

The Comprehensive Test Ban Treaty and the Origin of the Moratorium by Thomas Graham, Jr.

The search for an international agreement to terminate the testing of nuclear weapons goes back to the 1950s when gargantuan nuclear explosions in the atmosphere were being carried out by the first of the nuclear weapon states—primarily the United States and the Soviet Union—in the name of peace and security. And when the Nuclear Non-Proliferation Treaty (NPT)—the most important of international security agreements—was negotiated in the 1960s, a complete or “comprehensive” nuclear weapon test ban was seen by many states that had agreed pursuant to the NPT not to acquire nuclear weapons as the essential political cover for giving up the most destructive weapons ever created. While such an agreement after many years was finally negotiated and signed in the mid-1990s, it has never come into force and may never. All that the world community can rely on at present to prevent nuclear weapons from being tested is a moratorium—a voluntary restraint policy—institutionalized by the United States in 1993 which was gradually accepted by the other states that possess nuclear weapons over the next half dozen years—except for North Korea, a state outside the civilized world—and to the rest of the world through the NPT. The text that follows is the story of how the moratorium came to be.

With the departure of the George H. W. Bush administration in early 1993, no presidential appointments were made at the U.S. Arms Control and Disarmament Agency (ACDA) because the Department of State hoped to eliminate ACDA and absorb its functions as the Clinton administration entered office. ACDA had been founded by President Kennedy to be a sister agency of the State Department—located within the State Department building but independent of the Department—and have as its objective the negotiating and implementation of arms control and disarmament treaties with the Soviet Union first and then the world with the advent of the NPT for which ACDA had the lead. Some dozen of the 15 major arms limitation

treaties that have been accomplished since the end of World War II were negotiated by ACDA for the U.S. government. With the resignation in January, 1993 of the director, deputy ACDA director and four assistant directors, which were the presidential appointment positions at ACDA at that time, as is customary for Senate confirmed officials at the end of an administration, thus left me, the General Counsel, as the highest remaining official. As General Counsel my position was provided for by statute but the position was not Senate confirmable and, since I was the highest-ranking remaining ACDA official, at 12:01 on January 20, 1993, I automatically became the Agency acting director.

I realized that my primary mission was to try to defend ACDA independence against the State Department. But also by statute I would have a seat on the National Security Council (NSC) on arms control and non-proliferation issues and therefore a vote on the outcome of the Congressionally imposed U.S. nuclear weapon test moratorium which was due to expire in June, 1993 as well as consideration of the negotiation of a comprehensive test ban treaty (CTBT).

There had been essentially no action on the nuclear weapon testing issue since President John F. Kennedy's Limited Test Ban Treaty which prohibited testing in all environments except underground—except for the two 150 kiloton threshold treaties in the mid-1970s, which prohibited nuclear weapon tests and so-called peaceful nuclear explosions greater in yield than 150 kilotons. The NPT is the most important international security treaty that exists and because banning nuclear weapon tests was an essential part of the NPT central bargain in 1968 permitting its negotiation, I resolved that I would do all I could to move toward a test ban in the upcoming NSC consideration of the issue.

In the late 1960s, the NPT was negotiated based on a basic bargain of no further proliferation of nuclear weapons to additional non-nuclear states in exchange for eventual

nuclear weapon disarmament by the nuclear weapon states along with the sharing of peaceful nuclear technology. By the time of the signature of the NPT in 1968, the non-nuclear weapon states had made it clear that they considered the negotiation of a comprehensive nuclear weapon test ban as the litmus test of the commitment of the nuclear weapon states—principally the United States and the Soviet Union—to uphold their end of the bargain. For twenty years after NPT entry into force in 1970, most of the NPT review conferences either failed or were rendered a nullity over the issue of U.S. and Soviet commitment to completing a CTBT.

But then there began to be movement. In 1990 President Gorbachev announced a Soviet nuclear test moratorium, which was continued by Russia after the collapse of the Soviet Union. President Mitterrand of France—apparently to the surprise of his military—announced a French moratorium soon after, and in the fall of 1992 the Hatfield-Mitchell-Exon legislation, which called upon the United States to pursue a CTBT and also provided for the immediate commencement of a nine-month nuclear weapon testing moratorium, passed the U.S. Congress. According to the legislation, after the expiration of the moratorium, if the government so chose, it could conduct five tests per year for three years (a total of 15) for strictly limited purposes. Three tests per year were to be for the testing of new safety devices for nuclear weapons, one test per year could be for reliability and the other for Britain (which had for years been conducting its nuclear testing program at the Nevada Test Site). After that, in 1996, a moratorium would be observed until a CTBT was signed unless “another nation” tested, at which point the moratorium would end. In earlier drafts of the legislation, the language read “Russia” instead of the phrase “another nation,” but the co-sponsors agreed to broaden the escape hatch as a concession to the White House. The White House opposed the legislation and hoped that China would bail the United States out by doing a test after the 15 authorized tests were completed. President Bush

reluctantly signed the legislation because it was attached to the Department of Energy appropriations bill, which included money for the supercollider to be built in Texas—important in the context of the presidential elections, although, as it turned out, the supercollider was never built. The Hatfield-Mitchell-Exon legislation had the effect of forcing the Clinton administration to make some key decisions in the spring of 1993. Robert Bell, the senior official of the NSC responsible for arms control, called me in February and said he was going to hire a small staff to help him address this issue among others. He said that he was thinking of taking on Steve Andreason, who had worked for Paul Nitze, and asked if I knew him. I said I did not, but that I had heard good things about him.

In February 1993, Bob Bell circulated around the interagency the idea that NSC would support a CTBT with a one-kiloton threshold, which was argued to be needed for verification reasons. The Office of the Secretary of Defense (OSD) had similar ideas. But no one was supporting continuation of the nuclear weapon test moratorium imposed by the Hatfield-Mitchell-Exon legislation after the expiration of the nine-month period in June 1993. Rather, all national security agencies supported conducting the five tests per year for three years allowed by the law, after which a CTBT was to be signed unless another nation tested. At the time both Russia and France were observing nuclear weapon test moratoria and the United Kingdom was bound by what the United States did because they used the Nevada Test Site. Only China was conducting tests, although it had not conducted one for several years. Through Jim Timbie, a senior arms control official at the State Department, I sent Undersecretary of State Lynn Davis a note saying that it seemed to me that a one-kiloton threshold for the U.S. was a bad idea. After a few days, I received a vague response. With the strong backing and encouragement of my former deputy now acting general counsel since I had moved up to acting director, Mary Elizabeth

Hoinkes, I decided as acting director to have ACDA formally take the position of opposing any threshold, and extending the moratorium past June for the foreseeable future in the expectation of a CTBT. Around this time some were suggesting that I could take a neutral position on these issues and claim it was because I was only an acting director; but I didn't think that I wanted to do that. However, I decided that if I were going to go significantly against the emerging interagency consensus on the threshold issue, and totally against it on the moratorium issue, I had better seek counsel at least with the NSC and the Office of the Joint Chiefs of Staff (JCS) in advance. I had already tried with State, but to no avail.

As noted, the annual five tests allowed by the law were divided into three permitted to test new nuclear weapon safety devices, one for reliability, and one for the British. The problem was that the military had no interest in purchasing the safety devices that would be tested, in the three tests. Such devices would have cost around \$6 billion, and one of the safety devices was a fire resistant "pit" (or core of a nuclear weapon) for weapons allocated to bombers that were no longer on alert. Reliability testing is not something that had been done very often historically. And a test program driven entirely for British testing would not have been acceptable to the three nuclear weapon laboratories or the Congress. There was no demonstrable purpose in doing the testing except simply to have nuclear tests (of course, other measurements could conceivably be piggybacked onto the tests). This did not seem to me to be sustainable. Further, and more important, in about two years we were going to seek to extend the NPT, we hoped, indefinitely. Negotiations being what they are, it seemed to me highly unlikely that we would have a CTBT in place by April 1995, a CTBT being the sine qua non objective of the non-nuclear weapon states. To add to the lack of a CTBT, a U.S. and U.K. test program, and probably the resumption of testing by Russia and France in response, would most likely eliminate any possibility for a

permanent NPT. The threshold issue was also important in that a CTBT proposed by the nuclear weapon states with a one-kiloton threshold would be viewed as no CTBT at all, and simply as a cynical attempt to keep testing programs, albeit at a low level.

I called Bob Bell and told him what I planned to do. He told me that I should, of course, advocate what I thought was right. And then I met with General McCaffrey at JCS who as the J-5 was the responsible official for these issues. He told me that my responsibility was to defend the NPT and that I should take whatever position would best accomplish this. To do anything else would be to be derelict in my duties. In March, some of the CTBT issues began to sort themselves out. Since I was the acting director and had no acting deputy, I represented ACDA at both the deputies' level and the principals' level for CTBT as well as other issues. In these meetings, I opposed the one-kiloton threshold (embraced by all other agencies except State, which had an unclear threshold proposal) on the grounds that it would be viewed as no CTBT at all. I urged the continuance of the moratorium on the grounds that the 15 tests were not necessary, since the Department of Defense (DOD) had no interest in purchasing the safety devices, and that at the NPT Review and Extension Conference in 1995—with no CTBT in hand, which was likely—an active U.S. (and probable British, French, and Russian) test program—probably our chances for a permanent NPT would be eliminated. Further, how were we going to persuade Ukraine to give up the nuclear weapons on its territory if at the same time we were emphasizing the usefulness of nuclear weapons with a test program? Even so, all the agencies came in strongly against the moratorium, including the Department of Energy (DOE).

At the deputies meeting I sat next to John Deutsch, who was then DOD undersecretary for policy. He vigorously opposed the moratorium and we had a bit of a back and forth. But he is a gentleman with whom debating serious issues was always a pleasure. In March, OSD began to

move away from the idea of the one-kiloton threshold and the idea began to emerge that perhaps we could say we had a zero threshold, but argue to exempt experiments that did not produce more than four pounds of explosive yield (which is more or less what the United States had done during the 1958-61 nuclear test moratorium initially proposed by President Eisenhower). Also, JCS put out a proposal to have a special withdrawal clause ten years into a CTBT if there was concern about the safety and reliability of the stockpile, so that tests could be conducted to address any concerns. I decided not to fight this one and was inclined to accept the four pounds idea, but I wanted to continue strong advocacy of the moratorium. The interagency battle carried on into the spring. Mary Lib had a series of talks with White House Science Advisor John Gibbons, and he was coming around to support the continuation of the moratorium.

Later in the spring, Bob Bell called a meeting in his office with Lynn, Frank Wisner (a long-time leader at State who had been, inter alia, ambassador to Egypt and undersecretary of state, who was now at Defense as undersecretary and would later be ambassador to India), and myself. Bob said that now that all agencies had conceded on the one-kiloton threshold, we should all support the 15 nuclear tests permitted by the legislation. Lynn and Frank said, of course, they would. Much to the consternation of all, I said that I would not, and that I would continue to support extension of the moratorium as long as no other nation tested, a caveat which was in the legislation. The meeting broke up on a bit of a bad note.

In May the issue finally reached the principals or cabinet level. Present at the first meeting were National Security Advisor Tony Lake, his deputy Sandy Berger, Bob Bell, and Steve Andreason; the new DOE Secretary Hazel O'Leary and several aides; CIA Director Jim Woolsey; the White House Science Advisor John Gibbons; JCS Chairman General Colin Powell, Secretary of State Warren Christopher, and Defense Secretary Les Aspin, each with several

aides; and myself. The meeting was in the Cabinet Room of The White House and State, OSD and JCS were seated on one side of the long table, with Tony Lake as chair of the meeting sitting between Secretary Aspin and Chairman Powell. ACDA, The White House Science Advisor and DOE sat on the other side of the table directly opposite. At one end was Jim Woolsey, the CIA Director—almost immediately on my left—and at the other end sat Sandy Berger, the Deputy National Security Advisor.

There were three issues on the agenda: the threshold, the ten-year withdrawal clause, and the moratorium. I had gone to talk with DOE on the moratorium issue prior to the meeting and Mary Lib had again discussed it with Jack Gibbons. I had not been able to see Hazel O’Leary, the Secretary recently confirmed, but I spoke with her deputy, and he said that it was their view there that there is a time for an end to everything, and that nothing should just continue on forever with no rationale. I was cheered by these words. At the meeting, Bob Bell gave an opening presentation as to where the agencies were on the various issues. We spent a long time on the first issue, finally agreeing on no threshold and on the four-pound experimental exception. We also agreed on the ten-year escape clause for our opening position in the negotiations—this seemed minor at that time and I wanted to concentrate on the moratorium with the threshold issue largely won.

Finally, with about 15 minutes to go in the one-hour meeting, Tony said, “Who will speak for the moratorium?” I raised my hand and gave the speech that I had used in the deputies meeting, stressing NPT extension and also Ukraine. I argued that if the United States resumed testing (and having the British tests in Nevada), Russia, France and China likely would discontinue their moratoria. Indefinite extension of the NPT in 1995 against a backdrop of all five nuclear weapon states testing likely would prove impossible. I further argued that the tests

were not necessary and should not jeopardize NPT extension if they were not. Moreover, what credibility would we have with a Ukraine that wants to keep Soviet nuclear weapons left on its territory if we have an active test program?

General Powell said that our nuclear weapons were our “crown jewels,” so we had to be careful in our decision. Secretaries Christopher and Aspin said that the political deal in the fall of 1992 was 15 tests, so we should conduct 15 tests. White House Science Advisor Jack Gibbons said he agreed with me. Hazel, however, to the annoyance of Tony, stopped the show. She said she was a new kid on the block, having just been confirmed, and that she had not really had time to study the issue and consult her experts. She wanted to put off any discussions of this issue for two weeks so that she would have time to study and understand it. This created something of a furor, but she stuck to her guns. When asked about the position of DOE at lower levels that opposed the moratorium, she noted that she was the secretary. Grumpily, Tony announced that there would be no decision, no outcome to send to the president, and that the principals would meet again on this issue in two weeks’ time. I reported back to ACDA that there had been no decision, but that DOE might change its position. I think everyone except Mary Lib (who always said whenever I went off to a CTBT meeting, “Now don’t you give an inch”) was a little surprised we had gotten this far with the moratorium issue.

A few days before the next principals meeting, I had an appointment with Hazel O’Leary to discuss the moratorium issue. Present, among several senior DOE aides, was Vic Reis, the overseer of the nuclear weapons program. Ivo Spalatin, my Congressional aide, formerly of the House Foreign Affairs Committee staff, went with me. It was an inspirational meeting. Hazel said that she was with us and that stopping testing was the right way to go. Of course, it would

require a lot of laboratory support to maintain the weapons without testing. Vic made no dissent and seemed happy.

The second principals meeting on CTBT duly assembled in late May. This meeting largely focused on the moratorium issue, which was the remaining unresolved interagency issue. Hazel brought with her two senior lab experts to give a briefing on the status of the nuclear weapon stockpile. They explained how, for at least ten years, even if we were to do nothing, there was no problem with the safety and reliability of the stockpile. After that period of time they could not be so certain, but they were confident that any problems could be addressed successfully through means other than testing. After a lengthy discussion on this, Tony again went around the room on the moratorium issue. First, Tony turned to General Powell, who said that it is the responsibility of the secretary of energy to ensure the safety and reliability of the nuclear weapon stockpile. “My responsibility,” he said, “is to the military. If the secretary of energy tells me that I need to test, then I want to test; if she tells me that I do not need to test, then I don’t want to test.” Secretaries Christopher and Aspin, who spoke next, reiterated their position at the first meeting—that there was a political deal for the 15 tests, and that we should do the tests. Tony then asked, “Who will speak for the other side?” I raised my hand and gave again my by now standard speech, concluding that the moratorium should be extended until we have a CTBT, assuming no other nation conducts a test. Hazel then said, “I agree,” and Jack Gibbons said, “I agree.” Tony thanked everyone and, with that, the meeting ended. Since there was a split decision, the president would have to decide. I understand that Tony, for the President, in the next weeks, consulted senior members of Congress, such as Senators Nunn and Exon, and was assured that there would be congressional support for a continuation of the moratorium. Accordingly, on July 3, the president announced that, looking toward a CTBT, he

was continuing the moratorium as long as no other nation tests, until September 1994 (renewable each year thereafter until a CTBT is achieved).

France and Russia had been observing a test moratorium for some time. Thus, it was up to China, and nobody was really sure what it would do. Hopefully, I thought, they would not want to isolate themselves. The summer passed in uncertainty, but then in late August intelligence reports came in that the Chinese were likely to test. By the time a principals meeting was scheduled in early September to address this, the likelihood had grown to certainty. Many feared the moratorium decision would be reversed. This was widely seen as a make or break meeting. But, by contrast with the meetings in May—the same principals were present except that Jane Wales was substituting for Jack Gibbons—it turned out to have a somewhat different ending. The meeting was in the Situation Room which being a small room meant that everyone was sitting close together. Tony Lake sat at one end of the table as Chair, flanked on his left by Secretary Les Aspin and on his right by Secretary Warren Christopher. I was at the other end squeezed in between General Powell and Jane Wales. After Jim Woolsey gave the intelligence briefing which completely confirmed that a Chinese test was imminent, Tony opened the meeting for discussion. He said, “Well does this mean we change our policy and do the 15 tests? The legislation and our policy that we established were both contingent on no other nation testing.” You could have heard a pin drop; everyone was on the edge of their seat. A few seconds of silence passed. Then Les Aspin spoke up and said, “Well! We’re Americans! Our policy should not be determined by what some people in Beijing do!” He was strongly seconded by Christopher, and it was quickly apparent that this was the unanimous view in the room. So what some had feared might be a divisive debate and a threat to the moratorium turned out almost instantaneously to be unanimous support for the moratorium policy. Thus was the

moratorium issue institutionalized for the United States. The moratorium was continued each year from September to September until the signing of the CTBT in September 1996.

Subsequently, the moratorium spread beyond the five NPT nuclear weapon states to India and Pakistan after their tests in 1998. Israel hadn't done a test since allegedly in 1979. So—except for outlier state North Korea—the moratorium is still being observed worldwide. The CTBT has 162 parties including the United Kingdom, France and Russia and cannot come into force without U.S. ratification and several others most of whom are waiting on the U.S. Given U.S. Senate politics—where the Republican Party is dead set against CTBT ratification, ever, under any circumstances—quite possibly the moratorium will be what has to be relied upon for the indefinite future to prohibit nuclear weapon testing and to preserve the NPT. Except for North Korea, which no one regards as a real state, there has not been a nuclear weapon test for 18 years and for the U.S. it has been 24 years.

In closing I would note that there was an attempt last year (2015) by three colleagues and myself, Daniel Smith of the Plowshares Foundation, David Koplow of Georgetown Law School and Jonathan Granoff, President of the Global Security Institute (GSI), to seek a UN Security Council resolution under Chapter Seven of the UN Charter which would, *inter alia*, “determine” that any further nuclear weapon test or other nuclear explosive test by anyone, anytime, anywhere would be a threat to international peace and security and therefore “decide” that all States shall refrain from any test of a nuclear explosive device involving any release of nuclear energy as such would represent a threat to international peace and security. Such a resolution would apply to all states regardless of their relationship to the CTBT and would make a nuclear weapon test by anyone an act contrary to international law.

I first mentioned this idea at a GSI luncheon on the margins of the United Nations on October 28, 2013. Then I memorialized it in an article entitled “A New Pathway to Prohibiting Nuclear Testing” on June 3, 2014 in WMD Junction, an on-line publication of the Monterey Institute. This was followed by an in-depth law review article by David Koplow in mid-2015. I wrote two detailed memoranda advocating this course of action to senior U.S. National Security Council officials in June and November of 2015 and Jonathan and I spoke with the delegations of Jordan, Spain, Malaysia, New Zealand and Chile (all of them at the time non-permanent members of the UN Security Council) about the possible tabling of a draft resolution. All supported the idea but none wanted to table such a resolution without prior clearance by the United States. If the resolution could have been tabled, there was a reasonable chance it would have passed; 13 of the 15 members of the Security Council at that time had already ratified the CTBT; only the United States and China had not and on this issue China is waiting for the United States. It would be difficult for the United States not to support such a resolution if it were to be tabled given seven years of public advocacy by the Obama administration for CTBT ratification. One of these states did approach the office of the United States Ambassador to the United Nations stating that it was interested in tabling such a resolution but wanted first a response from the United States. A response from the U.S. government came back in several days which reportedly said that now was not the time for such an action. Thus, nothing was done on a Security Council resolution in 2015. And there the situation lies, the prohibition against nuclear tests and to a degree the NPT are held together by the thin reed of an institutionalized policy adopted around the world—perhaps for the indefinite future. With the one exception of North Korea all states adhere to the moratorium either because in the case of nuclear weapon

states they have adopted the moratorium policy or because they are non-nuclear state parties to the NPT.

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