

Chapter 1: Hitting the Numbers

They crouch on the edge of the tarmac, a pair of great war birds anxious to spring. These aircraft have no beauty, even in a brittle metallic sense. Their slab sides and stiff angles suggest no purpose except brutal assault. They were created only to kill.

The engineers who designed the F4 Phantom II had no interest in pointless aesthetics. Their job was to build the best fighter jet in the world. The result wasn't pretty, but it was effective. No aircraft of its day was faster or more powerful. By the time they left service to slowly decay in the Arizona desert, thousands had seen service with the Air Force, Navy, and Marine Corps.

Forget the rest. Focus only on these two Phantoms. They sit in revetments just off the runway at Aviano Air Base in northern Italy. It is four o'clock local time, on a chilly weekend afternoon in November, 1965. An intermittent misty rain falls from a dark, pregnant sky. Nevertheless, two pilots sit in each aircraft—on hair-trigger alert, ready to react to aggression by Warsaw Pact forces in southern Europe. At midnight they will be replaced by four more. The alert is perpetual. It won't cease until the Cold War ends, or heats to a flash fire.

Focus further. Look at the men in the aircraft on the right: young, handsome in their flight suits, lounging in their cockpit seats. The Phantom II has two pilots, one in front (the primary), and another behind him (jokingly referred to as the "guy in back," or GIB). The primary pilot of this Phantom is First Lieutenant Randall Simms III. Just turned twenty-five, Randy has lived an almost perfect life. His wealthy family has made sure of it. The best schools, the best clothes, all has been provided. In return, he's worked hard at academics and sports, and has stayed out of serious trouble. As a young man, his even features and easy smile continue to make him popular. Dad pulled a few strings to get him into the Air National Guard after college, shielding him from any chance of setting foot in a Vietnamese rice paddy. Some would call Randy Simms lucky.

Randy's Air National Guard wing is part of the "rotational" program, which sends squadrons overseas to train with regular Air Force support units. This doubles his luck, since it has allowed him to see Italy on Uncle Sam's dime. The training isn't bad either. Flying over breathlessly beautiful Mediterranean scenery to bombing and gunnery practice is not a bad way to sharpen combat skills. Venice is just a short train ride away. The food is great, and the bars are filled with pretty women. If it weren't for alert duty, this assignment would almost be a vacation.

The whole idea of sitting in an airplane for twelve hours waiting for the world to end makes little sense to Randy. His understanding of international affairs is limited, mostly due to lack of interest. Nothing bad is going to happen today, or any other day, he knows. Nobody could be that stupid. This exercise is simply a waste of time—like inspections, and parades, and most of the other things the lifer military does. He decides to have a smoke, but even that small pleasure is denied him. His GIB, Jack Lander, has left the cockpit already. He'll have to wait. Bored and restless, his eyes turn to what looks to be the face of a combination lock, set just below the center of his instrument panel. To pass the time, he begins to spin its dial, just as he and many others have done before.

Focus on that innocuous dial—white numbers etched into black Bakelite, centered with a brushed metal knob. The dial rotates with well-oiled ease, clicking busily as it moves the numbers on its face. It is part of a Permissive Action Link, also known as a PAL device. Three years ago, these devices didn't exist. After mounting requests from a nervous Congress, President John F. Kennedy mandated their installation. National Security Action Memorandum 160, signed by him shortly before his death in 1962, required PAL devices on all nuclear bombs, warheads, mines, depth charges, and artillery shells positioned in Europe: bombs like the B43 mounted below the centerline of the Phantom where Randy sits.

There's much more to the PAL than the small dial in Randy's cockpit. Within the casing of the thermonuclear bomb hanging a few feet below his seat is a complex weapon-initiating device, designed by Sandia Labs and powered by a small plutonium heat source of its own. Once activated, it will begin opening circuits to arm the bomb—actions that are essentially irreversible. Randy may be aware of all of this. Like the rest of the squadron's pilots, he has been briefed on the PAL and what it does. Still, spinning the dial hardly seems risky. The odds against randomly choosing the correct four-digit code are impossibly high (more than one hundred thousand to one at that time). Even so, the young pilot gets a small, vicarious thrill every time he twirls the PAL's dial.

The thud of boots and the sound of rustling fabric announces Jack Lander's return to the cockpit. "Man, I thought you'd never get back," Randy says without looking back.

"Sorry, man," Lander replies. "Had to hit the head something fierce."

"Too much vino," Randy says with a laugh. "Look, I'm going down to have a smoke." He stands, preparing to climb from the plane.

"Whoa, amigo," Lander says, pointing forward. "What's that blinking on your panel?"

Randy looks down and inspects his instrument panel. Sure enough, a small light is now pulsing with an intermittent amber glow. The light sits above and slightly left of the dial he has been spinning. The word ARMED is etched below it.

The young airman frowns. What could be wrong? “Better get the techs,” he says, and clambers down the scaffold beside the plane to find a member of the support crew.

He returns quickly, followed by a gruff maintenance sergeant. They mount the scaffold and stand beside the cockpit. Randy points to the blinking amber light. “Huh,” says the old noncom as he leans into the plane. “Pardon my language, sir, but you guys ain’t been dicking around with the switches, have you?” He asks in a deep, rumbling drawl.

“No, Sarge,” both men pipe, almost in unison. “I guess I could have hit something climbing out of the cockpit,” Randy adds.

“Electrics is funny,” the sergeant says, talking mostly to himself. He has been maintaining military aircraft for more than two decades. “These beasts are as much computer as airplane. Sometimes things turn on all by themselves.”

“Get out and stand away from the plane, gentlemen,” he tells the fliers. “I’ll turn off the cockpit circuits and restart them. That should resolve any transient current problems.”

The two pilots hurry down the scaffold and walk to the smoking area beside a nearby maintenance shack. Randy reaches into his flight suit for a cigarette and offers one to Jack as well. His GIB is visibly disturbed. “Jesus, Randy,” he whispers. “Did you see where that light was?”

Randy shakes his head in firm denial. “Look,” he says, “if that old sergeant wasn’t upset, then I’m not either. It’s like he said, just some transient current going through the panel. Maybe a bad fuse. Hell, it could be a million things.”

“But the dial ...”

Randy cuts him off. “Everybody spins that dial,” he whispers harshly. “Everybody! Do you know the odds? You’ve got more chance of winning the fucking Italian lottery than ...”

Their discussion is interrupted by the angry, gravel-crunching sound of approaching boots. The old sergeant reappears, flanked by a captain. Four armed men wearing white helmets and Air Police brassards follow behind. The group stops in front of Randy and Jack.

“Lieutenant Simms,” the captain barks, “you are detained.” He turns to the AP closest to him. “Escort this officer to the detention area. Lieutenant Lander, you are not detained, but you will remain in this area until further notice.”

“What is the charge, sir?” Randy asks as the APs surround him.

“Hell, we won’t know till it’s all over,” the captain replies, shaking his head. “For now, let’s call it misuse of government property. That should work.”

“Can’t you figure it out, son?” The sergeant says softly. “You hit the numbers. The bomb is armed. We got a NAICAP on our hands.”

Some would call Randy Simms lucky. This afternoon his luck has twisted savagely from good to very, very bad.

Chapter 2: Acronyms

The military loves acronyms. NAICAP—Nuclear Accident (or) Incident Control Action Protocol—is a good example. The strung-together words barely hint at the mountain of activities that begin to occur immediately when a nuclear incident is reported.

First and foremost, all nonessential people must be evacuated from the danger zone, and the area must be fully secured. In a practical sense, this is impossible at Aviano. The base is surrounded by farms and villages. In 1965, telephone service is spotty at best in rural northern Italy. Cell phones are three decades in the future. Those desiring a private phone must pay all expenses to set up a land line, including the cost of the telephone pole itself. When the base has an alert, helicopters with loudspeakers must be flown around the Po Valley, announcing the news to service members living away from the facility.

A full evacuation would mean door-to-door announcements, delivered to every house along the myriad winding roads and paths of the valley. It would also require reporting the problem to the Italian Army, which maintains a tank training facility immediately beside the air base. It's rumored that the Italians are there to make sure no combat missions are flown from Aviano without their consent. Indeed, a quartet of tanks is positioned to face the base runway right now. No, evacuation won't happen—at least not right away.

Other activities are taking place. Word has been flashed via ultra-secure troposphere scatter radio to U.S. Air Forces Europe Headquarters (USAFE) at Ramstein Air Base in Germany: NAICAP is in effect. From there, the message will be relayed to the Pentagon, and to DASA—the Defense Atomic Support Agency, the part of the Atomic Energy Commission that deals with military matters (the Department of Energy won't be established for twelve more years). DASA will immediately forward the news to Sandia Labs, in the shadow of mountains at the edge of Albuquerque, New Mexico. A NEST (Nuclear Emergency Support Team) will be formed there and transported to Aviano as rapidly as possible.

Meanwhile, NATO strike forces must realign. The removal of the Aviano aircraft from operational status has left a gap in western Europe's defenses which must not persist. Planes from Spangdahlem Air Base in southwestern Germany are brought online to replace them temporarily. Other shifts take place. Mace cruise missiles at several clandestine European sites get target changes. Mediterranean submarine patrol vectors are subtly altered. Electronic recon planes based in Germany and Turkey are directed to "snoop" the edges of the East German and

Soviet borders nearby, looking for any unusual military activity. The evolving incident at Aviano causes hundreds of soldiers, airmen, and sailors at locations across Europe to work through the night.

A breach in nuclear command and control security must be corrected. A war code has been compromised. As a result, the war codes for all U.S. nuclear weapons in Europe must be changed. In 1965, the codes are kept in sealed wafers, issued to flight crews of aircraft carrying nuclear weapons. The wafers are hard plastic with clear inserts. They are color-coded—red for actual war codes, black for practice use. Upon receiving an EAM (Emergency Action Message), a pilot will break open his wafer and extract the code, which is printed on a card within. If that code matches what he's received in his EAM, he must use it to activate his PAL device and perform his stated war mission. When not in use, the wafers are kept in high security safes. Only those with top secret clearances are even allowed to touch them. Now, until all the codes can be reworked, and all the wafers redistributed, control of NATO's nuclear deterrent is in jeopardy.

On the supposition that Simms or Lander (or both) could be enemy agents, the FBI is notified. An immediate investigation of both men is launched. Randy's family is interviewed in Rye, New York, as are Jack's parents in Mamaroneck. By noon the next day, every teacher, sports coach, girlfriend, or other social contact these young men have ever had will have been identified, located, contacted, and interviewed by polite men in dark suits. Some will be marked for further surveillance. All will be puzzled.

Closer to home, the officers in Randy's unit, from squadron leader down, are assembled and interviewed by OSI (Office of Special Intelligence) security agents. All of both men's personal property is impounded and searched, methodically and thoroughly. Their quarters are "swept" to find any hidden electronic equipment. Detailed notes are compiled about where the men have spent their off-duty time, which bars and restaurants they frequent, and any locals either keeps company with. Aviano's current mayor is a Communist, and although the Italian flavor of communism is quite different from the Soviet variety, the concept of conspiracy can't be overlooked. Nothing can be overlooked.

Finally, a tarp must be raised to conceal all activity around the Phantom II from prying eyes above. Since 1961, Zenit photo-reconnaissance satellites have regularly passed over Aviano. Though the Soviets try to mask their purpose by calling them "Kosmos" and blandly describing them as "scientific," the military are not deceived. By the time they are finally phased out in 1966, Zenit satellites will have become the most ubiquitous objects put in orbit by man.

Once all the steps that can be taken have been taken, the most important work can begin: the attempt to defuse the nuclear bomb on Aviano's flight line.

Chapter 3: Three Visitors

The detained alert pilot sits by himself in a windowless grey room in the Base Provost Marshal's building. The room contains a cot, but he is too upset to rest. Instead, Randy remains seated at the metal table nearby, finishing his last cigarette. He has no idea where Jack is but guesses his GIB is somewhere close by. Randy has already been interviewed by the captain who detained him (mostly to fill out paperwork), and by his squadron leader, Major Tanner. Neither would say anything about what's going to happen to him. He asked the major if he could call his dad.

"There's no way," Tanner replied.

"Please ..."

"Randy, it can't be done. Not right now. It doesn't matter anyway. He can't help you. Not with this. I can't help you either. You're in big trouble. Giant trouble. You are going to have to ride this one out on your own." He shook his head sadly.

A long, uncomfortable silence followed. "It's not fair," Randy finally murmured.

"You can't think like that," Tanner cautioned. "It won't help you."

"We all did it. You know that, sir. We all spun that damn dial," Randy continued, his voice rising, tears forming in his eyes. "It could have been any of us. Anybody. Even you."

Tanner sighed and looked away. Randy's father is both a friend and an important customer for his insurance agency, back in Westchester. "Yeah," he said quietly, "Even me." He rose and left the room. After that, Randy remained sitting at the metal table—alone with his thoughts.

Now, those thoughts tumble through Randy's mind like small animals caught in a cage. He clings to one belief. He's sure his dad will help him get through this awful situation, just like he did with the DUI several years back, or with that trouble at the frat party when he was in college. Once he's past this shit storm, he decides, he'll get out of the Air Force. He'll go to work for his father, just as both had planned. He pushes the fear about what might happen otherwise out of his mind—but it keeps returning.

Randy's father is wealthy and powerful. "Rockin' Randall" ("Rock on over to Randall, roll out in your new car!") owns seven new car dealerships, more than a dozen used car lots, and a string of tire stores as well. His businesses dot upstate New York and neighboring Connecticut. They employ almost a thousand people. He plays golf with the governor on a regular basis. Most of New York's congressional delegation owe him favors. Randy is sure his dad can make all this mess go away.

In the hush of the dim grey room, Randy imagines how it will be. He'll start as a salesman, of course. Soon after that, when he's shown what he can do, he'll be given a dealership to run—maybe the Dodge store in Newburgh. That would be his choice. He smiles. Sure. He'll get a little place of his own, not too close to home . . .

Muttering in the hallway shatters his reverie. Harsh neon light invades the room as its door swings open again. Randy has never seen the man who enters before. He wears a dark blue work uniform with the silver oak leaf of a lieutenant colonel on his collar. He is about Randy's height, trim, sallow complexion, intelligent brown eyes. His short, greying hair betrays his age: forty-something, a lifer for sure. The man seats himself at the table, facing him. The name tag on his breast pocket says CASSINO. Randy stiffens in his chair.

"Lieutenant, do you know who I am?" The voice is low and even. There's an accent. New York City?

"No, sir."

"I run munitions at this base. I'm in charge of the bomb you just activated. It's my job to turn it off. Do you understand?" As he asks his questions, the man stares intently at Randy, as if trying to catch the young airman's thoughts before they're spoken.

"Yes, sir. Colonel, could I have a cigarette? I'm out and . . ."

"Ask the guard when I go," the man interrupts. "I've only got a few questions. Did you handle the bomb itself in any way today? Did you kick it, or step on it?"

"No, sir. I . . ."

"Just listen. You spun the PAL dial, right? How often? How long?"

There's no reason to deny it now. "I don't know. Maybe a few dozen times. I was waiting for my GIB to get back. Maybe five, ten minutes."

"OK. How long before you noticed the flashing light? Think hard. This is important."

"It couldn't have been long—a few seconds, no more. Jack saw it before I did. It went off while I was getting out of the cockpit to go for a smoke."

The man rises at once and rushes from the room. Randy blinks, surprised at how fast the old lifer moved. The awful gravity of his situation has finally begun to sink in. Suddenly, he's very scared. He buries his head in his hands and moans.