtis LeMay (1906–1990) led the US airlift to Berlin. Credit: History Central Photo: Public Domain



First-generation Intercontinental Ballistic Missile (ICBM) was part of the SIOP-2 plan, which included the possible obliteration of the country of Albania because large Soviet air-defense radar was there.



Nuclear weapon test Bravo (yield 15 megatons) on Bikini Atoll. The test was part of Operation Castle. The Bravo was an experimental thermonuclear device surface event. The fireball was approximately 4.5 miles in diameter and created a crater over 6,500 feet in diameter and 250 feet deep.

Credit: National Nuclear Security Administration Photo: Public Domain



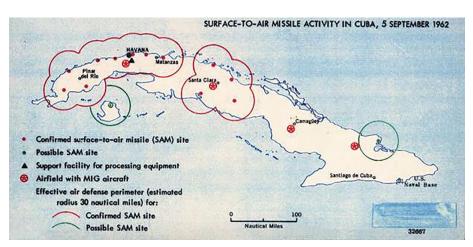
Robert F. Kennedy (1925-1968), United States Attorney General under Presidents Kennedy and Johnson.

Photographer: Warren K. Leffler Credit: Library of Congress Photo: Public Domain



USS George Washington, the first US Polaris ballistic missile submarine Credit: U.S. Navy

Photo: Public Domain



Map created by American intelligence showing Surface-to-Air Missile Activity in Cuba,

September 5, 1962 Photo: Public Domain Photo Credit: CIA



Cuban President Fidel Castro and Soviet Premier Nikita Khrushchev, 1961 Photo: Public Domain



A group of 800 women from Women Strike for Peace hold placards near the United Nations building relating to the Cuban Missile Crisis and peace.

peace. Photographer: Phil Stanziola Credit: Library of Congress



U.S. Executive Committee (ExComm) of the National Security Council meeting, White House, Cabinet Room, October 29, 1962. Clockwise from President Kennedy: President Kennedy, Secretary of Defense Robert S. McNamara; Deputy Secretary of Defense Roswell Gilpatric; Chairman of the of Defense Robert S. McNamara; Deputy Secretary of Defense Roswell Gilpatric; Chairman of the Joint Chiefs of Staff Gen. Maxwell Taylor; Assistant Secretary of Defense Paul Nitze; Deputy USIA Director Donald Wilson; Special Counsel Theodore Sorensen; Special Assistant McGeorge Bundy; Secretary of the Treasury Douglas Dillon; Attorney General Robert F. Kennedy; Vice President Lyndon B. Johnson (hidden); Ambassador Llewellyn Thompson; Arms Control and Disarmament Agency Director William C. Foster; CIA Director John McCone (hidden); Under Secretary of State George Ball; Secretary of State Dean Rusk

Credit: John F. Kennedy Presidential Library and Museum

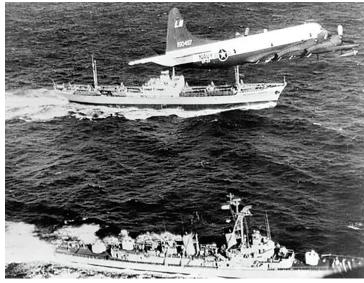
#### ~ Thomas J. Yeggy ~



President John F. Kennedy and Air Force Chief of Staff General Curtis LeMay discuss the Cuban Missile Crisis. LeMay told Kennedy that his refusal to invade Cuba would encourage the Soviets to move on Berlin. Photo: Public Domain



John McCone, Director of Central Intelligence from 1961-1965



A U.S. Navy Lockheed P-3A-20-LO Orion flies over the Soviet ship *Metallurg Anosov* and destroyer USS *Barry* during the Cuban Missile Crisis on October 11, 1962. Credit: U.S. Navy National Museum of Naval Aviation

Photo: Public Domain



Colonel Oleg Penkovskiy's military pass to the Ministry of Defense in Moscow, USSR. Penkovskiy provided the US and UK with valuable information about Soviet and Warsaw Pact military intentions. He was apprehended by the KGB in 1962, tried and found guilty of treason and espionage, and executed in 1963.

Credit: The booklet "CIA Analysis of the Warsaw Pact Forces: The Importance of Clandestine Reporting"



President John F. Kennedy in Dallas, Texas, November 22, 1963, minutes before he was assassinated. With him in the limousine are Jackie Kennedy, Texas Governor John Connally, and his wife, Nellie.

Photographer: Walt Cisco, *Dallas Morning News*Photo: Public Domain



Lee Harvey Oswald and two policemen after Oswald's arrest for the assassination of President John F. Kennedy on November 23, 1963.

Credit: U.S. National Archives and Records Administration Photo: Public Domain



The Soviet B-59 shortly after surfacing during the Cuban Missile Crisis. Vasili Arkhipov, the submarine's second in command, confirmed the near launch of a nuclear torpedo. Photo: Public Domain



Vasili Arkhipov averted a Soviet launch of a nuclear missile to counteract the US presence in Cuba, October 1962. Photo: Public Domain



Mary Pinchot Meyer at John F. Kennedy's 46th birthday party on the presidential yacht *Sequoia*, May 29, 1963. She became romantically involved with President Kennedy after her divorce from Central Intelligence Agency official Cord Meyer. Mary was murdered on the Chesapeake & Ohio Canal towpath in Washington, DC, on October 12, 1964.

Credit: John F. Kennedy Library Photo: Public Domain



In 1981, the USS *Ticonderoga* became the Unites States' first AEGIS-guided missile cruiser. New advances in Soviet missile technology could not keep up with the new defensive capabilities of the AEGIS, which gave the United States an important new advantage in the seas.

advantage in the seas. Credit: U.S. Navy Photo: Public Domain



(As of March 2022) (Red dots are silos; white lines are roads.) The People's Republic of China (PRC) has been producing nuclear weapons since the mid-1950s. In 1997, the PRC entered into the Comprehensive Test Ban Treaty. The number of nuclear weapons it currently has is unknown, but the Federation of American Scientists estimated around 350 warheads as of 2015. That would mean the PRC has the fourth largest nuclear arsenal among the five nuclear weapon states acknowledged by the Treaty on the Non-Proliferation of Nuclear Weapons.

Credit: National Geospatial-Intelligence Agency

Photo: Public Domain



Missile Defense Agency's Integration and Operations Center, Colorado Springs, Colorado, since 1988 for research and development, testing, and evaluation of Ballistic Missile Defense System Command, Control, Battle Management, and Communications.

Credit: U.S. Department of Defense, Missile Defense Agency



Designated fallout shelters were common during the Cold War era. Photo: Public Domain  $\,$ 



A family sits in an underground home bomb shelter in Garden City, New York, during the Cold War era.
Photo: Public Domain

# 31

## September 24, 1964 – 1617 Hours DOJ Conference Room Washington, DC

Attorney Forde didn't say a word to Caleb about the assassination during their session on September 24, 1964, until Caleb was at the door and ready to leave.

"Dr. Young, have you heard that the Warren Commission (WC) report was filed with President Johnson today?"

Caleb tried to look surprised and looked to make sure the recorder was off. He had anticipated the question. He had heard that the WC was finished and filed. Forde knew because Attorney General Nicholas Katzenbach had assigned Howard P. Willens as liaison from the Justice Department to the WC. Caleb decided to deflect the question.

"No, I hadn't heard," Caleb answered Forde. "Do you know what the finding was?"

"Yes," Forde said. "I've been told they concluded that Oswald was the assassin and that he acted alone."

Caleb was a little surprised that Forde wanted to discuss this issue. Forde was an Ivy League–trained attorney with more than a decade of experience in the Justice Department. Caleb questioned if Forde understood the serious nature of their relationship. Forde's department had offered immunity to a member of the CIA to inveigle him to disclose information that most at the Agency wanted to bury or forget for personal and professional reasons.

Caleb had long suspected that the Agency had a bug in the room and was listening to every minute of his conversation with Forde. Caleb had been careful not say anything that would get either one of them killed. He suddenly wondered if Forde was simple and naïve enough to believe that the DOJ and its personnel were off limits. Caleb concluded that he was.

"The report is probably 100 percent correct," Caleb said. "It should satisfy everyone who is seriously interested."

Forde looked like Caleb had just dropped his pants on the steps of the Lincoln Memorial. Caleb could see that Forde was preparing to make a remark, something that might get one or both of them "disappeared." He knew they needed another session on the stairs. Caleb rushed out the door before Forde could say anything else and waited for him in the stairwell. Caleb tuned his transistor radio to background static and unloaded on Forde as soon as he got to the stairs.

"Mr. Forde," Caleb said, "the Central Intelligence Agency doesn't look very kindly on the United States Department of Justice. No matter how untouchable you think you may be, I'm telling you the Agency is all about self-preservation. They think that without their "real-world" activities, the country would be in constant danger of subversion. I know you have a lovely wife and two small children. I am not threatening you; I am just trying to get to the end of this investigation without saying something anyone in the Diversity Plans and Programs Division of the CIA will get ulcers about. That division has been responsible for thousands if not hundreds of thousands of deaths not only in foreign countries but also here in the United States."

Forde turned ashen.

"I thought you knew that," Caleb said. "I thought you knew that Kennedy fired Allen Dulles after the Bay of Pigs. He just happened to be on the commission assigned to investigate the assassination. Don't you know that Kennedy wanted to splinter the CIA into a thousand pieces and scatter it into the winds after the Bay of Pigs debacle? Besides that, the military thought Kennedy was a feckless leader, someone who needed to be removed. The mob thinks Bobby double-crossed them. In addition, there are the anti-Castro and pro-Castro forces, and both wanted Kennedy dead for opposing reasons. Think about what I've just said, and if you want to talk somewhere off the record, I'll need a full day to brief you. Now I've got to go. Barnes is waiting for me."

"Who . . . who is Barnes?" Forde asked. His voice cracked a bit.

Forde was a man with little experience in the real world. He'd enjoyed a life of privilege, gone to prep school with others of his ilk, and assumed anyone who was someone attended Harvard. Educating

him about the inner workings of the Agency, an education he needed in order to save his life and those of his family, was going to take a while.

"Barnes is my tail," Caleb said. "From what I can see, Fitzgerald is on you. Have you not noticed?"

"I've got to go see Costello—now! He's the head of security at Justice."

Caleb immediately pushed Forde against the wall. Caleb wasn't a violent man, but years of battling on the basketball court had taught him when and how to be physical.

"Do it and we'll both be dead by morning," Caleb said. "Where do you think Costello worked before he came to the Justice Department?"

Caleb let go of Forde and hurried down the stairs. Even after he got to the bottom, Forde had still not moved.

### October 1, 1964 – 0900 Hours DOJ Conference Room Washington, DC

Forde was a different man when he met with Caleb again. He had the face of the guy at the weekly poker game who had bumped the bumper and wanted everyone at the table to believe him when he didn't believe it himself. He was clearly lost.

Forde had been questioning Caleb all morning when he passed Caleb a note that said he was going to create an excuse to leave so they could meet in the stairwell again—a little longer this time. Caleb nodded his consent.

About 1430 hours, Forde said they would take an hour break because he had another case to consider. Caleb said he would go for a soda and meet him back in the room at 1530 hours.

"Want one?" Caleb asked.

"No thanks," Forde answered

Both men left the room and ducked into the stairwell.

Caleb held his right index finger on his lips while he worked his magic with the transistor radio. Forde began talking quickly and nervously. He told Caleb that the night before, a 6 foot, slightly built white male in a dark blue suit had followed him out of the parking lot and tailed him in a 1961 green Chevrolet Biscayne until he was about a mile and a half from his house. Forde knew right away that it wasn't Desmond Fitzgerald because this man was well into his mid-50s.

"Don't know who it is," Caleb said, "but he's not very good. You wouldn't have spotted Desmond so easily."

Caleb's comment didn't soothe Forde at all. He gave Caleb the license number of the vehicle and indicated that he wanted the DOJ to contact the Virginia State Police.

"I want to know who's on the registration," Forde said.

"Don't do it," Caleb said. "Besides alerting everyone and his dog, all you'll get is a phony name and address. It might get the Agency to drop the tail . . ."

"Good," Forde said.

"You didn't let me finish," Caleb said. ". . . to drop the tail and take things to the next level."

"Not good, right?" Forde asked.

"Very, very not good," Caleb said.

Forde suddenly reverted to the role of grand inquisitor. "Dr. Young, I've been sending progress reports every month to the Deputy District Attorney in charge of special prosecutions. That office wants your head on a platter and intends to prosecute you for obstruction of justice unless you start giving me some information about the money that has been spent on all the special operations and who headed them for the last ten years."

"Well," Caleb said, "I'd rather be judged by twelve in an open courtroom than by your little cabal behind closed doors."

Forde's smile was weak. He continued. "Hoover is raising hell with Katzenbach. I'm sure Hoover wants to show how the CIA has done things American citizens would find morally reprehensible . . ."

Caleb interrupted. "Yeah, Hoover and McCone got into a big pissing match because Hoover thinks McCone dropped a dime on him to *The Post* and *The Times* about things the Bureau missed or intentionally withheld from the Commission—stuff the CIA sent to the FBI. It was all about Oswald, his time in Russia, his time in New

Orleans promoting the Fair Play for Cuba Committee (FPCC) and his Mexico City trip. McCone was trying to get in front of any potential fallout. The Agency wanted to be able to say, 'We told you guys about that loon, and you ignored us.' I reviewed the history of the CIA and the control the Executive Branch had exerted over clandestine and paramilitary operations run by the Agency since its inception. In truth, the American public had no stomach for the gritty details.

"Congressional oversight, to varying degrees, had been proposed from time to time when an errant newspaper article would slip by the stranglehold the Agency had over the news media, but the truth never came out in any oversight hearing. Money would be appropriated for X and used for Y, and so long as Z was accomplished, everyone was happy with the Agency. Many of the operations the Agency ran in the 1950s produced massive monetary windfalls. The money found its way into numbered foreign bank accounts."

Forde interrupted. "If Hoover can get there, he thinks Congress will be compelled to form an oversight committee with real teeth. He wants to restrict the Agency's unfettered discretion. Take the Bay of Pigs, for example. As you can imagine, any way Hoover can cut into the Agency's turf and increase the Bureau's is particularly important to him."

"Hoover has been trying to do that ever since he claimed he shot Dillinger," Caleb said. "The President has a lot of latitude as C-in-C. Where do you think the line is going to be drawn?"

Forde shook his head. "I still think the Agency's going to fare poorly in front of the Judiciary, especially if any of the details you provide me show that the Agency has flagrantly abused its grant of power to carry out intelligence gathering and then used it to engage in paramilitary guerilla actions, sabotage, and assassinations. The briefings I received before I was sent here go back as far as April 9th of 1948 when the Socialist candidate for president in Columbia, Jorge Eliecer Gaitan, was assassinated. The streets of Bogota exploded in what was called 'El Bogotazo.' Hoover and the Justice Department think this was the first of many of the CIA's assassinations of foreign leaders."

Caleb's expression didn't change, but he remembered the incident and the subsequent cover-up. As far as he knew, the CIA didn't pull the trigger but found someone who would for \$5,000. Rumors about Agency involvement had persisted. So Edward James Devitt, a freshman congressman from Minnesota, introduced an oversight bill. Congressman Devitt didn't get anywhere. Rather than contemplate drastic action against him, the Agency simply made sure he lost his next election. Eisenhower later tossed him a Federal District Court judgeship to keep him quiet.

Ford was still talking in a loud whisper. "The legislative history of the National Security Act of 1947 doesn't amount to much, but what is there is definitive. Congress was well aware of the carnage unleashed on other countries by the OSS during wartime. Hoyt Vandenberg, Director of the interim Central Intelligence Group, assured everyone that the CIA would not have any security functions in the United States and would therefore not become like the Gestapo in Nazi Germany. The language of the statute itself indicated that the National Security Council could determine other functions and duties 'related to intelligence' affecting national security and that the CIA could perform for the purpose of coordinating intelligence among the various government departments and agencies. It's hard to get from legitimate intelligence gathering to organizing insurgencies or overthrowing democratically elected governments even if they are socialist."

This guy is a babe in the woods, Caleb thought. He is totally clueless.

"I don't know," Caleb said. "But maybe the Agency can get to paramilitary actions through the 1949 amendment to the National Security Act. It gave the CIA Director additional discretion, took away any limits on intelligence spending, and gave the Director the discretion to spend federal funds for 'objects of a confidential, extraordinary, or emergency nature."

Forde apparently didn't know that the budget for the CIA was normally buried in the Defense Department's budget and that the Agency was never itemized. After the 1949 amendment, the CIA basically only had to answer to the President. When Forde continued his arguments for congressional oversight—all very reasoned and rational—Caleb resisted rolling his eyes.

"Article I Section 8 of the Constitution," Forde continued, "contains the 'necessary and proper' clause. Courts have interpreted it to allow

Congress to require reports from the Executive Branch on practically anything that can be legislated. In addition, Congress has the so-called power of the purse. Congress could simply refuse to fund anything related to intelligence activities or, more likely, hold closed hearings and exercise more rigorous oversight than the informal CIA Intelligence Subcommittees of the Armed Services Appropriations Committees of either house of Congress."

Forde would have made a great professor. He could have incessantly pontificated from his ivory tower about theoretical tenets totally unrelated to the real world. But he did not know his legislative history.

"In early 1954," Forde went on, "Senator Mansfield continued to beat the drum to rein in the CIA's activities, directly affecting foreign policy. Then-Senator Kennedy even voted for his bill when it got to the floor of the Senate, but it was soundly defeated by an almost two-to-one vote. The attitude of the American public was described well by Senator Leverett Saltonstall in 1956 when the Senate Armed Forces Committee member said something like, 'We should be careful about what we ask the CIA about because as a member of Congress and as a citizen, you could come into information and knowledge you would rather not have.'"

Forde paused and turned his gaze toward Caleb in a deeply reflective manner. "I don't think Katzenbach realizes the consequences of his and Hoover's inquest because he is blinded by his political ambitions. Exposing how the CIA is protecting us will undoubtedly show they have made huge mistakes that have left tens of thousands of people victims of their war on communism. I'm not sure any of the American people understand the difference between East Berlin and West Berlin or, for that matter, East Germany and West Germany. They do not understand the price of freedom because they have not been victimized by people like Hitler, Stalin, or other despots."

Although Caleb didn't tell Forde that he had this setup figured out from day one of their weekly sessions, he did ask him a question concerning where he thought the issue on separation of powers would ultimately end up. Forde responded as Caleb thought he would, that it would probably result in at least limited oversight by either a specially appointed judicial panel from the District of Columbia District Court of Appeals or an administrative agency that reported to the Judiciary.

Caleb provided Forde with more food for thought. "The Agency will stop at nothing to keep from having a more active oversight committee because, right or wrong, people like Wisner and Lansdale are convinced that the Agency is the only thing standing between the American people and an insidious onslaught of communist dictators. Communism sounds good to those who have nothing and have been victimized by a brutal, unchecked, capitalist system like the United States experienced during the Industrial Revolution, but it runs contrary to human nature. In my jaded experience, I have found that super-ego altruism is a rare quality compared to the greed compelled by the id. People obey the law because of the policeman on the corner and for no other reason. Conrad wasn't far from the truth. The Agency was an imperfect world policeman but a necessary one."

"What do you mean the Agency will stop at nothing?" Forde demanded quickly.

"I will give you everything you need in written form regarding several of the Agency's covert actions. It will be insurance."

Forde didn't ask Caleb what he meant by insurance. His bloodless face told Caleb that he understood. Once Caleb gave him the details, he knew he would have to run. The only other alternative was continuing the sessions, but each one brought Forde and his family closer to danger. Caleb had already left out many details that would have been grounds for the American people and Congress to demand more vigorous oversight of the CIA. He knew that at some point Congress and the American people would have to face the truth and deal with it. The Russian leaders were ruthless and savage. They would do anything to roll over opposition.

Caleb knew the CIA was a necessary evil to keep the world civilized, sometimes by means objectionable to democratic standards. And most of all Caleb knew he was a threat to their influence and power. Maybe LeMay was right after all, Caleb thought. Maybe we needed to deal with the commies. Yes, "We lost!" But it wasn't Kennedy's fault. During Cuba, he had no way of knowing how unprepared and vulnerable the Russians were.

A long silence was Caleb's cue to turn off his transistor radio and head back into the conference room to finish the session. But first, he told Forde one last thing. "On Sunday at 0800 hours, go to Union Station. Come in the main entrance, and wander around until 0900 hours. At that time, I will make contact with you if you aren't being followed. Wear comfortable shoes."

# 32

## Sunday, October 4, 1964 – 0800 Hours 50 Massachusetts Ave. NE Washington, DC

Forde entered the main entrance of Union Station at exactly 0800 hours and wandered around for an hour. Caleb watched him at a safe distance. When Caleb was sure Forde was not being tailed, he walked past him at exactly 0900 hours. Forde followed him at a comfortable distance. The two men continued walking for nearly 3 miles until they reached the Lincoln Memorial. Forde arrived a few minutes after Caleb. For the next four hours they talked. Caleb began the conversation by telling Forde about his history with the Agency.

Caleb quickly summarized key events.

- . . . Truman's vision with George Kennan
- . . . the concern over Soviet espionage
- . . . the transition to an anti-communist arm of the government
- . . . Dulles
- . . . and everything in between

"The Agency as it now exists is well beyond what the American people believe it is," Caleb said. "While it performs an intelligence-gathering function, it also harvests information on countries that most people believe are friendly to the United States and American interests. That includes all our NATO allies and numerous other countries throughout the world. In addition to direct funding, the Agency has numerous other sources of revenue, including several hundred million dollars it siphoned from the Marshall Plan. Eisenhower funneled \$30 million into the Agency to develop the U-2."

"Isn't the Agency supposed to be a policy tool as well as an intelligence-gathering organization?" Forde asked.

"Yes," Caleb said. "The official policy embraced by the Truman Administration's policy toward the Soviet Union was one of containment

as opposed to rolling back countries swallowed up at the Potsdam and Yalta Conferences by the Russians. George Kennan, our Ambassador to the Soviet Union from December '51 to September '52 was the chief proponent of this policy. To implement containment, the Agency created the Office of Special Projects in 1948. Frank Wisner became the head. He was a former intelligence officer for the OSS who spied on the Romanian government and discovered the Soviets' intention to take over all of Eastern Europe. By 1949, the Office of Special Projects became part of the Office of Policy Coordination, still headed by Frank Wisner. As the new head of this branch of the CIA, Wisner was told to create an organization that concentrated on propaganda, economic warfare, and preventive direct action, including sabotage, anti-sabotage, demolition, and evacuation measures. He was also to direct subversion against hostile states, including assistance to underground resistance groups and support for indigenous anti-communist elements in threatened countries of the free world."79

"A little conflict of interests there?" Forde's voice was humorless.

"A little," Caleb said. "I'm not sure of everything out of Wisner's camp, but one of the more memorable was Operation Bloodstone. Wisner recruited individuals from the Nazi Party and gave them safe passage to the United States and South America in exchange for their information on the Soviet Union. Although Operation Bloodstone was originally a State Department project, it was approved by an organization called the State-Army-Navy-Air Force Coordinating Committee, or the SANACC. The three main Nazi war criminals I can remember were Klaus Barbie, Gustav Hilger, and Stanislaw Stankevich. It's safe to say those three plus many others Wisner protected were guilty of war crimes. I have given you a complete list along with all the other information Katzenbach wants in a safety deposit box that belongs to this key."

Forde saw no key but assumed it was in the clutches of Caleb's right hand that was moving in a gesture to shake Forde's hand. The men shook hands, and Forde grasped the key. He acted like he was cuddling a cobra.

"Deliver the key to someone you trust, someone with no obvious connection to you," Caleb instructed. "It may be the only thing that keeps you alive. After I am gone, let the Agency know that Katzenbach will get all the information if anything happens to you or your family. I've got a lot more things to tell you, but I have to get right back to Wisner. But before I do, I'm going to give you a very brief rundown of all the failed oversight efforts."

Forde felt sick, like he might lose whatever he had eaten for breakfast, but he hung on.

Caleb began. "In June 1948, NSC 10/2 gave the Agency permission to conduct covert actions as well as psychological, propaganda, and economic warfare. All the operations were to have built-in, plausible deniability. The concept was to remain a requirement for all subsequent Agency actions. On April 4, 1951, Truman, by executive order, created the Psychological Strategy Board, the PSB, an interagency directorate in charge of propaganda. It was headed by the Secretary of State, Deputy Secretary of Defense, and the Director of the Central Intelligence Agency. On October 23, 1951, NSC 10/5 gave the CIA the authority to conduct guerrilla warfare activities under the auspices of the PSB, which became a rubber stamp, exercising little oversight. Starting in January 1953, Eisenhower and Allen Dulles did whatever they wanted in terms of meddling in other countries' affairs. The Eisenhower Administration did some papering over by having the NSC approve NSC 5412/2 on December 28, 1955. It gave oversight of Agency covert operations to the Secretary of State and the Secretary of Defense. The idea was for any such operations to be consistent with foreign policy. The NSC directive was, according to Attorney General Herbert Brownell, authorized by the National Security Act of 1947. To understand the scope of the operations, you need to know who Frank Wisner was."

"Not sure I want to," Forde said.

Caleb ignored his weak protest. "Wisner moved to Washington in 1948 to work for the State Department before transferring to the CIA. He was a charter member of a powerful group of journalists, politicians, and government officials known as the Georgetown Set. Just off the top of my head, this list included Kennedy when he was a senator, George Kennan, Richard Bissell, Desmond Fitzgerald, Joseph Alsop, Stewart Alsop, Tracy Barnes, Thomas Braden, Philip and Kay Graham, David Bruce, Walt Rostow, Eugene Rostow, Allen Dulles,

John McCloy, Paul Nitze, Chip Bohlen, Cord Meyer, John Cooper, and James Angleton. There are a few others on the written list. The group wielded unimaginable influence on United States foreign and domestic policy from the early 1950s, and even now they are very influential. I'm sure you recognized three of the names—McCloy, Dulles, and Cooper—all members of the Warren Commission. So they are still a force to be reckoned with. Back to Wisner."

"Oh God," was all Forde could say.

Caleb ignored him and went on. "In August 1952, Policy Coordination and Special Operations became the Directorate of Plans. General Walter Bedell Smith, the CIA Director, named Wisner to head the operation, which accounts for about 75 percent of the Agency's budget. With the possible exception of Kennan, these men were fiercely anti-communist and believed it should be combated by any and all means. They wanted it erased from the face of the planet.

"During 1952 and 1953, the Agency was busy in the Middle East. Wisner convinced Dulles to fund an operation called Ajax. It sought to overthrow the democratically elected government of Iran by taking down Mohammad Mosaddegh. The British had been stealing Iranian oil for several years through bribes and assassinations carried out by MI6. But in late 1951, the popular-elected Mosaddegh and the Iranian Parliament voted to nationalize the oil fields because the British Anglo-Iranian Oil Company would not give Iran an accounting. Long story short, MI6 through Operation Boot in conjunction with Operation Ajax bribed enough of the locals to take down Mosaddegh and install the religious leader, the Shah Mohammad Reza Pahlavi, on August 19, 1953. This action had the added benefit of marginalizing the communist Tudeh Party. Churchill had basically said that unless the United States went along with the scheme, the British would withdraw their support of US forces in Korea."

"Mother of God!" Forde gasped. "But I guess neither God nor his mother had anything to do with it."

"More likely his hellish counterpart," Caleb jibed. "Apparently, a light bulb went off in Eisenhower's head. Driving out the communists through regime change engineered by sabotage, assassinations, insurgency, and bribery was much easier than a prolonged military

action. The CIA head carried out other less infamous but certainly more heinous activities in the Pacific and Southeast Asia prior to the more notorious operation in Iran. The next prime actor—Edward Lansdale."

"Is all this going to be on the test?" Forde asked. It was a weak attempt at humor, but he was trying to lighten the mood.

"Only if you want to stay alive," Caleb said. "General Lansdale is someone you must watch very carefully if you want to live to see your grandchildren. Shortly after the end of World War II, Lansdale participated in torture, assassinations, and executions in the Philippines. From what I hear, a CIA agent named Paul Helliwell and Lansdale pilfered enough gold bullion from the Philippines between 1945 and 1947 to open 176 bank accounts in forty-two countries. The money was subsequently used to fund anti-communist CIA actions throughout the world for the next decade.

"In 1948, Lansdale became a lecturer at the Strategic Intelligence School in Colorado. In 1950, he was dispatched by the CIA to assist Elpidio Quirino, President of the Philippines, in putting down Hukbalahap, a communist guerilla movement. It sought land reform for rural peasants. He became the resident expert for the CIA on Southeast Asia but got run over when he butted heads with Maxwell Taylor over policy in Vietnam a few years before. Lansdale knew Southeast Asia was a rat hole and couldn't be dealt with by covert or overt military involvement. Taylor overruled him even though Lansdale had spent more time on the ground in South Vietnam than anyone else in the government. Lansdale based his advice on what he knew about Mao Zedong and his victory in China. He is highly intelligent, ruthless, and deadly. He is still very much in play and influential in the CIA."

Forde and Caleb took a break to wander around the Lincoln Memorial in separate directions and check for surveillance. When they were satisfied of their privacy, they reconvened.

"The next CIA action I know much about was called Operation PBSuccess," Caleb explained. "It involved deposing the democratically elected government of Jacobo Arbenz Guzman in Guatemala. Similar to what had happened in Iran, the local Guatemalan government voted to nationalize 40 percent of a foreign corporation's property, which happened to be a well-connected US company called the United Fruit

Company, or UFC. John Foster Dulles, the United States Secretary of State who was also a member of the Sullivan & Cromwell law firm, had represented UFC in past corporate matters and lobbied for action with Eisenhower in Guatemala. John's brother, Allen Dulles, the Director of the CIA, was a board member for UFC. John Cabot, a former president of UFC, was the brother of the assistant Secretary of State for Inter-American Affairs."<sup>80</sup>

"How crooked is this snake?" Forde asked.

"It's as bad as you can imagine," Caleb said. "In Guatemala, the democratically elected Parliament also voted to increase substandard wages. The UFC not only owned a great portion of the productive land in Guatemala but had also built up the infrastructure, including the railroad system. In August 1953, Eisenhower authorized nearly \$3 million to accomplish the overthrow of President Jacobo Arbenz Guzman. On June 27, 1954, Guzman resigned because the United States had intimidated the commanders of the Guatemalan forces with the threat of a US invasion. We bribed the ones we could not scare. All the records the CIA had on the invasion and attendant assassinations were destroyed.

"Frank Wisner headed the operation at the CIA. The field commander was former U.S. Army Colonel Albert Haney. Richard Bissell, a new member of the Georgetown Set, was Director Dulles' in-house leader. The puppet the CIA placed in charge of Guatemala, Carlos Castillo Armas, who had led the invasion force of 480 dissidents, took his cue from Allen Dulles, repealed the constitution of 1945, and then jailed and executed tens of thousands of alleged communists." 81

Caleb reached down and took two Cokes from his satchel that was on the memorial's marble floor. He handed one to Forde.

"Got any rum to go with this?" Forde asked. He was disappointed when Caleb shook his head. He leaned over closer to Caleb and circled his index finger in the air. It was an indication to go on with the horror story.

Caleb didn't hesitate. "In early July of '54, the CIA put on a dogand-pony show, complete with slides, for the benefit of the Cabinet and the Joint Chiefs of Staff. When it ended, Eisenhower turned to Allen Dulles and remarked, 'Thanks, Alan, and thanks to all of you. You have averted a Soviet beachhead in our hemisphere.' Upon learning that a Soviet sub might be lurking in the area to pick up some of Guzman's loyalists, Eisenhower turned to Admiral Robert Carney, Chief of Naval Operations, and instructed, 'Watch that sub, Admiral. If it gets near the coast of Guatemala, we'll sink the son of a bitch.'"

Forde only said, "Hmm."

"Oh, and let's not forget about Ike's most questionable order when he eliminated left-leaning Patrice Lumumba, the democratically elected president of the Republic of the Congo, just before Ike left office. I talked with Justin O'Donnell, and he is pretty sure Larry Devlin, another agent, played a key part in that one. Ironically, Lumumba then asked the United States for help and got a bullet in return when he tried to shake Belgian colonial rule.

"Oh, and as long as we are on Eisenhower, let's discuss the Pentagon's and the Atomic Energy Commission's rendition of *They Were Expendable*—Operation Desert Rock."

Forde slid a little closer to Caleb's left as if to hide his presence from onlookers and provide a hint for Caleb to lower his voice.

"Operation Desert Rock," Caleb went on, "involved testing about 20,000 US troops over eight years in the Nevada desert to see how they would react to combat on a nuclear battlefield. Some of them got within 3,500 yards of designated ground zero."

"Never heard of that. Why would anyone agree to expose themselves to that amount of radiation? What was the result?"

"Well, so far just leukemia and thyroid cancer, but if they received as much radiation as the 'survivors' at Hiroshima and Nagasaki, I'm sure we can expect lung, pancreatic, and prostate cancer, as well as negative genetic effects to follow."

Forde grimaced. "Our own troops . . . what the . . . that isn't funny." "Not meant to be."

Forde stopped Caleb and asked a few questions. Then Caleb wanted to know if Forde was still on board with the plan—Caleb's plan to give Forde this information and then carry out his getaway sometime just

after the Christmas holiday. Forde assured Caleb that he was on board, so Caleb continued.

Caleb told Forde he was only aware of fifteen major covert actions conducted by the CIA under Eisenhower and Kennedy but was sure there were more. Forde seemed anxious for Caleb to finish this oral history of the Guatemala CIA operations. Caleb had a good idea of what Forde wanted to talk about next—the Warren Commission Report. But Caleb put it off because first Forde needed to know about some other CIA activities. Caleb decided it was time to tell him about Operation Mockingbird.

#### Sunday, October 4, 1964

Caleb waited for a group of DC tourists to gawk at the immense statue of Abraham Lincoln and be on their way before he picked up his narrative.

"Joseph McCarthy, the relatively unknown junior senator from Wisconsin, claimed to have FBI evidence about members of the Georgetown Set. They had been members of left-leaning organizations in the 1930s and were currently working for CIA employees. J. Edgar was jealous of Wisner's power and had dubbed several members of the Georgetown Set as 'Wisner's Weirdos.' When McCarthy tried to make political hay out of Hoover's evidence, he was eventually destroyed in the press."

Forde broke in. "So you're telling me that senators and the FBI director were no match for the Georgetown Set?"

"Not even close," Caleb replied. "Let me tell you how the Georgetown Set worked and why I never went back to any of their functions after Director Dulles invited me to Joseph Alsop's residence one Sunday evening in 1960. Members of the Georgetown Set, the GS as it was called, and their wives would meet at a home on Sunday evenings for dinner and drinks. I would hazard to say that more policy was made in Joseph Alsop's antler room than in the halls of Congress."

"How so?" Forde asked.

"Control of the press through Operation Mockingbird," Caleb replied.

Caleb could tell Forde was beginning to grasp the full power of the GS and its connection with the CIA.

"Ben Bradlee of *Newsweek*; James Reston and Arthur Hays Sulzburger of *The New York Times*; Charles Douglas Jackson of *Time* magazine; Walter Pincus, Alfred Friendly, and Katharine Graham of *The Washington Post*; Walter C. Baggs from *The Miami News*—the list is

virtually endless. William Paley, Henry Luce, Jerry O'Leary, Stewart Alsop, Edgar Ansel Mowrer, maybe even Walter Lippmann.

"Mockingbird started with Frank Wisner and Philip Graham in approximately 1950. They turned it over to Cord Meyer when he was recruited to the CIA. Dulles, Bissell, and Tracy Barnes all took part in the management of this informal operation from 1953 to 1963. Mockingbird helped bring McCarthy down when he emerged as a threat to the Agency's power. He had already bungled the business about the Army's being soft on communism. When old drunk Joe saw his witch hunt wasn't going well, he tried to sandbag the Army's attorney, Joseph Welch. He said a member of Welch's firm was a communist sympathizer. Why Welch didn't throttle McCarthy on the spot is beyond me. Instead, he kept his calm and said, 'Until this moment, Senator, I think I never really gauged your cruelty or your recklessness. Have you no sense of decency?'

"The gallery, which was full of reporters and TV cameramen, rose to applaud Welch's reply. Later that year, the Senate voted 67 to 22 to censure Senator McCarthy. He died of alcoholism about three years later. Trust me, the CIA and the GS had more to do with McCarthy's plummet than the bottle."

Forde didn't say anything. Caleb didn't think he could.

"I'm not going to go on forever today about covert CIA actions," Caleb said, "but you should familiarize yourself with the written material on Operation Northwoods. Then-Colonel, now-General Edward Lansdale requested the Joint Chiefs of Staff to augment Operation Mongoose. The document that proposed to implement Operation Northwoods was captioned 'Justification for U.S. military intervention in Cuba.' Operation Northwoods proposed staging the assassination of Cubans living in the United States to develop a fake communist Cuban terror campaign in the Miami area. Part of the operation was sinking a boatload of Cuban refugees, faking a Cuban Air Force attack on a civilian jetliner, and concocting a Remember the *Maine* incident by blowing up a US ship in Cuban waters and then blaming the incident on Cuban saboteurs.<sup>83</sup> Of course, there were other plots by the CIA in Operation Mongoose that involved contracts with the mob to kill Castro. Oh, and by the way, President Kennedy and

his little brother Bobby had appointed Edward Lansdale to head Mongoose."

Caleb paused and took a much-needed breath. Forde took the opportunity to ask Caleb's take on the Warren Commission Report. Caleb hadn't seen more than a few of the 3,000 exhibits, but he had read the entire report. His study was enough to convince him that the Warren Commission was nothing but a guess at best and probably a deliberate attempt by Johnson to calm international nerves with no regard for the truth.

Caleb continued. "Let's see if we can conclude why Johnson set up the Warren Commission in the first place. Hardly anybody on the Commission wanted to be there, and for the most part they weren't. Approximately 550 witnesses testified, but most of the time, no more than two of the members of the Commission were present. It was the ultimate part-time job. Senator Russell outright refused to serve until Johnson told him, 'I can't arrest you and I'm not going to put the FBI on you, but you're goddamned going to serve, I'll tell you that.'

"Earl Warren told Johnson he wouldn't let the work interfere with his day job at the Supreme Court. The Chief Justice had refused to take the job even after Robert Kennedy and Archibald Cox asked him to. He only agreed to take it after Johnson called him to the White House and told him about the CIA reports from Mexico City that made it look like Khrushchev and Castro killed Kennedy. Johnson had Warren in tears with the fear of 40 million dead Americans before he agreed to serve. Johnson convinced most of the other Warren Commission members to serve by going through the CIA reports on Oswald's activities in Mexico City during late September 1963 and early October that same year."

"Seems compelling," Forde said.

"According to the CIA's reports on September 27, 1963, a man identifying himself as Oswald visited the Cuban Consul in Mexico City to get a transit visa for safe passage to Cuba and then on to the Soviet Union. Silvia Duran, a consulate employee, reviewed Oswald's passport, his correspondence with the American Communist Party, his membership card for the Fair Play for Cuba Committee, a newspaper clipping about his activities in New Orleans, and a photograph of Oswald

in custody in New Orleans. She told him he would need a passport photo. He returned in an hour. Vice Consul Oleg Nechiperenko told Oswald to go to the Soviet Embassy to obtain further required paperwork. Over the next few days, Oswald went back and forth between the Cuban Consulate and the Soviet Embassy approximately six times and placed a couple recorded phone calls to the Soviet Embassy."85

Forde was intrigued.

"Oswald was captured on videotape, and his phone calls were recorded all as part of CIA Operation LIERODE. During one of his recorded calls, Oswald referred to a previous meeting with Valerity Kostikov. On October 10, 1963, the CIA issued a teletype to the FBI and the State Department. It included a picture of Oswald."

"Sounds about right," Forde said.

"Except it looked nothing like him," Caleb said. "An agent in Hoover's office immediately recognized the name Valery Kostikov as a member of the KGB Department 13, specializing in sabotage and assassinations. Things only got murkier from there. Special Agents of the FBI who had conversed with Oswald and observed photographs of him did not believe any of the identifiers were him. Hoover sent special agent Larry Keenan to Mexico City to meet with Winston Scott, head of the CIA in Mexico City, to investigate a claim by Gilberto Alvarado, a Nicaraguan. Alvarado said Oswald had received \$7,000 to kill Kennedy. The events surrounding the assassination of Kennedy were rapidly spinning out of control. Hoover called Johnson and gave him the skinny—the seven grand, the mismatched identification, the trips to and from, everything." 86

"And nothing happened?"

"Exactly Jack Squat," Caleb said. "Johnson was more interested in who might be behind the impersonation than anything else. If it was the CIA, what were they doing? No one knew for sure."

"So Johnson hit the emergency brakes?" Forde asked.

"Exactly," Caleb said. "The Russians were promoting a right-wing scenario where the bigots in the South killed Kennedy because of his civil rights agenda. The liberal Northern contingent of conspiracy ideologues thought Oswald was being scapegoated because of his socialist ideology. The verbal evidence Johnson received indicated there

was a distinct possibility that Oswald was being encouraged by the KGB and Castro sympathizers, if not Castro himself. Attorney General Robert Kennedy was depressed because he thought his get-Castro-at-any-price idea had caused the assassination. So Johnson's pitch to the Warren Commission members was this: 'Get us the hell out of this as fast as you can without blaming anyone with whom we might decide to start a nuclear war that can kill 40 million Americans in an hour.'"

Caleb stopped. Forde stared at him.

"So you're saying the Warren Commission is horseshit—a snow job?" Forde asked.

"No," Caleb replied, "but I think the Commission—with seven lawyers—decided to act like prosecutors instead of investigators. They decided their job was to indict and convict Oswald, and they did just that. As you know, it's up to the defense team to cloud the eyes of the jury—in this case, the American people—with alternative and plausible theories of the crime. Prosecutors do not make cases for the defense. The Warren Commission ignored inconvenient facts, inconvenient witness testimony, and inconvenient judicial principles of the presumption of innocence because the defendant had already been executed."

Caleb handed Forde a piece of paper. "Here's a memo from Katzenbach to Moyers."

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November 25, 1963 Memorandum for Mr. Moyers

It is important that all of the facts surrounding President Kennedy's Assassination be made public in a way which will satisfy people in the United States and abroad that all the facts have been told and that a

1. The public must be satisfied that Oswald was the assassin; that he did not have confederates who are still at large; and that the evidence was such that he would have been convicted at trial.

statement to this effect be made now.

#### ~ Thomas J. Yeggy ~

- 2. Speculation about Oswald's motivation ought to be cut off, and we should have some basis for rebutting thought that this was a Communist conspiracy or (as the Iron Curtain press is saying) a right-wing conspiracy to blame it on the Communists. Unfortunately, the facts on Oswald seem about too pat - too obvious (Marxist, Cuba, Russian wife, etc.). The Dallas police have put out statements on the Communist conspiracy theory, and it was they who were in charge when he was shot and thus silenced.
- 3. The matter has been handled thus far with neither dignity nor conviction. Facts have been mixed with rumour and speculation. We can scarcely let the world see us totally in the image of the Dallas police when our President is murdered.

I think this objective may be satisfied by making public as soon as possible a complete and thorough FBI report on Oswald and the assassination. This may run into the difficulty of pointing to inconsistencies between this report and statements by Dallas police officials. But the reputation of the Bureau is such that it may do the whole job

The only other step would be the appointment of a Presidential Commission of unimpeachable personnel to review and examine the evidence and announce its conclusions. This has both advantages and disadvantages. It [sic] think it can await publication of the FBI report and public reaction to it here and abroad.

I think, however, that a statement that all the facts will be made public property in an orderly and responsible way should be made now. We need something to head off public speculation or Congressional hearings of the wrong sort.

Nicholas deB. Katzenbach Deputy Attorney General<sup>87</sup>

For a moment Forde reminded Caleb of the little kid who confronted Shoeless Joe Jackson who was accused of throwing the 1919 World Series. "Say it ain't so, Joe! Say it ain't so!"

"This is pretty damning," Forde said.

"The Agency caught Hoover on tape with Johnson trying to play down the Cuban and Mexican connections," Caleb continued. "It was all part of the WC whitewash. He said something like this: 'This angle in Mexico is giving us a great deal of trouble because the story there is of this man Oswald getting \$7,000 from the Cuban Embassy and then coming back to this country with it. We're not able to prove that fact, but the information was that he was there on the 18th of September in Mexico and can prove conclusively that he was in New Orleans then. Now they've changed the date to the 28th. The Mexican police have again arrested this woman Duran, who is a member of the Cuban delegation, and we're going to confront her with the original informant who saw the money pass, so he says, and we're also going to put the lie detector test on him.'"88

"So the Agency is surveiling the President and the FBI director," Forde said. "Where's the limit?

"I am just giving you the facts you will need," Caleb said.

"Dr. Young, was the Agency complicit in the Mexican-Cuban involvement?"

"I'll get to that in a moment, but first let's look at Johnson's motives," Caleb said.

"Okay."

"Let's say Johnson was convinced that the CIA had killed Kennedy, which is entirely possible. Do you think he wants to lose one of his top weapons against the spread of communism right in the middle of the Cold War? I can go on and give you good motives for at least five other individuals, countries, or organizations that were like organized crime. I never quite followed Allen Dulles' and Richard Bissell's logic of thinking that because the mob was good at whacking people here in the United States, they could kill Castro. Nevertheless, Robert Maheu, who worked in counterespionage activities at the CIA, made an offer of

\$150,000 to hit Castro. The list of people in the mob that Maheu talked to included Johnny Roselli, Sam Giancana, Carlos Marcello, Santo Trafficante, and Meyer Lansky. Hoover thought RFK, Bissell, and Dulles had taken leave of their senses. Mob leaders became convinced that taking down Castro would not give them back their Cuban operations, so they lost interest but continued to play the CIA for as long as they could. To their credit, they refused the one-fifty large."89

Forde laughed. "One-fifty large?"

"I watch a lot of old gangster movies," Caleb said. "Let's consider the facts the Warren Commission chose to ignore and put those back in our calculus. There were a lot of people who had reasons to want Jack Kennedy dead."

Caleb had to stop for a minute. His clinical approach had dissolved, and he felt a lump in his throat. He tried to play it off with a cough, but Forde didn't buy it.

"It's okay," Forde said. "It's okay, Caleb. It's a terrible thing." Forde had never called him Caleb before.

#### Sunday, October 4, 1964 Lincoln Memorial

Castro crowd—the ones left withering on a beach somewhere—hated the President and thought he had abandoned them.

"The Agency ruled out the Russian PDQ because COMINT indicated they were pretty shaken when we flooded the skies with hundreds of B-52s, put missile crews on alert, and dispatched ten Polaris submarines the second Johnson could get to a secure phone. To his credit, Khrushchev knew he was severely outgunned and told all his forces to stand down. He didn't want to give eager beavers like LeMay an excuse to start pushing buttons. The U.S. Ambassador to Moscow, Foy Kohler, cabled Washington on Saturday and stated that unwanted political repercussions may develop if undue emphasis is placed on the alleged Marxism of Oswald. I remember exactly what Kohler said. 'I would hope, if facts permit, we could deal with the assassin as a madman rather than dwell on his professed political convictions.'" 90

"So the Russians' out-for-blood theory doesn't wash?" Forde asked.

"Well, they had their reasons," Caleb said. "They viewed Kennedy's military buildup as madness. When you add Soviet defector Yuri Nosenko to the fire, it's conceivable that the KGB may have had a hand in Kennedy's assassination without Khrushchev's knowledge."

"Yuri? Who?"

"Yuri Nosenko was the highest-ranking KGB defector the West had ever acquired. He came over in early 1964, claiming he was the case manager for Lee Harvey Oswald. He said after the KGB interviewed Oswald, they dumped him because he was unstable. Remember, Oswald was stationed at a U-2 base in Japan and had access to various types of

electronic intercepts. He was married to a Russian, the niece of a Soviet Army intelligence officer."

"And the one KGB agent of several thousand who ends up on our doorstep just happens to be Oswald's case manager," Forde said.

"Now you're catching on," Caleb said. "We found ourselves on the horns of a dilemma. Should we believe what the defector is telling us, or should we figure he is a plant and disregard his information?"

"Where is Nosenko now?" Forde asked.

"In some shoebox-of-a-prison somewhere you wouldn't even send your mother-in-law to," Caleb said.

Caleb thought he saw Forde shiver a little.

"Nosenko claimed the KGB played no part in Kennedy's assassination," Caleb said, "but the man has never given the Agency anything but fluff. Anatoliy Golitsyn, a credible defector, judges Nosenko to be a plant. So there's enough credible evidence to sort of, kind of, almost, maybe hold the Russian accountable."

"That's a lot of conditions," Forde said.

Caleb shrugged. "I was trained in *theoretical* physics, remember?" It was a silly comment, but it broke the tension for a moment.

"If we crawl down that rabbit hole, we get to December 1963," Caleb said. "We have a massive Kennedy-initiated inventory of stuff—705 B-52 intercontinental bombers each carrying two 20 megaton bombs, 708 B-47 bombers, 597 ICBMs, and ten Polaris submarines carrying 160 ballistic missiles with a range of 1,500 to 2,000 miles. We have fallout shelter planning and all sorts of things that point to a massive push to eradicate the commies. The timing was correct for KGB involvement, and KGB agents could have even known Oswald's plan and arranged for the shot from the grassy knoll as backup."

Caleb waited to see if Forde had questions. But Forde looked like a kid watching a Saturday morning shoot-em-up—enthralled and a little frightened.

Caleb looked away from Forde and went on. "Through Kim Philby, the British traitor, the Russians knew General Thomas Hickey had presented the National Security Council with December 1963 as the last viable date for a preventive first strike. The Jupiter incident in Turkey, which both sides deny, would have been enough

to put the Russians on edge. Kennedy came into office talking about a bomber gap and a missile gap and built up the US arsenal to a 17 to 1 advantage in deliverable nuclear weapons. Every person in the room on October 28, 1962, except Kennedy, wanted to launch an air strike to take out the missiles in Cuba. He was the unintentional Soviet savior, and I fear they had a hand in killing him. We shouldn't be surprised."

"Not after what you told me," Forde said. "Sounds like we've been stamping out foreign leaders like cockroaches."

"A little over the top," Caleb said, "but I get your point. The whole thing makes me sick. Let me tell you where it is going to take us."

"Okay. I'm listening."

"Three days after Johnson took office," Caleb began, "he executed NSAM 273. It countermanded Kennedy's executive order to begin withdrawal of troops from South Vietnam. The withdrawal order wasn't a knee-jerk reaction for Kennedy. Eisenhower had warned Kennedy not to get bogged down in a land war in Asia. In his farewell address, Eisenhower had cautioned everyone about the military industrial complex. I promise you that Johnson is not going to stand up to the Joint Chiefs or oppose the powerful companies destined to profit from a war in Vietnam. Eisenhower wasn't the only one who warned Kennedy. Charles de Gaulle and Douglas MacArthur said the same thing. So now we're going to have a lot of dead American soldiers on our hands again. We could have had Adlai Stevenson, every bit as much the statesman as Kennedy, but Joe Alsop and Philip Graham wanted Johnson as VP. Graham isn't going to care because he committed suicide in August, but I imagine Joe will soon regret his hawkish position."

Forde's eyes were a little glazed. "Okay," he said. "Humor me for a little while, and let's go through what you really think about Oswald."

"Well," Caleb said, "let's not waste much time on motive even though the Warren Commission was unable to figure this out in over 5,000 pages and 3,100 exhibits, but I think I can sum it up in one word—political. Oswald had a bus ticket in his pocket when they arrested him—a ticket to Mexico. I think he was headed back to the Soviet Union or Cuba where he thought he would receive a hero's welcome."

"He was that deluded?" Forde asked.

"You asked me what I think," Caleb said. "It's what I think. He never imagined he would be a pariah, and he would have been. If the Russians had feted him, they would have disappeared in a white-hot fireball in less than five hours."

"Hmm." It was all Forde said.

"There are a ton of witnesses—not all reliable. Buell Frazier, Jack Dougherty, and Linnie Randle all said Oswald was not carrying anything larger than a lunch bag when he went into the Texas School Book Depository on November 22, 1963. He certainly wasn't carrying a disassembled rifle. Victoria Adams, Sandra Styles, and Harold Norman, TSBD employees, did not see anyone on the stairs even though they immediately went there after hearing the shots. Home videos by Robert Hughes and Charles Bronson fail to show anyone in the sixth-floor window very close to or right at the time the fatal shots were fired. But let's say we can put Oswald in the sniper's nest on the sixth floor of the Texas School Book Depository. Could he have made the headshot at 90 meters with the weapon that was recovered?"

"You're going to say no, aren't you?"

"Well," Caleb said, "Oswald was tested twice while he was in the Marines for his marksmanship abilities. In May 1959, his last test gave him a score of 191. A sharpshooter is 210–219. An expert is 220–250. Oswald was barely in the marksman category. The Marines considered him a rather poor shot."

Caleb closed his eyes to concentrate on something other than Forde's dumbfounded expression.

"Colonel Allison Folsom testified as follows, as best I can remember," continued Caleb. "The Marine Corps considers that any reasonable application of the instructions given to Marines should permit them to become qualified at least as a marksman. To become qualified as a sharpshooter, the Marine Corps is of the opinion that most Marines with a reasonable amount of adaptability to weapons firing can become so qualified. Consequently, a low marksman qualification indicates a rather poor shot, and a sharpshooter qualification has a fairly good shot."

Another "hmmm."

"You may ask, what about the rifle?" Caleb went on. "Italian 6.5x52 mm Carcano M91/38 bolt action with a six-round magazine. The Carcano rifle had a four-power telescope made by Ordnance Optics attached to the rifle by a gunsmith at Klein's Sporting Goods shortly before being shipped from Chicago to Oswald in Dallas. Assuming it was Oswald's and assuming the first shot missed the only thing that makes any real difference, we're left with the timing of the second and third shots—four to five seconds. I'm sure the first shot was deflected by the traffic signal. It has an indentation consistent with the caliber of the Carcano M91."

Caleb paused a minute and decided to tell Forde everything. "I took a quick trip to Dallas. It wasn't easy with all the surveillance, but I snuck in the depository and confirmed my theory. I took exact measurements."

"Damn!" Forde said. "Is anywhere safe from you CIA spooks?" "No." Caleb said.

Forde smiled. Caleb did not.

"Some people think the first shot would have been the easiest," Caleb explained. "Not true. The gun would have had a tracking swing angle of almost eight degrees per second. The second shot would have had a four-degree-per-second required movement for tracking the target. The tracking movement for the third shot would be reduced to the point of becoming practically stationary with a tracking movement required of only 1.1 degree per second. I have made several educated assumptions concerning distance from the shooter to the target when each of the three shots was taken, the speed of the limousine, and the height to the sixth-floor window. Using Euclidean geometry and the law of cosines, I calculated the amount of movement required by the shooter to track Kennedy. With a muzzle velocity of 625 meters per second, it would have taken .13 seconds for the third bullet to reach Kennedy during which it would have dropped .083 meters. Assuming the limousine had traveled approximately .65 meters, the bullet would have struck about 7.5 inches below the aiming point. Everything is in the report I am going to give you. At the time of the headshot, the angle from the base of the building to the limousine was 17 degrees, and the right to left angle was 13 degrees."

Caleb handed Forde three pages of diagrams and calculations.

"Experts tried to replicate the shooting with the rifle Oswald used," Caleb said. "They could not. Robert Frazier, the FBI analyst, testified that at 91 meters, the test shots landed 2.5–5 inches high within a 3-to-5-inch circle. The Army used three Master-rated shooters. They each fired two shots at a stationary silhouette target from a 60-foot-high platform at about the same distance as Oswald. Four out of the six shots missed the second target. If Oswald made the shot, it was rather fortuitous. He did not have the rifle or the skill to do so. The ballistics evidence for the two recovered bullets could have been fired by Oswald's rifle, but other ballistic and forensic autopsy reports are in dispute, and some see the fact that one of the bullets was recovered from Kennedy's stretcher is problematic."

"Suspicious to say the least," Forde said.

"Oswald wanted to kill Kennedy to get a visa to Cuba. That much is clear from his contact with the Soviet and Cuban Embassies in Mexico City about a month before the assassination. I don't know who impersonated Oswald in Mexico City or if he was, in fact, there other than on the 28th of September. I'm thinking that neither the Russians nor the Cubans figured Oswald could pull it off."

"Or he'd die before he got out of the Depository."

"Right," Caleb said. "Regardless, they didn't want anything traced back to them. Enter Jack Ruby. Oswald had to be dealt with one way or another. I don't know if you believe in coincidences, but how do you think Ruby—armed with a pistol—got enough information to walk down the parking ramp and through a locked door at the exact instant the police were transferring Oswald from the city jail to the county jail?"

"Again, suspicious."

"I can solve the conundrum," Caleb explained. "A detective in the Dallas Police Department was a frequent flier at Ruby's club and was very friendly with one of Ruby's dancers, an immigrant from the Ukraine who also happened to be a GRU agent. Her daytime job was at the police department in the secretarial pool.

"Castro reopened some of the casinos in February '59. We know Ruby went to Cuba in August '59. The Angleton and Hoover memos reveal a high probability that Ruby made as many as six trips to Cuba with the last one in late '62 or early '63, long after Castro had shut down the casinos in '61. Rolando Cubela, a CIA operative in Cuba code named AMLASH, also connects Ruby to Cuba during that time period."

"What else?" Forde asked sheepishly.

"Plenty," Caleb answered quickly. "Burt Griffin and Leon Hubert, assistant counsels to the Warren Commission and chief investigators of the Ruby angle, sent two memos to the Warren Commission that linked Ruby to gun sales to Castro's rebels."

Forde cringed. "And the WC ignored all that?"

"Bingo!" Caleb was satisfied that Forde understood. "They also ignored a link that Oswald and Ruby were photographed together and another link where Ruby tried to sell surplus Jeeps to Castro."

Forde frowned in disbelief. "What kind of lunatic commits murder in a police station?"

"The kind who knows that if he doesn't, a dozen members of his family, including women and children, are going to die," Caleb stated bluntly.

"Ruby had no family," Forde reminded Caleb.

"Nine brothers and sisters, numerous nieces and nephews," Caleb corrected him. "I'm moving on. Enough about Ruby. And we aren't going to go into Kennedy's autopsy inconsistencies or any of the other hundreds of leads that go nowhere. It's clear to me that the throat shot on Kennedy was a frontal entry, which means . . ."

Forde interrupted, "... a second shooter."

"Precisely," Caleb said. "So who was it? It was a Cuban working with the CIA."

Forde shook his head. "Are you serious? How do you get there?"

"NSAM-55 dated 28 June 1961 and Allen Dulles."93

"Go on," Forde urged.

"Do you think you just fire men like Desmond Fitzgerald, Tracy Barnes, James Angleton, Frank Wisner, Cord Meyer, Bill Harvey, and Edward Lansdale? No, you don't. National Security Action Memo-55 transferred all the paramilitary and covert actions to the DOD from the CIA. Wisner, Lansdale, and Harvey are stone-cold killers. Both Bobby and Jack were naïve in thinking they could just relegate those

types of people to obscure desk duties because they had been misled about the Bay of Pigs. Allen Dulles continued to battle Kennedy in the press about who bore the responsibility for the Bay of Pigs fiasco. He kept it up until Kennedy's death. The CIA, without Kennedy's knowledge, continued liaisons with Cuban double agents. The Agency even attempted to assassinate Castro on the day Kennedy was killed. A CIA case officer was passing a poison pen to Cubela about the same time Kennedy was shot."

This time, Forde said nothing.

"The Agency had all the FBI information on Oswald, including his Fair Play for Cuba propaganda, and had even impersonated him in Mexico City after they followed him there. Oswald and a CIA impersonator made several phone calls to the Soviet Embassy. It was obvious to those who listened to the recordings that two different people made the calls, not only because Oswald's voice differed from the impersonator's but also because the impersonator spoke broken and somewhat incoherent Russian while Oswald was fluent in the language. The FBI agents in Dallas who had dealt with Oswald confirmed his expertise. The impersonator spoke Spanish; Oswald did not."

"Seems sloppy to me," Forde said.

"Sometimes absolute power leads to arrogance," Caleb said. "Anyway, the recordings were erased on Fitzgerald's orders, a fact that Winston Scott kept confidential to protect his career. Scott had Sylvia Duran, a consul employee who had intimate relations with Oswald, picked up by Mexican authorities. Deputy Director of Plans Richard Helms advised Scott to stop his line of inquiry."

"You're not done, are you?" Forde asked.

"No," Caleb said. "We have the phone call on November 26 between Cuban President Osvaldo Dorticos and Joaquin Hernandez Armas, the Cuban Ambassador to Mexico. It concerned the interrogation of Sylvia Duran and what she had told the Mexican authorities. I am convinced that Dorticos knew about the plot and took an active part in planning it. Castro had made numerous statements about going after Kennedy, and Dorticos would have been the tip of the spear. Eusebio Azcue, the Cuban Consul, and Sylvia Duran both said Oswald was 5'3" and

blonde. The photo of the man purporting to be Oswald in Mexico is not him."94

"Anything else that indicates the CIA?"

"The Agency wanted any investigation of the Cuban plot steered away from their involvement and directly onto Oswald," Caleb shared. "They even staged a scene in the Cuban Consulate where one of their assets sat down with Oswald or someone purporting to be him and passed \$7,000 to him for a down payment to kill Kennedy. The transaction was witnessed by a Nicaraguan named Gilberto Alvarado. He changed his story back and forth, but by November 26, 1963, the Mexican Station of the CIA, which played no part in the plot, confirmed his story through a 'sensitive and reliable source.' Winston Scott, the station chief, his deputy David Atlee Phillips, and Thomas Mann, the U.S. Ambassador to Mexico, believed Alvarado. Hoover, per Johnson's and Katzenbach's instructions, sent FBI Agent Larry Keenan to Mexico City to 'discuss' the matter. He stopped the Cuban investigation. He said, 'Hoover, LBJ, and RFK are convinced that Oswald had not received any help from Cuba and they were not to push any further on that angle." "95

"That's a lot of information. Pretty damning stuff," Forde commented.

"One more thing." Caleb thought he heard Forde groan. "The second shooter was a Cuban."

"What evidence do you have of that?" Forde asked.

"A Cubana flight was delayed from Mexico City to Havana from 1800 to 2300 hours on November 22, 1963. It sat on the tarmac until a twin engine plane from the Dallas area landed. One man boarded the plane—no customs check—and he rode in the cockpit back to Havana." <sup>96</sup>

"You have some clean-up going on by the Agency, but were Fitzgerald and the rest in on the planning?" Forde inquired.

"Indirectly, I believe," Caleb said. "They encouraged known Cuban assets and had assets attend planning sessions."

"In Dallas?"

"Some in Dallas and some in Havana and Mexico," Caleb said. "I will get you the names of the military officers and CIA agents and their Cuban contacts along with details you can verify."

"How?"

Caleb ignored the question. "The Agency had the entire matter set up so there was no way they could lose. If AMLASH got Castro, they had destabilized a communist country just 90 miles from our doorstep. If the Cuban plan worked, they got rid of Kennedy, which benefited them in a number of ways. First, they were back in the paramilitary covert operation business, which they felt the country desperately needed in order to stop the global spread of communism. Second, they had enough to pin the assassination on the Cubans and from there falsely connect it to the Russians so they would get the war that LeMay, Power, and Anderson wanted to assure devastation of the Soviet Union. Dulles secretly had the backing of a select group of ultra-right-wing, blue-blood oil, steel, and bank executives along with certain military brass. They all hated both Kennedys and their Ivy League panache."

"Who were those people?"

"Just follow the money. It never lies. What companies had the most to benefit from war?"

Forde did not want to answer.

"After today," Caleb explained, "you won't see me in a setting where we can talk freely. Bear with me while I give you five minutes of my father's political and philosophical lessons. It will help you know who I really am. You need to decide who you are because you can make a difference. This may sound trite to you, but it is not."

Forde nodded like someone who'd been asked if they were ready for a colonoscopy.

#### Caleb Young

Lalways thought physics and chemistry were more important than philosophy," Caleb told Forde. "Well, it's too damn late for me to know now what my parents knew then, but it's not too late for you. You can still help our government regain its moral compass. I don't have any great wisdom to give you on the subject, but simple as it seems, I have always come back to Plato's *The Republic* when I have philosophical questions or need a definition of justice.

"No one is sure whether Plato was describing an ideal form of government of whether the ten books should be viewed as Plato's ontological thesis on man's existence. Taken either way, the relevance to the government I have served and the individuals leading the government is uncanny. Plato divided his mythical city into three classes of individuals—the rulers, the warriors, and the producers. The rulers and the warriors could not own any property and were there mainly to see that the city was run properly and without any domestic or foreign problems or interventions. The rulers were called Philosopher Kings and required specialized knowledge acquired through a grueling educational process. The producer class could own private property and become rich or poor, depending on their abilities "97"

"I'm with you so far," Forde said.

"To my way of thinking, if you had JFK, even with his faults, as your Philosopher King, General George Marshall as your chief warrior, and the capitalistic United States workforce as your producers, you would be all set to go. Utopia, Camelot, or whatever other name you want to give it, everything looks pretty good. Of course, all this is predicated on a phenomenal educational system for all members of this society, the same for women and men. It will only work if you are doing what you are best suited to do and not sticking your nose into the

other classes' business. As long as everybody follows the rules set down by the Philosopher King, you'll be okay.

"It's the same thing with your soul. Mr. Forde. The soul has three competing forces that all want to be in charge. Plato called them the rational, spirited, and appetitive parts of your soul. Freud called them the id, the ego, and the superego of your psyche. Hobbes was right. In an unrestrained state of nature, man will engage in an unrestrained war of all against all, resulting in an existence that is solitary, poor, nasty, brutish, and short.

"Vladimir Lenin's and Karl Marx's democratic centralism is based on an altruism that contradicts everything I've come to know about man and his predilections. Unrestrained capitalism does not work either. The excesses of capitalism as demonstrated by the likes of J. P. Morgan, John D. Rockefeller, and Andrew Carnegie around the turn of the century must be wrung out of the system by the Philosopher Kings within our American system of jurisprudence. That means you, the Justice Department, our court system, and presidents like John Fitzgerald Kennedy must reign over unconscionable producers and fight for the common man; otherwise, democracy and capitalism will not survive. You give a man a fair shake, and more often than not, society will get one back."

"And your point?" Forde asked.

"I've always been fascinated by how accurate Plato's governing continuum has been throughout history. He says an aristocracy eventually loses out to a timocracy because over time, the birth rate of those who lack aristocratic, guardian qualities draws the populace away from knowledge, music, poetry, and a guardian-type education and toward moneymaking and the acquisition of possessions. The result is an oligarchy. When avarice seekers relegate worker bees to a Spartan existence, criminals and beggars begin to emerge. But through bribes and constitutional manipulation, the oligarchs can hold on until the poor majority overthrows the wealthy minority and democracy reigns.

"Unfortunately, competing factions continue to toy with democracy's constitution until they fall prey to an appealing demagogue like Hitler or Stalin who whips them into a nationalistic frenzy. The result is

the worst form of government of all—tyrannical rule. You have the educational tools, and you are in a position of power to break free from this continuum and create a golden age here in the United States. The only question is whether you have the courage that President Kennedy talked about in many of his speeches and exemplified in the cabinet room during the Cuban Missile Crisis."

Dr. Caleb Young walked down the stairs of the monument, and William Forde never saw him again. He did some digging into Caleb's personal life and discovered that he often visited a woman named Mary Pinchot Meyer at one of the local art galleries. She had a connection to Kennedy. From there, Forde found her social acquaintance Katharine Graham and best friend Ann Truitt. They filled in some gaps.

#### June 26, 1960 – 0800 Hours Home of Philip and Katharine Graham 29th and R Streets Washington, DC

As Katharine Graham looked over the list for their dinner party on July 10, 1960, her husband, Philip, broke her concentration.

"Kay, I know this may not be a subject you want to talk about, and so far, we've ignored it. But since Mary's divorce from Cord, I've noticed increased use of drugs on her part—a lot of tranquilizers and the like—and I wonder if we should intervene to get her some help."

Katharine was not fond of any discussion of her friend. "It's tough for anyone to go through what she's endured—her son being killed in a hit-and-run accident and then a divorce."

"Nine years old. What a waste."

Katharine nodded.

Philip held out his hand. "Let me look at the list for the 10th."

"Not finished yet," she said. "I'm waiting on a few addresses from Allen Dulles who said he's bringing the most gifted scientist in the world to this party."

She passed the list to her husband. Philip perused it.

Dean and Alice Acheson 2805 P. Street Washington, DC	Joe and Susan Mary Alsop 2720 Dumbarton Washington, DC	Stewart and Tish Alsop 3139 Dumbarton Washington, DC
Chip and Avis Bohlen 2811 Dumbarton Washington, DC	Ben and Tony Bradlee 3321 N Street Washington, DC	David and Evangeline Bruce 1405 34th Street Washington, DC
Allen and Clover Dulles 2723 Q Street Washington, DC	Desmond and Marietta FitzGerald 1671 34th Street Washington, DC	Felix and Marian Frankfurter 3018 Dumbarton Washington, DC
Averell and Marie Harriman 3038 N Street Washington, DC	Bob and Jane Joyce 2811 O Street Washington, DC	John and Jacqueline Kennedy 3307 N Street Washington, DC
Llewellyn and Jane Thompson 1512 33rd Street Washington, DC	Frank and Polly Wisner 3327 P Street Washington, DC	

"Looks like there are some missing pieces," Philip said. "But this bunch of hard-core people will make Joe happy. I'm glad we're having this at Joe's house. The last time we had the gathering at our house I got so mad at Joe that I forgot I lived here and walked out. Things can get intense when we are talking about policy. Joe is such a hawk. He'd have us in every war on the planet." Phillip kept reading. "Darling, you forgot Mary's name."

"She's a given, but I will add it to make you happy."

"Who are you trying to line her up with this time? You know she is very outspoken, and most men are so insecure they can't handle her."

"I was thinking about the scientist. Allen says he's not a bore and is very self-confident."

Philip sipped his orange juice and wished it were a Bloody Mary. "I bet she chews him up and spits him out in less than 20 minutes. If she doesn't, she'll pull out her big stogie and light it up. That will make for his quick exit."

## July 10, 1960 – 1946 Hours 2720 Dumbarton Washington, DC Mary Pinchot Meyer

Mary Pinchot Meyer had been divorced from Cord Meyer for a couple years. Katharine (Kay) Graham was constantly trying out her Cupid skills on her. But Mary loved all the drunken, boisterous bantering with the men while the ladies were exiled to the parlor. She didn't want to give that up. She had a way of intimidating dates after she had enjoyed a few bourbons and was swearing like a stevedore.

When Mary arrived at Joe's house, she was directed to a seat next to a scientist Allen Dulles had invited to the dinner. Allen wanted to try to impress everyone with his guest's knowledge of the chemical and physical world. After about ten minutes, it was apparent that this lab geek would not be a good fit for the drunken shouting match Joe always held after dinner in his study. The scientist was apolitical and would be bored with the foreign policy and other domestic political squabbles Joe lobbed out for discussion in search of fodder for his newspaper column.

To Mary's surprise, Dr. Caleb Young was conversant on Impressionist painting and other *objets d'art*. She warned him about going to the study. So when the women excused themselves to the parlor, Mary suggested to Caleb that they go to her house and peruse some of her artwork. When they arrived at her home on N Street, Mary offered Caleb some wine, whiskey, beer, and finally some marijuana. He refused all of them. He was tall, athletic, and handsome. Mary was intrigued, but Caleb showed no interest in her other than her paintings. He shared some insights that Mary hadn't even thought about. She was sure he was not gay.

Kay had told Mary that this guy was wound up tight about science. Mary was sure he would be a drag. She was wrong. Caleb was remarkably interesting, and she agreed to meet him the following Sunday at the art museum where they could continue what Mary hoped would be a more intimate relationship. But that never happened. Even so, they became good friends. Caleb was extremely knowledgeable about abstract art. Mary finally quit flirting with him and just asked him why he wasn't interested in her. His response was a little startling.

"I am the Chief Science Officer for the CIA," he said. "If you and I get involved, you become a person of interest. I don't want that to happen."

Over the next couple of years, Mary continued to meet Caleb on most Sundays at noon, usually at the Jefferson Place Gallery where she introduced him to Alice Denney, the Director, and Kenneth Noland, one of her mentors. She took Caleb to other galleries that displayed abstract works, including the Franz Bader, the Barnett-Aden, and the Washington Gallery of Modern Art. Before long, Caleb was conversing with other abstract artists such as Morris Louis and Paul Reed.

Mary felt comfortable confiding in Caleb, and she told him about her relationship with President Kennedy. She also told him about Jack's negative view of the Agency, the Joint Chiefs of Staff, and other advisors. They had a relationship that involved much more than sexual encounters. Caleb knew this and warned Mary that if the Agency felt she had any compromising information, she could be in danger.

Mary knew about Patrice Lumumba and how Eisenhower had ordered the CIA to kill him. She knew about some other covert actions from Cord. Now she decided that she had to trust Caleb. Together, they were instrumental in helping fashion Jack's speech at the American University commencement on July 4, 1963—the speech Khrushchev rebroadcast to the entire Soviet Union. Caleb knew Mary was keeping a log of all their conversations and everything about her involvement with the President. Again, Caleb warned her about the danger.

When Caleb visited Mary's studio, she told him where her logbook was and instructed him to hand it over to the press if anything happened to her. She also had a personal diary of her more intimate conversations with President Kennedy. She did not bother hiding the diary. She knew if something happened to her, someone would go through her possessions

looking for something of that nature. She might as well give them what they wanted.

When Philip Graham committed suicide in August 1963, his wife, Kay, struggled, and Mary mourned the loss. Her pain pushed her closer to Caleb on an emotional level. They developed a deep, sibling-like affection.

### October 4, 1964 – 2200 Hours Home of Joe and Susan Alsop 2720 Dumbarton Street Washington, DC

When Mary Meyer burst into the room, Joe was at the head of the table. Katzenbach, McCone, Angleton, and Wisner were there.

"Mary, dear. So good to see you. It's been a long time," Joe said.

"Screw you, Joe!" Mary shouted. "Screw all of you! I know what you and Warren did. You never really wanted to know who killed Jack because it would have caused the Agency and the Bureau a lot of embarrassment. I know damn well what you and Hoover did. You ignored information pointing away from Oswald."

Mary turned to McCone. "John, you bastard! You lied to the Commission and conveniently never said a damn thing about the twenty plots the Agency had to kill Castro. You even tried to recruit the mob. Just how damn stupid are you?"

No one answered. They all knew exactly how stupid they were. Mary wasn't finished.

"I've got enough to hang all of you. Joe, you think the tryst you had with the young Russian man while you were in Moscow is going to be kept from the public? Think again."

Mary turned to Katzenbach. "You—you and Joe did this whole damn dog-and-pony show to save Johnson's ass because you know he can't find his ass with both hands and a flashlight without getting advice from you. Well, it's not going to work."

James Angleton, Head of Counterintelligence for the Agency who usually never said a word at any of these dinner parties, spoke. "Mary, you seriously can't believe any of us in this room didn't have the best interests of the Kennedy family and this nation as our guiding principle during this ten-month inquiry. We know you had a special relationship with Jack. Perhaps your judgment is clouded. Let's go on into the other room and talk."

"The hell with all of you!" Mary shouted.

Mary left. Joe Alsop turned to Angleton and Wisner and said, "Someone's got to rein her in."

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Frank Wisner stood up. "General Lansdale and I will take care of this. We've been cleaning up messes like this all our lives."

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#### October 12, 1964 – 1330 Hours Chesapeake and Ohio Towpath Georgetown Sector Washington, DC

Veteran detective Bernie Crooke leaned over the young woman's dead body. He looked up at Ray Crump Jr. in handcuffs and got an uneasy feeling. Something was off.

Crooke had investigated hundreds of homicides involving everything from first-time amateur muggers to highly skilled, professional assassins. There wasn't any evidence of a robbery or sexual assault. So Crooke thought, Why is this unintelligent, lower-level, ghetto Black man in front of me in handcuffs? The kill shots were professionally administered. The dark haloes on the skin around both entry wounds suggest they were fired at close range, possibly point blank.

Crooke knew Henry Wiggins, the tow truck driver from M Street Esso, had yelled across the canal when they apprehended Raymond Crump Jr.

"That's the guy. Saw him do it!" Wiggins had hollered.

But later it was determined that Wiggins had only seen Crump standing over the body and yelling for help. Crooke examined one of the victim's monogrammed gloves—Meyer.

"Officer, call the sergeant and find out how many Meyers live in Georgetown."

Crooke made it to the morgue about 1545 hours and talked with Dr. Linwood Rayford, the deputy coroner.

"The shooter was highly skilled and ambidextrous," Rayford said. "That's my opinion for what it's worth."

"Thanks, Doc." Crooke started walking. "I'm headed over to 2109 Stanton Terrace Southeast. That's were Crump lives."

Helena Crump had her youngest child in her arms and four other kids running around inside their decrepit townhouse. The children cowered behind the couch when they saw Crooke's badge. Elsie Perkins next door had already told Helena about Raymond's arrest. Before Crooke left, he was able to confirm that Raymond Crump had not been fishing as he had claimed. All his gear was in the front closet.

Crooke saw Elsie Perkins on his way to the car. "Did Raymond have a gun when he left?"

"Never seen that boy with no gun," Elsie said. "And there weren't nothin' in his pockets. No bulges. I seen enough guns in my time."

For the next three days, more than forty officers combed the area along with Park Service police and eight Navy scuba divers. None of them found a weapon, much less a 38 caliber pistol. 98,99

# October 12, 1964 CIA Headquarters – 1315 Hours 1000 Colonial Farm Road Langley, Fairfax County, Virginia

Wistar Janney picked up his phone and dialed the number for Ben Bradlee.

"I just heard over the radio about a murder on the Chesapeake and Ohio Towpath," Janney stated. "That's the place where your sister-in-law Mary likes to take her noon walks, right? Maybe you'd better check it out."

Bradlee was somewhat taken aback. "Do you have any reason to think it might be Mary?"

"No particular reason, but don't you think it's worth checking it out?"

Bradlee finished up and headed home. Shortly after he arrived, Detective Sam Wallace who had been assigned notification duty showed up at his house. It was nearing the evening hours.

"Mr. Bradlee, are you related to an individual with the last name Meyer?"

"Yes," Bradlee said. "My sister-in-law's name is Mary Meyer. She lives around the corner. I've been trying to contact her, but I can't find her. I heard there was a murder on the towpath."

Wallace nodded. "Would you come down to the morgue to view a body?"

Bradlee agreed. Every journalistic nerve in his body tingled. He knew he was in for bad news. He followed the detective to the morgue where he identified Mary Pinchot Meyer's dead body. Detective Wallace told him they had a man in custody.

Bradlee returned home and found out that Tony, Mary's sister, had received a call from Anne Truitt in Japan who had learned about Mary's death. Anne said Mary kept a diary of her affair with JFK and had instructed her to get it "before anyone else did" if anything untoward ever happened.

Bradlee and Tony immediately went to Mary's studio. James Angleton, head of counterintelligence for the Agency, was already inside.

"James, what are you doing here?" Bradlee asked.

"Ben," Angleton said, "I'm sure you've heard the rumors about Mary's involvement with Jack. I have reason to believe she kept a diary about the relationship. Before it falls into the wrong hands, I want to find it, save reputations—save Jackie's feelings. You understand. You and Tony can certainly go over it with me, and then we will destroy it."

"Anne told Tony it was somewhere near the bookcase where it wouldn't be obvious."

About fifteen minutes later, Ben found it inside another book. Over the next two hours, Ben Bradlee determined that all the information was personal and should be disposed of in the interest of everyone concerned. Even though the diary had nothing relevant to national security, Angleton took it with the promise to destroy it.

Everyone at the Agency knew that James Angleton never threw anything away.

#### October 13, 1964 – 1002 Hours 7th Precinct Metropolitan Police Department Washington, DC

Detective Crooke had been brooding about the case, but he kept his reservations to himself. When the receptionist announced that a Lieutenant Mitchell was there to speak to him, she hoped the visitor had the tonic to cure what had put the detective in such a foul mood.

"Have a seat, Mitchell. How can I help you?" Crooke asked.

"I heard about the murder on the Chesapeake and Ohio Towpath near Georgetown," Mitchell said. "I'm stationed at the Pentagon, and I run over there. I saw a lady matching the description of the decedent crossing the narrow wooden footbridge and walking west. She was about halfway across when I first spotted her, so I had to wait for her to get across before I could continue. I saw a Black man about my height some 200 yards behind her. His picture was in today's newspaper. Same guy I saw."

"What are you, 5'7"?" Crooke asked.

"A hair over 5'8", sir," Mitchell said.

"You run the same route every day about the same time?" Crook asked. "You know people are creatures of habit, and if you're working at the Pentagon, you're probably rather fastidious about your daily routine. So can you give me an approximate time when you reached the wooden bridge?"

"Close to 1230 hours, sir."

"What was the man wearing?"

"A white windbreaker, dark trousers, and a flat, checkered hat."

"Did you hear a gunshot? Which way did you turn once you crossed the bridge?"

"No shot—turned south."

"Can you tell me anything else?"Crooke asked.

"I think we've covered everything I know," Mitchell said.

"Thanks for coming in. Leave your number with Darlene, and we'll be in contact with you if we need something."

Detective Crooke wasn't sure about the intel. Raymond Crump Jr. was 5'3"—no taller than 5'5" in shoes. Mitchell should have noticed that the suspect was shorter. Crooke hadn't put a timeline together, but it bothered him that Raymond Crump Jr. was 200 yards behind his victim so near the time when the other witnesses heard the shots.

On October 16, the case against Crump weakened. Crooke thought they should toss it, but a lot of the detectives and officers on the police force were in a rush to judgment. They wanted a safe city, and they liked the story of a prototypical poor Black man robbing and then murdering a rich white woman.

#### October 16, 1964 – 1632 Hours 7th Precinct, Metropolitan Police Department Washington, DC

"Art, are you going to speak to Hantman about dropping the charges and reopening the investigation?" Crooke asked.

Chief Detective Art Weber scratched his head. He thought it made him look pensive, a word he'd learned in *Reader's Digest*.

"Already have," Weber said. "But he's hell-bound for leather, acting like the lab reports don't exist. I don't think he'll hand them over to defense counsel prior to the trial."

"I want to go on record here," Crooke said. "I disagree with his decision."

"Duly noted," Weber said, but Hantman still has reports of a man standing over the body and this Henry Wiggins character identifying the man as Crump, who lied about fishing. He obviously tried to disguise himself by dumping the hat and windbreaker, and then he tried to escape by swimming the Potomac."

"Do you know that Wiggins and Crump attended school together all the way through junior high? And stupid doesn't make him guilty," Crooke said. "Everyone he knows says Crump can't swim. Wiggins says Crump walked, not ran, away from the body. Obviously, he got spooked when he saw the police closing in from both directions and headed for the water. That's when Wiggins went all Barney Fife and started yelling about seeing Crump. Of course, he said the suspect was 5'8" and 180 when Crump is 5'3" and a buck-thirty."

"Out of my hands, Bernie," Weber said. "Hantman's all in, so we investigate as he orders."

"Okay," Crooke said, "but we've got the wrong guy."

Crooke turned to walk out of the office but stopped when Weber called to him. "What's your take?" Weber asked.

"Raford is sure the killer was ambidextrous and proficient, most likely a pro hitter," Crooke said. "Crump was drunk. At his size, he probably couldn't pull the body 25 feet along the towpath. What was

his motive? There wasn't any evidence of a robbery or sexual assault. Maybe he just decided to get up on Monday, say he was too tired to go to work, change his mind, and then half an hour later get up and go out looking for a rich white woman to kill. It's much more believable if he blew off work because he was going to meet another woman on the riverbank for sex—just like he said. Both Wiggins and Mitchell say our killer is 5'8". Forensics? Nothing to tie Crump to the scene—zero, zilch, nada."

Crooke dropped a folder on the desk. "Here's the report. I'll summarize it for you."

- 1. No evidence that any recently discharged firearm had been placed in any of Crump's pockets. Wiggins claims the shooter shoved the gun into his jacket.
- 2. No semen on the clothing of the victim or the suspect.
- 3. No fibers were found on Crump's clothing that were associated with Meyer's clothing. Keep in mind she was wearing a blue angora sweater.
- 4. No Negroid hairs were anywhere on Meyer's clothing. No Caucasian hairs were on Crump's beige jacket, his yellow sweatshirt, or his T-shirt.
- 5. And here's the kicker. Neither Crump's yellow sweatshirt nor his T-shirt had any indication of the presence of blood. Likewise, his jacket was clean. 100

"The last thing I've got to say on this is that I've never seen a search effort as thorough as this one fail to turn up a gun. That gun was not carried off the towpath by the 5'8" man; otherwise we would have found it, and you know it."

Detective Crooke left the office. Everyone could hear the Chief yelling that Crooke was going to support the United States District Attorney's Office for the District of Columbia in this case. It took the jury only 11 hours to acquit Raymond Crump Jr. Wiggins testified at trial that he had only taken a quick glance at the man standing over the body before he raced back to the station to call the police. The city mapmaker testified that the police had not sealed off all the exits from the park when they began their march from the north and the south along the towpath. Lieutenant Mitchell evaporated after the

#### ~ Thomas J. Yeggy ~

trial and could not be found by detective Crooke who continued the investigation during his personal time to find more leads.

#### December 20, 1964 – 0746 Hours 28 Eighth Street NE Washington, DC

Gina Forde had just come back in the door from retrieving the morning paper. She was still looking at the 5"x7" book she held in her hand. The volume was wrapped in twine.

"Bill, do you know what this is?"

A little smile crept across William Forde's face. "I have an idea," he said.

#### May 31, 1976 – 0548 Hours Cuzco Wells Cemetery Guantanamo Bay, Cuba William Forde

The lightly graveled road leading to the cemetery in Guantanamo Bay, Cuba, had a median of scraggly green grass where the tires from the light traffic hadn't stunted its struggle to grow. The blue and gold sign at the entrance that identified the grounds as a Naval Cemetery shielded the reason most of the "residents" had been laid to rest there. Most had nothing to do with the Navy. Some were refugees from the Castro regime. They'd hoped Fidel's hold on the country would be brief. Others were civilian workers whose friends or family members, if they had any, did not care where they found eternal repose.

Some of the folks wandering through the grounds (the gate had disappeared long ago) were headed to Blue Beach. William Forde was there to mark the end of a thirteen-year battle in the US government to find someone it publicly painted as a traitor and Cold War spy. The government claimed this man had dropped out of sight in August 1964 shortly after his lengthy investigation with the Department of Justice.

Forde figured he had been the target of "wet works." He wanted answers.

Shortly after the Freedom of Information Act was enacted in 1966, Forde thought he would find him, but he had been tied up in delays and appeals for a decade. The DOJ, the CIA, and the Department of Defense finally gave in when the 1974 amendments—vetoed by President Ford at the behest of his advisors who included Scalia, Rumsfeld, and Al Haig—passed both houses of Congress by veto-proof margins. The documents included a death certificate showing the cause of death as suicide. It was dated September 18, 1965, and signed by Lieutenant Commander Rafael Solis, Bethesda Naval Hospital.

After several more motions and hearings, Forde obtained the autopsy report. It included drawings showing several areas of the body that had been subjected to blunt force trauma. Apparently, the deceased had jumped from the psych ward at Bethesda. The report was signed by Major Michael N. Gimbal, Guantanamo Bay, Cuba, and dated September 22, 1965. Neither doctor returned Forde's calls or letters. Subpoenas were a waste of time because the Agency had rotated both doctors overseas.

Forde needed to visit the grave for some type of closure. During his ten-year search, he had never found one public document indicating any history of this man prior to his enrollment at Princeton University in the fall of 1936. Princeton's Alumni Office showed that he was a student for a few years and left in 1939.

After a long inquiry in 1964, Forde had cleared him of any wrongdoing. He had left Forde more than sixty volumes of documents and months of recordings. As part of the agreement, the DOJ kept the only copies, and Forde got bootlegged copies of everything. After this man's disappearance, Forde never again trusted the DOJ, the CIA, or the DOD.

This man had never come back for anything. Forde tried to reach him but never had any luck. He went through his daily journals, tapes, recordings, and documents in hopes of tracking him down. Forde suspected that the Agency couldn't let him go. The CIA didn't like loose ends.

Based on the FOIA documents the government produced pursuant to court order, Forde found what had to be his grave. Dr. Caleb Young's grave was marked "UNKNOWN"—an oddly fitting label. Forde needed to have his body exhumed and repatriated to Arlington. That's what Young would have wanted, and Forde had enough leverage to do it. He had spent five years trying to piece together Young's existence. His documents, especially the earlier ones, indicated that he was raised near the University of California, Berkeley campus where his parents were professors after they left Europe. Forde thought they were recruited by the University and for reasons never uncovered received new identities when they arrived in the United States. Everything Forde traced in Europe proved to be a dead end.

There were a lot of questions.

Was Dr. Caleb Young, in fact, a patriot deserving a plot in the United States' most prestigious cemetery, or was he a scientist who created weapons of mass destruction that were still threatening our very existence?

Did he participate in CIA operations that overthrew legitimately elected communist governments?

Forde never believed that Dr. Caleb Young was capable of such acts, but the records from the CIA painted another picture. Forde decided to let the revisionists decide. After all, history sans timely revisions is nothing but a myth retold.

"Rest in peace, Dr. Caleb Young. You were an odd duck, but you were a patriot. That's my story, and I will stick to it."

#### March 3, 1979 – 0900 Hours United States Court of Appeals District of Columbia Circuit Court 333 Constitution Avenue NW Washington, DC

John Doe vs. United States of America Central Intelligence Agency CV# -000USG96456

**(( ○** o, counselor," began Judge John R. Havercamp, "what you are telling us is that Frank Wisner and Edward Lansdale along with Richard Bissell implemented and supervised twenty-one clandestine operations around the world but primarily in Central America during the Eisenhower and Kennedy Administrations and that one of those operations was the Bay of Pigs Operation that took place in early 1961. You also have intimated that several of these operations were utilized to overthrow otherwise legitimate democracies because their economic system was based on a form of socialism or communism rather than capitalism. All this was done to benefit major corporations operating here in the United States although a secondary purpose was to stop the spread of communism sponsored by the Soviet Union. But what you are asking this court is to exhume the body of Dr. Caleb Young from the cemetery in Guantanamo Bay and inter his body in the Arlington National Cemetery because of his cooperation with the Justice Department. Is that correct?"

"Your honor," said Attorney William E. Forde, "I understand the sensitivity with which this matter has to be handled because of national security considerations. To that end, the government and I have reached a settlement agreeing to a gag order. Neither side will disclose any

information about those operations in exchange for an order for the interment of Dr. Young's body in the Arlington National Cemetery."

Deputy United States Attorney General David Trimer added, "That is correct, your honor. The government consents to the exhumation of the body buried in grave number 336, marked 'unknown,' at the Cuzco Wells Cemetery, Guantanamo Bay, Cuba, with interment at the Arlington National Cemetery as provided on page 37 of the Stipulated Agreement. As provided in the agreed order, there will be absolutely no publicity of any type connected with the burial, and it is to be in an area closed to the public during the burial. Only the name and dates mentioned in the Agreement are to be displayed on the monument, which is to be inconspicuous."

Judge Havercamp spoke. "The Agreement indicates that seven of the CIA operatives taking part in the clandestine operations in Latin America are still active at the CIA. Is that correct?"

"That is correct, your honor," Trimer responded. "The government is still investigating their activities."

"If there aren't any other questions," Judge Havercamp said, "I will conclude today's hearing and take the matter under advisement. The Court takes a dim view of these activities and anyone with knowledge or connected to them in any capacity, even if they turn whistleblower."

The decision came eight months later. Two months after that, William Forde watched alone as Dr. Caleb Young's body was quietly and secretly laid to rest in Arlington National Cemetery.

#### Armageddon

# Prologue 2027

President Connor Armstrong looked around the table. Twenty-three sets of eyes looked back at him.

Elected in overwhelming fashion, the youngest chief executive in US history had seized on national dissatisfaction and whipped the nominees of the traditional parties in the general election. He was handsome, urbane, well-spoken, popular, and adept at using social media.

And he was woefully unprepared for the responsibilities of his office.

He fixed his face in what he thought was a noble posture and uttered one word.

"Fire!"

#### July 31, 2025 – 0349 Hours Oyu Tolgoi Mine Khanbogd, Mongolia

The two copper miners from Dalanzadgad walked along the cavernous tunnel more than a thousand feet below the surface. The younger one turned his head. "You've been here since day one. Why is that section fenced off? Safety issue?"

"No," the veteran miner said. "I've never been in there, but my supervisor said the company closed it. No profit. Not surprising. I hear the tunnel is 50 percent taller and 25 percent wider than average. Several elevators. Big investment."

"Really! Maybe I'll wander in there one day and look around."

"Wouldn't if I were you," the older man said. "Lots of stories—men who go in there and never come out. Someone told me the company hired a search and rescue team that came up empty-handed."

"Thanks for the warning," the younger man said. He twitched a little as if someone had walked on his grave, and the pair continued along the corridor.

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The Umnugovi region supported just over three million Mongolians. Revenue from the mining operations in the Gobi Desert accounted for 34 percent of the national GDP. Income from China was continuing to shrink.

China had been subtly diminishing the Mongolian influence over the population of Inner Mongolia for decades by encouraging the Han Chinese to relocate there. Han Chinese men were paid substantial sums to marry Uyghurs in the Xinjiang region of western China. In August 2020, the Inner Mongolian government made an announcement. Ninety percent of the schools would conduct classes in Mandarin only.

Anti-Chinese sentiment, which had been simmering due to religious oppression and alleged political bribery, erupted.

A crackdown hardened the opposition and led to a resurgence of radical right-wing groups such as Tsagaan Khass, also called Dayar Mongol. They flourished in the far southern Umnugovi Aimag. US policymakers who had been overtly courting the top officials of Mongolia for many years due to its geostrategic location, saw an opening. China, apparently oblivious, continued to persecute six million Mongolians who attempted to flee Inner Mongolia over the next several years.

By the time the June 2024 Parliamentary elections rolled around, anti-Chinese sentiment was widespread and propelled an anti-Beijing coalition headed by the right center former Democratic Party President Battulga Khaltmaa to 47 of the 76 seat State Great Khural.

Ever interested in expanding international influence, the United States oiled its way into every crack. By 2023 there had been several diplomatic overtures and numerous instances of minor military field exercises. The Chinese Ministry of State Security (MSS) should have been alerted to what America was doing in Mongolia. On the diplomatic front, Khaltmaa had visited with the American president and agreed on utilization of the US Overseas Private Investment Corporation to help solve critical development challenges in Mongolia. More funds were slated for Mongolia as part of the Third Neighbor Trade Act.

Militarily, there had been a strategic relationship since 2004 when the first U.S.–Mongolia Bilateral Consultative Council meeting took place. Mongolia was supporting US efforts in Iraq—and later Afghanistan. Since 2012, Mongolia had been actively engaged in NATO's Science for Peace and Security Programme, considered by many as a precursor to NATO membership. Mongolia and the Alaska National Guard, along with other US forces, had engaged in a joint military exercise called Khan Quest for the last dozen years.

Mongolian leadership was cautious. They were well aware of the old Henry Kissinger adage: "It may be dangerous to be America's enemy, but to be America's friend is fatal." Khaltmaa, who had not been allowed to seek a second term in 2021 because of a change in the Mongolian Constitution, found himself back in charge after the constitution was altered again in 2024.

Despite being elected to a six-year term in 2021, President Ukhnaagiin Khurelsukh resigned after the stunning rebuke of his Mongolian People's Party (MPP) in the June 2024 Khural. Khurelsukh distrusted anti-Chinese sentiment. He suspected it would end badly for the Mongolian people. In his resignation speech, he blasted the right-wing Democratic Party.

But the CIA saw an opening. With the approval of President Armstrong, young and out of his depth, the Agency moved to get Aegis missiles close enough to the Chinese silos to implement Ballistic Phase Intercepts (BPI).

There was a certain irony to Operation Whack-a-Mole (WAM). Almost sixty years earlier, Operation Andyar had pushed the world to the brink of a nuclear holocaust, but perhaps it was only timing. The Soviet buildup in Cuba transpired over a matter of months. The US emplacement of SM-3 IIB ballistic Phase interceptors and Lockheed Martin RQ-170 Sentinel drones took several years.

About once a month, a 737 landed at the Ovoot Airport some 200 kilometers west of the Oyu Tolgoi mine, ostensibly as either part of a military exercise or a humanitarian aid package. From there, Mark 41 Launchers and SM-3IIB interceptors traveled under tarps and at night, just as the Soviets had done in Cuba. Upon arrival, they were lowered on one of five huge elevators into the cordoned off section of the mine where they were assembled and replaced on elevators for crisis deployment. Just like Kennedy, Xi Jingping never expected a little nation of three million to take such an enormous risk in his own backyard. But Khaltmaa was descended from a long line of warriors. The CIA had sold him on the concept by promising large sums for development once the Chinese source of funds dried up, money he needed to stay in power. For the CIA, it was a simple equation: rate x speed = distance.

The SM-3 Block IIB interceptors had been withdrawn from Poland and Romania under President Obama. Geographically, they had little chance of ever making a BPI even at 7.5km/s and a 10g rate of acceleration. Putin pushed Obama not to deploy the SM-3 IIB in Romania and Poland because the Russian strongman saw it as a BPI threat to the Russians' ICBMs.

But the distance from Oyu to the Chinese DF-41 silo sites at Yumen, Hami, and Hanggin was under 650 kilometers. The projected flight of the missiles over the North Pole was also geographically favorable. Since the interceptor's boost phase was primarily vertical and the second stage had enhanced acceleration due to its liquid fuel component, even a west to east trajectory intercept was likely on the ballistic or early ascent phase.

The main reason for the cancellation of the SM-3 Block IIB was that the initial booster stage was 27 inches in diameter and propelled by liquids. The SM-3 Block IIA was only 21 inches in diameter and fit the Navy's existing launchers. The CIA took on the project after the DOD deep-sixed it in 2013 because of the technical and political problems it presented.

The CIA used off-the-book funding to employ a cadre of chemists at Raytheon, Northrop Grumman, and Lockheed Martin to develop a liquid propellant designed to promote a 21-inch-diameter booster. It not only enhanced performance but also fit into the VL-41 or the VL-57 21-inch launchers. The Agency saw an opportunity in Omnogovi, Mongolia, and developed a platform to allow a launch of twenty-seven missiles from each of the five elevator shafts. The Agency did not believe that all 260 of the Chinese silos contained ICBMs. Even if they did, the Agency knew the mine shaft missiles would play a significant part in the Missile Defense Agency (MDA) ABM multi-layered defense strategy, a plan primarily based on mid-course and terminal phase intercepts before the Mongolian deployment. The drones would be launched ahead of the SM-3 Block IIB missiles and assigned to areas where the Agency suspected DF-16Bs would be launching DF-17 nuclear Hyper Glide Vehicles (HVGs). Spotting and taking out mobile DF-41 missile launching sites was also a high priority for the RQ-170s.

The United States had invested heavily in artificial intelligence (AI), and China made a critical mistake by deemphasizing critical research in the area. Punishing capitalists such as Jack Ma meant China was shut out of the capital market system, which dealt a severe blow to the nation's R&D, which then became solely dependent on state-sponsored funds. Direct funding was not the problem, but financing for peripheral projects that developed AI and produced intelligence for military applications lagged.

By 2021, the Heron Company had produced a drone capable of beating American fighter pilots in simulated dogfights. By 2026, the drones were more than a match for the Chinese air defenses, and they had been deployed not only in Mongolia but also in India where China continued to have conventional border battles in the Gorga Area. The Chinese significantly upgraded their submersible ship ballistic nuclear (SSBN) boats from the 092 model. By late 2027, they had produced two active 094s, four active 094As, and two 096 advanced class SSBNs featuring a 12,000 km JL-3 SLBM. China's SSBNs were all based at Sanya and were very noisy compared to the deadly US pump-jet propulsor Virginia Class attack submarines running in silent mode.

The older 094s were so easy to track that they might as well have been beating a bass drum on their way through the depths. Even the newer 096 models pumped out over 95 decibels, a deafening sound pattern in the world of silent submarines. The U.S. Navy Fish Hook Undersea Defense Line, a seamless network of hydrophones, sensors, and strategically positioned assets stretching across coastal areas of Northern China through the Philippines all the way to Indonesia, meant that none of the Chinese SSBNs could reach the Pacific without a Virginia Class attack submarine as an undetected shadow. In addition, the Navy's latest ASW plane, the Poseidon 8A, could lower hydrophones and a magnetic compass to a predetermined depth and connect by cable to a floating surface radio transmitter. The hydrophones converted acoustic energy from the water into a radio signal sent to aircraft computer processors for a kill shot when required. In short, the Chinese were wasting their money on SSBNs.<sup>102</sup>

#### October 24, 2027 – 0756 Hours USS ASW CG-71 Cape St. George, Western Pacific Ocean

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The ASW Task Force under the command of Captain Russ Denton was charged with keeping track of the Changzheng 092 Class submarine from the time it became active with the North Korean Navy

in early 2026. In addition to his flagship, Captain Denton had two guided missile destroyers, the USS *Milius* DDG-69 and the USS *Mason* DDG-87, in his task force.

The aging submarine had been acquired from the Chinese when tensions in the Taiwan Strait and South China Sea were boiling over after years of conflicts. The submarine had been commissioned in 1983 but had undergone a six-year remediation program before it was cleared for littoral service in 2009 by the Chinese Navy. Painted white, the 092 was adorned with two red stars, one on the bow and one on the stern. US intelligence, unsure of its capabilities, was concerned about what might happen if it ventured into an offensive position away from base.

In addition to the North Korean threat, the Chinese had been building ICBMs, warheads, hypersonic glide missiles, and nuclear-powered ballistic missile submarines at an unprecedented rate. To counteract the buildup, the United States rapidly expanded its ABM arsenal with numerous intercept options at all stages of the ballistic missile flight.

The expansion produced a few SM-IIBs that made it through the experimental phase before the DOD inexplicably cancelled the missile because Putin deemed it a threat to the ballistic phase of their ICBMs. They had been placed in strategic fixed, waterborne, and mobile land-based locations to take advantage of their acceleration and terminal velocity. The placements promised boost phase intercepts (BPI) at distances of over 750 km when almost instantaneous launch notification and targeting were supplied by the slew of new LEO and MEO satellites utilizing precision tracking space sensors (PTSS) that provided functional targeting solutions within twenty seconds of launch.

If the boost phase exceeded the standard 180 seconds of solid-fueled ICBMs and was as long as the 250 seconds required for liquid-based ICBMs, the booster kill range nearly doubled. Despite the experimental SM-3 Block IIBs' effectiveness in BPIs, because of the characteristics of the booster, liquid fuel, and a 27-inch diameter requiring a unique launcher, the DOD only accepted 250 missiles before cancellation. Even though the Navy had a long-standing ban on liquid-fueled

missiles aboard Navy ships (by order of the President and the Secretary of Defense), the *Milius* was carrying twelve SM-3 Block IIBs to effect BPI intercepts on the 092.

If the intercept failed at the boost and post-boost-ascent phase, the integrated seamless tracking sensors operated by the Command and Control Battle Management Communications (C2BMC) personnel in Colorado Springs throughout the flight turned the intercept over to various mid-course (MC) interceptors and terminal phase interceptors.

Given the potential effectiveness of more than eighty-six Ground-Based Midcourse Defense (GMD) missiles of the Ballistic Missile Defense System (BMDS), the Aegis mid-course SM-3 Block IIA system, the Aegis ashore system, and the addition of numerous other ABM terminal phase systems, it seemed to the Chinese and the Russians that the entire purpose of the ABM system was to eliminate any second-strike capability they had.

Because of the mutual mistrust, the US ABM systems were the catalyst for a new arms race. In the minds of the communists, those systems had obliterated the doctrine of mutual assured destruction considering what (if anything) would be left after a massive, overwhelming US first strike of a minimal deterrence force. While the United States maintained that ABM systems were to protect against rogue nations such as Iran and North Korea and not against second strikes by China and Russia, the system's effectiveness was originally somewhere between those two extremes. But by 2027, the US ABM system was considered robust and extremely effective by any standard.

The SM-3 Block IIA missiles had a range of 2,100 km, a speed of 5.5 km/s, and a maximum altitude of 2,000 km. But when the Missile Defense Agency (MDA) announced the addition of numerous Terminal High Altitude Area Defense (THAAD) missile sites as well as countless Arrow-5 and PAC sites to the Ballistic Missile Defense System (BMDS), the defensive phase of the arms race was on. The THAAD system could fire 72 interceptors from each squadron with a 200 km range and a speed of 10 km/s. The projectiles could reach an altitude of 150 km to destroy their targets and had demonstrated a

100 percent success rate in controlled tests. The ABMs' effectiveness against Chinese hypersonic glide vehicles was highly dependent on terminal phase intercepts.<sup>103</sup>

China was skittish, but the paranoia had started much earlier.<sup>104</sup> But the ante in this deadly cat-and-mouse game was about to go up as the 092 set a course east at a steady speed of 22 knots over the next three days.

#### October 28, 2027 – 0400 Hours US ASW CG-71 Cape St. George, North Pacific Ocean

The fear seizing every nuclear nation by the throat had set off another arms race in 2002, the year the United States withdrew from the Anti-Ballistic Missile Treaty. Over the next two decades, the Russians attempted to match American developments with numerous mid-course and terminal-phase intercept systems.

In November 2021, the Russians released news of their shiny new S-550 system for satellite and ICBM intercepts as augmentation to an already robust S-500 system that utilized surface-to-air missiles. They could detect and engage up to ten ballistic targets at speeds up to 7 km/s at a distance of 600 km and an altitude of 200 km. The new 550 system increased engagement distance and altitude to 1,200 km and 800 km, respectively. The Soviet A-235 PL-19 Nudol system presented a layered capability using the 51T missile and Don 2NP/5N20P radar. It would tangle with incoming ICBMs up to 1,500 km away at altitudes of over 800 km. The A-235 utilized the 53T6 missile for longer distances or the 45T6 missile for shorter range encounters.

Even with all these defenses, the *Changzheng* 092 transfer presented a very serious provocation, one the Russians were compelled to answer. The transfer had the dual effect of energizing the defensive arms race between the Russians and the United States at a time when the Chinese, despite all their economic gains, could not compete with the United States and Russia in the technological area of ABM warfare. Putin had learned about the submarine transfer too late to stop it. Privately he chastised Xi Jingping for making a move destined to accelerate the US ABM program and encourage such a drastic increase in US ABM systems to threaten Russian and Chinese second-strike capabilities.

President Armstrong was outraged by the transfer and took to the national airways to warn the Chinese. Any missile launched from the Changzheng would be treated as if it had originated in China. The other two North Korean SSBs were old, remodeled Romeo Class submarines with three Pukguksong-3 missiles dropped in through an enlarged sail. Those six missiles were not deemed a material threat to the United States because of their short-range, relatively light payload and lack of a reliable reentry system. But the remodeled Xia Class 092 reportedly carried 12 JL-1A missiles with a range of 1,550 miles that could be simultaneously launched from a submerged platform. The JL-1A RV had a 250–500 kt warhead, more than 20 times more powerful than the atomic bombs dropped on Hiroshima and Nagasaki.

Aboard the guided missile cruiser *Cape St. George* (CG-71), Captain Denton received a report from Lieutenant Bradley who was flying a P-8A.

"Captain, we are confirming the location of the C-3 believed to be the 092. It is at 39.50.50 N and 145.01.04 W. It is within 1,500 miles of Los Angeles, 1,265 miles of Portland, and 1,221 miles of San Francisco. Requesting emergency protocol to arm anti-sub torpedoes."

The Chinese had added several enhancements to the 092 in the previous two years. One was the ability to fire its missiles submerged. The *Changzheng* abruptly stopped dead in the water and came up to a depth of less than 30 meters, the optimal depth for the JL-1A's firing.

Captain Denton took quick action. "Contact the Vice Admiral, and ask for instructions."

The scene had been played out numerous times in the Pacific over the past six months. But ever since Chairman Kim Jong-il's debilitating illness in 2025 and Kim Yo-jong's bloody coup where she eliminated her older sister Kim Jong-un, North Korea became even more hegemonic. The United States had prepared for threats from ballistic missiles by installing low earth orbiting (LEO) and medium earth orbiting (MEO) satellites, which created a network to detect ballistic missile launches. The system passed tracking and targeting information to the SM-3 Block IIA and SM-3 Block IIB missiles through Aegis Spy 6 (V) (4) onboard sensors. In the event of a launch, the information was immediately given to the Command-and-Control Battle Management Communications Network (C2BMC). The C2BMC system also integrated the AN/TPY-2 and Spy-7(V1) sensors systems into its detection and fire

control solutions for all phases, including the terminal defense batteries made up of THAAD, THAAD-ER, AEGIS, ASHORE, SM-6 Block IB missiles, Arrow-5 missiles, Typhoon batteries, and PAAC-4/PAAC-5 systems.

Vice Admiral Karl Thomas' chief of staff responded, "Continue to monitor closely. Keep your 50-mile distance, and take no provocative actions."

Typical, Denton thought. Expected and typical.

The North Koreans had only produced one Sinpo class submarine (SSB), the *Gorae*. It had blown up while on patrol and contaminated a 1,550 square mile section of the Pacific. The North Koreans continued to test fire submarine-based and land-based missiles but were careful they never landed anywhere near the United States. But they regularly terrorized the Japanese by firing missiles over their airspace.

But this time, something looked different to Denton. The sub was stationary for several hours. Denton was apprehensive about the sub's intentions in light of the recent escalating rhetoric between Kim Yo-jong and President Armstrong.

A call came in from Bradley. "Twelve missiles away! Repeat, twelve missiles away. Spray pattern ranging from 52 to 110 degrees!"

Denton did not hesitate. "Engage SM-3 Block IIB anti-ballistic missiles. We need to get those bastards in the next three minutes." He radioed Bradley. "Once we clear target range, take out that damn sub!"

"Roger that," Bradley said. Minutes later, the P-8A launched two MK-54 nuclear torpedoes.

"Torpedoes in the water running true and direct," Bradley said. "ECM from 092 ineffective. Speed 38 knots. Expect impact in seventeen seconds."

The 092 dove and reached a depth of 280 meters when the first torpedo disintegrated its bow section.

Bradley could not keep the excitement out of his voice. "Target destroyed!"

# October 28, 2027 – 1036 Hours (MDT) Missile Defense Integration and Operations Center Schriever AFB, Colorado Springs, CO

Vice Admiral Jon Hill had been through numerous high-level meetings where he had fought hard to have Colonel Axelrod and Major Spires be the Agency's decision-makers if the United States ever came under attack. The men had refused promotions up the chain of command to remain in their positions while devoting every waking hour to coordinating how to handle a situation where millions of lives were at stake. Axelrod had a background in electrical engineering from Purdue University and had received PhDs from Stanford in mathematics and physics. Spires was a programmer. He had developed code for linking all the MDA's computers responsible to handle detection, tracking, and targeting.

Hill came out of his office and presented the situation to Axelrod and Spire.

"Figure it out," Hill said. "PDQ!" Then he called the White House.

An eerie calm settled over the elevated circular platform ringing the MDA's C2BMC center. They could clearly discern the preliminary alarm audible and visual signals depicting the 092 launch of twelve Jl-1As ten seconds after they cleared the water. To any observer, Axelrod could have been reading aloud the instructions for assembling a nightstand from Ikea.

"Bring LEO-23 to an inclination of 60 degrees, and adjust the eccentricity to give us a better picture of the direction of those missiles. Prepare to transfer targeting and firing sequence on my command," Axelrod ordered.

The missiles had been in the air for forty-five seconds. Axelrod already knew they had hostile intent.

# October 28, 2027 Missile Defense Integration and Operations Center Schriever AFB, Colorado Springs, CO

Large automatic firing solution for SM-3IIBs on the Milius," Axelrod barked. "Notify fleet commander Denton that those are our missiles. They must be activated within thirty seconds. Notify GMD and all terminal defense batteries. We are live. This is not a drill. Prepare mid-course intercepts for all Aegis-capable ships in range and SM-6B Block I Sea Based Terminal Defense ships for the three DDGs lining the West Coast."

The next ninety seconds unfolded on the large screens in front of the large number of employees and service personnel on the center's floor. The twelve SM-3 Block IIBs aboard the *Milius* successfully knocked down six SLBMs from the 092. The other half-dozen enemy projectiles continued.

The easy part was over.

Admiral Christopher Grady, Chairman of the Joint Chiefs of Staff, was sitting in "the Tank" at the Pentagon with his staff. His scowling countenance appeared on one of the screens at the White House Situation Room. Admiral Gilday, CNO, was at the White House with President Armstrong in the Oval Office when the alarm sounded. He scurried to the Situation Room with the President. They arrived thirty seconds before the six successful intercepts and were briefed on the 092.

Armstrong tried to sound presidential. "Admiral Grady, what are we doing about the six remaining missiles?"

Grady passed the question to Axelrod whose face appeared on the first screen from the C2BMC at Schriever AFB in Colorado Springs.

"The six RVs are exothermic," Axelrod said. "Speed 3.8 kilometers per second; altitude 250 kilometers. The apogee will be 750 kilometers. The targets are Los Angeles, San Francisco, and Portland. Nine SM-3 Block IIA intercepts are acquiring targets and have just been launched from three destroyers."

The President watched as the intercept missiles approached their targets on screens three through eight. Three more JL-1As were destroyed by Aegis SM-3 Block IIA missiles at various altitudes of 500 to 700 kilometers by the kinetic EKVs from the *Pinckney* DDG-91, the Momsen DDG-92, and the *Stockdale* DDG-106. The remaining trio kept hurtling through the sky, one toward each of the three targeted cities.

Secretary of Defense Rockton and his staff arrived in the Sit-Room.

"All forces to DEFCON 2," Armstrong said. The nuclear football was on the President's left. All airborne bombers were dead heading for their POC locations. NATO had been alerted, and China and the Soviet Union were bracing for the worst and praying the terminal US ABM system was even better than they had ever imagined.

Major Spires called from the C2BMC floor. "Colonel, all three cities have THAAD-ER, PAC-5, Arrow, and Typhoon batteries. They have turned their AN/TPY-2 launch on remote OPIR radar for controlling the targeting over to our system. I have engaged our internal automatic fire control system for all batteries. None of the other THAAD, Typhoon, Arrow-5, and Aegis Ashore Systems are within range of these trajectories."

"What now?" Armstrong asked. He winced when he heard his voice crack a little.

"We wait, sir," Rockton said.

They did not have to wait long. The THAAD-ER system intercepted the warheads headed for Los Angeles and San Francisco just outside the atmosphere at an altitude of 105 kilometers, 30 miles from the coastline. The terminal phase systems in the Northwest outside Portland performed flawlessly but missed the remaining warhead because it was knuckling due to being grazed by an SM-Block IIA ABM. The only remaining defense was the PAC-5.

#### ~ Armageddon ~

Axelrod watched anxiously as the fluttering warhead spun toward the nearest Patriot battery. The warhead passed the battery. A near miss provided an upward lift and changed its trajectory yet again.

"Goddamn thing doesn't fly straight," the President said.

"Damn inconsiderate," Rockton mumbled. He despised the young President and dismissed him as cocky, underinformed, and shallow. The President was a reflection of the American people's growing tendency to bypass qualified candidates who seemed dull in favor of glittery men and women who tended to speak loudly and long before they bothered to engage their brains, if they had one.

The enemy missile disappeared from the screen.

"What happened?' Armstrong asked.

"Mr. President," Rockton said, "The city of Portland just disappeared."

# October 28, 2027 Missile Defense Integration and Operations Center Schriever AFB, Colorado Springs, CO

The fireball erupted over the area about 50 miles east of Portland in a sparsely populated area.

Secretary of State Michael Johnston tapped the President on the shoulder. "Putin," was all he said. He pointed to a screen.

"Put him through," Armstrong said.

The Russian Premier had lost his stoic, impenetrable visage. His eyes were wide either with horror or fear, and his voice was higher than his normal grumble.

"Mr. President," Putin said, "Russia had nothing to do with the nuclear weapon that just struck the United States. We have no forces on alert. What can we do to help?"

Putin was relieved when he saw that President Armstrong, though pale, seemed in control and rational. Putin had feared he would encounter the bombastic showman whose campaign had electrified the United States.

"Premier Putin," Armstrong said, "the United States is not rushing to any judgment, but we will remain on full alert until this matter is sorted out. You can help yourself and us by giving us all your intelligence on this issue within the next sixty minutes. I expect your full cooperation. Anything less will be considered an act of aggression and will have a very negative impact on your country."

Putin bridled for a moment. "Is that a threat, sir?" He immediately regretted his reaction.

"No, Vladimir," Armstrong said. "It is an absolute promise."

Putin took a beat to rein in his notorious temper. "Mr. President, I don't need an hour. I was extremely displeased with Chairman

Jinping's decision to sell the 092 to North Korea. I even communicated my displeasure to Li Keqiang. My sources tell me what you already know—the missiles were launched from that Chinese submarine. I can also assure you the Russian people want peace with the United States. We will not attack the United States unless you attack Russia first. As we speak, the GRU is sending probable launch locations for all mobile Chinese DF-41AGs. We will assist the United States in controlling the Chinese arsenal, but—and I ask this humbly—you must pledge not to resort to a first use of nuclear weapons."

Armstrong looked at Rockton, who nodded. "Fine," Armstrong said. "You know we will retaliate for the attack. You would do the same. We will not use our nuclear arsenal against China unless they launch against us. Given that promise I expect you to stand down and back us in any conventional action we take. Some time ago, I told Chairman Jinping that any missile launched from the 092 would be considered launched by China. He cannot escape the consequences by fighting a proxy war or hiding behind you. Have I made our position clear?"

"As clear as Rogaska," Putin said.

Rockton had already scribbled a note by the time Armstrong looked at him. "Russian crystal," it said.

Putin continued. "Russia does not want to become the enemy of the United States at any time and especially today. My scientists have informed me that a large-scale nuclear exchange will exacerbate our already poor atmospheric conditions. I will work with you and Chairman Jinping to defuse this most unfortunate situation. All Russian submarines will surface and await a favorable outcome."

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Armstrong took twenty minutes to consult with his senior advisors, ranking members of Congress, and military leaders. He looked at Rockton.

"Liquidate the Chinese Navy's nine SSBNs, and sink its two aircraft carriers. Level all three Chinese military bases in the Taiwan Straits."

"What about the Chinese military personnel?" Rockton asked.

"I care less about them than the Chinese do about the men, women, and children of Portland," Armstrong said. "If you want to give them a 'get the hell out of Dodge' warning, that's up to you. Then I want you to obliterate everyone in North Korea who wears a uniform."

"Yes, sir."

Armstrong pointed at his defense secretary. "Those sons of bitches get no warning. Got it?"

"Roger that, sir."

Within the hour, with fire raining from the sky, Chairman Jinping understood he was on his own. There would be no help from Russia.

President Armstrong ordered all personnel to the bunker under the North Lawn.

#### October 28, 2027 – 1327 Hours North Lawn Bunker, the White House Washington, DC

Rockton, Admiral Christopher Grady (Chairman JCS), Admiral Michael Gilday (CNO), General Charles Brown (Chief of Staff, USAF), General Lori Griffin (Deputy Secretary of Defense), General Glen VanHerck (Commander of North American Aerospace Defense Command (NORAD), and a few others, along with the President and his family, listened to the electric locks on the bunker slide into place. While Mrs. Armstrong tended to the children, the rest of the occupants stared at a blank screen and awaited a report from Admiral Stricter, Commander of the U.S. 7th Fleet. The Navy man's face appeared. At the same time, an adjacent screen displayed a spreadsheet.

"Mr. President, within the last 45 minutes, we have decimated the Chinese Navy. Take a look," said Admiral Stricter.

All heads turned to the report.

- 096 Changzheng 22 422 SSBN Sunk Iowa MK-48 22' 06"N 180'17"E
- 096 Changzheng 24 424 SSBN Sunk Idaho MK-48 30' 29" N 165'22"E
- 094A Changzheng 21 421 SSBN Sunk Mass. MK-48 15' 53" N 116'07"E
- 094A Changzheng 20 421 SSBN Sunk Indiana MK-48 16'45" N115' 21"E
- 094A Changzheng 14 414 SSBN Sunk J. Carter TmHK Yulin Naval Base
- 094A Changzheng 12 412 SSBN Sunk J. Carter TmHK Yulin Naval Base
- 094 Changzheng 13 413 SSBN Sunk J. Carter TmHK Yulin Naval Base
- 094 Changzheng 11 411 SSBN Sunk J. Carter TmHK Yulin Naval base

- 001 Liaoning \* 16 Aircraft Car Sunk DDG-85 NSM 25' 34"N 172" 34"E
- 002 Shandong\*\* 17 Aircraft Car Sunk DDG-54 NSM 17' 22"N 114' 57"E

"Carriers John F. Kennedy and Ronald Reagan of the 7th Fleet are securely tucked away behind a screen of destroyers and steaming for territory beyond the range of any Chinese ASCMs," Stricter informed the President. "The asterisks indicate hostile aircraft we shot down during the course of the engagement—thirty-seven in all. Several of the Chinese aircraft launched YU-12 ASMs. They did no damage. We have lost twelve aircraft. Rescue operations are underway. The three Chinese Island bases in the Taiwan Straits are smoking holes in the ground."

There was a murmur of satisfaction, but no one felt like cheering. The death toll was still heavily in favor of the other side.

The Admiral continued. "Seven Chinese destroyers launched YU-18 missiles. They are all now at the bottom of the ocean. They are as follows: *Nanchang* 101, *Lhasa* 102, *Dalian* 105, *Hefei* 174, *Xning* 117, *Hohhot* 161, and the *Anshan* 103. China has fired over 100 DF-26B and DF -21E anti-ship ballistic missiles at our two carriers from the 634th, 676th, and 689th brigades in eastern China. Our ECM produced malfunctions in the reentry vehicles for nearly all warheads. The SM-6 Dual Block II intercept missiles destroyed any RVs that appeared as threats upon reentry. I would be remiss if I failed to mention the air superiority coverage by the Raptors from the Anderson Base on Guam. The fifty fighters stationed there took on a much larger force of JL-20Bs and engaged in numerous nonvisual engagements. They downed eight Jl-20Bs with AIM-120ds before the remaining JL-20Bs bugged out."

Admiral Gilday was trying not to smile. "Thank you, Admiral," he said. "Remain vigilant, and expect the worst."

Everyone turned to Armstrong.

Armstrong did not speak for a while. He was scrutinizing preliminary reports from the Portland area. With each line of text, his face reddened. Without asking, the White House physician began monitoring the Chief Executive's blood pressure. Armstrong did not protest.

"Death toll is lighter than we expected," Armstrong said, "but one American is too many. Now we have 30,000." He looked up. "What can we expect from Chairman Jinping, and what are their land-based missile capabilities?"

The face of Dr. M. J. Lewis, Chinese weapons expert from the Pentagon and an assistant Secretary of Defense, flickered onto a screen. Everyone listened, but on the other side of the world, a more interesting conversation was taking place in Beijing where Jinping and his top six committee members were in conference with Putin and his defense ministers.

# October 28, 2027 – 2057 Hours (Moscow Time)

The Central Military Commission of China recommended a declaration of war on the United States to the Politburo Standing Committee of the Chinese Communist Party. Jinping and Keqiang wanted to enlist the support of the Russian Federation.

Putin and his defense ministers met with Nikolai Dolgushkin and Alexander Sergeev, two atmospheric scientists from the Russian Academy of Scientists, to determine what the latest computer models revealed about a nuclear war between the United States and China.

"The nuclear winter theory is no longer accurate," Sergeev said. He wasn't sure he was right, but he'd been told what to say. "But such a war will most likely deplete 70 to 80 percent of the ozone filter in the atmosphere and result in worldwide disease and famine. For each megaton exploded at the optimal HOB, we can expect 5,000 tons of nitric oxides to be carried into the upper atmosphere. The soot propagates nitrogen oxide and nitrogen dioxide, which will combine with the O3 molecules. The resulting chemical reaction will deplete the O3 molecules that form the protective ozone layer."

Putin waved them quiet. "Spare me the science," he said. "How long will this last?"

"Between ten and fifteen years," Dolgushkin said.

Putin greeted the seven-member Chinese Politburo like long-lost relatives. "Good evening, my friends. We are up-to-date on the actions in the Pacific. We urge you to respond with restraint and join us in a call for a cease fire before more blood is shed."

Chairman Jinping's face twisted in rage. "How can we do that after the Americans have slaughtered 15,000 of our brave servicemembers and destroyed our Navy? We must have a proportionate response. We must sink the *John Kennedy* and the *Ronald Reagan*."

"Any attempt on the carriers will cause the United States to hit you with more than 2,000 megatons of nuclear weapons. China will cease to exist," Putin warned.

"They will not attack us," the Chairman said.

"My top advisors disagree," Putin said. "If you push, America will annihilate your country. You may land a few warheads in America, but you will not be around to celebrate. Though we despise the Americans, we will not join you in a suicide pact."

"Then we will strike them with all our weapons," Jinping said with confidence.

Putin shook his head. "I cannot let you do that."

"What exactly are you saying?"

"We will knock your missiles down," Putin stated with just as much confidence.

"You will fight against us?" Jinping asked incredulously.

Putin's legendary temper boiled over. He screamed at the images on the screen. "You idiots were instructed not to sell the 092 to North Korea. You are getting off lightly compared to what is now happening in North Korea. The atmosphere will be contaminated for years if you persist, and it will have a very detrimental effect on Russia's food supply. We can't let that happen. We are informing the United States that we will employ all our ABM forces, including the S-550, to knock down your missiles after launch. Do not fire any ballistic missiles."

"What if the United States attacks us?"

Putin calmed a bit. "We will defend you if the United States uses nuclear weapons against you first. But if you commence the hostilities, we are not your friend."

"Then we will retaliate on our own!" Now the Chairman was angry—or perhaps frightened. It was hard to tell.

"I am telling you to stand down!" Putin shouted. "You underestimate the destruction NATO missiles will bring. In addition, India will strike you with hundreds of their new sub- and land-based nuclear missiles. We will not join you in a first strike, which means it will be difficult for you to get any of your missiles through the combined ABM systems of the United States and Russia. Any missiles entering Russian airspace will be knocked down. We know the general location of even your rail-and truck-mounted mobile launchers. The S-550 will take out most of your liquid-fueled DF-5C MIRVs in the ascent phase. Do not press us on this issue, or you will die."

The Russia-China relationship had been slowly sinking into the sunset ever since Jinping had refused to support Russia in its failed attempt to annex Ukraine in 2022. Putin blamed Xi Jinping for not sending weapons when Russia was in dire need. Putin was sure a nuclear war with the United States and NATO would end the world. He hoped Jinping would soon come to his senses and think of another way to punish the United States. He advised Jinping to just sell all their bonds and cripple their economy, a move certain to cause tremendous economic turmoil, which Americans despised above all else, even loss of life.

Putin's jaw twitched. He snarled at the screen. "You have killed thousands of American citizens. Unlike you, they do not consider their people expendable pawns. You should suffer the consequences of your actions, and you need to reflect on the large disparity in nuclear warheads."

Enraged, Jinping terminated the feed and turned to the members of the Standing Committee and his military advisors. His voice screeched like an air raid siren.

"They are bluffing!"

No one spoke until General Wei Fenghe said, "Mr. Chairman, I respectfully disagree. The Russians are doing what is in their own self-interest."

Before Jinping could respond, Air Force General Xu Qiliang and General Zhang Youxia joined in dissent. "We cannot launch our missiles against the United States. They have a ten-to-one advantage and a better ABM system. Our submarine fired the first shot. World opinion and every other nuclear power on the planet will take action against us if we do not stop. We must contact the Americans and request a cease fire."

Politburo member Han Zheng jumped to his feet. "Enough from you military cowards! The Russians are bluffing. We must respond to

the Imperialist aggression. If we do not, we will be seen as weaklings and be pushed around forever. I demand a vote from the Standing Committee. Even if we die, we will die with honor."

Li Zhanshu waited for the clamor to die down. "Comrades, if we go down the road suggested by Han Zheng, we will have violated our own pledge of no first use (NFU), and the alliance of no first use countries treaty we entered into just last year will be violated. The other countries in that alliance—India, France, and Russia—will be obligated to come to the defense of the United States. We cannot travel such a perilous path."

He sat, and the voting commenced.

After the feed terminated in Moscow, a few of the defense ministers were critical of Putin and Shoigu.

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"The British Vanguard and French Le Triomphant classes of SSBNs possess in excess of 600 warheads. Add those to the 2,000-plus the Americans have," Shoigu said. "Each of those can be delivered into our homeland. At least 500 will hit their targets. The Chinese, if they ignore the danger, will launch nearly half of their stockpile of 450 nuclear warheads against the United States. The British and especially the French will stand clear but remain on alert status. If we launch with the Chinese, all of NATO will fire on us within ninety seconds. Whose missiles would you prefer to defend against?"

#### October 28, 2027 – 1417 Hours North Lawn Bunker Washington, DC

Dr. Michael Lewis, Pentagon weapons expert, spoke in a soft, calm voice. "The Chinese will place the limited number of W-88 type warheads they have on their two best missiles, the DF-41A and the DF-5C. They both have a range of 17,000 kilometers even when carrying three warheads.

If they launch, the entire United States will be within range of most of their missiles, regardless of whether they utilize a polar or a west-east trajectory. They've upgraded over the last three years and can probably attack us without flying their missiles over Russia. Those upgrades are most likely the result of their desire to have sufficient range to attack the United States without a Russian overflight. Russia's economic spiral almost toppled Putin. He will not allow the use of Russian airspace. My contemporaries at the Agency estimate that the People's Liberation Army Rocket Force (PLARF) has approximately 425 to 500 warheads available on ICBMs, MRBMs, and IRBMs. Of the 200-plus ICBMs located in range of the United States, about 150 are LOW capable."

"What's that?" It was a voice from the back. No one turned to embarrass the questioner.

"Launch on Warning," Lewis said. "Read over the handout we're distributing. It outlines where the LOW ICBMS will be coming from—mostly silos in Yumen, Hami, and Hanggin. Those missiles can boost three reentry vehicles into a predictable, ballistic missile path. They will employ chaff and decoys. We also believe that the 644th Brigade in Hanzhong may have some newer DF-41AGs. These are highly mobile missiles that can be transported over rugged terrain."

Lewis gave everyone a chance to look over the handout. "The other major threat comes from the DF-5C. It's a bigger rocket and can carry ten MIRVed RVs. Most likely, they will come from Base 25 at Wuzhai, the 401st Brigade at Luoning, or Xuanhua. Even though it is liquid-fueled, it can be ready to go in as little as fifteen minutes. Several DF-5Cs are in the autonomous region of Tibet."

"What else?" Armstrong asked.

"Well," Lewis said, "the DF-31AG has been upgraded to a range of 15,000 kilometers. It is highly mobile like the DF-41AG and carries at least three warheads. Both the DF-41AG and the DF-31AG are solid-fueled. They need minimal prep time. The DF-31-AG, like all the other Chinese missiles, is highly accurate and has a CEP of 150 meters or less. The DF-41 AG is considered the superior missile. IRBM and MRBM Chinese weapons can easily reach Guam, Japan, and South Korea. Taiwan alone has over 2,000 missiles trained on it, a handful of which carry nuclear warheads. Your red sheet identifies the types of

missiles and other locations for PLARF brigades in China known to have ICBMs."

President Armstrong took a breath. "Okay," he said. "What do we gain from a preemptive first strike?"

It felt like all the air had been sucked out of the subterranean room. Lewis was the only person who did not flinch.

"Well, sir," Lewis said, "you may be able to knock out a third of their ICBMs and 50 percent of their shorter-range missiles at best before they launch. All depends on where their missiles are when our warheads hit—at least that's my opinion."

"SAC should weigh in on this issue," Admiral Gilday said. "They are on screen now. General Dawkins believes we hold a huge advantage if we strike first against the Chinese. Our most effective first strike weapon may be our B-21 fleet, but our closest base is more than two hours out. They could simultaneously eliminate many of the hard siloed targets without notice They would be without the DF-5C liquid series of heavy payload rockets that may or may not be fueled under these circumstances. Even though they are silo-based, General Dawkins believes we can take them out before they can be fired."

There was a crackle of static. Colonel Axelrod's face appeared on the center screen.

"Mr. President, it's all moot now," Axelrod said. "Our LEO satellites have detected over 200 launches from across China and 112 ICBMs at T+ 17. Expect more. We are taking control of the SM-3 Block IIB BPI missiles in Mongolia. We will be launch-ready in T+ 77 seconds. All Chinese ICBMs are on a heading of 70 to 95 degrees away from Russian airspace and will enter the United States from the west-northwest or west-southwest direction. The missiles were fired from areas known to house ICBMs. Our Pacific Fleet of Aegis destroyers is well positioned. Many of the missiles will come within the 2,100 kilometer range of the SM-3 Block IIAs onboard those ships. We have the three Zumwalt Class stealth destroyers in the Yellow Sea, the Sea of Japan, and the East China Sea equipped with the MK-57 launcher, which allows for 80 cells. The *Zumwalt* is in the Yellow Sea and will assist South Korea. The *Michael Monsoor* is in the Sea of Japan and will assist Japan's eight Aegis destroyers. The *Lyndon Johnson* is in the East China Sea with eighty

Tomahawk BGM-109B nuclear cruise missiles. They have already been launched at every suspected SRBM, MRBM, and cruise missile site with an ability to attack Taiwan."

"What else?"

"SRBMs and MRBMs are lifting off now against Japan, South Korea, and in the direction of the Philippines, Guam, and our bases in Australia at Pine Gap and North West Cape. Japan has readied its eight Aegis destroyers with 720 ABM for intercepts. Guam has a THAAD-ER system and Aegis ashore for defense. South Korea is the most vulnerable. Australia is well defended but will take some hits. We believe Taiwan now has a chance to defend itself. Taipei will suffer massive damage. Seoul and Tokyo will also take numerous hits from nuclear weapons."

Armstrong called the National Military Command Center deep inside the Pentagon. "General Issacson, this is President Armstrong. I am initiating authentication code."

General Issacson, the Deputy Director in the War Room National Military Command Center, said, "Very well, Mr. President. Delta Bravo."

Armstrong looked at the laminated card in his hand. "Zulu Charlie."

The code selected by the President was the plan developed by the Pentagon SIOP for an attack on China first and then North Korea sans Russia. The order was an encoded and encrypted Emergency Action Message (EAM) containing about 150 characters. It was broadcast to each worldwide command center and launch crew that received two codes. With the first code they were able to unlock their weapons. The second code had to match the code found in their locked safe. The safe was in the silo, bomber, or submarine receiving the order. The B-2 and B-21 bombers surrounding Russia turned back toward home. Those near China delayed 45 minutes to allow over 2,000 cruise missiles to hit SAM sites, fighter bases, and suspected mobile launch sites for ICBMs.

The DOD had received over 156 target zones from Russian intelligence where there were suspected mobile launch vehicles and their supporting logistics. Numerous Tomahawk Vs capable of loitering and radical inflight course correction for mobile missiles were targeted for those areas. In addition, four Ohio Class SSBNs (each carrying 154

nuclear Block VI cruise missile iterations with a W-80-1, 150 kt warheads) fired on the suspected mobile locations.

Armstrong ordered more than 650 planes carrying the LRSO in the air in addition to the alert craft already airborne. As the twenty-five RQ-170s spread out over China from Mongolia, they searched for the next eight hours for mobile missile sites.

The plan targeted 763 DGZs in China and included 960 UGM-133 Trident II missiles with 475 kt warheads from five Ohio Class nuclear submarines—the *Nebraska*, *Rhode Island*, *Maine*, *Wyoming*, and *Louisiana*. Speed was of the essence, but it was equally important to avoid Russian airspace.

Officers aboard the vessels began spinning dials and opening safes. Onboard those vessels, the Captain, Executive Officer, Lieutenant Commander, and Lieutenant began opening the safes and authenticating the launch codes.

"How bad is this going to be?" Armstrong asked General Issacson. "Three hundred million dead in the first thirty days, sir."

# 46

### October 28, 2027 – 1100 Hours (MDT) Schriever AFB, Colorado Springs, CO

Colonel Axelrod had seen as much live action as anyone else in the service, but it was all he could do not to vomit on the floor. His adrenaline would not stop pumping.

"Mr. President," Axelrod said, "total ICBM launches, 142. Within three minutes of launch, sixty-nine of the missiles launched by the Chinese were taken out by BPI missiles from Oyu Tolga and . . ."

Never willing to miss a moment he might use in a campaign, Armstrong pumped his fist. He looked sideways to see if presidential photographer Chester Howren had gotten the shot. "The Agency was correct. I knew we needed those missiles. I knew it."

"Well, Mr. President," Axelrod said, "The Oyu Tolgoi BPI missiles only took out forty-three of the Chinese missiles; the Russians got the other ones."

Axelrod could not shake a sense of doom as he watched Armstrong preen and strut and act like he was about to wet his pants.

"What about the Russians?" Armstrong asked.

"Mr. President," Axelrod said, "their new S-550 system is very mobile, and they have recently added BPI missiles and stationed units on their border with China well within BPI distances of Wuzai, Luoning, and Xuanhua. Now we still have seventy-three missiles pushing RVs at T+ 372s. They are still in the ascent phase. Some of them have MIRVs, and eighteen from southwestern China are in an extended boost phase. We have eighty-six GMD interceptors at Greely and Vandenberg. They are ready to attempt long-range mid-course intercepts when the RVs are within optimal portion of their 3,000 mile range. Our first actual ascent or MC intercepts will be attempted by the *Oscar Austin, Winston S. Churchill*, and *Lassen* in the South China Sea. The *Howard*, *Bulkeley*,

and *McCampbell* are located 250 miles east of Japan and will be ready with the next salvo. We will likely lose some ships to Chinese cruise missiles."

Armstrong strained to look presidential. "Do you concur, Admiral Gilday?"

The Admiral could not have looked more stunned if a troop of tenyear-old Girl Scouts had appeared in the bunker selling cookies. "Of course, sir. The Colonel is absolutely on point. Those ships are on the frontline, but we do have effective ECMs and SM-6 Dual II missiles. Still, they can't avoid everything. One of those vessels will eventually run out of ammo."

"Have the bombers' and submarines' cruise missiles prioritize known locations for missiles that may threaten our ships," Armstrong said.

Gilday nodded and thought, Gee, why didn't we think of that, you pompous twit?

"Admiral Grady." Armstrong was beginning to believe he knew what he was doing. "Can you or Colonel Axelrod quickly give me an outline refresher of the MDA operations?"

You would know this if you spent more time on your security briefings and less on your short game, Grady thought.

"The Overhead Persistent Infra-Red System (OPIS) on the GEO satellites has almost instantaneous detection of a launch and tracks through the ascent stage," Grady said. "MEO and LEO satellites take over after the burnout and coordinate precise tracking for the rest of the flight. The entire BMD system has integrated sensors and centralized fire control based on the coordinated feed from those sensors. The Ground-Based Midcourse Defense System (GMDS), seventy Burke Aegis destroyers, five Ticonderoga cruisers, and the Terminal High Altitude Area Defense systems interface with C2BMC at Schriever Air Force Base in Colorado Springs. For the last two years, DOD's C2JADC2 system has been running a program written by Major Quentin Spires called Pathfinder. It integrates all sensors into a single AI network and allows us to run hundreds of mock attacks. The program has learned to optimize our assets even in the case of a missed intercept. The system learns from our mistakes."

#### ~ Armageddon ~

Colonel Axelrod broke in. "Sorry to interrupt, Admiral, but to give the President the latest information, I have to let him know how we are going to deal with the Hyper Glide Fractional Orbiting warheads that will be approaching from the south."

Armstrong had reached his limit. "From the south, like from the South Pole?"

"Mr. President, we have three Navy Aegis destroyers in the Gulf of Mexico armed with SM-6 Block IB terminal phase interceptors that have demonstrated an ability to go beyond the hypersonic speed of the Chinese DF-17s. If any of those four missiles gets through the Aegis ships, the Army's experimental GA-EMS High Energy Laser Weapons System (HELWS) may help our other terminal defense systems. Admiral Grady has a summary of our terminal defenses."

System	Range KM	F1t Ceil	Speed Km/s	# Available	Location	Intercept Phase
SM-3IIB	1800	900	8.5	250	Mongolia	BPI
SM-3 IIA	2100	2000	5.5	1500	Aegis	MCI
GBI	6000	2000	5.5	86	Conus	MCI
*SM-6IB	400	200	5.0	1000	AGS & Conus	TPI
*SM-6 Dual II	450	225	5.5	1000	AGS & Conus	TPI
**THAAD	200	150	2.8	1700	Conus	TPI
PAAC-4	70	24	2.2	2700	Conus	TPI
***THAAD-ER	400	275	7.5	235	Conus	TPI
PAAC-5 ARR	220	180	7.5	400	Conus	TPI
*Typhoon	400	200	5.5	800	Conus	TPI
^Arrow2	300	200	6.5	270	Conus	MC & TPI

<sup>\*</sup>All systems based on MK-72 Booster 21 inches as opposed to 13.5 under retired systems and 2nd stage MK-104 Quad thrust rocket motor operated by Army and Navy under MDA targeting and fire control. SM-6 Block I B now 21-inch rocket motor supported by 21-inch booster

<sup>\*\*</sup> Single Stage with bi-propellant liquid Divert Attitude Control System (DACS) on KKV (Kinetic Kill Vehicle) module. Thrust chamber (CSiC-3700 F) Six Thrusters for Yaw-pitch control. Four Rockets for terminal acceleration to 5.5 km/s once target locked by gimbal-mounted infrared seeker module in nose section

<sup>\*\*\*</sup> Two-stage system – Booster increased to 21 inches in diameter so battery consists of six launchers and only five missiles instead of eight on each vehicle. Second stage provides acceleration to 7.5 km/s in conjunction with same KKV module with four rockets for terminal acceleration

#### ~ Thomas J. Yeggy ~

Admiral Grady handed the President a green sheet. "This outlines everything, sir. It's included in your weekly briefing."

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The Colonel knew he'd overstepped, but he despised the bloviating politico. Armstrong realized his lack of preparation was on full display.

"Goddamn it," Armstrong said. "Can we stop those warheads or not? Where the hell are they?"

From the corner of his eye, Lewis saw the Admirals smirking.

"Well, sir," Axelrod said, "the four HGVs were launched by DF-16Bs with a DF-17 scramjet on top to guide the reentry. They are maneuverable and capable of avoiding our terminal defenses. The reentry vehicle comes back into the extreme upper atmosphere at 6 kilometers per second and can skim back into orbit and hit another target farther along in its chosen path. They don't get high enough for a mid-course intercept by GMI or Aegis SM-3 IIA missiles, but if they choose to come down where I think they will, we will attempt intercept first with the SM-6 Block IB. If that fails, THAAD-ER PAAC-5, THAAD-PAAC-4, or typhoon systems have a good chance."

"English, Colonel," the President said.

"We'll get them, sir."

"And if they don't?"

"I firmly believe the system has learned its lessons well," Axelrod said. "We'll stop most of them."

Armstrong looked like a man who'd just learned he had a terminal disease.

"Sounds to me like we're screwed," he said.

### 47

### October 28, 2027 Schriever AFB, Colorado Springs, CO

Moments later, Axelrod made an announcement. His voice showed no emotion. "India just knocked down eighteen ICBMs in the boost phase. They launched DF-5Cs from the Tibetan Autonomous Region on the Amdo Plateau. We are now into the ascent-early, midcourse intercept phase and probably can't count on any more BPIs from India or Russia. But our Aegis ships in the South China Sea and the ones east of Japan will be attempting ascent and early mid-course interceptions and providing trajectory data for others."

Armstrong looked at him. "Fifty-five left?

"Yes, sir."

"Update."

Axelrod continued. "Mid-course intercepts, if successful, will take place over the next 20 minutes for incoming RVs. HGVs may take longer. They feign an attack to see if we will commit interceptors and then maneuver back into a subspace orbit."

Armstrong gave his trademark—and irritating—two-finger salute.

Well, total annihilation would have one positive effect, Axelrod thought. The world would be rid of this idiot.

All eyes in the North Lawn bunker were on screens 4, 5, and 6. The *Oscar Austin, Winston Churchill*, and *Lassen* fired their SM-3 Block II A missiles at advanced points in the ascent phase. President Armstrong was encouraged when ten RVs were eliminated.

On screens 7, 8, and 9, the *Howard, Bulkeley,* and *McCampbell* were going through a similar procedure. Anxiety in the bunker escalated. Secretary of Defense John Rockton and his Chief Deputy General Lori Griffin conferred with Admiral Grady about a possible second wave. Admiral Gilday was scheming with Axelrod when the Colonel confirmed the twelve intercepts by the Aegis ships in the Sea of Japan.

"India has launched on Beijing in fulfillment of their obligation under the NFU Treaty," Axelrod said. "They have targeted other areas where China could strike them with short-range missiles. The thirty-three remaining missiles are launching MIRVs, chaff, and decoys. Our OPIR system can differentiate. We will be able to target reentry vehicles accurately in the mid-course and terminal phases. We'll hand off fire control to the MDA. Final count of warheads is sixty-one. They are nearing 1,100 kilometer apogee at terminal velocity for MC of 7 kilometers per second."

Lewis knew mid-course intercepts would be difficult but not impossible. The detection system radars were accurate and discriminating. They could identify, track, and project the path of anything the size of a baseball at an altitude of anywhere from 1 km to 2,000 km and a distance of over 12,000 km. As Axelrod predicted, each of the DF-41AGs released about eight decoys along with the other MIRVED RVs during the beginning of the MC phase. He wasn't surprised by India's involvement.

Axelrod's voice rang out above the rest. "We now have sixty-one reentry vehicles with warheads in ballistic paths en route to the United States. GMD and Aegis SM-3 Block IIAs have readied for engagement of mid-flight intercepts. We are tracking the four HGVs and are ready to engage all applicable terminal intercept systems in the HGV's flight path, which will be from the south. *Chaffe, Momsen*, and *Halsey* are in the Gulf of Mexico anticipating HGVs in FOBs from the south. The *Jack Lucas, Louis Wilson*, and *Ted Stevens* are located just offshore along the California coast up to Vancouver. All six ships will utilize SM-6 Block IBs in the terminal phase defense. The other Pacific-based ships will also engage with SM-IIAs during the MC Phase."

Admiral Gilday and the rest of the JCS watched the satellite feeds from China on a bank of screens. Nearly a thousand mushroom clouds started spiraling into the atmosphere carrying soot and debris. In less than forty-five seconds, the view was partially obscured. From a tactical standpoint, this was not an optimal sequence since the other targets the cruise missiles were seeking would not be visible. But for the most part, the cruise missiles were pure overkill. Most of the bases were within 10–20 miles of the larger cities and would be inoperable due to damage

from the five submarines' Trident UGM-133 missiles. Gilday turned his attention back to the MDA bank of screens where several intercepts were occurring.

Axelrod's voice remained flat and calm. He could have been leading a tour of the Louvre. "We have a lattice of thirty-four Aegis ships spread out across the Pacific and the Gulf of Mexico. Based on current trajectories, only twenty-four are positioned to engage in the intercept process. Mr. President, do you wish to reserve some missiles for a possible second wave from silo or mobile missiles?"

Gilday joined in. "Mr. President, the MK57-VLS is now installed on about half of our ships available for this intercept mission. The rest have a dependable VLS-41. Each VLS has ninety-six cells on the DDG and 122 cells on the CG Ticonderoga Class. I believe about 30 percent of those have our SM-3 Block IIA. If we allocate two SM-3 Block IIA missiles per RV, each targeted intercept will achieve a 70 percent effective rate, and we will have over 500 missiles in reserve. The GMI at Fort Greely and Vandenburg should be allocated in the same manner. We'll have about fifteen missiles for the TPI systems to clean up.

Alexrod's voice never changed. "Sir, we need a decision in sixty seconds. The SPY-6(V)(4) radar on the Aegis ships and five U.S. Space Force Overhead Persistent Infrared Satellites and sensors on the MEO and LEO satellites are handing off fire control to the MDA in thirty."

"Opinion, Colonel?" Armstrong asked. When Axelrod deferred to the Admiral, the President said, "Screw rank and protocol. What do you think, Colonel?"

"I agree with the Admiral, sir," Axelrod said.

"Colonel Axelrod, fire the indicated intercept missiles on your command," Armstrong announced with confidence.

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Each Aegis ship could engage 100 targets simultaneously. Firing intercepts from eighteen ships presented no problem. One by one, forty blips disappeared from the radar screens. There were twenty-one warheads on a descent path and four hyper-glides approaching from the south. The MDA readied for employment of the terminal defense

phase, which was headed by Major Spires who had graduated magna cum laude from MIT's Aerospace Engineering and Computer Science Department at the age of eighteen. Before his twenty-fifth birthday he had programmed the entire MDA C2BMC system to integrate all phases of intercepts.

The Major could tell by the trajectory of the Chinese missiles and their RVs shortly after they entered the ascent phase exactly which sites were being targeted. For the remaining ballistic reentry vehicles, fourteen sites were logical choices—three were Minuteman III sites at Minot AFB, Malmstrom AFB, and F. E. Warren AFB. Other missioncritical bases targeted included Kings Bay Naval Base, Whiteman AFB, Offutt AFB, Peterson AFB, Kirtland AFB, Barksdale AFB, Kitsap Naval Base, and the Jim Creek Naval Radio Station. Spires knew the enemy would try to hit the Pentagon and the VLF Transmitter near Cutler as well. What he couldn't discern was where the HGVs were headed. He had eight minutes to give instructions to the terminal defense batteries concerning whether the centralized fire control at Schriever would be more effective than localized fire control. Since the RVs were designated for primary targets and he had programmed the integrated fire control system to handle this exact scenario, he opted for the preprogrammed fire control system at Schriever.

Armstrong turned to Lewis. "I want your candid assessment of what our chances are with the remaining twenty-one warheads and four HGVs."

Lewis's mind whirled like a super computer. He knew the Terminal Layered Homeland Defense System (TLHDS) started with the forty-six Arleigh Burke Class II A and six Class III destroyers. They utilized the two-stage RIM-174-ERAM SM-6 Block IB missiles with a range of 400 km and maximum engagement altitude of 200 km. The missile became hypersonic with a new second stage kick velocity of 5.0 km/s. Instead of depending on a kinetic kill vehicle like the SM-3 Block IIA Aegis missiles, the new SM-6 Block IB used a 64 kg high-explosive (HE) fragmentation warhead to expand its kill area. Although only six of the Aegis ships were near enough to the shore to be a factor for terminal stage intercepts, the Army's half-dozen Typhoon batteries—consisting of four launch M983A4s trucks each with a total battery

count of sixteen launchers utilizing the same SM-6 Block IB Next Generation Interceptors—were strategically placed around the six westernmost counterforce targets.

"Mr. President," Lewis said, "the targets covered by SM-6 Block IB, THAAD-ER PAAC-5 systems, THAAD-ER PAAC-4, and Typhoon systems have a 95 percent chance for interception. Where the targets are not completely covered, the chance of an intercept drops by roughly 10 percent for each omitted system. If the target is not covered by any of the systems, the probability of the intercept is zero. Since the RV hits the atmosphere at an altitude of 100 kilometers and a reentry angle of 22 degrees, it will be traveling at 6.5 kilometers per second. By the time the RV traverses the atmosphere and gets to an altitude of 20 kilometers, it will have slowed to 2.2 kilometers per second. The RV will be subject to a 40 to 50 g deceleration force before it activates the warhead. Some of our terminal phase weapons will be able to attempt exo-atmospheric intercepts because of their range, but those will be challenging when the RV is traveling at 7.5 kilometers per second. We will have a better chance in the atmosphere once the RV has slowed down, but at the most we will only have a thirty- to forty-second window once the RV enters the atmosphere. Naturally, the higher the intercept the better. Intercepts below 30 kilometers will cause some ground damage and atmospheric contamination."

"So you think some of those things will get through?" Armstrong's face was showing the strain as the horror became real.

"The system was never designed to handle an all-out attack, sir," Lewis said. "If Russia joins, it's Katie bar the door."

# 48

### October 28, 2027 Schriever AFB, Colorado Springs, CO

The United States had been deploying Terminal High Altitude Area Defense (THAAD) batteries for almost two decades. It was not without problems. The original THAAD system could not intercept ICBMs traveling at a speed of 6.5 km/s because of insufficient reaction time relative to incoming speed. The initial iteration of the THAAD system had proven effective against slower-moving targets such as MRBMs. All the THAAD systems since 2025 were deployed with a PAAC-4 Stunner underlay battery and were effective against ICBMs below 25 km because of Spires' integration of the AN/TPY-2, Spy-6(V)(4), Spy-7(V)(1), and LEO satellite systems into the enhanced Panther fire control AI system. The increased time provided by the integrated sensor systems greatly enhanced the effectiveness of the TPI System. Now, even the newer Patriot systems had enough lead time to make ICBM intercepts.

With the placement of the AN/TP-2 forward looking systems in Korea and Japan and the initiation of immediate launch detection and fire control solution satellites, the THAAD system had plenty of lead time to target RVs of ICBMs. Even after successful testing of the THAAD system against ICBMs from 2022 to 2024, the MDA and Army went ahead with the THAAD-ER system that featured the NGI with a 21-inch booster, a second-stage accelerator, and enhanced range and altitude. There was a drawback to the THAAD-ER. The ground-based launcher could only accommodate five missiles. The earlier systems had eight. Still the speed had increased to 7.5 km/s, the range to 400 km, and the altitude ceiling to 275 km.

In addition to THAAD systems in Japan, South Korea, Guam, and Hawaii, the MDA and Army had deployed nine more TPI systems in the CONUS. A total of five of the newer THAAD-ER systems were deployed in 2025 with the underlay being a combined Patriot

Stunner-Arrow system developed by Raytheon, Boeing, and Rafael, a state-owned Israeli Aerospace defense contractor. This Patriot Advanced Affordable Capabilities-5 system was the most advanced underlay TPI ABM defense system and was radically modified in 2023 by the MDA to resemble a shorter-range version of the Arrow Block-5.

The PAAC-5 had a range of 220 km, a speed of over 7.5 km/s, and an altitude ceiling of 180 km. The firing solution was programmed into the relay from the AN/TPY-2 radar system and other sensors to the MDA and was automated based on a set timing sequence from the THAAD-ER firing radar without regard to effectual intercepts. As detailed by the Admiral, even if the missile did not intercept, it passed along course corrections to the MDA from satellite feeds. The Army's Typhoon system had proven to be capable of both exo- and endo-atmospheric intercepts in several tests. The Arrow system was land-based and, depending on its location and the trajectory of the missile, could also achieve a high kill rate of ICBMs in the terminal phase.

The Typhoon's battery operations center was linked to the Army's Integrated Battle Command System, which handed off targeting and fire control decisions to the MDA center at Schriever AFB. Assuming any missiles made it through the SM-6 IBs, the MDA would then turn to the THAAD-ER, THAAD, and Typhoon systems backed up by the PAAC-4, PAAC-5, and HELWs systems.

The TPI system was arranged so the longest-range system was deployed the farthest distance from the target in the direction of the expected trajectory of the incoming RV. Since the systems were highly mobile, there usually wasn't any problem. The current system was set up from west to east with a spacing based on range. Not every target had every system. A complete array included THAAD-ER (400 km), Typhoon (400 km), Arrow 2 Block 6 (300 km), PAAC 5 Stunner (225 km), THAAD (200 km), and Patriot underlays (50 km).

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The RVs were in the descent phase at an altitude of 1,000 km. System checks had been made to prepare for the first EMP detonation anticipated at an altitude of 400 km. The MDA had insulated its

entire terminal phase system from the effects of EMPs by modeling the terminal phase power grid to survive EMPs. An enhanced design utilized small, modular nuclear reactors (SMRs) with buried fiber optic cables to preserve all communication links necessary to operate the terminal phase systems. All other information regarding course, probable decoys, and interception points had been stored from external sensors.

Because Russia had forbidden a polar trajectory, the Chinese missiles suffered a higher MCI ratio than expected. But with a range of 17,000 km, the DF-41AG could reach any installation or city in the CONUS even with three reentry vehicles attached.

Major Spires' voice rang out. "Jack Lucas, Louis H Wilson, and Ted Stevens firing salvos of six SM-6Block IBs. Bogeys incoming at altitude of 900 kilometers, exo-atmospheric intercept attempt in progress. Expect intercepts in forty seconds. Ready with next six-pack contingency from all ships for endo-atmospheric intercept. Targets are Jim's Creek Naval Radio Station, Kitsap Naval Base, Strategic Missile Integration Complex, and Malmstrom AFB."

Four missile intercepts were made at various altitudes. All intercepts produced detonation because of the HE fragmentation warheads on the SM-6 Block IB missiles. Minimal fallout damage was expected. Additional Chinese missiles were headed for the same four targets as Major Spires had identified, and he began endothermic sequencing when the RVs hit an altitude of just over 100 km.

Across the board, the President and his advisors watched one target screen after another, going from west to east with no more than about 90 to 120 seconds between the results from each target.

"Miss on first bogey," Spires said. "Contingency six-pack fired. All land-based THAAD PAAC and Typhoon missiles ready at the Creek."

The President watched as six more interceptors were fired from the *Jack Lucas*. He took a quick glance around the room. Worry painted every face.

Major Spires spoke through clenched teeth. He sounded like a man calling a macabre iteration of the Kentucky Derby. "Creek incoming bogey destroyed at altitude of 85 kilometers by THAAD. Expect atmospheric damage from 1 megaton explosion. Minimal damage

on the ground for now. Creek is clear." He waited a moment. "TPIs engaged for all incoming RVs. THAAD-ER and PAAC-5 missiles sequencing now at SMIC in Utah. Intercepts in air . . . tracking . . . locked on . . . target destroyed at 50 kilometers by Arrow 2 Block 6 intercept. Maelstrom intercept at 42 kilometers by THAAD. Minot and F. E. Warren intercepts by THAAD at 56 kilometers. NORAD and Kirtland intercepts by THAAD at 41 kilometers. Offutt being targeted by three RVs . . . THAAD-ER locked on two RVs . . . two intercepts at 37 and 39 kilometers . . . third RV targeted by battery of PAAC-5 . . . intercept at 27 kilometers. Whiteman and Barksdale THAAD interceptors locked on. Intercepts at 56 and 62 kilometers. Pentagon incoming three RVs . . . Arrow system and THAAD-ER have both fired more than 100 interceptors . . . two targets destroyed . . . PAAC-4 and PAAC-5 engaging third RV . . . intercept at 22 kilometers. Cutler and Kings Bay . . . THAAD interceptors away . . . locked on . . . final ICBM RVs down at Cutler and Kings Bay."

"What do you mean 'down'?" Armstrong's voice cracked.

"I am sorry, Mr. President," Spires said. "They were intercepted and destroyed at 18 kilometers. All systems are in reload mode, which will take from 30 minutes to an hour."

Armstrong looked at Admiral Grady. "Damage assessment."

"Fallout from the ones that exploded has caused EMPs and residual fallout. But we still have the four hyperglides."

Axelrod never took his eyes from the screens. "Three destroyers in the GOM engaging with SM-6 Block I B in three minutes."

Lewis spoke quietly. "We will have severe damage to the ozone layer in the stratosphere. Fallout will reach us in four to seven days. DHS needs to prepare the population for some real hardships. Life as we know it on this planet will be different for the next decade."

Spires continued his report. *Chaffe, Momsen*, and *Halsey* SM-6 Block I B missiles ready for firing. Sequencing has been integrated." He waited. "*Halsey* missiles fired . . . tracking . . . locked on . . . lost lock on . . . attempting reacquisition . . . targets gliding . . . skimming atmosphere at 62 kilometers . . . locked on again . . . targets diving into atmosphere . . . angles ranging from 18 to 45 degrees . . . evasive

maneuvers . . . *Halsey* missiles missed . . . *Momsen* missiles fired . . . tracking three targets . . . one target burned up by atmosphere."

"Can we get the remaining three?" Any pretense Armstrong made at being presidential had evaporated. His quavering voice betrayed his terror.

"They are exponentially easier targets now that they have entered the atmosphere and have less maneuverability," Spires said. "Momsen missiles tracking and locked on . . . target seems to be SAC at Offutt . . . intercept of another HGV at 38 kilometers over central Louisiana . . . two other targets locked on."

Admiral Gilday and Admiral Grady exchanged glances. Grady nodded to Gilday and gave a thumbs up.

He was premature.

"Momsen missiles all miss . . . Chaffe missiles away at last two targets just now crossing the coastline . . . C2BMC AI interpolating information from Momsen misses . . . targets evasive . . . changing course on heading of 020 degrees, altitude 31 kilometers . . . Chaffe missiles tracking . . . locked on . . . intercept accomplished on one HGV. One HGV still active . . . climbing back into FOB . . . rest of Chaffe missiles miss . . . final HGV changes direction back toward Offutt, heading 352 degrees . . . reentering atmosphere at 22-degree angle, speed Mach 3.8. Offutt TPI on ready."

Everyone in the bunker saw the TPI missiles. Armstrong recovered a little of his composure. "Prepare emergency services for Omaha."

Army Chief of Staff James McConville stepped forward. "Colonel Axelrod, isn't there an experimental GA-EMS HELWS near Offutt?"

"Yes, but not much range."

General McConville did not hesitate. "Fire it!"

Axelrod reacted like the soldier he was. "Major Spires, engage the laser."

"Engaged."

Axelrod watched the screen. "Laser in contact with HGV at 18 kilometers . . . HGV maneuvers . . . still locked on."

The seconds clunked along. Detonation came at 13 kilometers.

"Premier Putin is on screen 24," Grady said.

Armstrong had managed to compose himself. "Premier Putin, we have a worldwide crisis on our hands. Famine and health problems will plague the planet for more than a decade. We cannot afford to be in an arms race."

Putin nodded. "I agree. We both need to divert all resources to reduce human suffering. Our country will have more damage than yours due to our proximity to China. We will need your help."

"We will do what we can for your people," Armstrong said. "Right now, we need to assess the damage."

Putin rang off, and Armstrong turned to Lewis. "Mike, what can we expect from here in terms of fallout and atmospheric problems? I want you on full screen so everyone hears this."

"This will be a rather lengthy explanation even if we cover just the top problems," Lewis said.

"Take your time," Armstrong said. "If we have any more launches, Colonel Axelrod can break in."

"We'll start with fallout," Lewis said. "The biggest danger will come from a gamma emitter, cesium-137, which has a half-life of thirty years. It is readily taken into the bloodstream. Strontium-90 with a half-life of twenty-eight years is incorporated into the bones and teeth. Iodine-131 has a short half-life of eight days, but those exposed have a significant chance of thyroid cancer. Other radioactive fallout that will threaten our immediate food supply includes Pu-239, Tritium-3, and C-14."

There were no questions.

"The ozone issues will be significant," Lewis went on. "In the stratosphere we have an ozone layer about the thickness of two to three pennies. It is formed when molecular oxygen, O2, is broken apart by sunlight. Single oxygen atoms bump into molecular oxygen and form O3 molecules. The ozone layer deflects much of the sun's ultraviolet radiation (UVB) back out into space and prevents it from reaching the Earth's surface. UVB can cause cancer, crop failures, and a breakdown of the marine life food chain."

"How severe in terms of the food chain?' Armstrong asked.

"It all depends on the megatonnage and the height of the blast plus the duration of the wildfires," Lewis said. "Let's do the chemistry first. We need ozone in the stratosphere. Free oxygen atoms in the stratosphere form 4,500 tonnes of O3 per second by reacting with UV rays from the sun. The nuclear blast throws oxides of nitrogen—NO and NO2—into the stratosphere. Even without our injection, nitrous oxides account for 50 to 70 percent of ozone depletion. As a general rule, for each megaton of TNT, you can expect five long tonnes of nitrogen oxides to reach the stratosphere. They take the O3 and convert it to O2 and regenerate. Each NO molecule introduced into the atmosphere can destroy ten to the twelfth power of O3 molecules. The introduction of smoke aerosol exacerbates the situation in three ways. First, the smoke absorbs short-wavelength radiation and reduces the rate of oxygen photolysis, which results in less O3 formation. Second, smoke absorbs solar radiation, heating the stratosphere and increasing NO + O3 = NO2 + O2 reactions. Third, 2-O3 will be changed to 3-O2, or the particles could be oxidized by the O3 to form products such as carbon monoxide expressed as O3 + C (solid) = O2 + CO gas. The smoke particles absorbed in this last reaction shorten the duration of sunlight blockage. To summarize, the planet will have little to no sunlight followed by UVBs that will damage marine life and lead to a short growing season."

Everyone in the bunker heard Armstrong's breathless response. "Jesus!" He coughed. "How long will the soot last?"

"I estimate years, not months," Lewis said. "We're already starting with a bad atmospheric situation. The amount of soot from the initial explosion is at least 100 T g, 100 million long tonnes of elemental carbon. Historically, older models have compared nuclear blasts to volcanic eruptions. In 1815, Mount Tambora exploded with a force of 30,000 megatons and ejected 38 cubic miles of rock and tephra. We estimate that the Mount Toba eruption about 75,000 years ago produced 670 cubic miles of tephra and 6 billion short tons of sulfur dioxide. We imagine it reduced the human population to tens of thousands. In 2021, wildfires alone emitted 1.76 billion long tonnes of carbon

#### ~ Thomas J. Yeggy ~

globally. The amount has increased by more than 10 percent in each of the last five years. Smoke from the wildfires in Eastern Siberia due to global warming has consumed 80,000 square miles since 2020."

He paused. "Should I continue?"

"Might as well get all of it," Armstrong said. "How much worse could it be?"

Lewis' face was stone-like. "A lot, Mr. President. A hell of a lot."

### 49

### October 28, 2027 Schriever AFB, Colorado Springs, CO

The room looked like a hospital ward for flu patients. Every face was drawn and pale. Several of the younger folks, those with children who had only that morning dreamed of a bright and bountiful future, appeared on the verge of tears. Lewis tried not to look at anyone.

"Superheating from each bomb carries substantial toxin debris into the stratosphere," he said. "The fires in China will exacerbate this situation and raise the temperature enough to torch thousands of acres in Sakha. The smoke will rise to a height of 14 or so miles and will darken the United States for the next few years. Pollution from the wildfires in Siberia will bring on severe health problems here in the United States. Resin-rich boreal forests, peat buried in bogs, and melting tundra permafrost will release gasses. They will, in turn, carry lightweight particles of soot ready to be ingested into Americans' lungs. Absent mandatory N-95 mask wearing, there will be hundreds of thousands of deaths."

All Armstrong could think to say was, "Really?"

"Absolutely, sir," Lewis said. "Remember, virtually every combustible item in China will be on fire. We are talking about groups of toxins that are going to be carried into the air, many of which will end up here in the United States. Right now we are burning 800 million barrels of oil, refineries, natural gas lines, chemical plants, toxic waste dumps, rubber, coal reserves, plastics, and more. All of them will produce seventy-five types of dioxin isomers, among other particulates. Depending on the spread pattern, much of our land will be contaminated to some extent. Whether we can grow something that isn't a carcinogen is open to debate."

"What is your best-case scenario for our ecosystem?" Armstrong asked.

"Dr. Hunstein from Rutgers could provide you with a better estimate," Lewis said, "but in my opinion, crops will not exist for the next two years. When we can finally grow *something*, the ozone will have been depleted by 70 percent. I believe that shortened and less effective growing seasons will reduce yield by two-thirds if, that is, we can find any uncontaminated ground."

"Fishing?"

"Phytoplankton form the base of the aquatic food chain. They feed all the smaller fish and crustaceans. The production of the planktons is limited to the euphotic zone, the upper layer of the water column. The soot will block the sunlight and likely reduce the plankton population by 40 percent or so. After the soot clears, the UVB rays will affect the remaining population of plankton by limiting their orientation and mobility. I would say we will lose one-third of our marine life.

"It sounds bad," Armstrong said.

"Worse than bad," Lewis said. "Catastrophic."

General McConville's voice intruded on the funereal silence. "Mr. President, DHS is on screen 13."

"Mr. President." General Connor Freidhoff's face was flushed and sweating. "I know you are handling considerable external threats, but you need to see what's going on in our cities."

The General's face was replaced by images that changed every ten seconds of supermarkets in Los Angeles, Chicago, and New York. Glass rained down from smashed windows. Customers trampled one another going in and out. Within three minutes, shelves were empty. No one bothered to help those who'd been injured in the stampede.

"It's anarchy," Armstrong said.

"Mr. President," McConville said, "I'm getting reports from all over the country. It's the same situation—every region, every town and city."

An unfamiliar face appeared on one of the screens. The man in the picture wore an Army field uniform and oak leaves on his shoulders.

"General, Colonel Hiram Naylor, Ohio National Guard."

"Go ahead," McConville said.

"We have been deployed to guard the major food storage hubs around the Cleveland area. We are taking fire from what I believe are

organized groups of survivalist insurgents and street gangs that are hell bent on driving us away from our assigned post. What are the rules of engagement?"

The President federalized and deployed the National Guard across the country to maintain order and preserve warehouses with emergency food supplies. Within an hour, he took to the airwaves. The bunker had a mock-up of the Oval Office. No one needed to know the Chief Executive was hiding underground while they were in harm's way.

### October 28, 2027 – 1239 Hours North Lawn Bunker Washington, DC

"My fellow Americans, our beloved nation has come under attack from China," President Armstrong intoned through the airwaves. "By the grace of God and through the valiant efforts of the men and women of our Armed Forces, all external threats have been eliminated. The danger now lies within. I will not sit idly by and watch our country be torn apart by any type of paramilitary group. To that end, I have ordered all our Armed Forces to maintain martial law until further order. I have instructed them to guard our food and water supplies. I have commanded them to maintain order by returning deadly fire for any threats to these vital stores. Our infrastructure remains intact. We have suspended all exports of any grain and other foodstuff and will be storing them for our use. The Department of Homeland Security will immediately begin a distribution program to ensure that no one goes hungry in the United States of America.

"The Secretary of Agriculture informs me that we are prepared for just such a situation, thanks in large measure to the steps we took following the COVID-19 pandemic earlier in this decade. The Farm to Food Bank Program, founded several years ago by a previous administration and expanded during my presidency, will assist in this vital effort. Using 2022 as a base, the Department of Agriculture has increased our allocation to the emergency food system by over 100 percent. There is no reason for panic or hoarding. Every county will have a distribution system set up within three days to provide basic nutrition of 1,500 calories per day to every man, woman, and child in this country. Stay calm, and stay in touch with local developments. All will be well. God bless you, and God bless the United States of America."

The President assembled his entire staff in the Cabinet Room at 1450 hours.

Dr. Aldus Hunstein, a protégé of Alan Robock, the world's foremost authority on climate modeling after natural and human-made disasters, had been coptered in from Rutgers University.

"Dr. Hunstein, you have our attention," the President said.

"Thank you, sir," Hunstein said. "Let us address the fallout situation first and then the more difficult O3 depletion scenario. The Chinese conducted two atmospheric nuclear tests that deposited fallout across North America. On September 26, 1976, they set off a 200 kiloton device. During passage over the United States at about 30,000 feet, turbulence brought radioactive materials down to altitudes where rainfall was occurring over the Eastern United States. These materials were carried downward and deposited on the ground. The effects were not significant.

"On November 17, 1976, the Chinese set off a 4 megaton device in the atmosphere. The fallout from this test also proved to be insignificant. We will not be so lucky this time. Detonations for the most part were near the surface and resulted in hundreds of thousands of tons of radionuclides being sucked up into the mushroom cloud and deposited in the atmosphere at various levels. We can be sure we will all inhale radioactive dust particles here in the United States. The ten-day forecast is not favorable. I would recommend that all those who can should

go to fallout shelters or similar facilities for five weeks. Emergency facilities such as the Superdome have been modified to provide limited protection.

"Now on to the O3 problems. While O3 in the troposphere acts as a pollutant, we all know O3 in the stratosphere makes life possible on this planet by shielding us from harmful UV rays. The World Health Organization's UV scale is as follows: 1–2 low; 3–5 moderate; 6–7 high; 8–10 very high; and 11+ extremely high. For the next three years, soot will hold the UV numbers down. After thirty-six or so months, UV rates will climb over 35 for much of the world. The Community Earth System Model (CESM) and Whole Atmosphere Community Climate Model version 5 (WACCM5) predicts we will suffer an 80 percent loss of stratospheric O3 for fifteen years. 105 There will be no grain production at all for the next five years due to the cooling caused by the soot followed by the extreme UV rays. Even if the extreme UV rays do not destroy plants that can adapt to such an increase, the depleted ozone layer will not reflect enough warmth to allow any significant crop production during the nuclear war plus years four through fourteen. Those lucky enough to survive fifteen years without grain-based food will see some improvement. 106 The situation in India and all over Asia will be much worse."

James T. Clements, the administration's chief botanist, took the floor.

"The O3 in the troposphere will enter plant leaves through the stomata-pores that facilitate gas exchange. It will react with cellular components to produce a series of chemical reactions that will create strong oxidative stress. Even before this catastrophe, the wheat and rice crops in India over the last twenty years have been reduced an average of 2 percent per annum due to O3 in the troposphere." 107

He sipped from a glass of water for a moment, not to relieve thirst but to give the hearers a moment to reflect both on what was getting ready to happen to them and their families and for whatever part they had played in the disaster, even if in no way other than benign complicity.

"The best studies on plant life almost universally acknowledge that the average biologically effective daily dosage of UV-B radiation ranges from .02 to 8.75 kJ m-2 d-1, depending on the season and the cloud

cover. When corn plants have been subject to 15 kJ m-2 d-1 treatments, plant height was reduced by two-thirds. I predict the temperatures in Iowa and Illinois will remain below freezing for the next four years. Summer temperatures will rise temporarily for two to four years thereafter, but it will take ten more years for the stratosphere to heal." <sup>108</sup>

Armstrong, who was never comfortable remaining quiet for long, leaned over the table. "It looks like we have a couple of years to rectify this situation before our food supplies dwindle."

He was wrong.

So was everyone else.

The next two years failed to result in any meaningful solutions. Radiation estimates had been woefully miscalculated—on the low side. Half of the nine billion people on the planet died of starvation. Rain patterns, significantly altered by atmospheric heating, depleted the water table, which was already low due to excessive irrigation in the years prior.

### October 28, 2027 601 W. Riverside Avenue Spokane, Washington

Anyone with a working brain cell realized very quickly how badly the government had "fusterclucked" the food issue. Even if there had been sufficient foodstuff for developed countries to hold on for a year or two, no one anywhere believed the world's population could hold out for ten years until the ozone level repaired itself. Frigid temperatures slashed at the Northern Hemisphere while in the other half of the planet, blistering heat scorched whatever wasn't frozen.

The planet was never the same. The ozone level had been depleted past the point of restoration. There was no electricity, natural gas, healthcare, or running water. Widespread civil disorder overwhelmed police and National Guard units. In many cases, those charged with maintaining order joined the rioters in hopes of finding a way to sustain their loved ones.

Shooting someone because they had food and you did not ceased to be considered a crime. Even if the perpetrator was caught, there was no one to prosecute and no one to defend. People on the coastlines died from consuming radioactive fish. Before long, men and women considered horses, dogs, and cats not as pets but as the main course. There were widespread, substantiated reports of cannibalism.

William Draper was a fifty-year-old Black man who had served as a Colonel in the Army Special Forces units before he earned a degree in finance from Wharton. Ten years prior to the Chinese attack, Draper had met John Constantine, a professor of philosophy and constitutional law at Gonzaga University. A chance encounter at a conference led to a friendship—and then to a plan.

The two men shared similar ideas. They were both disillusioned by current affairs and harbored a mutual distrust of all things governmental, especially the two-party system, which they compared to the inbred royal families of Europe. The Great American Experiment had failed and was now caught in a never-ending cycle of self-preservation. Congress and the Supreme Court had done little to nothing to end gun violence, health issues, and widespread corporate corruption. Draper and Constantine had seen enough. They believed the entire system should be consigned to the scrapheap of history along with Alexander's Greece, Caesar's Rome, the British Empire of the 18th century, and Hitler's fascism.

They believed education would lead their new America to the light. The Constitution was, in their minds, inherently flawed. The monied ruling class on both sides, from the Koch brothers to George Soros, was more interested in puppeteering than purity of motive. Having reviewed the writing of former Supreme Court justices and Plato's *The Republic*, they determined the right to vote was superfluous. Leaders should be determined through the educational process founded on Hobbesian, Kantian, and Platonic principles, slightly modified. Vestiges of the First, Sixth, Eighth, Thirteenth, and Nineteenth Amendments found their way into the document Draper and Constantine developed. Along the way, they scrutinized the congressional hearings on the January 6,

2021, assault on the U.S. Capitol.

Among the groups identified were QAnon, the Proud Boys, the Three Percenters, the Boogaloo Boys, the Oath Keepers, and a Neo Nazi group called NSC-131. Although none of the groups or all of them collectively constituted a serious threat without support from the military, Draper and Constantine knew that their existence, coupled with an ideologue more accomplished than a clueless, self-centered president, could destroy the society they intended to create.

Their list of grievances stretched over years of discussions . . . no bail systems that perpetuated violent crimes against its citizens by career criminals . . .

- . . . rising crime statistics
- ...children slaughtered in schools while people offered only thoughts and prayers
- . . . cities set ablaze by protestors who had abandoned the principles of passive resistance in favor of violence and destruction
- ... police officers held unaccountable when they exceeded their authority or ignored their training
- ... elected officials more interested in padding their pockets than producing positive results for the very people who put them in office.

# 50

# May 2021 Lake Ozette, Washington

Jim Bramer, CEO of Fortified Structures and Shelters, signed the contract.

"Mr. Draper," he said, "this thing of yours is going to cost a small fortune. Are you sure about this?"

"Thank you." Draper tried never to show emotion, but this time he allowed himself a small, self-satisfied grin.

Bramer continued. "The deep water well will be to your specifications. To be clear, you want an underground, one-million-gallon fuel storage tank. The shelter is to be 96 inches below the surface and 250,000 square feet."

"Correct," Draper responded.

"Air vents and carbon purifiers along with reverse osmosis filters, right?" Bramer asked.

"Correct."

"This is going to cost a bundle. It's the biggest contract we've ever had."

"Too much for you?" Draper asked.

"Not at all," Bramer said. "Just wondering about the strain on your wallet."

Draper tapped the desk. "That's a check for \$150 million, Mr. Bramer."

"You're not running drugs are something, are you?" Bramer was only half kidding, which he showed with a half-smile. "I don't want to get into anything illegal."

"I run a hedge fund," Draper said. "The money is perfectly legit." Bramer was visibly relieved. "Mind telling me what this is?"

"Not at all," Draper said. "You can't be too careful these days. We've got rampant gun violence, gangs, drugs, all sorts of things. Putin's crazy and could push the button any minute. If push comes to

shove, I want someplace where my friends and family can be safe. Is that okay with you?"

Bramer looked properly chastened. "No offense intended," he said.

"None taken," Draper said.

"Well, I wish you luck," Bramer said. "Project will take about three years."

"Does that include the thirty-seven satellite shelters?"

"No, sir," Bramer said. "Those will be another two years. And probably another couple of hundred million," he added, wincing.

"When we get within \$20 million, you call me, and I will make things right."

#### October 28, 2027

William Draper looked at the faces on his Zoom call. "Gentlemen and ladies, it's go time."

Everyone on the call lived within 600 miles of one of the satellite shelters. They'd been squirreling away fuel for years. All families were secured and safe in less than 12 hours. Over the next few years, the situation on the planet sharply deteriorated.

Life outside the shelters was a hellish version of *The Lord of the Flies*. Temperatures of minus 45 degrees and ever-diminishing food sources turned average men and women into savage huntergatherers. Anyone walking along a street and eating a Baby Ruth—if they were lucky enough to find one—were torn apart. Stores were ransacked. Warm clothing was impossible to find. Despite the ageold assumption that body warmth would alleviate any chill, men and women abstained from sex for fear of bringing any new life into the hell of their existence.

A few groups discovered the compounds. First, they banged on the six-inch chromium steel doors and demanded access. Then they begged. Finally, they attacked, but they were like modern caricatures of cave dwellers hurling sharpened sticks at wooly mammoths. The doors were impenetrable, the fortresses unassailable. The main compound was set up like a dictatorial corporation. Draper was the CEO and sole member of the Board of Directors. Sixty former Army Rangers who had served with Colonel Draper formed the backbone of an 800-person security team. They were deployed throughout the network. All branches of the Draper-Constantine tree operated under the duo's system of governance.

Five days after the nuclear exchange and against the strident objections of his advisors, the Surgeon General, the Secret Service, and his wife, President Conner Armstrong gave a televised address from the Lincoln Memorial. His intent was to calm the waters and assure the American people that all would be well.

Although the minions in the Oval Office had planned for a cheering throng, no one gathered on the Mall. The "crowd" and its reactions were added in post-production.

Six months later when the federal government collapsed, Armstrong was nowhere to be found. He had died of radiation sickness ten weeks after his publicity stunt.

By 2030, 96 percent of the world's population were dead. Of the survivors, more than half were located in prepper communities across the United States. Life on the outside was—as Hobbes had suggested—a "solitary, poor, nasty, brutish, and short existence."

There were trade-offs. The Draper-Constantine methodology for governing did away with many individual rights for the common good. Before anyone was admitted into the shelters, they agreed to eschew their privacy rights. The Guardian Class could inspect and search persons and domiciles at their discretion without fear of interference or retribution.

There were no gangs.

There were no anti-government movements.

There were no protests.

There were no firearms, save those in the hands of the Guardians. There was no crime.

But in Draper World, there was food, water, clothing, chocolate, and breathable air—and those who chose to indulge in the carnal aspects of life did so without hesitancy.

When anyone wanted to complain, all they had to do was peer out one of the readily available periscopes. Once they saw the surrounding desolation, everyone understood the wisdom of surrendering individual rights for security . . . peace . . . life.

Advancement in the Producer Class was based on a meritocracy. Remunerative rewards such as upscale lodging came as a reward for skills or innovation. Offenses against others—and there were very few—were punished immediately and more severely than in the America of old. The educational system stressed the weaknesses of a democracy as Plato taught. Students saw historical examples of how and why democracies always devolved into tyrannies as the German State had done from 1919 to 1939. Democracies tended to produce rhetorical demagogues who were motivated by the acquisition of power and wealth at the expense of the populace.

In democracies, the Sophist politician appeal to the less than sophisticated masses with emotional rather than rational arguments and ultimately pitted one class against another. As a result, the masses turned to populists who ultimately confiscated the assets of the property-owning class by raising taxes to unsustainable levels and redistributing confiscated property to those paid not to work.

But there was an upside to the lack of individual freedoms—no more Crips, Royals, Fresno Bulldogs, Aryan Nation, drug cartels, or human trafficking rings. Teachers were revered—never insulted or assaulted. Students lived and learned under the protection of the Guardians. Bullying, racism, discrimination, and all the other affectations so rampant in the world of 2025 no longer existed.

The primary guiding principle for justice taught in the schools was this: "Do my actions put someone else in a place I'd want to be?" Students were expected to behave in ways designed to promote peace, unity, and cooperation. As soon as they could understand, young people digested the words of Oliver Wendell Holmes, Joseph Story,

John Harlan, Simone Weil, Mother Teresa, Mahatma Gandhi, Martin Luther King Jr., Mencius, and Louis Brandeis. While the collective was paramount, as long as the assertion of an individual right did not infringe on or threaten another's right to be secure against physical harm, it was allowed.

Citizens were free to speak out against the government in forums similar to those in the ancient Greek societies. Those in charge were required to defend their decisions to a panel of nine Supreme Rulers. Freedom of speech was preserved to the degree that the citizens desired. Freedom of religion was intact if it did not conflict with civil law. When any religious beliefs or practices threatened the peace and tranquility of any citizen, those practices were not allowed. Abortion was a woman's choice, and unwanted pregnancies were terminated with safety and precision using pharmaceuticals before the completion of the fourth month.

#### December 18, 2029 Sawtooth Wilderness

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Constantine rode herd on a different breed of cat—the survivalists. By the time Armstrong made his ill-fated address to an inattentive nation, hundreds of backwoods citizens had already stored a twenty-five year supply of dried food inside insulated structures. Like Draper's bunch, inclusion in the group was merit-based. If you added by your presence, you were in. If not . . .

Satellites and survivalist compounds other than Draper's "mother ship" dotted the Northwest landscape. Clearly, national leadership would come from the Northwest if the nation ever reconstituted. The experts, whoever they were, had predicted an 85 percent restoration of the ozone layer by 2039, but they had been wrong about every other prognostication. Still, hope sprang eternal, assisted not in small measure by the understanding that the food supply was not infinite. Even among well-supplied communities, strict rationing of food and water was the order of the day.

Each survivalist camp was governed by one person who oversaw community life and regulated the justice system. The educational system was designed to produce erudite Rulers, fierce Auxiliaries, and hardworking Producers. The Auxiliaries protected the community from outside forces and enforced the Rulers' decisions. Schools trained each child in the basics required to qualify for one of the three positions in the community. Training for the Rulers took several years. They learned to distinguish between phenomena and noumena forms. Most importantly, the Rulers were expected to control their appetitive and spirited desires with the rational part of their mind. They were forbidden from acquiring property.

Not surprisingly, the more refined and structured surviving encampments outside the Draper-Constantine models came in conflict with one another. Draper and Constantine avoided fighting. They knew everything would inevitably fall to them. They had determined early on that most of the radical groups had miscalculated and assumed five to fifteen years of supplies would prove sufficient. In 2029, Draper and Constantine admitted several dozen like-minded communities into their consortium. The combined communities expanded over the next ten years to the fertile grounds of the Midwest.

The Midwest Producer class was populated by additional agronomists, diesel mechanics, and production workers, previously known as farmers. A significant minority frequently questioned the system and its lack of individual freedoms and asked if democracy might be an improvement. Perhaps an educated democracy trained to control urges by developing an ego-ideal would result in real-world actions through reality testing.

Perhaps there would arise a system of government exhibiting characteristics closely resembling Plato's definition of justice.

Perhaps the Draper-Constantine educational model could bring such a wondrous utopia into existence.

But as Caleb Young had once said in response to his mother's question about the collective being able to exercise the wisdom of a Philosopher King . . .

"I doubt it."

# Epilogue Washington, DC 2032

She lowered the periscope following her early evening lookout session, locked it in place, and made another pencil mark on the cinder block wall. She counted without thinking about it.

"Fourteen hundred and seventy-eight," she said. "A little over four years."

She knew exactly how long it had been because she tallied everything—every day. She knew how much water she could consume, how many cans she could open, what had to be used by when, and . . . if it ever came . . . the day she could open the hatch to the outside.

When she'd bought the little bungalow in a part of Washington, DC, known as Northern Virginia, she thought it odd there was a bomb shelter in the backyard. Sure, she'd studied the Cold War. She knew all about Hiroshima and Nagasaki . . . the Cuban Missile Crisis . . . Khrushchev . . . Kennedy . . . but she was young, and all that stuff was as relevant as Julius Caesar and the Peloponnesian War. But now that she thought about it, she was pretty sure the Roman Emperor wasn't involved in the Greek conflict. She might have majored in ecogastronomy, but she wasn't stupid.

She'd listened very intently while the Realtor explained how all the airlocks worked and droned on about the ventilation—filtration, hydration, the whatever-i-zation systems. Even though the house was in a sort of sketchy neighborhood, it was in her price range, and she thought the house was quaint in a dog-that's-so-ugly-it's-cute sort of way. It was well-maintained, had a nice yard, and looked like it had been decorated by someone's Eastern European great-grandmother.

She figured she could change the décor.

She never did.

She never looked forward to her scouting sessions, but she understood the importance of routine. Routine would keep her safe. Routine would keep her healthy. Routine would keep her sane.

She exercised twice every day—weights and the treadmill in the morning, stretching in the afternoon. She followed the instruction booklet to the letter.

And she read. There were plenty of books. Some were really good by guys named Heinlein and Asimov, but there were others—Hume, Descartes, Kant, Nietzsche. Those guys would bore a giant tree sloth to death, so she read them when she couldn't sleep. She could tell that someone else had already read them. Every volume—every one of them—bore the signs of repeated use. They were dog-eared with notes scribbled in the margins—sometimes in English, sometimes in a foreign language. And there were mathematics symbols, not someone figuring a checking account balance but formulae she could not comprehend and which she found oddly fascinating.

She ran the periscope up every morning, perhaps in search of some miracle, a flash of sun, a sprig of green. And she checked just before sunset, probably just to ensure that there would be something to see when she peered through the viewfinder the next morning.

Outside, the ground was scorched and barren. Nothing had survived. It was how she had always imagined the world would be like if a neutron bomb went off. All the people were gone, but the buildings were intact. She imagined there might be other people huddled behind periscopes and looking for her like she was looking for them. But the angles were wrong, or worse, she had bought the only home in the area occupied by someone eccentric enough to prepare for "the Big One" that no one else ever thought would happen.

She could see across the river. She saw the hulking, abandoned remains of what had once been the most powerful city in the world. Now this once-metropolis marked by its 24-hour freneticism rested in an uneasy permanent coma, devoid of life or at least anything she might consider human. She'd lived there once—before everything—in a box of a walk-up apartment in a section of town unknown to power brokers where tenants perpetuated decades-long traditions of banging on radiators in search of heat and beating broomsticks against the ceilings in a vain attempt to quiet rowdy upstairs neighbors who apparently had nothing better to do than carouse or have sex or sumo wrestle or whatever the hell they were doing up there.

She missed those days . . .

- ... the days of bracing herself at the door every February morning in preparation for the slashing razor of wind or the blistering heat of July.
- . . . of bustling along a sidewalk with countless others who jostled and bumped shoulders without so much as a glance or a word of apology.
- ... of doing whatever she had been doing wherever she had been doing it with a bunch of people her age who didn't make enough money and didn't care because they were convinced of their collective ability to change the course of a world they were sure was on the brink of madness. She missed that.

She missed . . .

. . . people.

She prepared her meager dinner. It was, as always, a little canned this with some canned that mixed with canned something else. While the food was bland and monotonous, she knew she was one of the lucky ones.

One of the lucky few.

She cleaned up, washing her plates in water somehow made or extracted from her urine. She tried not to think about it. She had thousands of gallons of water in voluminous tanks, but she rationed "the good stuff" with the zeal of Ebenezer Scrooge guarding a lump of coal. Twenty-five years was a long time.

She checked the generator's oil and made sure it was venting properly. It would be a pity to survive everything else and die of carbon monoxide poisoning in your own bunker.

She showered and brushed her teeth with real water. But she spit it in the proper receptacle where it would be purified and recycled. She'd read all the manuals that came with the house and bunker. She knew them almost from memory. But damn if she understood how anyone had figured all this stuff out. She had technology no one else had except maybe the guys who'd gone into space.

As always, she sat on the couch watching television. The little set was a hand-crank model and would go for 30 minutes on a single charge. Since there were no functioning broadcast stations in the area,

she turned on the set, stared at the fuzz, and recalled her favorite episodes from years gone by. She had always liked reruns of *The Beverly Hillbillies, The Andy Griffith Show*, and for reasons she could not understand, *Gilligan's Island*. She could do a more-than-passable Mary Ann impersonation. Sometimes she would make up her own courtroom dramas or whodunnits because she felt the mental exercise of playing various characters and manufacturing or remembering dialogue helped keep her mind sharp.

Once "TV time" ended, she slipped into her flannel nightgown, got in bed, and did her reading: *Stranger in a Strange Land*. It was good, even the fifth time.

Before she turned off the reading lamp and pulled up the sheet, she looked at the opposing wall. A tall, thin young man in a basketball uniform stood in a defensive position favored by athletes in old high school annuals she had seen, knees bent, arms spread, hands ready to steal a sloppy dribble, weight forward as if anticipating his opponent's next move. His uniform bore the legend Central DC YMCA.

The athlete's eyes burned with an intensity she'd seldom seen. She didn't know who he was, but she assumed he was the father or grandfather of whoever had built the concrete web of safety in which she was condemned to live for the next quarter century.

She waved. She'd blown him a kiss once early in her stay, but it seemed overly familiar, so now she simply wiggled her fingers and said, "Good night. See you tomorrow."

The light went out.

Another day in an unending string.

Inside, the generator hummed its soft lullaby.

Outside, the sky continued to weep the dull gray flakes of basketball-playing physicists, millions of others, and the ashes of the future in an eternal snowfall of despair.

The End

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<sup>22</sup>William Burr (ed.), "The Creation of SIOP-62: More Evidence on the Origins of Overkill," The National Security Archive Electronic Briefing Book No.130, July 13, 2004, https://nsarchive2.gwu.edu/NSAEBB/NSAEBB130/index.htm.

<sup>23</sup> "Castle Bravo," Atomic Heritage Foundation, March 1, 2017, https://www.atomicheritage.org/history/ castle-bravo.

<sup>24</sup>"No Plan Survives Contact with the Enemy," Boot Camp & Military Fitness Institute, February 28, 2016, https://bootcampmilitaryfitnessinstitute.com/military-and-outdoor-fitness-articles/no-plan-survives-contact-with-the-enemy/.

# Chapter 6

<sup>25</sup>Kaysen reported that if the SIOPs were executed, the attack would kill 54 percent of the USSR's population and destroy 82 percent of its buildings. Kaysen asked, "Is this really an appropriate next step after the repulse of a three-division attack across the zonal border between East and West Germany? Will the President be ready to

take it? . . . Soviet retaliation is inevitable; and most probably, it will be directed against our cities and those of our European allies." Fred Kaplan, "JFK's First-Strike Plan," *The Atlantic*, October 2001, http://www.theatlantic.com/past/docs/issues/2001/10/kaplan.htm.

# Chapter 7

<sup>26</sup> "Kaysen then laid out the details of the plan. 'There are three types of targets which it seems essential to destroy in the first wave of an attack,' he wrote. These were the forty-six home bases for Soviet nuclear bombers, the bombers' twenty-six staging bases, and the up to eight ICBM sites (with two 'aiming points' for each site, or sixteen targets in all), for a total of eighty-eight targets—or, in the military parlance, DGZs (for 'designated ground zeros'). 'If we destroy a total of 88 DGZ's,' the memo continued, 'we will have eliminated or paralyzed the nuclear threat to the United States sufficiently to permit follow-on attacks for mop-up purposes or for the elimination of other targets.' Given that some of these DGZs were within twenty minutes' flying time of one another—meaning that several of SAC's bombers could hit one set of targets and then move on to hit another—Kaysen estimated that the first strike could be carried out by a mere fifty-five bombers. He calculated that almost none of the planes would be shot down, and cited a CIA intelligence estimate of July 11 stating that the Soviet air-defense system 'would lose most of its effectiveness' if bombers flew in at low altitudes. Kaysen acknowledged the need for more 'detailed operational studies and exercises' to test these assumptions. 'But,' he added, 'there are numerous reasons for believing that the assumptions are reasonable, that we have the wherewithal to execute the raid, and that, while a wide range of outcomes is possible, we have a fair probability of achieving a substantial measure of success.' The calculations foretold a fairly clean attack, by the standards of nuclear-war planning. 'Given the locations of the targets, Kaysen wrote, '[Soviet] mortalities from the initial raid might be less than 1,000,000 and probably not much more than 500,000." Fred Kaplan, "JFK's First-Strike Plan," The Atlantic, October 2001, http://www.theatlantic.com/past/docs/issues/2001/10/ kaplan.htm.

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<sup>30</sup>Frederick Kempe, "Berlin 1961: Kennedy's Showdown at Checkpoint Charlie," Atlantic Council, June 15, 2011, https://www.atlanticcouncil.org/content-series/thinking-global/berlin-1961-kennedy-s-showdown-at-checkpoint-charlie/.

<sup>31</sup>Frederick Kempe, *Berlin 1961: Kennedy, Khrushchev, and the Most Dangerous Place on Earth* (New York: G. P. Putnam's Sons, 2012).

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<sup>32</sup>Frederick Kempe, *Berlin 1961: Kennedy, Khrushchev, and the Most Dangerous Place on Earth* (New York: G. P. Putnam's Sons, 2012).

<sup>33</sup>Frederick Kempe, *Berlin 1961: Kennedy, Khrushchev, and the Most Dangerous Place on Earth* (New York: G. P. Putnam's Sons, 2012).

<sup>34</sup>"Full Text of 'Roswell Gilpatric Speech before the Business Council," Internet Archive, Department of Defense, Office of Public Affairs, October 21, 1961, https://archive.org/stream/RoswellGilpatricSpeech BeforeTheBusinessCouncil/ELS000-010\_djvu.txt.

<sup>35</sup>"Khrushchev, Nikita," Encyclopedia.com, June 8, 2018, https://www.encyclopedia.com/people/history/russian-soviet-and-cis-history-biographies/nikita-sergeyevich-khrushchev.

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<sup>36</sup>Michael Dobbs, "Minutes Dragged to Hours: One Minute to Midnight," Echoes of History, July 29, 2017, https://echoesofhistory.wordpress.com/2017/07/29/minutes-dragged-to-hours-one-minute-to-midnight-by-michael-dobbs/.

<sup>37</sup>Colloquium on Contemporary History, Raymond L. Garthoff, Walter S. Poole, and Jeffrey G. Barlow, *A New Look at the Cuban Missile Crisis* (Washington, DC: Naval Historical Center, 2003), https://www.worldcat.org/title/54000195.

# Chapters 13 and 14

<sup>38</sup>The Russian submarine involvement in the Cuban Missile Crisis called "Operation Karma" is based on Douglas Gilbert's *The Last Saturday of October* (Bibliopole, 2018). All credit for this part of the story rests on his novel and exhaustive research found in more than eighty pages of his bibliography and notes.

# Chapter 14

<sup>39</sup>Mary S. McAuliffe (ed.), *Cuban Missile Crisis 1962* (Washington, DC: Central Intelligence Agency, 1992), https://www.history.navy.mil/content/dam/nhhc/browse-by-topic/War%20and%20Conflict/cuban-missile-crisis/pdf/Cuban-Missile-Crisis1962.pdf.

<sup>40</sup>James H. Hansen, "Soviet Deception in the Cuban Missile Crisis," Leaning from the Past, https://apps. dtic.mil/sti/pdfs/ADA525825.pdf.

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<sup>42</sup>McNamara and Rusk quotes. Mary S. McAuliffe (ed.), *Cuban Missile Crisis 1962* (Washington, DC: Central Intelligence Agency, 1992), https://www.history.navy.mil/content/dam/nhhc/browse-by-topic/War%20and%20Conflict/cuban-missile-crisis/pdf/Cuban-Missile-Crisis1962.pdf.

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<sup>44</sup>The reader can find Special National Intelligence Estimate 85-3-62 dated September 19, 1962, for the primary source of the conversations that take place here at "Special National Intelligence Estimate," Historical Documents – Foreign Relations of the United States, 1961–1963, Volume X, Cuba, January 1961–September 1962, Document 433, https://history.state.gov/historicaldocuments/frus1961-63v10/d433. <sup>45</sup>Milo Jones, *Constructing Cassandra: The Social Construction of Strategic Surprise at the Central Intelligence Agency, 1947–2001* (dissertation, University of Kent), https://kar.kent.ac.uk/86410/1/516207.pdf.

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<sup>47</sup>Jan Drent, "Confrontation in the Sargasso Sea: Soviet Submarines during the Cuban Missile Crisis," *The Northern Mariner/Le marin du nord*, XIII, no. 3 (July 2003): 1–19, https://www.cnrs-scrn.org/northern\_mariner/vol13/tnm\_13\_3\_1-19.pdf.

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<sup>48</sup> Jan Drent, "Confrontation in the Sargasso Sea: Soviet Submarines during the Cuban Missile Crisis," *The Northern Mariner/Le marin du nord,* XIII, no. 3 (July 2003): 1–19, https://www.cnrs-scrn.org/northern\_mariner/vol13/tnm\_13\_3\_1-19.pdf.

<sup>49</sup>"Off the Record Meeting on Cuba," The White House, JFK Library, October 16, 1962, https://microsites.jfklibrary.org/cmc/oct16/doc3.html.

# Chapter 18

<sup>50</sup>The meeting between Kennedy and the JCS took place in the Cabinet Room on October 19, 1962, at 9:45 a.m. with General Maxwell Taylor, Chairman of the Joint Chiefs of Staff; General David Shoup, the Marine Commandant; Admiral George Anderson, Chief of Naval Operations; and Earle Wheeler, Chief of Staff of the United States Army. The exact transcript is available at Sherman Casey and Michael J. Tougias, *Above and Beyond: John F. Kennedy and America's Most Dangerous Spy Mission* (New York: Public Affairs, 2018).

<sup>51</sup>Kennedy and Sweeney exchange. "Notes on October 21, 1962 Meeting with the President [Minutes of Briefing on U.S. Air Attack and Invasion Plan]," National Security Archive, https://nsarchive.gwu.edu/document/29223-oct-21-kennedy-briefing-october-21-air-strikes-turns-him-against-military-action.

<sup>52</sup>Martin J. Sherwin, "Inside JFK's Decisionmaking during the Cuban Missile Crisis," *Time*, October 16, 2020, https://time.com/5899754/jfk-decisionmaking-cuban-missile-crisis/. <sup>53</sup>"Address during the Cuban Missile Crisis," John F. Kennedy Presidential Library and Museum, October 22, 1962, https://www.jfklibrary.org/learn/about-jfk/historic-speeches/address-during-the-cuban-missile-crisis.

<sup>54</sup>Douglas Gilbert, *The Last Saturday of October: The Declassified Secrets of Black Saturday* (Bibliopole, 2017).

<sup>55</sup>Tom Ållen, "Mister President, the Navy Will Not Let You Down," U.S. Naval Institute, September 2012, https://www.usni.org/magazines/naval-history-magazine/2012/september/mister-president-navy-will-not-let-you-down.

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<sup>57</sup>Kennedy and McNamara on submarine contact and surfacing. Norman Polmar, "The Submarines of October," *Naval History Magazine*, October 2022, U.S. Naval Institute, https://www.usni.org/magazines/ naval-history-magazine/2022/october/submarines-october.

<sup>58</sup>Dean Rusk's "eyeball-to-eyeball" quote is discredited from the Soviet perspective. Rakesh Krishnan Simha, "It Was Eyeball to Eyeball but Who Really Blinked?" Russia Beyond, October 18, 2012, https://www.rbth.com/articles/2012/10/18/it\_was\_eyeball\_to\_eyeball\_but\_who\_really\_blinked\_18465.

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October 25, 1962, History and Public Policy Program Digital Archive, Archive of Foreign Policy, Russian Federation (AVP RF), Moscow; copy obtained by NHK (Japanese Television), provided to CWHP, and on file at National Security Archive, Washington, DC; translation by Vladimir Zaemsky, The Wilson Center, https://digital archive.wilsoncenter.org/document/111918.pdf?v=5681d084d0f613ed61c6c5e965c13a14.

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<sup>62</sup>Douglas Gilbert, *The Last Saturday of October: The Declassified Secrets of Black Saturday* (Bibliopole, 2017).

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<sup>63</sup> "Khrushchev's Letter to Kennedy on Cuba (1962)," Alpha History, accessed November 21, 2022, https://alphahistory.com/coldwar/khrushchevs-letter-to-kennedy-on-cuba-1962/.

<sup>64</sup>Scali's meeting with Fomin. Emily Robinson, "The Pork Chop That May Have Saved the World," Boundary Stones, March 15, 2018, https://boundarystones.weta.org/2018/03/15/pork-chop-may-have-saved-world.

<sup>65</sup> "Letter from Chairman Khrushchev to President Kennedy, October 27, 1962," John F. Kennedy Presidential Library and Museum, accessed November 21, 2022, https://microsites.jfklibrary.org/cmc/oct27/doc4.html.

<sup>66</sup>ExComm discussion. McGeorge Bundy and James G. Blight, "October 27, 1962: Transcripts of the Meetings of the ExComm," *International Security*, 12, no. 3 (Winter, 1987–1988), pp. 30–92, https://doi.org/10.2307/2538801.

<sup>67</sup>Anderson's mission. *Air Force Magazine* (full issue), August 2021, https://www.airandspaceforces.com/app/uploads/2021/07/August2021\_FullIssue.pdf.

<sup>68</sup> "The Cuban Missile Crisis: An Eyewitness Perspective," John F. Kennedy Presidential Library and Museum, October 17,2007, https://www.jfklibrary.org/events-and-awards/forums/past-forums/ transcripts/the-cuban-missile-crisis-an-eyewitness-perspective.

<sup>69</sup> B-59 Soviet Foxtrot. Douglas Gilbert, *The Last Saturday of October: The Declassified* 

Secrets of Black Saturday (Bibliopole, 2017).

Jan Drent, "Confrontation in the Sargasso Sea: Soviet Submarines during the Cuban Missile Crisis," *The Northern Mariner/Le marin du nord,* XIII, no. 3 (July 2003): 1–19, https://www.cnrs-scrn.org/northern\_mariner/vol13/tnm\_13\_3\_1-19.pdf.

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<sup>70</sup>"The Cuban Missile Crisis: An Eyewitness Perspective," John F. Kennedy Presidential Library and Museum, October 17, 2007, https://www.jfklibrary.org/events-and-awards/forums/past-forums/ transcripts/the-cuban-missile-crisis-an-eyewitness-perspective.

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B-59 Soviet Foxtrot. Douglas Gilbert, *The Last Saturday of October: The Declassified Secrets of Black Saturday* (Bibliopole, 2017).

Jan Drent, "Confrontation in the Sargasso Sea: Soviet Submarines during the Cuban Missile Crisis," *The Northern Mariner/Le marin du nord,* XIII, no. 3 (July 2003): 1–19, https://www.cnrs-scrn.org/northern\_mariner/vol13/tnm\_13\_3\_1-19.pdf.

William Burr and Thomas S. Blanton (eds.), "The Submarines of October: U.S. and Soviet Naval Encounters during the Cuban Missile Crisis," National Security Archive Electronic Briefing Book No. 75, October 31, 2002, https://nsarchive2.gwu.edu/NSAEBB/NSAEBB75/#:~:text=Of%20the%20four%20 submarines%20 that,commanded%20by%20Valentin%20Savitsky%2C%20and.

# Chapter 25

<sup>71</sup> Surfacing of the B-59. Peter A. Huchthausen, *October Fury* (New York: John Wiley & Sons, 2002), p. 281.

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<sup>72</sup> "Letter from Chairman Khrushchev to President Kennedy, October 28, 1962, John F. Kennedy Presidential Library and Museum, accessed November 21, 2022, https://microsites.jfklibrary.org/cmc/oct28/doc1.html.

<sup>73</sup>LeMay and Anderson react to resolution of the crisis. Richard Rhodes, "The General and World War III," *The New Yorker*, June 11, 1995, https://www.newyorker.com/mag-azine/1995/06/19/the-general-and-world-war-iii#:~:text=%E2%80%9CAfter%20 Khrushchev%20had%20agreed%20to,'%20%E2%80%9D.

David Coleman, "The Fourteenth Day: JFK and the Aftermath of the Cuban Missile Crisis," The Fourteenth Day, accessed November 21, 2022, https://jfk14thday.com/ifk-trust-soviets/.

<sup>74</sup>Criticism of ExComm. Martin J. Sherwin, "The Cuban Missile Crisis at 50: In Search of Historical Perspective," *Prologue Magazine*, 44, no. 2 (Fall 2012), https://www.archives.gov/publications/prologue/2012/fall/cuban-missiles.html.

#### Chapter 28

<sup>75</sup>Capture of Von Braun. Alan Hall, "Nazi Rocket Man," Express, July 25, 2009, https://www.express.co.uk/expressyourself/116250/Nazi-Rocket-Man.

Rebecca Grant, "Our German Scientists," *Air Force Magazine*, January 2017, https://www.airandspace forces.com/PDF/MagazineArchive/Magazine%20Documents/2016/December%202016/1216german.pdf.

<sup>76</sup>The following day, on May 2, 1945, the von Brauns and their inner circle were on their way to the American camp at Reutte to be debriefed. Wernher von Braun stood in front of the booster rocket motors of the Saturn S1-B, which successfully launched all the NASA *Apollo* and moon missions. Claudia Flavell-While, "Magnus von Braun – Rocket Man," Chemical Engineers Who Changed the World, *The Chemical Engineer*, November 24, 2017, https://www.thechemicalengineer.com/features/cewctw-magnus-von-braun-rocket-man/.

<sup>77</sup>The Army's Director of Intelligence, the Chief of Naval Intelligence, the Assistant Chief of Air Staff-2 (Air Force intelligence), and a representative from the State Department. The diplomat in the group was outnumbered by the military officers three to one. The State Department officer assigned to the JIOA was Samuel Klaus who was perceived by his JIOA colleagues to be a troublemaker. Annie Jacobsen, *Operation Paperclip: The Secret Intelligence Program That Brought Nazi Scientists to America* (New York: Little, Brown and Company, 2014.

# Chapter 31

<sup>78</sup>President John F. Kennedy wanted to "splinter the CIA into a thousand pieces and scatter it to the winds." The Bay of Pigs invasion caused him to realize that certain persons and powers dictate to the President. The CIA was fingered for their decision to make policies that belong to Congress and the citizens. Peter Kornbluh, "Top Secret CIA 'Official History' of the Bay of Pigs: Revelations," The National Security Archive, August 15, 2011, https://nsarchive2.gwu.edu/NSAEBB/NSAEBB355/.

# Chapter 32

<sup>79</sup>The Office of Policy Coordination "became the espionage and counterintelligence branch of the CIA. Wisner was told to create an organization that concentrated on 'propaganda, economic warfare; preventive direct action, including sabotage, anti-sabotage, demolition and evacuation measures; subversion against hostile states, including assistance to underground resistance groups, and support of indigenous anti-Communist elements in threatened countries of the free world." Mary Pinchot Meyer became part of what became known as Operation Mockingbird, a CIA program to influence the American media. "Mary Pinchot Meyer," Spartacus Educational, accessed November 21, 2022, https://spartacus-educational.com/JFKmeyerM.htm.

<sup>80</sup>Operation PBSuccess (Guatemala). Kate Doyle and Peter Kornbluh (eds.), "CIA and Assassinations: The Guatemala 1954 Documents," The National Security Archive, accessed November 21, 2022, https://nsarchive2.gwu.edu/NSAEBB/NSAEBB4/.

<sup>81</sup> Wisner moved to Washington, DC, where he associated with a group of journalists, politicians, and government officials who became known as the Georgetown Set. They included Frank Wisner, George Kennan, Dean Acheson, Richard Bissell, Desmond FitzGerald, Joseph Alsop, Stewart Alsop, Tracy Barnes, Thomas Braden, Philip Graham, David Bruce, Clark Clifford, Walt Rostow, Eugene Rostow, Chip Bohlen, Cord Meyer, James Angleton, William Averill Harriman, Felix Frankfurter, John Sherman Cooper, James Reston, Charles Thayer, Allen W. Dulles, and Paul Nitze. "Mary Pinchot Meyer," Spartacus Educational, accessed November 21, 2022, https://spartacus-educational.com/JFKmeyerM.htm.

"Edward Lansdale," Spartacus Educational, accessed November 21, 2022, https://spartacus-educational.com/COLDlansdale.htm.

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<sup>82</sup> "Operation Mockingbird," Spartacus Educational, accessed November 21, 2022, https://spartacus-educational.com/JFKmockingbird.htm.

<sup>83</sup>Operation Northwoods. Paul Craig Roberts, "John F. Kennedy Turned to Peace and Was Assassinated. Rejected U.S. Military's 'Operation Northwoods' False Flag," Global Research, November 21, 2020, https://www.globalresearch.ca/john-f-kennedy-turned-to-peace-and-was-assassinated/5536896.

<sup>84</sup>Formation of the Warren Commission. Walter Pincus and George Lardner Jr., "Warren Commission Born out of Fear," *The Washington Post*, November 14, 1993, https://www.washingtonpost.com/archive/ politics/1993/11/14/warren-commission-born-out-of-fear/4f621e1e-a49f-4ce8-ab92-a3e5296ac0b6/?itid=lk\_inline\_manual 12.

<sup>85</sup>Silvia Duran's interactions with Oswald in Mexico City. To establish his identity, Oswald showed Duran his passport, his correspondence with the American Communist Party, his membership card for the Fair Play for Cuba Committee, a newspaper clipping about his activities in New Orleans, and a photograph of Oswald in custody, accompanied by two police officers. "Silvia Duran," Spartacus Educational, accessed November 21, 2022, https://spartacus-educational.com/JFKduranS.htm.

<sup>86</sup>The real Oswald was left in Mexico City on October 1, 1963, at 0830 hours. "Lee Harvey Oswald in Mexico," National Archives, https://www.archives.gov/files/research/jfk/releases/104-10067-10413.pdf.

"1996 Release: Oswald, the CIA, and Mexico City ('(Lopez Report')," History Matters, accessed November 21, 2022, https://www.history-matters.com/archive/jfk/hsca/lopezrpt/html/LopezRpt\_0012a.htm.

Thomas Mann and Winston Scott believe the Warren Commission covered up Cuban involvement. Philip Shenon, "What Was Lee Harvey Oswald Doing in Mexico?" *Politico Magazine*, March 18, 2015, https://www.politico.com/magazine/story/2015/03/jfk-assassination-lee-harvey-oswald-mexico-116195/.

"The Framing of Oswald," History Matters, accessed November 21, 2022, https://www.history-matters.com/frameup.htm.

<sup>87</sup> "Katzenbach Memo," Mary Ferrell Foundation, accessed November 21, 2022, https://www.maryferrell.org/pages/Katzenbach\_Memo.html.

<sup>88</sup> "Silvia Duran," Spartacus Educational, accessed November 21, 2022, https://spartacus-educational.com/JFKduranS.htm.

<sup>89</sup>Robert Maheu and the mob. "CIA, Memorandum, 'Maheu, Robert A.,' Secret Eyes Only, June 24, 1966," National Archive, accessed November 21, 2022, https://nsarchive.gwu.edu/document/20836-6.

# Chapter 34

<sup>90</sup>Walter Pincus and George Lardner Jr., "Warren Commission Born out of Fear," *The Washington Post*, November 14, 1993, https://www.washingtonpost.com/archive/politics/1993/11/14/warren-commission-born-out-of-fear/4f621e1e-a49f-4ce8-ab92-a3e5296ac0b6/.

<sup>91</sup> Warren Commission Hearings, Volume XIX, Mary Ferrell Foundation, June 8, 1964, https://www.mary ferrell.org/showDoc.html?docId=1136#relPageId=35.

"Was Oswald an Expert Marksman?" 22 November 1963, http://22november1963. org.uk/lee-harvey-oswald-marksman-sharpshooter.

<sup>92</sup>Technical analysis of shots. Nicholas R. Nalli, "Sniper Target Tracking Analysis of John F. Kennedy Assassination," *Journal of the Association for Crime Scene Reconstruction*,
 (2018): 1–21, https://www.acsr.org/wp-content/uploads/2018/12/2018-Target-Tracking-Analysis-of-JFK-Assassination-Nalli.pdf.

<sup>93</sup> "National Security Action Memoranda [NSAM]: NSAM 55, Relations of the Joint Chiefs of Staff to the President in Cold War Operations," John F. Kennedy Presidential Library and Museum, accessed November 21, 2022, https://www.jfklibrary.org/asset-viewer/archives/JFKNSF/330/JFKNSF-330-005.

<sup>94</sup>Dorticos and Armas conversation on November 26, 1963. "Chronological Summary: Gilberto Nolasco Alvarado Ugarte," National Archives, accessed November 21, 2022, https://www.archives.gov/files/research/ifk/releases/104-10422-10026.pdf.

95"According to Alvarado, Oswald said something about being man enough to kill someone. He also claimed that he saw money changing hands. He reported the information at the time to the U.S. Embassy but they replied: 'Ouit wasting our time. We are working here, not playing.' Winston Scott told David Atlee Phillips about what Gilberto Alvarado had said to Alan White. On 26th November, Phillips had a meeting with Alvarado in a safe-house. Alvarado told Phillips that the red-haired black man had given Oswald \$1,500 for expenses and \$5,500 as an advance. Although he was not sure of the date, he thought it was about 18th September. Thomas C. Mann and David Atlee Phillips believed Alvarado but Scott was not so sure. He argued that there was an 'outside possibility' that it might be a set-up by the right-wing government in Nicaragua who wanted the United States to invade Cuba. However, as Jefferson Morley pointed out in Our Man in Mexico: 'The unstated message emanating from the White House was by now clear to Win – though not to Mann. Speculation about Oswald's motives was to be cut off, not pursued.' On 27th November, Luis Echeverria told Scott that they had rearrested Silvia Duran because she was trying to leave Mexico for Cuba. Thomas C. Mann sent a message to Winston Scott that stated: 'Duran should be told that as the only living non-Cuban who knew the full story, she was in exactly the same position as Oswald prior to the assassination. Her only chance of survival is to come clean with the whole story and cooperate fully. I think she'll crack when confronted with the details.' On 28th November, Scott contacted Luis Echeverria and told him that Washington wanted the Mexicans to interrogate Gilberto Alvarado. On 29th November, Winston Scott received a message from John M. Whitten saying: 'Please continue to keep us filled in on status of interrogations of Slvia [sic] Duran, Alvarado and others implicated as fast as you can get info.' J. Edgar Hoover sent FBI agent, Larry Keenan, to Mexico City in order to have a meeting with Scott, Thomas C. Mann and David Atlee Phillips. Mann started the meeting by expressing the belief that Fidel Castro and the DGI were behind the assassination of John F. Kennedy and that it was just a matter of time before the United States invaded Cuba. However, Keenan replied that Hoover, Lyndon B. Johnson and Robert Kennedy, all believed that Lee Harvey Oswald acted alone. Thomas C. Mann later told Dick Russell: 'It surprised me so much. That was the only time it ever happened to me - We don't want to hear any more about the case - and tell the Mexican government not to do any more about it, not to do more investigating, we just want to hush it up." "Winston Scott," Spartacus Educational, accessed November 21, 2022, https://spartacus-educational.com/JFKscottW.htm, https://spartacus-educational. com/JFKscottW.htm.

<sup>96</sup>Flight from Mexico City to Havana on November 22, 1963, was delayed for seven hours. Peter R. Whitmey, "The Cubana Airlines Flight of November 22, 1963," accessed November 21, 2022, http://www.kenrahn.com/JFK/The\_critics/Whitmey/Cubana.html. Also note the Senate Intelligence report stating the Havana flight left Mexico City at 2200 hours, allowing enough time for Miguel Casas Saez to board after a flight from Dallas. National Archives, accessed November 21, 2022, https://www.archives.gov/files/research/jfk/releases/180-10142-10160.pdf.

<sup>97</sup>While Plato spends much of *The Republic* having Socrates narrate a conversation about the city he founds with Glaucon and Adeimantus in speech, the discussion eventually turns to considering four regimes that exist in reality and tend to degrade successively into each other: timocracy, oligarchy (also called plutocracy), democracy, and tyranny (also called despotism). Socrates defines timocracy as a government of people who love rule and honor. Socrates argues that timocracy emerges from aristocracy due to a civil war breaking out among the ruling class and the majority. Over time, many more births will occur to people who lack aristocratic, guardian qualities, slowly drawing the populace away from knowledge, music, poetry, and guardian education toward moneymaking and the acquisition of possessions. This civil war between those who value wisdom and those who value material acquisition will continue until a compromise is reached. The timocracy values war insofar as it satisfies a love of victory and honor. The timocratic man loves physical training and hunting, and values his abilities in warfare. Oligarchy temptations create confusion between economic status and honor, which is responsible for the emergence of oligarchy. In Book VIII, Socrates suggests that wealth will not help a pilot navigate his ship since his concerns will be directed centrally toward increasing his wealth by whatever means rather than seeking out wisdom or honor. The injustice of economic disparity divides the rich and the poor, thus creating an environment for criminals and beggars to emerge. The rich are constantly plotting against the poor, and vice versa. The oligarchic constitution is based on property assessment and wealth qualification. Unlike timocracy, oligarchs are unable to fight war since they do not want to arm the majority for fear of their rising up against them (fearing the majority even more than their enemies), nor do they seem to pay mercenaries since they are reluctant to spend money. In a democracy, as this socioeconomic divide grows, so do tensions between social classes. From the conflicts arising out of such tensions, the poor majority overthrows the wealthy minority, and democracy replaces the oligarchy preceding it. The poor overthrow the oligarchs and grant liberties and freedoms to citizens, creating a most variegated collection of peoples under a "supermarket" of constitutions. A visually appealing demagogue is soon lifted up to protect the interests of the lower class. However, with too much freedom, no requirements for anyone to rule, and having no interest in assessing the background of their rulers (other than honoring such people because they wish the majority well) the people become easily persuaded by such a demagogue's appeal to try to satisfy people's common, base, and unnecessary pleasures. With tyranny, the excessive freedoms granted to the citizens of a democracy ultimately lead to tyranny, the furthest regressed type of government.

"Republic (Plato)," Wikipedia, accessed November 21, 2022, https://en.wikipedia.org/wiki?curid=1607411.

"Republic, Plato: Summary and Analysis Book VIII," Spark Notes, accessed November 21, 2022, https://www.cliffsnotes.com/literature/r/republic/summary-and-analysis/book-viii#:~:text=Socrates% 20argues%20that%20there%20are,%2C%20and%20tyranny%20(despotism).

<sup>98</sup> "The evidence suggests that the gun was virtually touching Mary's body when it was fired. As the FBI expert testified, 'the dark haloes on the skin around both entry wounds suggested they had been fired at close-range, possibly point-blank.' . . . Soon afterwards Raymond Crump, a black man, was found not far from the murder scene. He was arrested and charged with Mary's murder." "Mary Pinchot Meyer," Spartacus Educational, accessed November 21, 2022, https://spartacus-educational.com/JFKmeyerM.htm.

<sup>99</sup>The details surrounding Mary Pinchot Meyer's murder have been exhaustively investigated and written about by Peter Janney in *Mary's Mosaic, Third Edition* (New York: Skyhorse Publishing, 2016).

See also Dennis Riches, "Review of Peter Janney's 'Mary's Mosaic," Lit by Imagination, December 20, 2019, https://dennisriches.wordpress.com/2019/12/20/review-of-peter-janneys-marys-mosaic/.

"Was John F. Kennedy's Mistress Killed Because She Knew Too Much?" Irish Central History, November 25, 2021, https://www.irishcentral.com/roots/history/john-f-kennedy-mistress-killed; Ron Rosenbaum, *The Mysterious Murder of JFK's Mistress* (New York: New Times, October 1976).

# Chapter 37

<sup>100</sup>Scenes and dialogue at the Crump house, murder investigation, and trial, all from Peter Janney, *Mary's Mosaic, Third Edition* (New York: Skyhorse Publishing, 2016).

# Chapter 40

101 "As I was watching Kabul fall to the Taliban, I was reminded of a comment by former Secretary of State Henry Kissinger – 'it may be dangerous to be America's enemy, but to be America's friend is fatal.' The richest country with the most powerful military in the world spent two trillion dollars, deployed as many as 775,000 military personnel since the invasion in 2001, and trained, equipped and nation-built for two decades. And when it decided to pull out, its Afghan allies surrendered within a week." Zalan Khan, "Does Afghanistan Mark the End of American Empire?" Aljazeera, accessed November 21, 2022, https://www.aljazeera.com/opinions/2021/8/28/does-afghanistan-mark-the-end-of-american-empire.

<sup>102</sup>"Poseidon-dispatched sonobuoys can contribute to the often discussed 'US Navy Fish Hook Undersea Defense Line,' a seamless network of hydrophones, sensors and strategically positioned assets stretching from coastal areas off of Northern China down near the Philippines all the way to Indonesia. . . . By lowering hydrophones and a magnetic compass to a predetermined depth, connected by cable to a floating surface radio transmitter, Poseidon sonobuoys can convert acoustic energy from the water into a radio signal sent to aircraft computer processors, according to a June 2018 issue of 'Physics World.'" Kris Osborn, "China vs. America: A Submarine Showdown in the South China Sea?" The National Interest, June 22, 2020, https://nationalinterest.org/blog/buzz/china-vs-america-submarine-showdown-south-china-sea-163258.

<sup>103</sup>"Both THAAD and PATRIOT exchanged messages through tactical data links and verified interoperability between the weapons systems," according to an MDA statement. THAAD and PATRIOT linked the US Missile Defense Agency (MDA) following a successful software upgrade. Both systems were deployed to the White Sands Missile Range in New Mexico and successfully simulated engagement. "India's IGMP Missile Programs: Export Contenders?" Globe at War,

August 20, 2022, http://www.globeatwar.com/aggregator/www.fas.org/sgp/crs/weapons/ricks.foreignpolicy.com/posts/2013/12/03/www.abs-cbnnews.com/nation/06/20/12/www.dtic.mil/ndia/2004navylog/session2/www.latribune.fr/entreprises-finance/industrie/aeronautique-defense/20140401trib000823074/defense-update.com/theaviationist.com/2013/10/18/www.defenseindustrydaily.com/www.france24.com/en/www.usni.org/magazines/proceedings/2012-09-0/www.timescolonist.com/business/Viking%20 shot%20military/7402202/story.html?page=5.

<sup>104</sup>This chapter provides additional information on alternative systems to US boost-phase missile defense as requested in the congressional tasking. Specifically, an overview and analysis of the Ground-Based Midcourse Defense (GMD) system; the Aegis ballistic missile defense system, with all variants of the standard missile-3 (SM-3) interceptor; the Terminal High-Altitude Area Defense (THAAD) system; the Patriot (PAC-3) system; and the Medium Extended Air Defense System (MEADS). National Research Council, *Making Sense of Ballistic Missile Defense* (Washington, DC: National Academies Press, 2013).

# Chapter 49

<sup>105</sup>O3 in the troposphere. K. Raja Reddy, Shardendu K. Singh, et al., "Quantifying the Effects of Corn Growth and Physiological Responses to Ultraviolet-B Radiation for Modeling," *Agronomy Journal*, 105, no. 5 (2013): 1367–1377, http://uvb.nrel.colostate.edu/UVB/publications/aj-0-0-agronj2013.0113.pdf.

"Worldwide Effects of Nuclear War," Atomic Archive, accessed November 21, 2022, https://www.atomicarchive.com/resources/documents/effects/wenw/foreword.html. Charles G. Bardeen, Douglas E. Kinnison, et al., "Extreme Ozone Loss Following Nuclear War Results in Enhanced Surface Ultraviolet Radiation," *Journal of Geophysical Research: Atmospheres*, https://doi.org/10.1029/2021JD035079.

<sup>106</sup>The UV index levels are as follows: UV INDEX DANGER LEVEL ICON, 0–2 Low, 3–5 Moderate, 6–7 High, 8–10 Very High, 11 and above Extremely High. "UV Index Description," United States Environmental Protection Agency, accessed November 21, 2022, https://www.epa.gov/enviro/uv-index-description.

<sup>107</sup>"Here, we investigate the stratospheric ozone forcing in a fully coupled global climate model, the Community Earth System Model (CESM) Whole Atmosphere Community Climate Model, version 4 (WACCM4) with WACCM4-GHG scheme (more details of the model are given in section Simulations and Data), and compare the ozone variations specified in the model with observations. Fei Xie, Jianping Li, et al., "Improved Global Surface Temperature Simulation Using Stratospheric Ozone Forcing with More Accurate Variability," *Scientific Reports*, 8, 14474 (2018), https://doi.org/10.1038/s41598-018-32656-z.

where it reacts with cellular components, producing a series of chemical reactions that create strong oxidative stress. Damage ranges from visible leaf injuries such as yellowing (chlorosis) and stippling and localized cell deaths (necrosis) to subtle physiological changes such as reduced photosynthesis and premature senescence. These effects ultimately reduce crop yields. Divya Pandey, Lisa Emberson, and Sofie Mortensen, "Ozone May Protect the Earth but Poses a Threat to Food Security: Here's How," *The Conversation*, April 9, 2018, https://www.business-standard.com/article/international/ozone-may-protect-the-earth-but-poses-a-threat-to-food-security-here-show-118040900474 1.html.