



Eight Zeroes

Blast Door, Minuteman Nuclear Missile Silo, South Dakota

"The only way to win is not to play at all."
The computer in 'War Games' (1983)

AT LEAST TWICE IN 2013, U.S. Air Force officers in charge of launching America's Minuteman II nuclear missiles were caught leaving the huge blast doors of their underground command post open, a severe violation of basic security measures.

The excuse given by the embarrassed crew members? ... Domino's Pizza—which had a contract with Global Strike Command as its sole pizza supplier—required that the blast doors remain open whenever an order was called in so that the company could meet its popular '30 minutes or it's free' guarantee.

Terrorists notwithstanding, God forbid the long-suffering officers entrusted with the country's awesome nuclear weapons arsenal should endure the hardship of cold pizza.

But there was little cause for concern: After the Air Force undertook the usual 'thorough investigation,' it ingeniously solved the problem by changing suppliers to Papa Murphy's Take 'N' Bake Pizza.

Of course, numerous other layers of security exist in missile silos to prevent unauthorized entry. (That is, apart from pizza delivery personnel, who are apparently exempt.) And should anyone somehow manage to illegally access a command post, the safeguards preventing unauthorized launch of the missiles have always been totally impenetrable...right?

Well, not exactly. As reported by nuclear weapons expert Bruce Blair, in 1961 then Secretary of Defense Robert McNamara ordered increased security measures, which included rotary locks requiring secret eight-digit launch codes for each armed missile.

Not about to be ordered around by a civilian politician (even by McNamara, who was an Army Air Force veteran) and concerned about adding precious seconds to the time required to arm and launch their missiles, officers of the Strategic Air Command ordered the code for every missile set to 00000000—and then left them that way *for the following 16 years*.

That's right: For over a third of the entire Cold War, *the code required to arm all of America's strategic nuclear missiles was 'eight zeroes.'* (One can't help wondering if, when the lapse was finally discovered and the codes were ordered to be changed, the new code was set to 12345678.)

But that's not all. Blair—a former launch control officer—outlined in detail how easy it would be to override the safeguards preventing authorization by anyone but the U.S. president to launch the missiles.

Due to networked connections between each command center, a determined conspiracy consisting of only four men in two centers would be all that was required to launch an entire squadron of 50 missiles.

Worse yet, if one of them happened to be posted in the squadron's command center, it would even be possible to transmit a valid launch order *for the entire strategic missile force of 1,000 Minuteman missiles!*

The dominant theme in the military's nuclear weapons strategy can be defined as 'launch on warning', and the popular belief that the President has the option of waiting through an attack before deciding how to respond is in practice a myth. The fact is that in a world where a nation has as little as five minutes to counter an attack or risk losing its ability to do so, in an actual war situation a President's only option would be to *abort* an attack, rather than to *initiate* one.

And no president, faced with reasonably reliable reports from its military of incoming missiles, is likely to take that risk. (The military even has a name for this practice of precluding all options for the president other than the 'desired' one: it's referred to as *jamming* the president.)

During the Cold War, Russia went one further, developing a semi-autonomous 'dead hand' system that could automatically launch Russia's entire missile force with a minimum of human intervention—in essence, the fictional doomsday weapon depicted in the 1964 film *Dr. Strangelove*.

It's safe to assume that American technology was vastly superior to the Soviet Union's during the Cold War, and so it isn't reassuring to learn that U.S. launch officers were storing nuclear launch orders received from the president on 8-inch floppy disks inserted into antiquated 1970s computer hardware, until they were finally replaced with digital data storage devices in 2017.

Considering the innumerable accidents, security breaches, software bugs, and close calls that have occurred on almost a regular basis since the beginning of the Atomic Age—many of which could have led to a nuclear war—it's nothing short of a miracle that we are still here to contemplate our good fortune.

But with about one-fifth of the estimated 10,000 nuclear weapons currently deployed worldwide inexplicably still on hair trigger alert more than *three decades* after the Cold War ended, it's a safe bet that it's only a matter of time until our luck runs out.

Like a diabolical slot machine that pays out only after eight spinning reels line up in a row, the probability of 'winning' becomes a whole lot higher when the game is rigged. Eventually, you're going to get eight lemons, cherries, or mushroom clouds in a row. ■