



Correcting the Most Serious Mistake: Prospects for U.S. Ratification of the CTBT

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Abstract

This article examines the Senate debate regarding the Comprehensive Nuclear-Test-Ban Treaty (CTBT), traces a policy history of presidential administrations toward the CTBT since that debate, makes a case for why the U.S. should ratify the treaty, and recommends measures that may improve the prospects of U.S. ratification in the future. Following his election as the 46th President of the United States, Joe Biden – an outspoken advocate of the CTBT in the Senate – will have to decide whether to expend political capital on securing Senate advice and consent for the treaty. While the nuclear nonproliferation regime has seen many changes since the Senate last considered the CTBT in 1999, the debate over the treaty has remained remarkably static, with Republicans arguing that the treaty is unverifiable and threatens U.S. interests, and Democrats arguing that the treaty would lock in a U.S. testing advantage and strengthen U.S. global leadership. In examining the policy history of the treaty and making recommendations to facilitate U.S. ratification, this article seeks to reinvigorate the debate over the CTBT a quarter century after it first opened for signature.

“I truly think, I honestly believe that, in the 27 years I have been here, this is the most serious mistake the Senate has ever made — or is about to make.”

—Senator Joe Biden

On the Senate’s refusal to grant advice and consent to the Comprehensive Nuclear-Test-Ban Treaty U.S. Senate, 1999

Introduction

On October 13, 1999, the U.S. Senate rejected the Comprehensive Nuclear Test Ban Treaty, which had been crafted to become an integral part of a nuclear order based on strong nonproliferation norms and the long-term vision of a world free of nuclear weapons. That fateful decision has now become a thing of the past. A CTBT observed but not ratified by the United States has come to be regarded as the new relatively stable status quo rather than something wrong and anomalous. In fact, this perception is deeply flawed. The Senate refusal to consent to the ratification of the CTBT harms the legitimacy of the nuclear nonproliferation regime, including the indefinite extension of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), which was predicated on the adoption of a nuclear test ban treaty. Without entry into force of the CTBT, progress on nuclear disarmament and nonproliferation has remained elusive, which has led to the advent of gift basket diplomacy.

We are still living in a world where nuclear testing is legal, albeit with limits imposed by the Partial Test Ban Treaty, the Threshold Test Ban Treaty, and the Peaceful Nuclear Explosions Treaty. As of April 2022, 185 countries have signed the CTBT and 172 have ratified it. Eight Annex 2 states still have to ratify the Treaty for it to enter into force. One of these eight countries is the United States of America.¹ In 1999, Joe Biden, then a United States Senator from Delaware and ranking minority member of the Foreign Relations Committee, called the rejection of the CTBT “the most serious mistake” the Senate had made during his years in office. Wrongs need to be righted, and Joe Biden’s presidency may provide the appropriate time for correcting the mistake made in 1999.

¹ Status of Signatory and Ratification, CTBTO Preparatory Commission, <<https://www.ctbto.org/the-treaty/status-of-signature-and-ratification/>> (accessed December 9, 2021).

Background

U.S. SIGNATURE OF THE CTBT AND THE PUSH FOR SENATE ADVICE AND CONSENT

On September 24th, 1996, U.S. President Bill Clinton signed the Comprehensive Nuclear-Test-Ban Treaty (CTBT) at the United Nations, declaring it “the longest-sought, hardest-fought prize in arms control history.”² By banning nuclear weapons testing, the Clinton Administration sought to convince non-nuclear weapon states party to the NPT that the U.S. and other nuclear weapon states took seriously their Article VI commitment “to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament.”³ While Clinton’s signing marked a historic milestone in efforts to ban nuclear weapons testing, it constituted just the first step in joining the treaty under U.S. law.

On September 22nd, 1997, Clinton formally submitted the CTBT to the Senate for advice and consent.⁴ At that time, Republicans controlled the Senate with a 55-45 majority, which would remain throughout the CTBT ratification process. The split meant that the administration would have to convince 22 Republicans to vote for advice and consent. Clinton asked the Senate “to approve” the CTBT during his 1998 State of the Union Address, arguing that the treaty “can help to prevent the development of new and more dangerous weapons and make it more difficult for non-nuclear states to build them.”⁵ Despite Clinton’s request, Senator Jesse Helms, Chairman of the Senate Foreign Relations Committee, decided to hold the treaty in committee and ended “a process of consultation between committee and administration staff that had been quietly going on since the treaty’s submission to the Senate.”⁶ Without the support of Helms, the CTBT would sit in committee for over two years before receiving a hearing.

² Alison Mitchell, “Clinton, at U.N., Signs Treaty Banning All Nuclear Testing,” *The New York Times*, September 25, 1996, <<https://www.nytimes.com/1996/09/25/world/clinton-at-un-signs-treaty-banning-all-nuclear-testing.html>>.

³ Treaty on the Non-Proliferation of Nuclear Weapons, March 5, 1970, Article VI.

⁴ Craig Cerniello, “Clinton Sends CTB Treaty to Senate: Hearing Set to Begin in October,” *Arms Control Today*, Volume 27 (September 1997), <www.armscontrol.org/act/1997-09/press-releases/clinton-sends-ctb-treaty-senate-hearing-set-begin-october>.

⁵ Bill Clinton, “State of the Union Address,” text reproduced at <<https://www.washingtonpost.com/wp-srv/politics/special/states/docs/sou98.htm>>, January 27, 1998 in Terry L. Deibel, “Inside the Water’s Edge: The Senate Votes on the Comprehensive Test Ban Treaty,” Georgetown University Edmund A. Walsh School of Foreign Service, Institute for the Study of Diplomacy Case Study Program, Case 290 (2003), <<https://isd-georgetown-university.myshopify.com/products/inside-the-waters-edge-the-senate-votes-on-the-comprehensive-test-ban-treaty>>, 4.

⁶ Deibel, 5.

Senator Helms did not act alone in frustrating efforts to ratify the CTBT. Senator Jon Kyl, a conservative from Arizona, led Republican efforts to defeat the vote for advice and consent. Kyl hosted “gatherings of anti-treaty staffers,” distributed “briefing books” for other Republican Senators, and organized meetings between senators and former defense and lab officials opposed to the CTBT. Kyl’s staff also conducted whip checks to poll informally the number of senators opposed to the granting of advice and consent. From February to September 1999, the number of anti-treaty senators steadily grew, from “twenty-four firm no votes” to “forty-two solid votes against the CTBT,” more than enough to refuse to grant advice and consent to ratification.⁷

Frustrated by Helms’s decision to hold the treaty, Democrats threatened to obstruct Senate work until the CTBT received hearings and a date for a vote. Fearful of these threats, Majority Leader Trent Lott decided to offer a compromise on September 30th, 1999: he would bring the treaty to a vote within a week, with restrictions.⁸ The Democrats, led by Minority Leader Tom Daschle, agreed to Lott’s offer. After fourteen hours of debate between October 8th-12th, the Senate would vote on whether to grant advice and consent to the CTBT.

Despite its abbreviated schedule, the Senate general debate on the CTBT allowed proponents and opponents of the treaty to voice their views on whether the treaty advanced U.S. national interest. Kyl, the leading opponent of the CTBT, summarized his arguments against the treaty as follows:

[The CTBT] will jeopardize rather than enhance our national security. It will undermine our vital nuclear deterrent by jeopardizing the reliability of our nuclear stockpile. It will prevent us from making our weapons as safe as they can be. It will not stop nuclear proliferation, and it is not verifiable. It is not worthy of Senate approval.⁹

In addition to these concerns, Kyl also noted that the treaty failed to define “nuclear explosion” and argued that other states may hold a looser understanding of the test ban than the zero-yield standard understood by the United States, placing the U.S. at a disadvantage.¹⁰

In response to Republicans opposed to ratification, Democrats noted, in the words of then-Senator John Kerry, that the U.S. “enjoys a tremendous technological advantage over the other nuclear powers in both the sophistication of our weapons and our ability to maintain them reliably.”¹¹

⁷ Ibid., 10-11.

⁸ Ibid., 1.

⁹ 145 Congressional Record, October 8, 1999, <<https://www.congress.gov/106/crec/1999/10/08/CREC-1999-10-08-pt1-PgS12257-6.pdf>>, S12262.

¹⁰ Ibid., S12261.

¹¹ Ibid., S12351.

Kerry further argued that the CTBT's International Monitoring System would have the capability to detect any militarily significant testing, ensuring "an end to nuclear testing that advances the sophistication of current nuclear stockpiles or the development of new nuclear stockpiles."¹² Kerry also highlighted the CTBT's importance in securing the indefinite extension of the Non-proliferation Treaty (NPT) in 1995, noting that "failure of the United States to ratify the CTBT will seriously undercut our ability to continue our critical leadership role in the global nuclear non-proliferation regime."¹³ Finally, Kerry noted that the Science Based Stockpile Stewardship program would allow the U.S. to maintain its nuclear arsenal without the need to engage in nuclear testing, "based on over 50 years of experience and analysis of over 1,000 nuclear tests, the most in the world."¹⁴ In short, Democrats argued that the CTBT would enhance U.S. security interests by locking in the advantage of having conducted the most nuclear weapons tests and by preventing other nations from further testing their arsenals.

As the Senate debate veered towards a vote on advice and consent, Democrats realized that they lacked the votes required for ratification and, consequently, began a push for postponement. On October 12th, President Clinton sent a letter to Majority Leader Trent Lott requesting that he "postpone consideration of the Comprehensive Test Ban Treaty on the Senate floor."¹⁵ Further, 62 Senators "including 24 Republicans" signed onto a letter dated October 12th, 1999, "supporting putting off the vote until the next Congress."¹⁶ Despite calls for postponement, Lott "facing pressure from the conservative wing of his party" moved to resume consideration of the CTBT on October 13th in a party line vote of 55 Republicans to 45 Democrats.¹⁷ Ultimately, the Senate refused to grant advice and consent to the CTBT in a 51-48 vote, returning the treaty back to the custody of the Senate Foreign Relations Committee.¹⁸

CHANGING ADMINISTRATIONS, CHANGING PRIORITIES

Despite the defeat in the Senate, President Clinton reiterated that the U.S. would continue a test moratorium, invited the other nuclear-weapon

¹² 145 Congressional Record, October 12, 1999, <<https://www.congress.gov/106/crec/1999/10/12/CREC-1999-10-12-pt1-PgS12329-7.pdf>>, S12351

¹³ Ibid., S12351-S12352.

¹⁴ Ibid., S12352.

¹⁵ Ibid., S12333 in Deibel, 15.

¹⁶ Deibel, 16.

¹⁷ Ibid., 18

¹⁸ Eric Schmitt, "Defeat of a Treaty: the Overview; Senate Kills Test Ban Treaty in Crushing Loss for Clinton; Evokes Versailles Pact Defeat," *The New York Times*, October 14th, 1999, <<https://www.nytimes.com/1999/10/14/world/defeat-treaty-overview-senate-kills-test-ban-treaty-crushing-loss-for-clinton.html>>.

states to follow suit, and urged all nations to sign and ratify the CTBT.¹⁹ In a letter dated October 18th, 1999, U.S. Secretary of State Madeline Albright further assured foreign ministers that “the United States will continue to act in accordance with its obligations as a signatory under international law, and will seek reconsideration of the treaty at a later date when conditions are better suited for ratification.”²⁰ Republicans rejected this view, with Lott arguing “if the Senate does not consent to ratification of a treaty - and in this case we didn’t - it has no status for the United States in international law.”²¹ Helms also took issue with the Administration’s interpretation, stating “since the Senate is a co-equal [in treaty-making] and the Senate has overwhelmingly vetoed the CTBT, the intention to never become a party has been made crystal clear.”²² Just over a year later, Republicans would retake the White House and redefine U.S. executive branch policy toward the CTBT.

As a candidate, George W. Bush left no doubts regarding his opinion of the CTBT. The 2000 Republican Party Platform referred to the treaty as an “anachronism of obsolete strategic thinking,” arguing that the “treaty is not verifiable, not enforceable, and would not enable the United States to ensure the reliability of the U.S. nuclear deterrent.”²³ Bush’s 2001 Nuclear Posture Review reiterated this stance, noting that the Bush Administration would not seek ratification, but would maintain a unilateral nuclear testing moratorium.²⁴ John Bolton, then Undersecretary of State for Arms Control and International Security, went further, reportedly asking “the State Department’s legal office to determine whether a president had the power to unilaterally withdraw a treaty pending before the Senate.”²⁵ The State Department’s lawyers responded that the president could not unilaterally withdraw a treaty from Senate consideration. The Bush Administration further reiterated its policy towards the CTBT in a July 5th, 2008 letter from Secretary of State Condoleezza Rice to Senator Kyl, highlighting numerous diplomatic statements expressing that the U.S. did “not intend to become a party to the treaty” and stating that “we do not believe the treaty imposes any current obligation on the United States resulting from U.S. signature

¹⁹ Deibel, 21-22.

²⁰ Bill Gertz, “Albright says U.S. bound by nuke pact - Sends letters to nations despite Senate vote,” *The Washington Times*, November 2, 1999, Page A1.

²¹ Bill Gertz, “Lott hits Clinton’s stance on nuke pact - Says he’s risking ties with Senate,” *The Washington Times*, November 3, 1999, Page A1.

²² Gertz, “Lott hits Clinton’s stance on nuke pact - Says he’s risking ties with Senate.”

²³ Republican Party Platform of 2000, The American Presidency Project, University of California, Santa Barbara, July 31, 2000, <<https://www.presidency.ucsb.edu/documents/2000-republican-party-platform>>.

²⁴ Congressional Research Service, “Comprehensive Nuclear-Test-Ban Treaty: Background and Current Developments,” September 1, 2016, <<https://crsreports.congress.gov/product/pdf/RL/RL33548>>, 3.

²⁵ Thom Shanker and David E. Sanger, “White House Wants to Bury Pact Banning Tests of Nuclear Arms,” *The New York Times*, July 7, 2001 <<https://www.nytimes.com/2001/07/07/world/white-house-wants-to-bury-pact-banning-tests-of-nuclear-arms.htm>>.

in 1996, and we do not consider the United States to have obligations under international law as a signatory to the treaty.”²⁶ Only six months after Rice’s letter, the U.S. position on the CTBT would switch again, with the election of Barack Obama.

Following midterm elections in 2006, Democrats claimed only their second majority in the Senate since 1994. Section 3122 of the Senate draft version of the Fiscal Year 2008 National Defense Authorization Act (NDAA) noted “it is the sense of Congress that the Senate should ratify the Comprehensive Nuclear-Test-Ban Treaty, opened for signature at New York September 10, 1996.”²⁷ In response to this section, 41 Republicans signed onto a letter written by Senator Kyl to Senate Armed Services Committee Chairman Carl Levin dated October 24th, 2007 that opposed the section, stating “we believe it denigrates the serious role of the U.S. Senate to claim in section 3122 to express the “~sense of the Congress’ that the CTBT should be ratified.”²⁸ The 2008 NDAA also convened a Congressional Commission on the Strategic Posture of the United States, chaired and vice-chaired respectively by former Secretaries of Defense William Perry and James Schlesinger.²⁹ The commission made two recommendations regarding the CTBT, calling for the Obama Administration to “secure P-5 agreement on a clear and precise definition of banned and permitted test activity” and “secure agreement among the P-5 to implement CTBT verification provisions without waiting for entry into force of the treaty,” including on-site inspections.³⁰

Just three months into his first term, President Barack Obama declared in his Prague speech that “my administration will immediately and aggressively pursue U.S. ratification of the Comprehensive Test Ban Treaty.”³¹ The overwhelming Democratic victory in the 2008 Senate elections also left Democrats with their largest majority since the early 1990s, at one point reaching a 60-40 split.³² In such a Senate,

²⁶ Letter from Secretary of State Condoleezza Rice to Senator Jon Kyl, July 5, 2008, reprinted in the Congressional Record, September 7, 2016, <<https://www.govinfo.gov/content/pkg/CHRG-114shrg27232/pdf/CHRG-114shrg27232.pdf>>, 45-47.

²⁷ U.S. Congress, Senate, To authorize appropriations for fiscal year 2008 for military activities of the Department of Defense, for military construction, and for defense activities of the Department of Energy, to prescribe military personnel strengths for such fiscal year, and for other purposes., S. 1547, 110th Cong., 1st sess., introduced in Senate June 5, 2007, <<https://www.congress.gov/110/bills/s1547/BILLS-110s1547rs.pdf>>.

²⁸ 153 Congressional Record, October 24, 2007, <<https://www.congress.gov/110/crec/2007/10/24/CREC-2007-10-24-pt1-PgS13357.pdf>>, S13358.

²⁹ United States Institute of Peace, “Congressional Commission on the Strategic Posture of the United States,” <<https://www.usip.org/strategic-posture-commission/background>>.

³⁰ William J. Perry and James R. Schlesinger, “The Final Report of the Congressional Commission on the Strategic Posture of the United States,” United States Institute of Peace, <https://www.usip.org/sites/default/files/America's_Strategic_Posture_Auth_Ed.pdf>, 87.

³¹ Barack Obama, “Remarks by President Barack Obama in Prague as Delivered,” April 5, 2009, <<https://obamawhitehouse.archives.gov/the-press-office/remarks-president-barack-obama-prague-delivered>>.

³² United States Senate, “Party Division,” <<https://www.senate.gov/history/partydiv.htm>>.

advice and consent to CTBT ratification would likely have required only seven Republican votes. The administration's actions, however, did not match the president's rhetoric. Focused on domestic priorities and the negotiation and ratification of the New START Treaty, the Obama Administration did not make a concerted effort to secure CTBT ratification. As former Undersecretary of State for Arms Control and International Security Rose Gottemoeller has noted, securing Senate advice and consent to ratification of the New START Treaty required more political capital than expected, leaving little left for CTBT ratification.³³ By the time administration efforts began in earnest to educate the public and engage with Senators on the CTBT, Republicans had regained power in the Senate, with a majority of 54-46.

Late in his term, President Obama sought to promote the CTBT through a UN Security Council Resolution marking 20 years since the treaty's opening for signature. In the leadup to the resolution vote, the P-5 issued a September 15th, 2016 joint statement on the CTBT, reaffirming their nuclear test moratoria and "recognizing that a nuclear-weapon test explosion or any other nuclear explosion would defeat the object and purpose of the CTBT."³⁴ A week later, the Security Council voted 14-0 to adopt Resolution 2130, which urges states to sign and ratify the CTBT and "calls upon all States to refrain from conducting any nuclear-weapon test or any other nuclear explosion."³⁵ Rather than raising support for the treaty on Capitol Hill, President Obama's efforts at the UN met fierce opposition from Republicans, who interpreted the UN Security Resolution as a means of effectuating an international nuclear test ban while circumventing the Senate's role of providing advice and consent to treaty ratification. Thirty-three Republican Senators signed onto Senator Marco Rubio's letter threatening to cut off funding for the CTBTO Preparatory Commission if the Security Council Resolution imposed binding restrictions on U.S. nuclear testing, while Senator Bob Corker, the Chairman of the Senate Foreign Relations Committee, held the first Senate hearings on the CTBT in nearly seventeen years.³⁶ Ultimately, the Obama Administration did too little, too late in its aborted attempt to seek ratification of the CTBT.

³³ Anna Péczeli and Bruce Goodwin, "Technical Issues in the Comprehensive Nuclear Test Ban Treaty (CTBT) Ratification Debate: A 20 Year Retrospective," Lawrence Livermore National Laboratory, Center for Global Security Research (September 2020) <<https://cgsr.llnl.gov/content/assets/docs/CGSRctbtONLINE.pdf>>, page 49.

³⁴ "Joint Statement on the Comprehensive Nuclear-Test-Ban Treaty by the Nuclear Nonproliferation Treaty Nuclear-Weapon States," State Department, September 15, 2016, <<https://2009-2017.state.gov/r/pa/prs/ps/2016/09/261993.htm>>.

³⁵ UN Security Council Resolution 2310, S/RES/2310, September 23, 2016) <<https://digitallibrary.un.org/record/842784#record-files-collapse-header>>.

³⁶ Marco Rubio to Barack Obama, September 8, 2016, <https://www.rubio.senate.gov/public/_cache/files/5144be8b-4cfc-422a-8017-cc19d362a778/6971525E619F533B35207A7868DEB787.ctbt-letter-final-2016.pdf>. See also Hearing before the Committee on Armed Services, S. Hrg. 114-724, The Administration's Proposal for a U.N. Resolution on the Comprehensive Nuclear Test-Ban Treaty, 114th Cong., 2nd sess., September 7, 2016, <<https://www.govinfo.gov/content/pkg/CHRG-114shrg27232/pdf/CHRG-114shrg27232.pdf>>.

Reflecting the waning political salience of the CTBT, the 2016 Republican Party Platform made no mention of the treaty. In its Nuclear Posture Review, the Trump Administration stated that it would not seek CTBT ratification, while noting that it would “continue to support the Comprehensive Nuclear Test Ban Treaty Organization Preparatory Committee as well as the related International Monitoring System and the International Data Center.”³⁷ In 2019, the head of the Defense Intelligence Agency, Lieutenant General Robert Ashley, accused Russia of conducting low-yield nuclear experiments in violation of its obligation under the CTBT, without substantiating the claim.³⁸ Shortly thereafter, Senator Tom Cotton, joined by three Republican colleagues, sent a letter to President Trump, in effect arguing that the U.S. should “unsign” the CTBT.³⁹ Just under a year later, news reports indicated that the intelligence community further believed that China may also have violated the zero yield standard adhered to by the United States.⁴⁰ A month later, Trump Administration officials reportedly discussed resuming nuclear testing, which attracted widespread criticism.⁴¹ In June 2020, the State Department released its annual report on compliance with arms control agreements, which found that Russia had “conducted nuclear weapons experiments that have created nuclear yield” and suggested that Chinese activity at the Lop Nur test site “raise concerns regarding its adherence to the ‘zero yield’ standard.”⁴² The report indicated that the U.S. had sought to engage Russia and China in developing test site transparency measures as a confidence-building measure, including by inviting foreign officials to the Nevada National Security Site. In the end, the Trump Administration did not take steps to resume testing and made no attempt to unsign the treaty, as advocated by Senator Tom Cotton.

³⁷ Office of the Secretary of Defense, “Nuclear Posture Review,” February 2018, <<https://media.defense.gov/2018/Feb/02/2001872886/-1/-1/1/2018-NUCLEAR-POSTURE-REVIEW-FINAL-REPORT.PDF>>, XVII.

³⁸ Michael R. Gordon, “U.S. Says Russia Likely Conducting Low-Yield Nuke Tests, Defying Test Ban Treaty,” *The Wall Street Journal*, May 29, 2019, <<https://www.wsj.com/articles/u-s-says-russia-likely-conducting-low-yield-nuke-tests-defying-test-ban-treaty-11559135102>>.

³⁹ Tom Cotton to Donald Trump, March 8, 2019, <https://www.cotton.senate.gov/imo/media/doc/190308_CTBT_Letter_POTUS.pdf>.

⁴⁰ Michael R. Gordon, “Possible Chinese Nuclear Testing Stirs U.S. Concern,” *The Wall Street Journal*, April 15, 2020, <<https://www.wsj.com/articles/possible-chinese-nuclear-testing-stirs-u-s-concern-11586970435>>.

⁴¹ John Hudson and Paul Sonne, “Trump administration discussed conducting first U.S. nuclear test in decades,” *The Washington Post*, May 22, 2020, <https://www.washingtonpost.com/national-security/trump-administration-discussed-conducting-first-us-nuclear-test-in-decades/2020/05/22/a805c904-9c5b-11ea-b60c-3be060a4f8e1_story.html>.

⁴² U.S. Department of State, “Adherence to and Compliance with Arms Control, Nonproliferation, and Disarmament Agreements and Commitments,” June 2020, <https://www.state.gov/wp-content/uploads/2020/06/2020-Adherence-to-and-Compliance-with-Arms-Control-Nonproliferation-and-Disarmament-Agreements-and-Commitments-Compliance-Report.pdf>, 49-51.

The Biden Administration and the CTBT

Upon coming into office in January 2020, Biden ran on a platform committing Democrats to push for ratification of the CTBT.⁴³ With an evenly divided Senate, the Administration would have to convince 17 Republican Senators to vote for advice and consent to ratification of the treaty. Given the increasing strength of the conservative wing of the Republican party and the fact that 29 current Republican Senators have either voted against or signed onto letters opposing the CTBT, the Biden Administration will have an uphill battle in seeking ratification of the treaty. To gain support of Senate Republicans, the Biden Administration will have to commit limited political capital and address Republican concerns repeatedly raised regarding the treaty over the past 25 years. These concerns include the lack of a definition of nuclear explosion in the CTBT, the verifiability of the treaty, and whether the U.S. can maintain “and modernize” its nuclear deterrent without a return to testing.

⁴³ Democratic Party Platform of 2020, The American Presidency Project, University of California, Santa Barbara, August 17, 2020, <<https://www.presidency.ucsb.edu/documents/2020-democratic-party-platform>>.

TABLE 1: CURRENT U.S. SENATORS AND THE CTBT

| Status | List of Senators |
|--|--|
| Voted For in 1999 ⁴⁴ | Richard Durbin (D), Dianne Feinstein (D), Patrick Leahy (D), Patty Murray (D), Jack Reed (D), Charles Schumer (D), Ron Wyden (D) |
| Voted Against in 1999 ⁴⁵ | Susan Collins (R), Mike Crapo (R), Chuck Grassley (R), James Inhofe (R), Mitch McConnell (R), Richard Shelby (R) |
| 2007 Kyl Letter Opposing CTBT Ratification ⁴⁶ | John Barrasso (R), Richard Burr (R), John Cornyn (R), Mike Crapo (R), Lindsey Graham (R), Chuck Grassley (R), James Inhofe (R), Mitch McConnell (R), Lisa Murkowski (R), Richard Shelby (R), John Thune (R) |
| 2016 Rubio Letter Opposing Obama UN Resolution on CTBT ⁴⁷ | John Barrasso (R), Roy Blunt (R), John Boozman (R), Bill Cassidy (R), Susan Collins (R), John Cornyn (R), Tom Cotton (R), Ted Cruz (R), Deb Fischer (R), Lindsey Graham (R), James Inhofe (R), Ron Johnson (R), James Lankford (R), Jerry Moran (R), James Risch (R), Michael Rounds (R), Marco Rubio (R), Ben Sasse (R), Tim Scott (R), Dan Sullivan (R), Thom Tillis (R), Roger Wicker (R) |
| 2019 Cotton Letter Calling for Unsigning the CTBT ⁴⁸ | John Cornyn (R), Tom Cotton (R), James Lankford (R), Marco Rubio (R) |

⁴⁴ Craig Cerniello, "Senate Rejects Comprehensive Test Ban Treaty; Clinton Vows to Continue Moratorium," *Arms Control Today*, Volume 29 (September/October 1999) <<https://www.armscontrol.org/act/1999-09/press-releases/senate-rejects-comprehensive-test-ban-treaty-clinton-vows-continue>>.

⁴⁵ Ibid.

⁴⁶ Senator Kyl, speaking on S. 1547, 110th Cong., 1st sess., Congressional Record, Vol. 153, No. 162 (October 24th, 2007): S 13357, <<https://www.congress.gov/congressional-record/2007/10/24/senate-section/article/S13357-1>>.

⁴⁷ Marco Rubio to Barack Obama, September 8, 2016, <https://www.rubio.senate.gov/public/_cache/files/5144be8b-4cfc-422a-8017-cc19d362a778/6971525E619F533B35207A7868DEB787.ctbt-letter-final-2016.pdf>.

⁴⁸ Tom Cotton to Donald Trump, March 8, 2019, <https://www.cotton.senate.gov/imo/media/doc/190308_CTBT_Letter_POTUS.pdf>.

TABLE 2: EVOLUTION OF THE U.S. APPROACH TO THE CTBT

| Period | U.S. Administration | U.S. Congress |
|--|---|---|
| Clinton Administration 1993-2001 (D) | Consent to the zero-yield standard; CTBT negotiations; Signing of the CTBT; Advocacy for CTBT ratification; Nuclear test moratorium reaffirmed. | CTBT is submitted to the Senate; 45-55 split in the Senate; Failure to provide advice and consent. |
| W. Bush Administration 2001-2009 (R) | Not seeking ratification but maintaining a unilateral nuclear test moratorium; John Bolton contemplates the possibility of withdrawing the CTBT from Senate consideration; Condoleezza Rice states that the U.S. has no obligations as a signatory to the CTBT. | Democrats push for CTBT ratification in the draft 2008 NDAA; Congressional Commission on the Strategic Posture of the United States advocates for a specification of banned and permitted test activities. |
| Obama Administration 2009-2017 (D) | Prague Speech calls for CTBT ratification; CTBT ratification efforts are sidelined amid New START ratification challenges; UNSC resolution in support of CTBT ratification. | Democratic victory and large majority in the Senate; Loss of Democratic Senate Majority in 2010 midterm elections; Republican Senators oppose the UNSC resolution on the CTBT. |
| Trump Administration 2017-2021(R) | U.S. accuses Russia of conducting low-yield nuclear experiments; Discussions on a potential resumption of nuclear tests. | Some Republican Senators advocate “unsigned” the CTBT. |
| Biden Administration 2021-present (D) | Allegations against Russia are upheld; The Democratic platform endorses the CTBT, but the Administration takes no immediate action. | |

Why the U.S. Should Ratify the CTBT

CTBT RATIFICATION AND U.S. NATIONAL SECURITY INTERESTS

A case can be made that the strategy of resisting the CTBT lacks a consistent logic behind it. First and foremost, the technical concerns voiced in 1999 have either been addressed or become irrelevant. The Stockpile Stewardship Program (SSP) is a long-standing reality, and it is increasingly difficult to doubt the SSP's effectiveness and feasibility 26 years after the program was conceived. Under both Democratic and Republican Administrations, the United States has poured billions of dollars into the SSP. Any Senator arguing that the program is insufficient or ineffective would question the policy previously pursued by fellow party members. Moreover, the SSP's usefulness has over time been acknowledged in the National Laboratories with lab directors stating "that they certainly understand much more about how nuclear weapons work than during the period of nuclear testing."⁴⁹ According to Parney Albright, former director of the Lawrence Livermore National Laboratory, testing is "a bad strategy, since our adversaries have not made the investments in the SSP that we have made, hence have less confidence in their weapons than we do, and hence stand by far the most to gain with a resumption of testing."⁵⁰ Therefore, CTBT ratification would allow the U.S. to restore global leadership by effectively exploiting America's technological edge.

Further, the U.S. has apparently accepted some of the deficiencies cited as reasons not to ratify the CTBT in the case of other treaties. As much as we would like to think otherwise, no single arms control, disarmament or nonproliferation treaty has ever been 100% verifiable. The Nuclear Non-Proliferation Treaty (NPT), widely regarded as the high point of multilateralism and universality, is no exception. The IAEA Additional Protocol, "enhancing the IAEA's ability to detect undeclared nuclear material and activities,"⁵¹ has not been universalized yet, which means that we may simply lack information about some nuclear activities of concern. Furthermore, the 2012 National Academy of Sciences report on the CTBT found that Russia and China would be "unlikely to be able to deploy

⁴⁹ Opening Remarks at the NNSA Stockpile Stewardship Program 20th Anniversary Event, October 22, 2015, <<https://www.energy.gov/articles/opening-remarks-nnsa-stockpile-stewardship-program-20th-anniversary-event-delivered>>.

⁵⁰ Péczeli and Goodwin, 19.

⁵¹ International Atomic Energy Agency, "Additional Protocol," <<https://www.iaea.org/topics/additional-protocol>>.

new types of strategic nuclear weapons” with low-yield evasive testing, instead only able to “partially validate design codes and modernize their arsenals.”⁵² Is the risk of such testing, which cannot lead to major weapon improvements, a sufficient reason to postpone the ratification of the CTBT provided that the risk of nuclear proliferation has not led us to question the value of the NPT?

Worth noting is that the logic of retaining a capability until everyone else has relinquished it is not the only game in town either. The Chemical Weapons Convention (CWC), prohibiting the development, production, stockpiling and use of chemical weapons, has been ratified by the United States, even though some other countries have neither signed nor ratified the Treaty. In fact, the U.S. has not linked the elimination of its own stockpile with the performance of either signatories or non-signatories, continuing to undertake chemical weapons destruction activities despite concerns that Syria and Russia may not be adhering to their obligations under the CWC.

The U.S. would clearly benefit from CTBT ratification even if compliance and CTBT universalization issues remained unresolved. The history of nuclear nonproliferation demonstrates that violations can be detected and prevented reasonably well, although the international community lacks some specific details. There is every reason to believe that the CTBT framework, including its IMS and on-site inspections, suffices to minimize the ambiguity of foreign-policy decision making. The potential rise of another nuclear power would not go unnoticed by the United States with the CTBT in force.

CTBT RATIFICATION AND THE STATUS QUO

It is equally important to acknowledge that the very idea of the status quo being beneficial or acceptable to the United States is based on false premises. To begin with, there is no alternative for the CTBT that would be better for U.S. interests. The CTBT cannot be renegotiated after most countries of the world have ratified it: it can be either accepted or rejected. Without entry into force, States parties cannot invoke the treaty’s on-site inspection provisions, leaving a gap in the global verification regime against explosive nuclear testing that may allow very low-yield tests to evade detection. It is only after the CTBT enters into force that the U.S. will maximally benefit from the global norm against such test.

Next, the notion of not being the only “obstacle to the entry into force” that has been implicitly adopted by policy circles in the United States and

⁵² National Academies of Sciences, Engineering, and Medicine, *The Comprehensive Nuclear Test Ban Treaty: Technical Issues for the United States* (Washington, DC: The National Academies Press, 2012), <<https://doi.org/10.17226/12849>>, page 117.

clearly articulated by China⁵³ implies that individual ratifications of the CTBT do not matter anymore, which is simply wrong. All Annex II States that have not ratified the CTBT share responsibility for the failure to indefinitely ban nuclear testing. There is no single spoiler, whether it be North Korea or the United States. A U.S. ratification would definitely bring us closer to the entry into force since it would change the political calculus of the remaining seven states.

Last but not least, the present status quo strongly resembles a classical catch-22 situation: key U.S. concerns about the CTBT cannot be addressed until the CTBT enters into force. On-site inspections enhance the international community's ability to monitor compliance in cases where the International Monitoring System (IMS) is deemed incapable of detecting activities of concern, such as hydronuclear tests. Since on-site inspections are provided for in the CTBT, its entry into force can legally strengthen the norm against nuclear testing and dissuade Russia and China from conducting hydronuclear tests. Before the Treaty's entry into force, Moscow and Beijing can hardly be accused of violating even their self-imposed moratoria, as the specific terms of the moratoria are determined domestically rather than internationally.

CTBT RATIFICATION AND NORMATIVE CONSIDERATIONS

The non-ratification of the CTBT is also problematic from the normative perspective. A liberal democracy cannot contemplate national security measures causing evident damage to civilians in peacetime. The fact that some countries act otherwise is no justification for a potential resumption of nuclear tests contaminating indigenous lands in the United States. Moreover, the normative argument extends to the international level. According to Article VI of the NPT, Parties to the Treaty undertake “to pursue negotiations in good faith” on effective measures leading to nuclear disarmament.⁵⁴ The indefinite extension of the NPT in 1995 was implicitly conditioned upon banning nuclear tests. The failure to bring into force the CTBT effectively constitutes a broken promise, and it is widely known that broken promises tend to unravel international trust and cooperation.

⁵³ Remarks by Ambassador Zhang Jun at Security Council Briefing on the Comprehensive Nuclear-Test-Ban Treaty, September 27, 2021, <<https://www.fmprc.gov.cn/ce/ceun/eng/hyyfy/t1910386.htm>>.

⁵⁴ Treaty on the Non-Proliferation of Nuclear Weapons.

Recommendations

ADVOCACY AND OUTREACH IN TIMES OF POLARIZATION

When the U.S. Senate decisively rejected the CTBT in 1999, 70 percent of the American public supported the Treaty, whereas only 13 percent opposed it.⁵⁵ There can be no better indication of how crucial it is to directly engage with stakeholders on Capitol Hill. This holds true even today, when Democrats and Republicans are more polarized than ever in the post-Cold-War era.

First, increased polarization has visibly strengthened party discipline. Although this renders the strategy of winning over individual Senators less effective, there may be more space for broader agreements between the two sides of the aisle. The provision of funding for weapon modernization in exchange for the ratification of an arms control agreement is a proven strategy. New tradeoffs can be developed at the intersection of nuclear policy, cyber security, outer space affairs and conventional weapons modernization. If CTBT ratification is put high on the political agenda, a tradeoff at the intersection of domestic and international policies will also be conceivable.

Second, it is still possible to identify moderate and radical Senators. As difficult as it is, CTBT advocates may start approaching those Senators and staffers who are less likely to tenaciously oppose ratification but who still doubt the value of the CTBT. A carefully streamlined advocacy campaign may yield positive results even in challenging circumstances.

Further, international advocacy efforts aimed at the CTBT's entry into force and its ratification by the U.S. may be reshaped to maximize the impact on the U.S. domestic political agenda. As Robert Putnam put it in 1988, "international pressure is more likely to reverberate negatively if its source is generally viewed by domestic audiences as an adversary rather than an ally."⁵⁶ It seems that Russia and China have dominated the public discourse surrounding the CTBT in recent years. If the European Union and Washington's Asian allies reaffirmed their commitment to the Treaty's entry into force and publicly urged the United States to ratify the CTBT, they would certainly help those arguing for ratification on American soil.

⁵⁵ Joseph Cirincione, "Status, Prospects and Politics: The Comprehensive Test Ban and Nuclear Non-Proliferation Treaties," June 28, 1999, <<https://carnegieendowment.org/1999/06/28/status-prospects-and-politics-comprehensive-test-ban-and-nuclear-non-proliferation-treaties-pub-137>>.

⁵⁶ Robert D. Putnam, "Diplomacy and Domestic Politics: The Logic of Two-Level Games," *International Organization*, Vol. 42, No. 3 (Summer, 1988), 456.

Securing broader popular support is no less important, though not in itself sufficient. We currently lack information on how Americans feel about the nuclear test ban simply because those few opinion polls that are available were carried out quite a while ago.⁵⁷ Moreover, in the years following the 1999 vote in the Senate, surveys on the issue have been commissioned and their results have been distributed by research institutions dealing specifically with international relations issues rather than by world-renowned polling organizations. Measuring public attitudes and letting the CTBT escape from the think tank world to the daily reality are two initial steps needed to revitalize the public debate.

Think tanks and academia can bring about this change. The competition for public attention is growing increasingly fierce, especially as the COVID-19 pandemic, the conflict in Ukraine, and climate change have drawn attention away from the threat of nuclear testing. The campaign for CTBT ratification should be a collaborative effort. No single research center can shoulder the entire burden of swaying public opinion and building momentum in the Senate. Public events, articles, and research projects dedicated to the nuclear test ban would be a good start. More elaborate efforts, including outreach to local communities suffering from the adverse consequences of nuclear testing, may follow later.

CTBT advocates should ensure definite support from National Laboratories and their technical specialists before discussing CTBT ratification in the Senate. Although there have been some clear indications that many lab experts endorse the CTBT today, we do not know yet whether they constitute a stable majority. In 1999, testimony from the lab directors casting “doubt regarding the adequacy of the stockpile stewardship program” proved fatal during Senate hearings.⁵⁸ The U.S. administration cannot allow this to happen again.

CHANGING THE ENVIRONMENT AND ADDRESSING CONCERNS

Although the CTBT ratification controversy is indeed embedded in U.S. domestic politics, other nuclear powers still have leverage over the ratification process. Some of the concerns raised by American legislators are directly linked to Washington’s perceptions of Moscow’s and Beijing’s policies. In April 2021, Russian Foreign Ministry Spokeswoman Maria Zakharova said that “the completely baseless charge that Russia is out of

⁵⁷ Alicia Sanders-Zakre, “Majority of Americans Still Support the CTBT,” *Arms Control Now*, June 21, 2018, <<https://www.armscontrol.org/blog/2018-06-21/majority-americans-still-support-ctbt>>.

⁵⁸ Deibel, 13.

compliance with the nuclear test ban” is “nothing short of perplexing.”⁵⁹ The charge, however, has appeared in the State Department’s Adherence and Compliance Report for several years in a row under two different administrations, so it indeed reflects opinions held by responsible authorities and deserves attention. Quite a lot can be done by nuclear-weapon states jointly to mitigate U.S. concerns.

First, nuclear-weapon states may reaffirm their commitment to the zero-yield standard. The UN Security Council would probably be a wrong platform for this kind of reaffirmation, given the Obama Administration’s experience of alienating the Senate in 2016. Therefore, nuclear-weapon states should pursue a high-level restatement within the framework of the P5 Process that would be considered credible by domestic audiences.

Second, the United States and Russia may develop test site transparency and verification measures using the experience of verifying the Threshold Test Ban Treaty, as proposed by Jeffrey Lewis.⁶⁰ Similar ideas have been voiced by a number of Russian experts, including Viktor Slipchenko.⁶¹

Third, the United States, Russia, and China could jointly conduct verification experiments modeled off the 1988 U.S.-Soviet Joint Verification Experiment. Such verification experiments would allow for the development of signatures that might help differentiate between permitted hydrodynamic testing, which does not produce a nuclear yield, and banned hydronuclear testing, which does produce such a yield.⁶²

Fourth, the United States, Russia, and China could use the P5 framework to negotiate an agreement that would clearly define a nuclear test explosion and include “a clear and precise definition of banned and permitted test activity,” as suggested by the Perry-Schlesinger Commission.⁶³ Such an agreement should also include provisions for on-site inspections at testing sites prior to CTBT entry-into-force. We are well aware that the war in Ukraine and the unprecedented escalation in great-power relations make this kind of trilateral discussions highly improbable. However, once the parties decide to rebuild trust, frank conversations leading to precise definitions and commitments can benefit from and contribute to a wider thaw in relations.

⁵⁹ Comment by Foreign Ministry Spokeswoman Maria Zakharova on the US State Department’s report 2021 Adherence to and Compliance with Arms Control, Nonproliferation, and Disarmament Agreements and Commitments, April 21, 2021, <https://www.mid.ru/en/foreign_policy/news/-/asset_publisher/ckNonkJE02Bw/content/id/4697720>.

⁶⁰ Jeffrey Lewis, “U.S.-Russia Test Site Transparency Measures: Avoiding a Return to the Arms Race,” November 14, 2018, <<https://www.nti.org/analysis/articles/us-russia-test-site-transparency-measures/>>.

⁶¹ Viktor Slipchenko, “Some Considerations Regarding the Ratification of the CTBT by the United States,” July 24, 2009, <<https://carnegiemoscow.org/2009/07/24/some-considerations-regarding-ratification-of-ctbt-by-united-states-pub-40415>>.

⁶² Frank N. von Hippel, “Commentary: Transparency for nuclear weapons test sites,” *Physics Today*, 73, 5, 10 (2020), <<https://physicstoday.scitation.org/doi/10.1063/PT.3.4463>>.

⁶³ “The Final Report of the Congressional Commission on the Strategic Posture of the United States,” 87.

One may argue that if China and Russia agree to implement the above-mentioned steps, the United States will have no further incentives to seek ratification. Therefore, many of the proposed measures can be tied to the ratification process in the United States and China. One option would be to secure a legally binding commitment to those measures, while postponing their implementation until after the CTBT has been ratified.

Conclusion

Although the United States signed the CTBT in 1996, the U.S. Senate failed to provide its advice and consent to the Treaty three years later. Since then, both Democratic and Republican administrations have been unwilling to devote the political capital to change the status quo, even though Democrats are generally supportive of the CTBT. As indicated by our analysis, 29 current Republican Senators have either voted against or signed onto letters opposing the CTBT. It is indeed difficult to secure ratification under these circumstances.

Despite consistently opposing ratification of the CTBT, Republican administrations in the US have grown less hostile over time to the treaty and its constituent institutions, including the International Monitoring System and the International Data Center. Nonetheless, a vocal minority of Republican Senators remain fiercely opposed to the CTBT, going so far as to advocate for “unsigning” the treaty. For any progress toward ratification to take hold, an administration supporting the CTBT will have to address Republican concerns regarding the verifiability of the treaty, the lack of definition of nuclear explosion, and other nations’ compliance with the zero-yield standard. Addressing these concerns could go a long way toward securing support for ratification among more moderate Republican Senators.

Yet, it would be fundamentally wrong to assume that uncertainty over the fate of the Treaty is in America’s interest. A CTBT that has not entered into force creates no specific legal obligations, while the terms of national moratoria are determined domestically rather than internationally. The belief that a functioning CTBT would undermine U.S. security is also erroneous. Concerns about maintaining a reliable nuclear arsenal without testing have largely been addressed by the Stockpile Stewardship Program. Moreover, verification challenges have not prevented the U.S. from joining other important arms control and nonproliferation regimes.

A policy aimed at achieving U.S. ratification should be informed by an understanding that the ratification debate is embedded in U.S. domestic politics but still influenced by international developments. On the one hand, carefully crafted advocacy efforts are needed to sway public opinion and alter the existing dynamics on Capitol Hill. On the other hand, Russia, China, as well as other states possessing nuclear weapons can do quite a lot collectively to mitigate U.S. concerns.

It is crucial to bear in mind that securing the Senate’s advice and consent to the CTBT is the only way to get the Treaty ratified by the United States. There is no way around this. Only the Senate can correct what Joe Biden called its “most serious mistake” in 1999.



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