

# A History of NASIC

NATIONAL AIR AND SPACE INTELLIGENCE CENTER

WRIGHT-PATTERSON AIR FORCE BASE, OHIO

## From the Cuban Missile Crisis to the INF Treaty: A 28-Year Journey

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On 22 October 1962, President John F. Kennedy told the world that the Soviet Union was building secret missile bases in Cuba. Soviet ships were in the process of bringing nuclear-capable medium-range and intermediate-range ballistic missiles to Cuba, Kennedy said, so that they could be in a position to be launched into the United States. Our nation was plunged into a crisis almost unimaginable today, for in the blink of an eye, our young President, indeed all of us, suddenly found ourselves in a situation that could have led to nuclear war.

Wright-Patterson Air Force Base (WPAFB) played a significant role in helping our nation through those terrible and frightening days. But that particular story is for another to tell, for that all happened years before I arrived at WPAFB. Indeed, in October 1962, I was a junior engineering student and a cadet NCO (noncommissioned officer) in the Corps of Cadets at Texas A&M College. When the news of this situation made its way around the campus, our entire school was charged with the very real sense of being at the brink of something truly unthinkable—and truly terrifying.

This reaction might seem a little extreme today, but people of my generation lived many years of our lives during the times when the Soviet Union and the United States targeted each other with hundreds of long-range missiles armed with nuclear weapons, to keep one another in check from preemptively annihilating the other. These missiles eventually were stored in hardened underground launch

“silos” and were kept on ready alert at all times. The reasoning of the time was known as MAD—Mutual Assured Destruction. The policy held that nuclear war would be kept at bay primarily because if one nation launched a nuclear ballistic missile strike on the other, then the nation that launched first would immediately experience a massive and unstoppable nuclear counterstrike that would utterly destroy their entire nation, leaving it a wasteland, perhaps for centuries. Everyone would lose...everything.

One of the types of missiles the Soviets were sending to Cuba had the US name SS-4/SANDAL (which the Soviets called the R-12). From Cuba, the SS-4 could deliver a nuclear warhead well into the United States with effectively little to no warning of any kind, hence the seriousness of the crisis we were in then. The international tension over the now infamous “Cuban Missile Crisis” lasted until 28 October 1962, at which time the Soviet Premier, Nikita Khrushchev, agreed to US demands to remove those missiles from Cuba. In my wildest dreams, back in October 1962, as a young Texas Aggie bent on becoming an aerospace engineer, I never could have imagined that one day, many years later, those very same SS-4 missiles would play a very real and personal role in my life.

After graduating from Texas A&M, I entered the United States Air Force (USAF) and, as it sometimes happens in the Service, I did not get the kind of assignment I thought I was going to get. (Imagine that.) Instead of going to an engineering assignment, I was assigned to Malmstrom AFB, Montana, where I served for a number of years as a Minuteman intercontinental ballistic missile (ICBM) launch control officer in the Strategic Air Command (SAC). That assignment



*Soviet SS-4 Medium-Range Ballistic Missile Site, Cuba*



*Targeting range of Soviet missiles in Cuba*



meant that, should the unthinkable happen, then I would be one of the officers who would take the direct and very hands-on actions necessary to launch multiple ballistic missiles equipped with nuclear weapons into the Soviet Union.

My Minuteman missileer friends and I were young military officers then; most of us were in our early 20's. We were incredibly focused on our mission. Certainly, the sobering reality of our mission was always there, but such somber thoughts were much more in the back of our minds than in the presence of everyday life. Those of us who wore the SAC missileer's badge seldom talked about the actual consequences that would follow if the moment actually came when we would have to do what we had been so well trained to do. We did, however, spend a little time now and then more or less joking about how to get out of our underground launch control center after an attack.

We knew that if we experienced a Soviet attack, then our normal method of leaving our underground launch control center (an elevator) would surely be inoperative, and that the elevator shaft would be filled with impassable debris. However, not to worry; the fine Boeing engineers who designed those facilities had allowed for that possibility and had provided us with a Plan



*Minuteman Intercontinental Ballistic Missile Launch, Vandenberg Air Force Base, CA*

B. In the event that the destruction caused by a Soviet nuclear weapon detonating above our launch control center prevented us from escaping via the trusty elevator shaft (pretty much a sure thing), then there was Another Way Out. During my early days as the junior officer on the crew, I would have been the one with the distinct honor of grabbing a shovel and tunneling our way to the surface through an 8-ft diameter, approximately 120-ft-long, sand-filled escape tube—assuming, of course, that we even survived to be able to make it back to the surface, which, frankly, many of us knew would not happen.

Oh yes—that escape tube did not really go all the way to the surface; it ended about 5 feet below the surface. Actually, I recall thinking that those same fine Boeing engineers may have had a dark

sense of humor and constructed that tube so that it ended about 5 feet under the surface-level sewage lagoon. But I digress; actually, in the overall scheme of things at that time, single guys like me were really considerably more preoccupied with our social life once we got off alert than about things like thermonuclear war and escape tubes.

Even a young man in his 20's can have a serious moment or two. Later on, sitting on alert deep under the Montana prairie late one night, my thoughts did indeed wander to the fact that somewhere on the other side of the world, there was another young man, perhaps not so different from me, who was likewise sitting in an underground missile launch facility, waiting for a similar order that he, too, hoped never to hear. I recall daydreaming about what it might be like if the two of us could actually meet. I also recall thinking that if we did meet, while we would each have our major differences

with one another's politics and methods of government, we would probably agree that it just might be better if we each could just shut all these things down and find some less terrifying way of keeping the peace between us.

At some point after that, in the late 1960's, I had the opportunity to visit the Washington DC area, where I spent some time with my closest high school friend,



*Minuteman Intercontinental Ballistic Missile Launch Control Center*

Midd Hunt, and his parents. Midd and I had graduated from Washington-Lee High School in Arlington, Virginia, and had spent many great times together before our lives took different paths. My friend's father, Clyde Hunt, was a highly respected, pioneering electrical engineer with WTOP radio and television in Washington DC. By then, however, Clyde was confined in bed and, tragically, dying from emphysema. I recall him calling me over to his bedside and asking me what kind of work I was doing in the USAF. I told him about my missile duties in Montana, and he asked me what I thought about such things. I answered that while I saw these nuclear missile systems as necessary for the times, in view of the horrific risk such weapons presented to us all, I thought it would be better if they no longer existed.



I had known Clyde Hunt for several years, and he was such a serious and quiet man that we seldom had all that much to say to one another. But that day he spoke to me. The last words I ever heard that brilliant, elegant, and refined gentleman say to me were, “Bill, perhaps the day will come when you will get to do something about that.” I never saw Clyde Hunt again after that visit, but the memory of our last conversation is as fresh today as if it had happened yesterday.

On December 8, 1987, President Ronald Reagan and Soviet General Secretary Mikhail Gorbachev signed the Intermediate-Range Nuclear Forces Treaty, or “INF Treaty,” as it was commonly referred to in the press. Under the provisions of this treaty, both the United States and the Soviet Union agreed to eliminate all of the intermediate-range nuclear missile systems within 3 years of the date of the treaty’s “entry into force” date of 1 June 1988, and further agreed that neither nation would ever again possess such weapons. The INF Treaty only addressed nuclear missile systems with a range between 500 and 5,500 kilometers (about 340 to 3,400 nautical miles). The reduction of other classes of weapons systems, such as long-range ICBMs (to include the Minuteman ICBM of my earlier years), was left to other treaties.



*Soviet General Secretary Gorbachev and President Reagan signing the Intermediate-Range Nuclear Forces Treaty in Washington DC*

A unique feature of the INF Treaty was that it provided for, and indeed required, the use of onsite inspections to verify that the provisions of the treaty were indeed being followed as required. Under these provisions, inspection teams from each nation actually visited the missile system elimination sites of the other nation to visually verify that it was actually eliminating all of the missiles, missile-related equipment, and missile-related facilities precisely as specified in considerable detail in the INF Treaty.

And that brings me (finally!) to the WPAFB connection to my story. By this time, I was a reasonably experienced civilian ballistic missile analyst at WPAFB, Ohio, having been assigned there as an Air Force officer following completion of my master’s degree at the Air Force Institute of Technology. I had left the USAF in 1975, and continued my work at WPAFB as a civilian. As a result of spending just about all of my time at WPAFB analyzing ballistic missile

systems, I found myself engaged in providing technical support to those responsible for monitoring Soviet compliance with the INF Treaty. In fact, one day, while on a brief temporary assignment to Washington DC, I was walking through one of the endless hallways in the Pentagon when I ran into a gentleman who was working with the On-site Inspection Agency. We had worked together before, and this gentleman asked me if I would like to join his new organization in Washington DC. I told him that I would very much like to do that.

A flurry of activity followed, which included getting the seniors at WPAFB to agree to let me go for a year or two, and getting my family not only to agree, but also to leave their home and their friends and come with me to Washington DC. All that worked out and, before long, I was a member of the pioneering team that had been assembled from military and government agencies across the United States to lead the national effort of monitoring Soviet compliance with the INF Treaty.

No one had ever done anything like this before—on either side of the ocean—and I recall thinking something like, (a): “What in the world am I doing here?” and (b): “What does one really do to ‘monitor an INF Treaty?’” Of course, we had extremely specific guidance on national-level treaty-related policy and procedures that had been worked out in agonizingly painful detail by both the United States and the Soviet Union, an excellent working environment, and plenty of resources and support. However, there really wasn’t a set of “this is how you make it happen” procedures already worked out and in place for actually executing the inspection operations per se. That was left to our group to figure out.

For some, that may have been an uncomfortable situation. However, for those of us who were there, I have to say that the most energizing aspect of it all is that we were trusted to just make it all work. And “making it all work” was a challenge. On any given day, we were responsible for executing procedures that had US personnel strung out all over the Soviet Union (and other locations). There were not a lot of rules (yet) and there really was very little in the way of close supervision and oversight. (Definitely my kind of job!) Actually, that was the idea. For this to work, it required the efforts of “can-do” people who could be trusted to do just that: “make it all work.”

I had the remarkable privilege of working with a small but great bunch of incredibly talented, highly experienced, and very motivated men and women. We were constantly aware that our work directly impacted our government’s execution of this treaty, and that our actions were in support of some of the highest levels of our nation. We were all likewise keenly aware that mistakes on our part would have major international consequences. It was the kind of fascinating work environment that on one hand was absolutely exciting, and on the other hand—well, it kept one very, very alert.

One little episode will illustrate the “just make it all work” attitude that was expected of those assigned to this effort. There were two US “gateways” in operation for INF Treaty inspection support: one in Germany and one in Japan. A “gateway” was a facility that housed the overseas INF Treaty operations, as well as staff who supported the multiple US inspection teams constantly going to and coming from the Soviet Union. After a few months in DC, the time came for me to go to work at the gateway operation in Japan. I walked into the



office of the Director (the same guy who asked me to join this operation that day in the Pentagon) and asked him for instructions on what he would like me to do once I got there. He was, as usual, surrounded by chaotically scattered piles of paper and immensely busy. He looked up, stared at me for a moment, and gave me this order (and, no kidding, this was the entire sum total of his guidance and direction): “Bill, whatever you do, don’t \*%# up.” On one hand, that was kind of intimidating. On the other hand, however, I deeply appreciated the trust, and I did my very best to live up to it. Apparently, I did manage to avoid “\*%#-ing up” too badly, for I spent the entire time in Japan that I was supposed to be there (i.e., I did not get myself fired!).

While supporting the On-Site Inspection Agency, I was named as a member of an INF inspection team that would go into the western part of the Soviet Union for 12 days. As it worked out, that journey led to a most remarkable experience for me, one that took me back to my last conversation with Clyde Hunt.

On Tuesday, 15 May 1990, our inspection team arrived at a military airfield in Baranovichi, Belarus, just east of Poland, for an 8-day period of inspections at the nearby SS-4 missile system elimination site at Lesnaya, Belarus. This was a region of truly devastating tragedy during World War II. About one in every four citizens (not soldiers, but *citizens*) in Belarus was killed by the Nazis. Monuments to the valor of the Soviet soldiers who eventually freed the area from Nazi control were everywhere. Our living arrangements at Lesnaya were excellent, as was the food, which was actually an issue of more than a little concern for me because we were only about 100 miles north of Chernobyl! Maids cleaned our living quarters every day, and likewise our laundry was done for us every day. Everything, and I do mean everything, came back cleaned, pressed, and starched. Those were truly remarkable days for those of us who had spent much of our professional lives analyzing the Soviets from afar; for here we were, working, dining, engaging in sporting events, and socializing with Soviet military personnel every day...surrounded by Soviet military equipment we had previously seen only in pictures.

This close environment, in turn, provided some unheard-of opportunities for both sides. For example, one day I found myself sitting at the same lunch table as a few of the more senior Soviet officers. These officers asked me how one went about actually owning property in the United States. I explained that most of us did own property (with a little help from the banks), and talked them through the process. However, I could see that they just could not quite capture the concept. Think about that.

I knew that some of the military officers there were with the Soviet Rocket Forces (that is something one could identify from the insignia on their uniforms). As a former Minuteman ICBM guy, I was really anxious to see if I could get into a conversation with some of these people and talk shop...missile shop, that is. After coordinating my intentions with my inspection team leader, I approached one of the Soviet officers. His name was Valerij. After some small talk, I let him know that I had once been the commander of a US ICBM crew, and asked him if he would be willing to tell me what life was like for a Soviet missile crewman. Somewhat to my surprise, he opened up right away and soon the two of us, men who once had literally been the targets of one another, were into the most amazing conversation

about life “in the silo.” We soon found that we shared some common experiences, including the silliness of some of the asinine and mindless checklist procedures we had to follow; the “quality” of the food when one was on alert; those times when you were supposed to try to get some sleep, but couldn’t; and the long lonely hours on alert in the middle of the night.

At one point, I asked Valerij if he could tell me what procedures he would have to follow to launch his missiles at the United States. He again surprised me by answering right away, telling me of a procedure that involved very strict controls over not only the type and format of information that a launch crew had to receive and how they would authenticate that information before launching, but also of the very precise channels of communication that had to be used for the launch order to be considered valid. He then asked me about the US procedures, and I told him that in a way, they were the same. We, too, had very strict controls over the type and format of information and the procedures we had to follow to ensure we had received a valid launch order. We also, as they did, had procedures to ensure that no one person, indeed, no single crew, could ever launch the missiles on their own.

According to Valerij, Soviet missile crews had to receive their launch order from a very specific source for it to be valid. I told him that in this respect, things were a little different for US missile crews. For a US missile crewman, it was the information that mattered, not the way we received it. Just to illustrate that point, I told Valerij that if we received a valid and authenticated launch code that had been written in lipstick on a piece of toilet paper and it was handed to our crew by the lowest-ranking cook on the “upstairs team,” then about 30 minutes later, the Soviet Union would be toast. We actually had a strange little laugh over that, followed by some serious talk about how, in spite of the horrific destructive power we each were capable of sending toward one another, it really was not personal among us. Rather, we each spoke of how we were soldiers, in the service of our respective country. At that point, Valerij reached across the table and we shook hands. Later that day, he brought me a gift made of wire from a Soviet missile launch control center.

I have that little gift to this day, and I continue to carry the memory of that conversation—an astonishing conversation, given that, many years ago, while on alert under the Montana prairie, I had once daydreamed about having just such a conversation. How could I ever have imagined that, on another day, I would actually meet, talk to, dine with, and shake the hand of that “young man, perhaps not so different from me,” who likewise had sat “in an underground missile launch facility, waiting for the order that he, too, hoped never to hear”?

On 23 May 1990, our inspection team had the honor of taking part in the elimination of the very last operational SS-4 missile. That day symbolically, as well as actually, ended forever the threat to mankind that had been posed by the very same missile system that, so many years before, had played a major role in a crisis that had many of us wondering if the world was about to come apart. This historic event was marked by the arrival of the senior INF military officers from both the United States and the Soviet Union; considerable Soviet media presence; a Soviet military band, which played both the US and the Soviet national anthems; way too many



speeches; and a final banquet which, in true Russian fashion, was served with limitless quantities of serious Russian vodka and decent Armenian cognac—all in the name of international cooperation, peace, and brotherhood, of course. I still remember the generals; I kind of remember the Soviet news media people; I promptly forgot all the speeches; I definitely remember the noisy and fun-filled banquet; and I even recall one or two of the opening toasts. However, I must say, my toast-recollection talents seem to have gotten a little fuzzy after the sixth or seventh toast for some reason...but I am certain they were great toasts. Well, at least I think mine were!

A few days later, at 9:30 PM (4:30 AM Lesnaya time), following a flight back to Moscow on a Soviet AN-72 military jet, another flight on a noisy and all-but-windowless USAF C-141 to Germany, and a long and crowded commercial flight from Germany to the States, my totally time-botched body returned home. As happy and excited as I was to see my family waiting for me at the airport, the remarkable events of the past 2 weeks were still spinning around in my head as I walked down the jetway toward them. My family and I passed the airport gift shop with shelves overflowing with things I knew that most Soviets would never see, and for a few moments, my mind flashed back to the utter dreariness of a primitive grocery store—if that is what you could call it—we had visited in a place called Baranovichi. I recall thinking, again, how it was that such a militarily powerful nation as the Soviet Union could ever let its citizens live in such squalor, with little to no hope of ever improving their individual situations. It was one of the most exciting times of my life to have been there, but it was also very good to be home.

Oh yes, one last little observation, if I may. You may recall that conversation I had with my friend's father in the 1960's back in Arlington, Virginia, especially in response to his inquiry about what kind of work I was doing for the USAF out there in Montana. Well, Clyde, I hope you somehow can see this picture. It took about 25 years for the world to come around to the point that I might be able to act on that conversation we had, but I did get to do what you hoped I would do. Look closely, Clyde. Remember the Cuban missile crisis? Well, that would be the very last SS-4 missile behind us, and that would be me, on your left.



*Soviet SS-4 Missile*



*US INF Treaty monitoring team and (what is left of) the world's last SS-4 operational medium-range ballistic missile in Lesnaya, Belarus, Soviet Union on 23 May 1990*