

Oh, Say Can You See

THE VIEW FROM THE TOP

I watched more than a dozen atmospheric nuclear tests, all of them before I became secretary of defense. Only one other secretary of defense (Charlie Wilson) may have seen one. I wanted to see the work of which I'd been part and to make sure the devices did work. At a test in 1956 of a ten-megaton thermonuclear weapon, I was billeted in a cabin on Eniwetok while the test ran on Bikini, 200 miles away. I was in my late twenties. The test occurred an hour before sunrise. The sky was pitch black. In the Marshall Islands, so close to the equator, there is little in the way of dawn. The sun comes straight up. In the predawn darkness the bomb made a light so bright that for twenty seconds I could have read the newspaper on that beach.

On another occasion I viewed the detonation of a six-megaton bomb from an aircraft thirty miles away. I saw the immense fireball expand to a thousand yards in diameter. About two minutes later I felt the shock wave. The fireball expanded into a hot cloud within the first minute and kept changing color as its temperature rose. When the cloud reached the stratosphere, it spread into the well-known mushroom shape.

My reactions watching tests were mostly scientific and professional. I was gratified when designs I'd overseen worked and disappointed if they fizzled. There was a component of deep concern about their power of destruction and a component of satisfaction that convinced me—as it still does—that I was contributing to U.S. security. By the sixth multi-megaton bomb I had no poetic or religious or inspirational sort of reaction. We

needed nuclear weapons as a deterrent to their use. After viewing their destructive power, I was determined that so far as I could influence matters, we would never be confronted with the decision to use them.

One way to make sure that the Soviet Union wouldn't use nuclear weapons was to ensure we could deliver our own. For that purpose new designs were necessary. Emotions could not be substituted for actions. I do not pretend to know what a full-scale nuclear war would be like. I remain utterly convinced that it would be dreadful beyond imagination.

During the 1960s and 1970s we coined new jargon in the Cold War: "rapid deployment forces" and "power projections" and "deterrence." America faced an existential threat. There was widespread concern that the United States might be falling behind the Soviet Union in strategic nuclear weaponry. Most Americans were aware of and feared the Soviet nuclear arsenal. Few citizens knew or wanted to know the terrifying extent of weaponry that the Soviet Union and the United States kept at the ready and how the arsenals grew through the 1970s. By 1979 the total Soviet nuclear stockpile numbered about 28,000 weapons, the U.S. nuclear stockpile numbered about 24,000.¹ The potential devastation that could be caused by these thousands of nuclear arms would be catastrophic.

When I became secretary of defense in 1977, the military services, most of all the army, were disrupted badly by the Vietnam War. There was general agreement that the Soviet Union outclassed the West in conventional military capability, especially in ground forces in Europe. Soviet leaders were convinced that they had conventional warfare superiority in Europe and were committed to increasing their influence in Western Europe. I concluded that America and its allies needed to be able to deny or at least reduce Soviet confidence that it could roll over Western Europe in thirty days. We thought that given more than a month of fighting, the Soviet Union's Warsaw Pact alliance would fray.

The disparity in conventional forces loomed over political relations between the United States and our European NATO allies. Because of it we still needed to rely on the threat that we would use tactical nuclear weapons to deter or blunt any conventional Soviet attack in Europe. We had to accept the possibility that our use of those weapons could escalate to a full-blown nuclear war that would destroy the United States, the

Soviet Union, and Europe. That was a terrifying strategy in a tumultuous time. The world was truly divided into “our side” and “theirs.”

The United States considered how to change the Soviet calculation that its military could accomplish a blitzkrieg victory in Western Europe. We reinforced our conventional warfare capability. We planned ways to deter a Soviet nuclear strike with our own ability to strike back. At the same time, we negotiated with Soviet authorities on limiting strategic nuclear arms. The constant Cold War competition raged hot during the Carter administration and preoccupied me throughout the four years.

One telling incident occurred after the Soviet Union collapsed and before Chief of General Staff Sergei Akhromeyev committed suicide. Shortly before his last act, he confided to a friend of mine his belief that the Soviet forces could have fought their way to the English Channel in thirty days in a conventional war. “But,” he added with a nod to our nuclear deterrent and the Soviet system’s internal failure, “then what would we have done?” Our deterrent and global reach prevented Soviet expansion and military domination. The containment we engineered made the Soviet authorities confront their dysfunctional system and helped to bring it down.

In the four years of my tenure as secretary of defense, I also focused my attention on North Korea. President Kim Il-sung, grandfather of that country’s current leader, Kim Jong-un, had authorized attempts to kill the president of South Korea and members of his cabinet. Kim’s army had already assaulted and killed American soldiers in the demilitarized zone. Even as we dealt with those pressing concerns, the Carter administration was to find that still more security issues would define the president’s term. They included the normalization of relations with China, and the Panama Canal Treaties, as well as Mideast conflicts, and ultimately the Iran Revolution and the subsequent hostage crisis.

From where I sat, the panorama of challenges was complex and the penalty for mistakes was severe. I called on experience I’d gained from my former positions. With each one, my perspective had widened. When I directed Livermore Laboratory, I’d overseen the development of thermo-nuclear weapons and considered them paramount for national defense.

Next, as director of defense research and engineering (DDRE) in the Defense Department, I became concerned with efficient acquisition of entire weapons systems, nuclear and nonnuclear. I tried to select the ones

that made the most sense in terms of cost-effectiveness and mission relevance. In that job I quickly understood that in a situation of mutual deterrence, Soviet and U.S. nuclear weapons in effect canceled each other out. That greatly increased the importance of conventional armament.

Later, as secretary of the air force, I considered one aircraft program versus another for the war in Vietnam. Planes can have up to fifty-year life spans so I looked at them with an eye not only for their immediate use but also for how they would weather time and serve military purposes that could differ and change drastically over decades. Taken together, these vantage points offered an understanding of security issues in considerable detail.

After my first Pentagon service in the 1960s, and before my return as secretary of defense in 1977, I was president of Caltech. During that period I was a member of the negotiating team for the Strategic Arms Limitation Talks (SALT I) for the Nixon and Ford administrations. I understood the need to limit and preferably reduce nuclear arms even as we readied programs for potential conflict or war. I concluded that the goal of a stable strategic balance could be safely sought through agreed limitations on offensive and defensive weapons if they were adequately monitored to ensure the limits were observed. This was a better path than continuing an unrestricted competition in which the perception of advantage, however mistaken, could lead to rash action and even a nuclear war. Our reasoning led to the formulation of the “1,000 strategic warheads” proposal, which the Soviet negotiators dismissed out of hand. So the strategic arms competition continued, only slightly moderated by SALT I.

I still had much to learn about how both my strategic decisions and my daily actions as defense secretary would affect the country’s safety and influence the economy clear down to its local communities. I understood from the start that I had to weigh the relative value of various armament systems and of military units and their placement. I compared the value of adding aircraft against adding ships, tanks, or personnel. I considered how aircraft or other weapons platforms and systems might be used not only by America, but also by our allies over the next two generations of those systems. I looked at new technologies under development to select those that provided the most benefit for the cost and would prove effective in combat. And I learned how military capabilities and operations fit into the larger framework of national security.

In high school I had been the kind of kid who went to his room after dinner to read a book. One book, *Bleak House*, written more than 150 years ago by Charles Dickens, concerned a Victorian court bureaucracy in which he'd labored as a clerk. In the frustration and anger that it engendered, it was not unlike bureaucracies of our own day. Dickens wrote of that bureaucracy: "It exhausts finances, patience, courage and hope . . . and overthrows the brain and breaks the heart."

The organization I was charged to lead—the Department of Defense—transcended anything the Victorian mind could have imagined. In 1977 the secretary of defense managed 2.1 million soldiers, sailors, marines, and airmen and airwomen in uniform, and 1 million government civilians—a force much larger than the number of employees in the world's largest private corporation and nearly 40 percent of the civilian employment of the entire federal government. Getting a massive organization like the Department of Defense to focus on the right things wasn't going to be easy.