Forging a Consensus for a Sustainable U.S. Nuclear Posture

STUDY DIRECTOR
Clark A. Murdock

AUTHORS
Stephanie Spies
John K. Warden

A Report of the CSIS Nuclear Consensus Working Group

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Executive Summary

This report was commissioned by the deputy assistant secretary of defense for nuclear matters, conducted under the oversight of the deputy assistant secretary of defense for strategic forces, and produced by the Center for Strategic and International Studies (CSIS). The aim was to provide a wide variety of supporting material, including lessons learned from both previous consensus-building efforts and facilitation of a small-scale agreement among members of the CSIS Nuclear Consensus Working Group (NCWG). The larger purpose is to assist the Obama administration in forging, during its second term, an enduring consensus about the U.S. nuclear posture. The principal deliverables of this project include the following:

- Seven individual statements from nuclear thinkers and practitioners across the “broad middle” of the spectrum of opinion on the role and value of U.S. nuclear weapons, the U.S. nuclear posture needed for this defined role, and a political strategy for sustaining the recommended posture (see Appendix C);

- An agreed-upon statement signed by eight members of the NCWG that was facilitated by Clark Murdock, CSIS senior adviser and NCWG chair (see below);

- A description of the process used by the NCWG to forge the signed statement, which includes the lessons learned from the facilitation process (see text of the report);
  - This includes a bulleted snapshot of the future security environment that was discussed by the NCWG and represents the security context of the consensus-facilitation effort (see Appendix D);

- A case study covering 2008–2012, which provides both a chronology of past attempts to broker consensus about the U.S. nuclear posture and our assessment of the lessons learned (see Appendix E).
An Agreement in Support of a Sustainable U.S. Nuclear Posture
18 January 2013

The signers of this document:

With respect to the role and value of U.S. nuclear weapons:

- Despite differences of opinion about the nature of the current security environment, agree with the policy of the current and the previous administrations that the United States should maintain nuclear forces at the lowest levels necessary to meet its deterrence, assurance, and defense requirements. U.S. nuclear weapons are essential—most importantly, they deter nuclear blackmail or nuclear attack on the United States, its deployed forces, or its allies by another nuclear weapon state. Even those who are optimistic about the current security environment agree that nuclear weapons remain an important hedge against unpredictable geopolitical and technological developments.

- While sharply divided on the desirability and feasibility of a world without nuclear weapons, agree that, should the goal be pursued, the most important steps that can be taken to move toward a world without nuclear weapons are improvements in international security conditions. Global nuclear disarmament requires resolving disputes between India and Pakistan, Israel and its neighbors, and other conflicts, while also stemming any further nuclear proliferation—objectives that are desirable in their own right.
  - Further agree that a world without nuclear weapons will not be achieved in the near to medium term—or, as President Obama put it, “perhaps not in my lifetime.” Despite occasional pronouncements in favor of total nuclear disarmament, other nations possessing nuclear weapons have shown little inclination to reduce their stockpiles to zero.
  - Since no signatory wants the United States to rust its way to disarmament, agree that the United States should maintain a safe, secure, and reliable nuclear arsenal as long as other states retain nuclear weapons.

With respect to the U.S. nuclear posture:

- Despite some disagreement about the pace of modernization, agree that, for the foreseeable future, the United States should sustain a strategic triad of delivery systems and dual-capable fighters; as a whole, these capabilities meet important strategic objectives and mitigate risk. Indeed, at this time, there is no overriding economic,
political, or strategic advantage in eliminating any leg of the triad or nuclear-capable fighter aircraft.

- Agree the United States must modernize its nuclear command and control system in order to support presidential situational awareness and decisionmaking. The system must be secure, survivable, redundant, and integrated with new capabilities such as cyber and missile defense.

  - Further agree that sizing U.S. nuclear forces must include close consideration of existing and emerging threats, the capabilities of adversaries or potential adversaries, the security concerns of allies, and the known strategic uncertainties that can be identified.

  - Also agree that U.S. nuclear weapons should remain forward-deployed in Europe as long as they are required for assurance and deterrence, although a U.S.-Russian agreement on nonstrategic nuclear weapons (NSNWs), particularly if it included limits on numbers and locations, would have a bearing on this requirement.

- Agree that differences about which systems to modernize and when are surmountable. The United States should continue to extend the life of systems such as the Minuteman (so long as this remains feasible) while replacing systems such as the Ohio-class submarine where extension is not possible. The Air Force is developing its new penetrating bomber with both a conventional and nuclear capability. Signatories agree that the bomber should be nuclear capable and that, in order to save near-term costs, the decision to equip it with nuclear weapons and to certify it for the nuclear mission can be made later.

  - Agree that the United States should interpret the policy of not developing new nuclear weapons with new military capabilities in a way that permits sensible modifications to current weapons during the life extension process that improve safety, security, and reliability but do not result in new military capabilities.

  - Agree that the United States should pursue needed nuclear modernization efforts but recognize that, in the current fiscal climate, special emphasis must be given to cost containment.

- Agree that missile defenses can play a useful role in supporting U.S. deterrence objectives and security commitments.

  - Agree that the United States should continue to develop and field theater ballistic missile defenses capable of dealing with potential attacks from North Korea, Iran, and other countries on U.S. allies and U.S. forces deployed abroad.

  - While continuing to support development and maintenance of national ballistic missile defense (NMD) against Iran and North Korea, agree that it is not practical to field NMD defense against attacks from Russia and is increasingly impractical to field NMD against significant attacks from China.

*With respect to the U.S. nuclear weapons complex:*
While divided on the mechanics of the solution (e.g., with respect to governance of the nuclear complex and its possible consolidation), agree that the U.S. nuclear weapons complex is in significant need of both modernization and improvement in governance. The complex must be capable of reliably meeting Department of Defense requirements for Life Extension Programs in a timely and affordable manner and certifying the security, safety, and reliability of the nuclear force. A major improvement is needed in cost estimating and schedule adherence for construction of complex facilities.

*With respect to the role of arms control, nonproliferation, and nuclear testing:*

- While not unanimous on the need for, and utility of, formal arms control with Russia, agree that enhancing strategic stability with Russia must remain the goal of any such agreement. Signatories also agree that the U.S. nuclear arsenal should remain at least as capable as any other state’s nuclear arsenal.
  - While divided over the wisdom of U.S. unilateral reductions in its nuclear stockpile, agree that any U.S.-Russian agreement on reducing nuclear weapons should be verifiable.

- While divided on whether U.S. nuclear weapons reductions, coupled with a reduced role for U.S. nuclear weapons, encourages states to cooperate with the United States on nonproliferation goals, agree that U.S. nuclear reductions have no impact on the calculus of Iran and North Korea.

- Agree that the United States should remain committed to sustaining a robust international regime of nonproliferation, strengthening the Nuclear Nonproliferation Treaty (NPT), and supporting the International Atomic Energy Agency (IAEA).
  - Further agree that there is insufficient evidence to indicate that further disarmament steps by the United States—whether negotiated or unilateral—will result in a new-found willingness by nonaligned states to embrace restrictions on enrichment or to call for the universal application of the Additional Protocol.

- While sharply divided on the political feasibility and utility of pursuing the ratification of the Comprehensive Test Ban Treaty (CTBT), agree that the United States should base its internal planning for sustaining the U.S. nuclear posture on a continued moratorium on nuclear testing.

*With respect to the way forward:*

- Agree that a credible and effective nuclear deterrent is critical to U.S. leadership as long as other states retain nuclear weapons, both for maintaining the U.S. global network of security assurances and commitments and sustaining a robust international regime of nonproliferation.

- Agree that providing safe, secure, and reliable U.S. nuclear forces—for now and for the foreseeable future—will only be possible if there is agreement on what needs to be done and constancy of purpose in actually doing it.
Agree that the single most important factor in forging and sustaining domestic support for U.S. nuclear policy is strong, persistent presidential leadership.

Agree that senior administration and congressional leaders must be willing to speak to the basic principles of an agreed way forward and avoid the temptation to stress only those elements which appeal to a particular support group—on both the right and the left. Now is the time to engage in a constructive dialogue on specific, often contentious, issues with the intention of establishing a common understanding and agreement on how best to support a sustainable U.S. nuclear posture.

In alphabetical order:

Barry Blechman, Stimson Center
Linton Brooks, Former Administrator, National Nuclear Security Administration
Robert DeGrasse
Franklin C. Miller, Center for Strategic and International Studies
Clark Murdock, Center for Strategic and International Studies
George Perkovich, Carnegie Endowment for International Peace
Steven Pifer, Brookings Institution

Lessons Learned from the Nuclear Consensus Working Group initiative:

- Opinions on nuclear issues cannot be organized within a single continuum of Left to Right
  - Related, nonnuclear issues, such as missile defense, can derail agreement
  - Political circumstances will determine and shift what counts as the “centrist” position for any given agreement

- Stretching the terms of an agreement to garner support from those furthest to the Right or Left often fails and can dilute any final agreement
  - Concessions to those on the Right can result in losing the support of the far Left for a final agreement while also failing to ultimately attract support from the Right

- Involved parties must create a common understanding and goal for U.S. nuclear policy
  - Short-term achievements, including but not limited to compromises, specific budget deals, and political posturing, will not create sustainable, domestic consensus

- Forging agreement will require consistent, meaningful dialogue between the executive

1. Those signing this statement are expressing their personal views, not those of the institutions with which they are affiliated.
and legislative branches

- Presidential leadership, political pragmatism, and constancy in purpose by all parties involved can create an environment conducive to consensus

**Lessons Learned from Case Study of 2008–2012:**

- For the United States to find agreement on a sustainable path forward, policymakers and experts must find areas of compromise on capabilities and policies to pursue despite enduring disagreements over the security environment, the need to move toward a world without nuclear weapons, and the role and importance of nuclear weapons. For such a bargain to endure, it must include a place for both a modernized nuclear arsenal and cooperative measures such as arms control and a strong nonproliferation regime. Ironically, funding for modernization, a stronger Republican priority, will be easier to achieve during a Democratic administration, while additional arms control (or reductions in the U.S. arsenal) will be easier to achieve during a Republican administration. Under these circumstances, the party in the White House will have natural allies across the aisle.

- Congress’s increased focus on controlling budgets and curbing the deficit—exemplified by the Budget Control Act—will make securing funding for next-generation nuclear delivery systems and the nuclear weapons complex even more difficult in the future. In any case, it is remarkably hard to implement long-term programs given the way the U.S. budgetary process works. As one interviewee put it, “no long-range plan survives first contact with the next budget cycle.” Even the best-intentioned administration has to deal with annual budget requests, appropriating committees more interested in water projects than nuclear weapons, and the additional uncertainty created by continuing resolutions. Going forward, it is necessary to reevaluate what is affordable, making hard decisions between what is *required* and what is *nice to have*. Part of the solution must be increased efficiency, including better cost-estimates and project management, at both NNSA and the weapons labs.

- A future bargain on nuclear policy must extend throughout the executive and legislative branches, ensuring that all parts of the government are invested in maintaining necessary funding. To sustain such a bargain, the administration must be prepared to consult with Congress early and often, especially when it plans to alter its strategy or funding priorities.
Forging a Consensus for a Sustainable U.S. Nuclear Posture

By Stephanie Spies

Introduction

In 2010, the United States government forged an “inside the Beltway” compromise on the future of the U.S. nuclear weapons arsenal with the release of the Obama administration’s Nuclear Posture Review (NPR) and the U.S. Senate’s ratification of the New START Treaty. Although the NPR advocated for a “safe, secure, and effective” nuclear arsenal by maintaining the nuclear triad at reduced force levels, the Obama administration also pledged to modernize the nuclear force and the nuclear complex over a 10-year period. However, the administration’s $215 billion estimate for sustaining and modernizing strategic delivery systems, nuclear warheads, and infrastructure seems now to be both an underestimate and unaffordable in the current climate of defense budget austerity. Meanwhile, the New START Treaty, although comprehensive in describing the composition of a smaller—yet still reminiscent of the Cold War—nuclear force structure and infrastructure, provided no suggestion, let alone built a consensus for, the role of nuclear weapons in U.S. strategy in the 21st century and the capabilities that will be required in the future security environment.

Given this uncertainty, defining an affordable, but effective, U.S. nuclear posture and forging a sustainable consensus in support of it must remain a top priority in 2013 and the years to come. However, such a sustainable nuclear posture relies upon the United States first establishing a domestic agreement on how best to support it. During 2013, analysts and policymakers alike must grapple with the important issues involved in maintaining a safe, secure, and effective nuclear arsenal, including but not limited to: whether to maintain a strategic triad of delivery systems and dual-capable fighters; when and how to modernize the nuclear force as well as the nuclear complex; and which, if any, arms control and nonproliferation initiatives to pursue in the near term. Addressing these questions in a timely and cost-efficient manner will require political pragmatism, presidential leadership, and willingness to compromise by all parties given new budgetary realities.

This report was commissioned by the deputy assistant secretary of defense for nuclear matters, conducted under the oversight of the deputy assistant secretary of defense for strategic forces, and produced by the Center for Strategic and International Studies (CSIS). The aim was to provide a wide variety of supporting material, including lessons learned from both previous consensus-building efforts and facilitation of a small-scale agreement.
among members of the CSIS Nuclear Consensus Working Group (NCWG). The larger purpose is to assist the Obama administration in forging, during its second term, an enduring consensus about the U.S. nuclear posture. The principal deliverables of this project include the following:

- Seven individual statements from nuclear thinkers and practitioners across the “broad middle” of the spectrum of opinion on the role and value of U.S. nuclear weapons, the U.S. nuclear posture needed for this defined role, and a political strategy for sustaining the recommended posture (see Appendix C);

- An agreed-upon statement signed by eight members of the NCWG that was facilitated by Clark Murdock, CSIS senior adviser and NCWG chair (see below);

- A description of the process used by the NCWG to forge the signed statement, which includes the lessons learned from the facilitation process (see text of the report);

- This includes (as Appendix D) a bulleted snapshot of the future security environment that was discussed by the NCWG and represents the security context of the consensus-facilitation effort;

- A case study covering 2008–2012, which provides both a chronology of past attempts to broker consensus about U.S. nuclear posture and our assessment of the lessons learned (see Appendix E).

In formulating this proposed consensus, CSIS convened a working group composed of nuclear thinkers and practitioners from across the political spectrum, representing government, the private sector, and nongovernmental organizations, to discuss: the role of U.S. nuclear weapons in U.S. national security in the current and future security environment; the capabilities needed from the U.S. nuclear force (weapons and infrastructure) to execute those missions; and the political strategy for building a domestic consensus for sustaining a U.S. nuclear posture.

While the original goal of this study was to provide senior policymakers with a menu of options drawn from across the “broad middle” of the political spectrum, the CSIS team discovered the difficulties in attempting to forge consensus on a multitude of complex issues along a linear continuum. Not only did the outcome of the 2012 presidential election determine the focus and “center” of substantive consensus positions, but the task of building support for an agreement often involved more compromises than many participants were willing to accept. Just as any agreement requires compromise, the CSIS team often found that attempts to slightly alter consensus positions in order to attract the more “extreme” individuals often served to weaken the overall consensus, particularly given the unlikely that such individuals would ultimately join the eventual agreement. Thus, while this report offers a valiant attempt at recommending policies that could achieve broad, bipartisan support, it more importantly demonstrates the great, although surmountable, challenges that remain to creating consensus for a sustainable U.S. nuclear posture.
The Process of Building Consensus: Determining Areas of Agreement and Disagreement

In order to provide a strategy for developing political consensus and a recommendation for a sustainable U.S. nuclear posture that could achieve that consensus, the CSIS team crafted, revised, and implemented a specific analytic process. While many aspects of the initially proposed process for completing this report remained intact throughout the project, the CSIS team discovered that several political, procedural, and substantive issues required adapting the process to improve the chances of reaching agreement. The importance of this report lies not only with its final recommendations, but also with the process the CSIS team used and its implications for attempts to forge actual agreement in the United States.

THE PROPOSED PROCESS

The CSIS team proposed a working group structure to fulfill the tasks in this project. In addition to the internal “lessons learned” case study that the CSIS team produced based upon interviews and literature reviews of the 2008–2012 timeframe, CSIS recruited and convened a working group of leading nuclear thinkers and practitioners representing the “broad middle” of the political spectrum. The core members of this working group, including Barry Blechman, Linton Brooks, Robert DeGrasse, Robert Joseph, Frank Klotz, Franklin Miller, and George Perkovich, were invited to participate in two capacities: 1) as individuals representing a particular political viewpoint and 2) as members of a group seeking to craft a consensus position.

The specific goals of the working group were to: 1) develop a consensus understanding of the current and future security environment, 2) define the role of U.S. nuclear weapons, and 3) seek a political strategy for building and sustaining a domestic political consensus for sustaining such a U.S. nuclear posture (as well as coping with international responses to U.S. nuclear posture). In order to accomplish this task, the working group was scheduled to meet for seven two-to-three-hour sessions at CSIS to discuss the following topics: 1) Introduction and Presentation of Methodological Approach; 2) Lessons Learned from 2008–2012; 3) Defining the Security Environment and Political Context; 4) Individual Member Presentations, review a Left-Center-Right set; 5) Individual Member Presentations, review a second Left-Center-Right set; 6) Building a Consensus Position on Roles and Capabilities; and 7) Developing a Political Strategy for Forging a Lasting Consensus.

Each member of the working group was specifically asked to prepare a three-to-five-page individual statement, to be presented and subsequently discussed at the fourth or fifth meeting, that addressed the following issues: 1) the role and value of U.S. nuclear weapons in U.S. national security in the current and future security environment; 2) the capabilities needed from the U.S. nuclear enterprise (weapons, delivery systems, and infrastructure) to...
fulfill this role; and 3) a recommended political strategy for building the domestic support for sustaining this proposed nuclear posture for at least 25 years. After these individual statements were discussed with the entire working group in two different sessions, the CSIS team aimed to compile a draft consensus statement, crafted around what was deemed the “centrist” position of the group, that would attract the support of all working group members.

THE ACTUAL PROCESS

As originally intended, this final report provides a set of recommendations for U.S. nuclear force posture goals, policies, and strategies that the CSIS team believes would satisfy most, if not all, of the views represented in the project’s working group. However, the process of forming agreement changed in several ways following the presentation of the individual statements. While the CSIS team followed the original methodology for the project for the first several meetings, it developed an alternative process for “building a consensus position” based upon the individual statements. In particular, the CSIS team discovered that, instead of a “centrist” position that could serve as the basis for agreement, the group contained distinct Center-Left and Center-Right consensuses, each of which could serve to create separate areas of agreement. Given these divisions, this report’s final proposals deviated from the planned method to identify not just points of agreement, but also areas of persistent disagreement, made clear through the difficult process of attempting to forge consensus.

Upon receiving, discussing, and analyzing the individual statements of the eight core members of the working group, this revised process required two initial steps: 1) organizing the statements on a linear continuum, from Left to Right; and 2) determining the “Center” of this continuum that would serve as the dividing line between those considered further “Right” and “Left.” The linear continuum was subsequently further divided into two groups, a “Center-Left” group and a “Center-Right” group, each of whose only overlapping members were the one to two “centrist” statements. Once these two groups of supposedly similar views were established, the CSIS team analyzed each of them separately to determine areas of agreement and disagreement within each subgroup. This process involved examining the individual statements of each of the members of the subgroups to find areas of agreement, thereby allowing the CSIS team to discover points of “inferred consensus” within the Center-Left group and the Center-Right group. After completing this process with the two subgroups, the CSIS team then compiled and analyzed the two sets of findings in order to determine areas of inferred consensus for the entire working group.

This process yielded a final set of potential areas of agreement and recommendations regarding U.S. nuclear force posture that attempts to encompass the views of all participants in the working group. While the original goal of this project was to produce a consensus strategy that represents the “broad middle” of the political spectrum, the consensus-building process and associated debates within the working group demonstrate the complexity of this task. Rather than simply present a consensus strategy informed by the working group findings and individual statements as originally planned, the CSIS team also asked all

4. See Appendix C.

FORGING A CONSENSUS FOR A SUSTAINABLE U.S. NUCLEAR POSTURE
of the working group members to sign the final consensus statement if they supported it.\(^5\)

The resulting list of signatories illustrates both strong support for the recommendations in this report as well as clear politically motivated opposition to some of its content, but it does not begin to demonstrate the intricacies of the substantive divergences that prevented some members from signing.

Several factors shaped the content of this final set of recommendations, including political events in the United States and intransigence on particular complicated nuclear issues. Hoping to produce a strategy that would be most politically palpable following the 2012 presidential election, the CSIS team canceled the working group meeting originally scheduled for the day after the election, and later shifted its focus away from the “broad middle” of the political spectrum toward a more “Center-Left” consensus. Subsequently, the CSIS team attempted to alter the Center-Left consensus statement in order to determine how far it could be moved to the Right while still maintaining support of the participants on the Left. However, this attempted shift consequently undermined the effort to achieve broader agreement, as other attempts to include those considered further on the Right of the spectrum often proved unsuccessful in attracting their support while also watering down the entire consensus position to the point that several members on the Left no longer supported the agreement. Thus, while the goals, strategies, and policies for the U.S. nuclear posture recommended below represent an attempt to encompass a broad spectrum of political views, there are still several areas of disagreement that remain unresolved.

Areas of Disagreement and Inferred Consensus

In analyzing the eight individual statements of the working group members, areas of disagreement and inferred consensus were divided into four categories: the security environment, the role of nuclear weapons, characteristics of the U.S. nuclear force, and the role of arms control, nonproliferation, and missile defenses. Each of these sections includes a summary of the disagreements within the working group, less frequently mentioned issues that were also contentious, and potential areas of consensus inferred from the different individual statements.

SECURITY ENVIRONMENT

*The Nature of Current Threats*

There is great disagreement among the group about the current and future security environment.\(^6\) Some participants argue that violence is decreasing, interstate wars are exceedingly rare, and there are few if any state-based existential threats to U.S. security. Instead, they argue that the greatest threat to the United States is posed by terrorist organizations with weapons of mass destruction intent on attacking the U.S. homeland. Other participants agree that terrorism is of critical importance, but they are more worried than the first group

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5. See Executive Summary.
6. See Appendix D for a full description of the group’s views about the future security environment.
about state-based threats to U.S. security. They point to Russia’s continued reliance on nuclear weapons and provocations toward U.S. allies in the North Atlantic Treaty Organization (NATO), China’s expanding military capabilities and increasing assertiveness in regional disputes, and other sources of instability.

Despite differences of opinion about the nature of the security environment, there is widespread agreement about how the security environment should inform U.S. nuclear policy. Participants believe 1) that nuclear weapons and threats of their use can make only limited contributions to achieving specific, tactical objectives or deterring terrorist organizations; and 2) that the United States should maintain a nuclear force at the lowest levels necessary to meet its deterrence, assurance, and defense requirements. However, even those who are optimistic about the current international system agree that nuclear weapons remain an important hedge against unpredictable changes in the security environment. U.S. nuclear weapons are essential to deter nuclear blackmail or nuclear attack on the United States, its deployed forces, or its allies by another nuclear weapon state.

**THE ROLE AND VALUE OF NUCLEAR WEAPONS**

The group fundamentally disagrees about the usefulness of the goal of working toward a world without nuclear weapons. On one side, there are those who believe that nuclear zero is a dangerous goal that, if implemented, would make the world more prone to major conventional war. Others are agnostic about the desirability of zero, but they believe it is unrealistic and, in the short term, the goal weakens U.S. nuclear deterrence and makes it harder to garner support for nuclear weapons modernization. On the other side are those who believe that global nuclear disarmament is an important long-term goal, necessary to rid the world of catastrophic nuclear dangers. Others are unsure whether the conditions for nuclear zero will ever arise, but they believe that it should remain a part of U.S. policy because it can be useful in garnering international support for nonproliferation and countering nuclear terrorism.

While the difference between the two camps appears stark, there are underlying areas of agreement. First, the group agrees that the most important steps that can be taken to move toward a world without nuclear weapons are improvements in international security conditions. Nuclear zero requires resolving disputes between India and Pakistan, Israel and its neighbors, and others, while also stemming any future proliferation. Second, the group agrees that nuclear zero will not be achieved in the near to medium term—or as President Obama put it, “perhaps not in my lifetime.” Despite occasional pronouncements in favor of total disarmament, other nations possessing nuclear weapons show little inclination to reduce their stockpiles to zero.

Since no working group participant wants the United States to rust its way to disarmament, they agree that the United States should maintain a safe, secure, and effective nuclear arsenal for the foreseeable future. If the U.S. government explicitly frames the goal of a world without nuclear weapons around improvements in security conditions, rather than reductions in weapons, these areas of agreement could be more easily emphasized.
While disagreements over the role of nuclear weapons still allowed room for potential agreement among the working group members, the same cannot be said for irresolvable divergences about the value of nuclear weapons. As one participant noted, this issue “is like theology” and will prove impossible to agree upon. Therefore, any potential consensus must avoid irresolvable subjects like this one if it hopes to succeed.

**CHARACTERISTICS OF THE U.S. NUCLEAR FORCE**

*Nuclear Weapons Modernization*

Participants disagree about how the United States should move forward with nuclear sustainability. Some participants argue that the Obama administration needs to make firm and immediate commitments to recapitalize all legs of the nuclear triad, while others believe that the United States would be better served by a wait-and-see approach that adjusts to fiscal realities and changes in the international security environment. In particular, this second group argues that the United States can defer decisions about replacing the Minuteman and making the new penetrating bomber nuclear-capable.

While there is some disagreement about the pace of modernization, there is general agreement among the group that, for the time being, the United States should sustain a strategic triad of delivery systems and nuclear-capable fighters; as a whole, these capabilities provide important strategic advantages and mitigate technical risk. Indeed, today, there is no overriding economic, political, or strategic advantage in eliminating any leg of the triad or nuclear-capable fighters. There is also general agreement that force-sizing must include close consideration of existing and emerging threats, the capabilities of adversaries or potential adversaries, the security concerns of allies, as well as the known strategic uncertainties that can be identified. The group also agrees that U.S. nuclear weapons should remain forward-deployed in Europe as long as they are required for assurance.

Disagreement about which systems to modernize and when are surmountable. The United States should continue to extend the life of systems such as Minuteman as long as possible while replacing systems such as the Ohio-class submarine where extension is not an option. The Air Force is developing its new penetrating bomber primarily for its conventional utility, and, at relative thrift, should include nuclear capability in the design. Participants are in general agreement that the United States should pursue needed modernization efforts while giving a special emphasis to cost-containment.

*The Nuclear Weapons Complex*

While the group agrees that a robust nuclear weapons complex is needed, they differ in at least three areas. First, they disagree about whether the United States should focus the laboratories almost entirely on nuclear stockpile maintenance and modernization or continue seeking to broaden support for the three weapons laboratories by encouraging nonweapons national security work. Second, participants disagree about whether to continue nuclear work at all of the current three laboratories (each of which devotes about half its budget to weapons work) or to consolidate nuclear weapons responsibilities (into two nuclear
laboratories at a maximum). Proponents of the latter option prefer one laboratory that would focus on support of the U.S. nuclear weapons stockpile with the remaining laboratories focused on other national security efforts. Finally, the group disagrees about where federal responsibility for (and budget control of) the weapons complex should be lodged, with options ranging from remaining in the Department of Energy (DOE), shifting to an independent agency, or moving to the Department of Defense (DOD).

Despite disagreement about the mechanics of the solution, the group agrees that the U.S. nuclear weapons complex is in need both of modernization and of a dramatic improvement in governance. The complex must be capable of reliably meeting DOD requirements for Life Extension Programs in a timely and affordable manner. A drastic improvement is needed in cost estimating and schedule adherence for construction of complex facilities. In addition, the budget for the nuclear weapons complex should be removed from the purview of Congress’s Energy and Water Appropriations Subcommittees.

THE ROLE OF ARMS CONTROL, NONPROLIFERATION, AND MISSILE DEFENSES

Future Arms Control with Russia

All members of the working group agree that the United States should continue to pursue strategic stability with Russia, but they disagree about the appropriate role for formal arms control. One group argues arms control with Russia remains valuable and that reductions should be an explicit goal of the next treaty. Another believes strategic stability remains an important goal but that further arms control with Russia, and in particular additional reductions, are not necessarily consistent with U.S. interests. This divergence is not surprising since the group also disagrees about whether the United States should have ratified New START.

Participants differ over how the United States can best enhance strategic stability with Russia, but agree that it remains a worthwhile goal. The group also agrees that any future reductions in the U.S. nuclear arsenal should occur reciprocally with Russia. After all, the sizing of U.S. strategic nuclear forces remains overwhelmingly driven by the perceived need for essential equivalence and strategic stability with Russia.

The Influence of U.S. Policies on Nonproliferation

A fundamental difference among the group is the extent to which participants believe that U.S. nuclear policies influence other actors. All participants recognize that U.S. nuclear reductions will not change the calculus of states like Iran and North Korea. However, some argue that serious reductions in the U.S. nuclear stockpile coupled with reductions in the role of nuclear weapons will encourage states to assist the United States with its nonproliferation goals, either by participating in export controls or by agreeing to more stringent safeguards. Other participants argue that U.S. reductions and restraint bring little to no real benefit.

The group agrees that the United States should remain committed to sustaining a robust
international regime of nonproliferation, strengthen the Nuclear Nonproliferation Treaty, and support the International Atomic Energy Agency. However, the United States should not be under any illusions that major disarmament steps on its part—whether negotiated or unilateral—will result in a new-found willingness by nonaligned states to embrace restrictions on enrichment or to call for the universal application of the Additional Protocol. The pursuit of these additional benefits should not drive U.S. policy.

*The Comprehensive Test Ban Treaty*

Participants disagree about whether, in the near term, the Obama administration should pursue ratification of the Comprehensive Test Ban Treaty (CTBT). On one side are those who believe that the United States is already in compliance with the treaty and might as well get the political benefits of ratification. These participants also believe that pushing the CTBT will buy advocates of nuclear modernization additional good will among arms control proponents. On the other side are those who believe that ratification of the CTBT is politically unlikely, if not impossible, in the United States, and that even if the treaty is ratified, it will not enter into force. This group is skeptical that a push for ratification of the CTBT will help with modernization.

Participants agree that whether or not the CTBT ever comes into force, the United States should base its internal planning on a continued moratorium on nuclear testing.

*Missile Defense*

Although not strictly a nuclear issue, missile defense is a source of fundamental disagreement within the working group. Participants disagree about whether missile defense is effective, and if so, which particular systems work best, as well as the destabilizing effects of deployment. While members on the Left accept the phased adaptive approach, they are unwilling to endorse national missile defense due to its potentially destabilizing effects and its high economic costs. On the other side, a few working group participants feel that national missile defenses are crucial to the security of the United States and its allies. The group is also irrevocably divided over whether these systems should explicitly be targeted at Russia and China. The issue of missile defense, and its direct impact on participants’ support for the final consensus statement, clearly demonstrates the fallibility of a linear-based approach to developing consensus, which fails to recognize the importance of related, nonnuclear issues that serve as true dividers between otherwise comparable perspectives regarding U.S. nuclear weapons.

**Conclusion: Lessons Learned and the Way Forward**

- Opinions on nuclear issues cannot be organized within a single continuum of Left to Right
  - Related, nonnuclear issues, such as missile defense, can derail agreement
  - Political circumstances will determine and shift what counts as the “centrist” position for any given agreement
Stretching the terms of an agreement to garner support from those furthest to the Right or Left often fails and can dilute any final agreement

- Concessions to those on the Right can result in losing the support of the far Left for a final agreement while also failing to ultimately attract support from the Right

Involved parties must create a common understanding and goal for U.S. nuclear policy

- Short-term achievements, including but not limited to compromises, specific budget deals, and political posturing, will not create sustainable, domestic consensus

Forging agreement will require consistent, meaningful dialogue between the executive and legislative branches

- Presidential leadership, political pragmatism, and constancy in purpose by all parties involved can create an environment conducive to consensus

The most important lessons learned from this project are not purely substantive, but also procedural. In attempting to attract the support of working group members for the final consensus statement, the CSIS team discovered first-hand the delicacy with which agreement must be forged. Although the original methodology for this project presupposed that opinions on complex issues could be collapsed to and organized within a single continuum, the consensus-building process revealed the impossibility of this task as it relates to nuclear weapons policy. Attempts to generate support for an agreement stretching from the furthest Left views to those just Right of center failed because Center-Left views are sometimes different from both those on the far Left and those on the Center-Right. Several attempts to alter and thereby extend the statement to garner the support of those on the Right almost derailed the entire agreement, as those on the far Left were unwilling to support an agreement that had been so diluted and weakened from its original views. These potential losses of signatories on the Left were particularly informative given that the concessions to the Right were often still unsuccessful in enticing the participants furthest to the Right to sign the final statement. These experiences demonstrate the importance of not weakening any final agreement by including within it any concessions to parties who are unlikely to support the final agreement anyway.

The pathway to consensus on a sustainable U.S. nuclear posture will not be easy, but there is great room for improvement and agreement. Given the current budgetary environment, the next few years will prove critical for policymakers and analysts to determine how best to maintain a safe, secure, and effective nuclear arsenal in a cost-effective yet politically palatable manner. In order to address these difficult questions, the United States must establish a domestic agreement on how best to support the U.S. nuclear arsenal. Such a consensus cannot be achieved through short-term compromises and political posturing; rather, involved parties must engage in pragmatic, constructive dialogue about specific, often contentious issues with the intention of establishing a common understanding and goal for U.S. nuclear policy going forward. Although budget limitations will constrain these policies, the executive and legislative branches of government should discuss these issues based upon a desired vision for the future rather than focus exclusively on funding profiles and specific budgets.
Short-term achievements, such as treaty ratification or single program modernization efforts, may achieve political support, but they cannot serve as a substitute for forging a broad, sustainable consensus about the role of U.S. nuclear weapons. Similarly, the administration and congressional leaders must avoid pandering to particular interest groups on either side of the political spectrum and instead engage in consistent, meaningful dialogue about the most important, albeit contentious, issues.

While this strategy may sound easier said than done, it will require presidential leadership, political pragmatism, and a constancy of purpose by all parties involved. The way forward is uncertain, but it need not be treacherous or perilous; now is the time for the United States to engage in a constructive, serious dialogue about the future of the U.S. nuclear posture and develop a sustainable domestic consensus in support of it.
Appendix A
Members of the Nuclear Consensus Working Group

CHAIR
Clark Murdock, Center for Strategic and International Studies

CORE GROUP
Barry Blechman, Stimson Center
Linton Brooks, Center for Strategic and International Studies
Robert DeGrasse, Bechtel Corporation
Robert Joseph, National Institute for Public Policy
Frank Klotz, Council on Foreign Relations
Franklin Miller, The Scowcroft Group
George Perkovich, Carnegie Endowment for International Peace

ADVISERS
Paul Bernstein, National Defense University
M. Elaine Bunn, National Defense University
Mort Halperin, Open Society Institute
Carol Kuntz, Center for Strategic and International Studies
Steven Pifer, Brookings Institution
Vic Utgoff, Institute for Defense Analyses
Amy Woolf, Congressional Research Service
# Appendix B

Schedule and Meetings of the Nuclear Consensus Working Group

<table>
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<tr>
<th>Date</th>
<th>Meeting Description</th>
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<tr>
<td>17 July 2012</td>
<td>Working Group Meeting 1: “Introduction and Presentation of Methodological Approach”</td>
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<td>10 October 2012</td>
<td>Working Group Meeting 4: “Individual Member Presentations (I)”</td>
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<td>25 October 2012</td>
<td>Working Group Meeting 5: “Individual Member Presentations (II)”</td>
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<td>7 November 2012</td>
<td>Working Group Meeting 6: “Building a Consensus Position on Roles and Capabilities” (CANCELED DUE TO PRESIDENTIAL ELECTION)</td>
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<td>29 November 2012</td>
<td>Working Group Meeting 7: “Developing a Political Strategy for Forging a Lasting Consensus”</td>
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A Sustainable U.S. Nuclear Posture

By Barry Blechman

I. Perspective

A. Given U.S. superiority in most elements of “soft power,” in economic power, and in military capabilities, it is in our national interest to seek the elimination of nuclear weapons—not as a distant vision, but as a concrete goal of national policy.

1. Achieving this goal does not require a fundamental transformation of the international system, but:
   a. Resolution of some very difficult international issues; and
   b. Recognition by key national leaders that rather than increasing national security, the continuing existence and possible spread of nuclear weapons pose grave dangers to all nations.

2. As a result, while elimination cannot be achieved in the near to mid-term, it is a realistic objective over three or four decades.
   a. Complete elimination by 2045, the 100th anniversary of the first nuclear detonation, is a realistic aspirational goal.
   b. The U.S. government should develop a plan to achieve this goal, but be prepared to accelerate or prolong its achievement in response to world events.

3. In addition to repeated articulation of the goal by the nation’s leaders, continuing efforts to negotiate a wide range of arms control and counter-proliferation agreements are essential to make “elimination” a credible goal of U.S. policy, and eventually to achieve it.

4. Continuing efforts to maintain an effective and credible U.S. nuclear posture are essential to achieve these agreements, as well as to ensure national security, even as the United States builds down its arsenal along with other nations.

5. While not all states with nuclear weapons need participate in the early stages of a process intended to eliminate nuclear weapons, eventually U.S. interests could be harmed if we cut too deeply or too rapidly while key nations remain outside the process.
B. Decades of efforts to constrain nuclear proliferation have been relatively successful.

1. All but nine nations have permanently renounced their right to acquire nuclear weapons and have accepted intrusive safeguards on their civil nuclear facilities to reassure the international community that they are not violating this pledge.

2. North Korea’s violation of this pledge, withdrawal from the NPT, and acquisition of nuclear weapons has not led to additional defections from the nonproliferation regime.

3. Iran currently poses the one serious threat to the continuing viability of the regime, but even if Iran were to acquire nuclear weapons it’s not evident there would be wholesale defections from the NPT.

4. U.S. security assurances, in which nuclear guarantees sometimes play a part, are an essential element in preserving the viability of the proliferation regime.

5. Significant progress has been made in reducing the largest nuclear arsenals since the end of the Cold War, but Pakistan and, to a lesser extent, China and India are continuing to build up their forces and may, eventually, make further reductions difficult.

C. Nuclear weapons can destroy cities and kill large numbers of civilians, but they are not effective military weapons. Historically, wars have been won by defeating armed forces, not by destroying civilian facilities. Nuclear weapons are inefficient relative to other technologies as weapons of war.

1. Because of their destructive potential, however, it is widely believed that threats to use nuclear weapons can influence national decisionmakers—deterring them from contemplating military actions or aggressive foreign policy initiatives.

2. The historical record is inconclusive about this widespread belief, most importantly about whether or not nuclear weapons prevented the Cold War from turning into a third world war.

3. What is evident from the history of crises in which nuclear threats were, or may have been, considered is:
   
   a. There is a widely accepted ‘taboo’ against the use of nuclear weapons that seems to strengthen with each passing year.
   
   b. Although military doctrines and national strategies often explicitly or implicitly suggest nuclear use under various circumstances, since the 1950s, political leaders have been cautious about conveying explicit nuclear threats.
   
   c. The existence of nuclear arsenals has not been sufficient to deter nonnuclear nations from pursuing hostile goals, and even from attacking the armed forces and allies of nuclear-armed states.

II. The roles and value of U.S. nuclear weapons in the current and future security environment.

A. The perceived capability of the U.S. nuclear arsenal is a component of the world’s image of U.S. power, and thus may help to support the nation’s leadership in relevant aspects of international affairs.
1. How important nuclear capabilities may be relative to U.S. conventional military capabilities and repeated demonstrations of U.S. willingness to use conventional forces is unknowable.

B. In a possible future security environment, should a crisis or conventional conflict erupt between the United States and Russia, or between the United States and China, perceptions of U.S. nuclear capabilities could cause Russian or Chinese leaders to behave more cautiously.

1. U.S. nuclear capabilities likely would deter Russian or Chinese leaders from attacking the U.S. homeland.

2. In a crisis, they might also help to deter those nations from attacking U.S. forces deployed abroad.

3. If other nations develop the capability to attack the U.S. homeland with nuclear weapons, U.S. nuclear forces could play similar roles.

C. As a component of overall U.S. military capabilities, U.S. nuclear forces currently help to reassure political/military leaders of some allied nations that U.S. security guarantees are credible.

1. Currently, this role is particularly important with respect to the leaders of some East European nations who, for various reasons, believe there is a real possibility of conflict with Russia.

2. Currently, this role also is important with respect to the leaders of Japan and South Korea, who perceive a long-term threat from China, and a near-term threat from North Korea, respectively.

3. By reassuring these national leaders, U.S. nuclear forces contribute to avoiding a breakdown of the nonproliferation regime.

4. In a possible future scenario in which Iran has acquired nuclear weapons, the United States may wish to extend nuclear deterrent guarantees to certain allies in the Middle East to avoid further proliferation, although it would be difficult to make such guarantees credible.

5. In plausible future scenarios, economic and political incentives will result in the easing of tensions and resolution of disputes in Europe, the Middle East, and/or East Asia, nullifying this role of U.S. nuclear forces.

D. In some future security environments, one can imagine circumstances in which large numbers of U.S. military personnel or a U.S. ally were threatened militarily.

1. In such circumstances, a U.S. president may decide to make a nuclear threat or even to detonate a nuclear weapon as a demonstration of U.S. resolve.

2. Such a scenario could occur regardless of whether or not the United States had adopted a “no-first-use” policy.

III. Capabilities needed to fulfill these roles

A. The United States needs to maintain overall nuclear capabilities that are at least comparable to any potential adversary—meaning Russia for the foreseeable future.
1. Given that Russian long-range forces are currently considerably less capable than those of the United States, the United States can accelerate its build-down to New START levels, and seek a new agreement with Russia that would reduce both sides to lower levels.

2. Such an agreement ideally would be part of a comprehensive limitation on the number of warheads in the two sides’ arsenals, thus reducing Russia’s advantage in short-range systems in exchange for reductions in U.S. reserve warheads and, consequently, in its ability to generate larger long-range capabilities.

3. So long as its European allies agree, the United States should retain a small number of short-range nuclear weapons in Europe, as their bargaining value in a negotiation for such an agreement is far greater than their number would suggest.

B. The United States needs to maintain a survivable retaliatory capability to ensure the credibility of its deterrent threats.

1. This means that the Trident replacement program should receive the highest priority in modernizing U.S. nuclear delivery systems.
   a. Changes in U.S. planning factors could make possible a reduction in the size of the submarine force.
   b. So, too, could the outcome of negotiations with Russia, as well as Russian unilateral decisions.

2. The United States also should maintain a force of land-based intercontinental ballistic missiles (ICBMs) as they are relatively inexpensive to operate, complicate targeting against U.S. nuclear forces, and provide a hedge against the unlikely appearance of a real threat to U.S. submarines.
   a. As Minuteman can remain effective until 2040 and beyond with only modest modernization efforts, decisions on replacing Minuteman can be deferred for at least 10 years.

3. The United States should build a new bomber for conventional missions, continuing to rely on B-2s and B-52s as the third leg of the Triad.
   a. Although the new bomber should be designed to be nuclear-capable, a decision as to whether or not give it a nuclear role can be deferred as existing bombers will be viable until around 2040.
   b. A new air-launched cruise missile also is necessary to maintain the capabilities of U.S. bombers. The new cruise missile should be designed with a nuclear capability.

C. The United States needs a viable nuclear infrastructure consistent with the requirements of a nuclear arsenal that can be expected to become smaller in the future.

1. Highest priority in spending on the nuclear infrastructure should be given to the stockpile stewardship program and to warhead Shelf-Life Extension Programs (SLEP). I support Linton Brooks’ suggestions to utilize these programs to enhance the safety, utility, and interchangeability of warheads, and to reduce the number of types of warheads.
2. The Chemistry and Metallurgy Research Replacement Nuclear Facility (CMRR-NF) at Los Alamos can be delayed, perhaps indefinitely, depending on decisions on the future size of U.S. nuclear forces.

3. The Uranium Processing Facility (UPF) facility at Oak Ridge also can proceed on a slower schedule to accommodate fiscal limitations.

4. Three nuclear laboratories are at least one too many. The nation has many scientific and technical issues that could use greater attention.

IV. Political Strategy

A. The reduced and slower-paced nuclear modernization program outlined above would make it somewhat easier to gain the necessary financial resources from the Congress, as well as domestic political support.

B. Equally important is developing an international environment in which the need to make progress toward reducing nuclear dangers is widely recognized as an important international priority.

1. Articulation by high-level U.S. officials, and orchestration of multinational repetitions, of the importance and the realism of the goal of nuclear elimination.

2. Successful resolution of the Iranian issue.

3. Pursuit of the U.S./Russia agreement outlined above.

4. Evolution of the P-5 forum that grew out of the last NPT review into a forum for multinational discussions, and eventually negotiations, for restraints on Chinese and European nuclear forces, along with deeper cuts in U.S. and Russian forces.

5. Continuing efforts to secure nuclear materials through existing programs.

6. Utilization of the next NPT review to begin a process to strengthen the treaty.

C. Development of a domestic constituency in support of nuclear elimination through the articulation of ambitious objectives, by success in dealing with threats to the nonproliferation regime as they emerge, and by:

1. Continuing efforts to engage Russia in missile defense cooperation in Europe.

2. Continued development of capabilities to defend U.S. allies and forces overseas against short- and medium-range nuclear-armed missiles, and to defend the contiguous United States (CONUS) against small nuclear forces whether delivered by missiles or unconventionally.

3. Maintaining confidence in U.S. ability to defend its, and its allies', interests through nonnuclear means through cooperative planning, rotational deployments of U.S. forces, and joint exercises.
The Elements of a Possible Political Agreement to Maintain a Safe, Secure, Reliable, and Effective Nuclear Deterrent

By Linton Brooks

GENERAL POLICIES

- The primary purpose of U.S. nuclear weapons is to deter nuclear attack on the United States, its forces, and its allies. For the foreseeable future, except to the degree that they contribute to a perception of general U.S. strength, nuclear weapons are not required to deter conventional, biologic, or chemical attack.

- U.S. nuclear posture and declaratory policy should give heavy attention to preserving extended deterrence of attack on its allies, partners, and friends. As a result, the United States should not adopt a policy of no first use nor should it allow the perception that, in extremis, it would not be willing to use all elements of its power in defense of its allies. For similar reasons, the United States must not allow itself to be perceived as inferior in any significant way to any other nuclear power. As a practical matter, this means Russia. Note that it is the perception among our allies that matters rather than narrow technical analysis or simple numerical comparison. It is almost certainly true that deterrence of a direct nuclear attack on the United States would be possible with a vastly smaller stockpile. It is also irrelevant as long as the United States seeks to maintain its leadership role in the world.

- Although the United States should not adopt a policy of no first use, it should make it clear that the use of nuclear weapons would be a last resort and that alternatives to nuclear weapons are always to be preferred.

- The United States should seek security both through maintaining a strong deterrent and through supporting a robust international legal regime aimed at reducing nuclear risk. Emphasizing both components will be crucial to maintaining political agreement to the steps set forth in this paper.

- Whether or not the Comprehensive Nuclear Test Ban Treaty ever comes into force, the United States should base its internal planning on not resuming nuclear testing. A formal test readiness program is neither required nor politically sustainable. As a hedge, however, the United States should take no irrevocable actions at the Nevada National Security Site that would make it impossible to test in the future.

- Whatever the merits of the abolition of nuclear weapons, such abolition is decades in the future and should not directly drive decisions over the next 20 years.
NUCLEAR WEAPONS

- **The total U.S. stockpile is almost certainly too large.** Despite this, the United States should be cautious about unilateral reductions. The experience of the last 12 years suggests that sizable unilateral reductions (such as the George W. Bush administration cutting the stockpile in half) do little to reinforce a domestic political agreement, while the appearance of unilateral reductions can raise suspicion among those who are concerned with maintaining a robust nuclear capability. Reductions in the total stockpile significantly below the current level of approximately 5,100 weapons should only be made either in the context of an agreement with the Russian Federation on overall reductions or following careful explanation of why the weapons being eliminated are excess to U.S. defense needs.

- **The United States should continue the policy of not developing new nuclear weapons with new military capabilities.** It should, however, interpret this policy in a way that permits sensible modifications to current weapons during the life extension process (for example, by fielding some primary-only ballistic missile warheads to reduce collateral damage and thus reduce the chance that the United States will be self-deterred from nuclear use). The United States should permanently embrace the notion that refurbishment, reuse, and replacement of nuclear components are all acceptable strategies for life extension.

- **The United States should move toward a stockpile in which all warheads use insensitive high explosives.** This will require accepting the technical risk of using pits that were initially designed for use in conventional high-explosive weapons in refurbished weapons employing insensitive high explosive. Other modern safety and security improvements should be incorporated during life extensions only where considered affordable (which is unlikely to be the case for the next 20 years).

- **Life extension of the W-78 ICBM warhead should be conducted in such a way as to allow the United States to reduce the existing four ballistic missile warheads to three by allowing some interchangeability between ICBM and submarine-launched ballistic missile (SLBM) warheads as a hedge against technical failure.** On a longer-term basis, and depending on whether or not a decision is made to replace the nuclear-armed Air Launched Cruise Missile, the country should also move from the current three warheads designed for air-breathing systems to two (each capable of substituting for the other).

NUCLEAR WEAPONS INFRASTRUCTURE

- **As the Strategic Posture Commission made clear, high-quality people are the most important infrastructure element.** This includes scientists at the national laboratories and military personnel in operational and planning billets. It is crucial that both groups understand the importance of the nuclear mission to the nation.

- **The delay in construction of the Chemistry and Metallurgy Research Replacement-Nuclear Facility (CMRR-NF) at Los Alamos is fiscally responsible and strategically...**
acceptable. The United States should adopt the revised plutonium strategy proposed by the National Nuclear Security Administration (NNSA). This strategy depends both on limited pit production at the PF-4 facility in Los Alamos and on the reuse of some of the thousands of plutonium pits now stored at the PANTEX plant in Amarillo, Texas.

■ **Construction of the Uranium Processing Facility in Tennessee should proceed.** The schedule should be adjusted to accommodate fiscal reality if necessary. Accommodating fiscal reality means accepting some additional cost to maintain existing production facilities for 10–15 years and some additional risk of production disruption.

■ **The existing attempts to broaden the base of support for the three NNSA national laboratories should continue.** This entails encouraging greater use by the Department of Defense, Department of Homeland Security, and the intelligence community. It also requires improvements in governance procedures to make such use easier. The nuclear mission should, however, remain the unquestioned core of the weapons laboratories.

■ **Serious management problems with NNSA and the Nuclear Security Enterprise, especially with its ability to meet DOD requirements, must be corrected.** The most important first step is to understand what the problem is.

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**DEVELOPMENT SYSTEMS**

■ **The United States should maintain the nuclear Triad for at least another 20 years.** There is no overriding economic, political, or strategic advantage in eliminating any leg of the triad. A decision on the long-term future of the Triad should be made in the 2020s, once it becomes necessary to commit significant funds to replace Minuteman III.

■ **Development of the replacement for the Ohio-class submarine should proceed on the current schedule,** giving emphasis to cost containment. Given that the replacement submarine will still be operational 50 years in the future, cost containment should not come at the expense of survivability features.

■ **The decision on when to acquire a new strategic bomber should be made on non-nuclear grounds.** If and when such a bomber is deployed, it should be made nuclear capable. The decision on a replacement for the current Air Launched Cruise Missile, while important, does not rise to the level that it threatens an overall political agreement on the future of the nuclear deterrent.

■ **The policy of only deploying ICBMs with a single warhead is stabilizing and should be continued.** Analysis to permit a decision on whether to replace Minuteman III or phase out ICBMs should continue, aiming at a decision in the early 2020s.

■ Pending future developments in the NATO alliance, the Joint Strike Fighter should be made nuclear capable, although the exact deployment schedule can be adjusted to meet fiscal considerations.
- Prompt Global Strike should not be seen as a substitute (or even a complement) for nuclear capability. The decision to continue development of Prompt Global Strike—and on how rapidly to proceed with such development—should be made on nonnuclear grounds.

- Nuclear command and control should be given equal priority with delivery systems.

**BALLISTIC MISSILE DEFENSE**

- The United States should not seek to develop a national ballistic missile defense capable of dealing with an attack from Russia. Doing so would be likely to fail technically and would be enormously expensive. The United States should continue the current efforts to convince Russia of this fact.

- The United States should continue to develop and field a national ballistic missile defense capable of dealing with an attack from either Iran or North Korea. Given the scope of the existing national defense and the fact that an Iranian or North Korean ICBM is not imminent, the current policy of giving near-term priority to theater missile defenses, especially the Phased Adaptive Approach, should be maintained.

- The United States should not design its national ballistic missile defense to deal with an attack from China, but should depend on the threat of offensive retaliation to deter such an attack. At the same time, the United States should not limit its defenses against Iran or North Korea in an attempt to pander to China.

- The United States should not limit theater missile defenses in response to concerns from China or Russia. In particular, maintaining solidarity with our NATO allies is more important than seeking to alleviate Russian concerns with the Phased Adaptive Approach, even if doing so continues to cause Russia to be unwilling to discuss next steps in arms control. At the same time, the United States should be willing to adjust the timing of the phases depending on the speed with which the Iranian ballistic missile threat develops. This should include a willingness to significantly delay deployment of Phase IV if an Iranian ICBM threat does not emerge as expected.

**ARMS CONTROL AND NONPROLIFERATION**

- Sustaining the political agreement hypothesized in this paper requires that the United States be perceived domestically as committed to sustaining a robust international legal regime of arms control and nonproliferation. As a practical matter, this means some form of continued arms control with the Russian Federation as well as visible U.S. support for the international legal regime associated with the Nuclear Nonproliferation Treaty and the International Atomic Energy Agency. Voluntary arrangements such as those associated with the 2010 and 2012 Nuclear Security Summits, the Proliferation Security Initiative, the Global Initiative to Combat Nuclear Terrorism, and similar efforts are important and desirable, but will not substitute for supporting a formal international legal regime in terms of maintaining a domestic political agreement.
■ On arms control, the United States should seek a follow-on agreement with Russia following the expiration of New Start. U.S. goals should be to maintain, and if possible improve on, transparency, to reduce the Russian tactical nuclear stockpile threatening our NATO allies, and—if possible—to preclude deployments of a new Russian heavy ICBM. Modest reductions in the arsenals of the two sides are more likely to be helpful in maintaining alliance solidarity and in maintaining the domestic political agreement on nuclear deterrence than are more draconian cuts. The United States should, therefore, view the next negotiations through the lens of maintaining alliance and domestic solidarity, rather than primarily as a way of reducing the Russian threat. A treaty that can be described as modest but useful and as doing no harm should be perfectly acceptable. The numbers sought as reductions should flow from an analysis of U.S. strategic requirements (which can of course be modified) and not be set arbitrarily.

■ On nonproliferation the United States should not be under any illusions that major disarmament steps on its part—whether negotiated or unilateral—will actually result in a new-found willingness by nonaligned states to embrace restrictions on enrichment or to call for the universal application of the Additional Protocol. The United States should engage internationally and defend its record of compliance with NPT Article VI while continuing to focus on strengthening the nonproliferation regime. The expectation should be sustaining a domestic political consensus while making modest progress internationally. Rhetoric setting forth the ultimate goal of a world safe enough that nuclear weapons will no longer be necessary may be helpful; premature dramatic steps (especially unilateral steps) toward such a world will probably not be.

ALLIES/NATO

■ As noted earlier, the U.S. nuclear posture is—and should be—heavily influenced by the need to ensure credible extended deterrence. This means the United States must continue a robust consultation process with both NATO and our Pacific allies.

■ The United States should not agree to withdraw existing nuclear weapons from Europe while any substantial number of our European allies desires them to remain. The United States should, however, be willing to accept withdrawal as an outcome of negotiations with the Russian Federation that significantly reduces Russian tactical weapons. Because of the importance of shared risks and responsibilities among NATO nations, the United States should not be eager for withdrawal. But in terms of a broad political agreement domestically, shared risks and responsibilities is not a sufficient reason for maintaining weapons in Europe indefinitely. If weapons are removed from NATO, there should be visible procedures (however unlikely they are to ever be implemented) to allow their reintroduction.

■ Deployment of U.S. weapons in Asia or in the Middle East is neither necessary nor desirable. The United States should quietly discourage any calls for such deployments on the part of U.S. allies.
AREAS OF DISAGREEMENT

- It is unrealistic to expect broad agreement on every detail of future force posture and policy. The political effort should be to prevent areas of disagreement from invalidating the fundamental political bargain that allows preservation of a safe, secure, reliable, and effective nuclear deterrent.

- Among the areas where disagreement will occur but which need not preclude an enduring political agreement are the following:
  - Whether abolition of nuclear weapons is ultimately feasible or desirable.
  - The importance of ratifying the Comprehensive Nuclear Test Ban Treaty and of negotiating a Fissile Material Cutoff Treaty.
  - Exactly how to characterize the potential nuclear threat from China.
  - Whether to develop a replacement for the nuclear variant of the Air Launched Cruise Missile. (A decision not to develop such a replacement endorsed by the military would not upset a political agreement. Imposition of such a decision by a future administration over military objections would upset such an agreement.)
  - Exactly how future reductions will be taken (provided that the Triad is maintained).
  - Whether and when to engage China in the arms reduction process.
  - The best approach to rectify the serious problems with NNSA.

POLITICAL STRATEGY

- Strong, sustained presidential support is crucial to forge and sustain a political agreement. In the absence of personal involvement by the president, active engagement by the secretary of defense can create some—but not all—of the support necessary.

- The administration needs both a broad educational effort and a sustained dialogue with individual members of Congress. Outside experts should support and amplify this effort to the extent feasible.

- Centrist experts should consistently advocate for the broad agreement outlined in this paper. They should support all elements to help create the political reality of an acceptable package.

- Centrist experts should be equally consistent in not adding to the elements of this package. They can—and should, if they think necessary—argue for ratification of the Comprehensive Nuclear Test Ban or for increased numbers, but these arguments should stand alone and not be part of the core package.

- All involved should avoid expressing any political agreement in terms of a specific funding profile. Experience with New START shows that funding commitments involve too many players and too much uncertainty to be stable. The agreement should be on where we want to go, with the de facto recognition that the pace must be governed by broader fiscal realities.

"
Proposed Nuclear Posture And Sustainable Strategy

By Robert DeGrasse

I. The role and value of U.S. nuclear weapons in U.S. national security in the current and future security environment (next 25 years).

A. Key features of the current and future security environment that must be considered in developing U.S. nuclear posture:

1. The multipolar, post-Cold War security environment requires collective action on just about every dimension. While nations may still act in unilateral ways, the interdependencies created by economic activity and political alliances drive the need for coalitions and consultation. Efforts related to discouraging Iran from developing nuclear weapons are a case in point.

2. Information and knowledge diffuse throughout the world more rapidly than at any time in the past, and the rate of diffusion will likely accelerate in the future. The increasing difficulty of protecting against unauthorized access to or release of information is a closely related feature.

3. While information and knowledge are diffusing rapidly, wealth and military capabilities are still highly concentrated and competition for parity in these fields drives nationalistic behavior.

4. Unfortunately, understanding and compassion also appear to lag the diffusion of knowledge and information. Nationalism, religious beliefs, insecurity, and fear still weigh heavily in the calculations of nation states, including our own.

5. This highly interconnected world order is increasingly vulnerable to non-state actors willing to commit terrorism.

6. Nuclear weapons are blunt instruments of national power that play an important role in setting the overall world security environment and discouraging the most egregious forms of aggression. But nuclear weapons and threats of their use can make only limited contributions to achieving specific, tactical objectives or deterring terrorist organizations.

B. Roles and value of nuclear forces

1. Deterrence:

   a) In concert with U.S. conventional military capabilities, create a credible threat of retaliation in the minds of potential aggressors for any significant attack on our homeland or vital military assets.

   b) While making clear that nuclear weapons will only be used in the most extreme circumstances, create ambiguity in the minds of potential aggressors about the meaning of “extreme circumstances.”

2. Extended deterrence—assure allies of the U.S. commitment to their security and our mutual interests.

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7. The views expressed in this paper are my personal perspective and should not be attributed to my employer.
3. Hedge against dramatic changes in the international order.
4. Create conditions in which nuclear weapons are not used by discouraging competition and encouraging strategic cooperation.

C. Elements of the current and future security environment that might be influenced by the U.S. nuclear posture.

1. Regional conflicts that might trigger the use of nuclear weapons (or other weapons of mass destruction). In concert with conventional capabilities, U.S. nuclear posture could discourage regional actors from using nuclear weapons to resolve conflict. Using the threat of nuclear retaliation (even if it is only a veiled threat) to discourage chemical or biological attacks should not be ruled out.

2. Threat of a terrorist weapons of mass destruction (WMD) attack. Concerns about attribution and retribution can dampen the interest of state actors in helping or condoning terrorist plans.

3. Destabilizing modernization by one or more current nuclear states of its weapons and/or delivery systems. The capability to rapidly alter the U.S. nuclear posture could discourage new, highly destabilizing developments by another nuclear state. However, the threat of a major change in the U.S. posture might motivate further competition instead.

4. Discourage further proliferation of nuclear weapons and/or technology. U.S. security assurances based on our nuclear deterrent force reduce the need for nonnuclear states to develop nuclear weapons capabilities. Threats of nuclear preemption are probably not credible except in the most extreme circumstances particularly given the fact that these forces have not been seen as a credible way of denying North Korea or Iran of nuclear weapons capabilities.

5. While our current nuclear forces are more than sufficient to deter nuclear attacks by the other major nuclear-armed nations, our current relations with nations such as Russia and China do not require such deterrence. And while North Korea should be deterred from using nuclear weapons by the risk of annihilation, I feel more comfortable knowing that we have a chance of destroying a ballistic missile launched from that nation using our missile defenses.

II. The capabilities needed from the U.S. nuclear enterprise (weapons, delivery systems, and infrastructure) to fulfill this role.

A. The sizing of U.S. forces remains overwhelmingly driven by the requirements of essential equivalence and strategic stability with Russia. In addition to the essential equivalence of forces established in the New START treaty, Russian nonstrategic and U.S. nondeployed hedge systems should remain in rough parity. Delinking this essential equivalence through unilateral action could result in unpredictable and unintended consequences even though Russia is not an enemy of the United States. That said, the existing U.S. nuclear force structure is significantly larger than what is required for accomplishing virtually all of the roles discussed above.
B. The United States must maintain a stockpile of nuclear weapons that are safe, secure, and reliable, and whose threatened use in military conflict would be credible. While developing weapons with new military characteristics might enhance some aspects of deterrence, such weapons could encourage further arms competition and lead to strategic instability. Improving the safety, security, and reliability of our current weapons will involve significant challenges (including cost) that can only be overcome through the creativity of our national laboratories.

C. The current triad of strategic nuclear delivery systems provides options that enhance strategic stability and should be maintained for the immediate future. The same is true for delivery systems of nonstrategic nuclear weapons. Forward deployment of nonstrategic nuclear weapons should be guided by NATO policy. The current pace of strategic modernization should be maintained, but may have to be modified to accommodate fiscal realities.

D. Missile defenses can play a useful role in supporting the basic objectives of deterrence, broadly defined. Defenses that are effective against regional aggressors are a valuable component of the U.S. strategic posture. However, if deployed in sufficient number and capability, defenses could result in strategic instability.

E. Nuclear command and control systems should be modernized to increase crisis stability.

F. Improving our ability to monitor the health and status of space-based capabilities is crucial to strategic stability.

G. Improving nuclear forensics for post-attack attribution can enhance deterrence.

H. The United States should reduce its vulnerability to attack through cyberspace and by electromagnetic pulse weapons. Additional investments to strengthen our cyber security and modernize the national power grid should be made to address these risks.

I. The physical infrastructure of the nuclear weapons complex requires significant improvements independent of force structure requirements. This issue must be solved through developing a sustainable plan consistent with budget constraints and future weapons requirements.

J. The scientific and engineering expertise of the NNSA laboratories is fragile but essential to progress on a wide range of national security matters in addition to maintaining the nuclear stockpile and providing technologies for nuclear threat reduction.

III. A political strategy for building the domestic support for sustaining the proposed nuclear posture for at least 25 years.

A. The overarching goal of the U.S. nuclear posture and political strategy should be to reduce nuclear dangers by:

1. Balancing the deterrent strength of the nuclear weapons arsenal with other means, including principally arms control and nonproliferation.

2. Expanding the international tradition of nuclear nonuse.

3. Engaging allies and other international partners in efforts to reduce nuclear dangers.
B. While the goal of a world without nuclear weapons provides a vision to motivate action, the conditions that would make possible that goal are not present today. More importantly, achieving the needed conditions will require a fundamental transformation of the world political order.

C. That said, reducing international reliance on nuclear weapons for security should be a central element of the U.S. nuclear posture and our diplomatic agenda.

D. Arms control agreements can increase strategic stability through transparency and verification measures. But further arms reductions should be taken in concert with other nuclear powers and balance reductions in numbers with strategic stability. Before long, the United States and Russia must engage China, and the other nuclear powers, in substantive discussions about nuclear stability and security.

E. We should recognize that the principal obstacles to deep reductions in nuclear forces lie outside of the United States and include:

1. Nuclear arms buildups by current nuclear states including India and Pakistan, and the potential for further weapons proliferation.
2. Concerns about the survivability of nuclear forces growing out of advances in missile defenses, prompt conventional strike capabilities and improved surveillance.
3. Imbalances in conventional force capabilities among the various nuclear armed states.

F. The United States should continue to pursue a broad agenda to strengthen the nonproliferation treaty and the institutions that support its effective functioning.

G. Additional steps should be taken to prevent nuclear proliferation and terrorism and protect ourselves from its consequences including efforts to “lock down” fissile materials, the Proliferation Security Initiative, and the Global Initiative to Combat Nuclear Terrorism.

H. No single achievement, such as ratifying the Comprehensive Test Ban Treaty or developing a new nuclear capability to enhance deterrence, will substitute for establishing a broadly shared vision for assuring strategic security and a strategy for achieving that vision. Domestic disagreements on nuclear security matters weaken our overall security posture.

I. In the immediate future, the most significant constraint on the U.S. nuclear posture will be budget limitations resulting from our national fiscal crisis. The United States will be forced to balance the value of nuclear forces with conventional capabilities and overall fiscal policy. This task presents an opportunity for expanded dialogue and understanding between the executive and legislative branches of government.

J. Beyond budget constraints, the most significant domestic impediments to establishing a broad-based, sustainable nuclear posture are:

1. Partisan differences accelerated by lack of good faith on both sides.
2. The relative lack of leadership and knowledge about nuclear security issues within the legislative branch.
K. Actions Required:

1. To achieve a sustainable U.S. nuclear posture, the next administration should:
   a) Cultivate current and future congressional leaders on nuclear security matters by offering multiple opportunities for engagement designed to expand knowledge and foster understanding.
   b) Open a dialogue between executive branch officials and key congressional leaders on the specific issues that have been the source of contention, with the intention of establishing a common understanding of the challenges and a plan for resolving the issues.

2. In support of its interest in reducing the role of nuclear weapons and its interest in strategic stability more generally, the United States should pursue a much broader and more ambitious set of strategic dialogues with not just Russia but also China and U.S. allies in both Europe and Asia. Eventually, these talks should involve all nuclear-armed nations. These talks should involve:
   a) Discussion of the conditions required for reduced reliance on nuclear weapons (transparency, verification, enforcement, and dispute resolution).
   b) Near-term actions that would foster strategic stability (including transparency measures) and/or increase crisis stability (including data and intelligence sharing).
Forging Consensus for a Sustainable U.S. Nuclear Posture

By Robert Joseph

SECURITY CONTEXT

■ Past agreement on the utility of, and need for, a robust nuclear force posture has broken down. While there were always ideological and religious outliers, there was broad consensus during the Cold War on the need to maintain a nuclear posture that, at a minimum, would be “second to none.” As reflected in the breakdown of the agreement forged during the Senate consideration of New START ratification to fund the recovery of the nuclear infrastructure, there is no such agreement today.

■ There is wide agreement that, post-Cold War, we should lessen our dependence on nuclear weapons and maintain the minimum force necessary to meet our deterrence and defense requirements. Yet, there is no agreement on how these policy pronouncements translate into operational doctrine or force requirements. The focus of the debate in the United States today is more on “how low can we go” in the context of taking “steps toward a nuclear-free world,” than on the roles and requirements of U.S. nuclear forces in the current and future security environment.

■ Today, the administration’s public rationale for reviewing U.S. nuclear requirements with the so-called 90-Day Study is to facilitate further reductions below New START Treaty ceilings. The expressed purpose of these reductions is to strengthen the nuclear nonproliferation regime en route to nuclear zero. U.S. reductions and nonproliferation are said to be “two sides of the same coin.”

■ The nuclear zero movement, while not new, has been transformed in the United States from a fringe element to a major voice in policy formulation and public diplomacy. This is best seen in many recent calls by nuclear-zero advocates for “minimum deterrence” at very low levels of nuclear forces as a stepping stone toward a nuclear-free world.

■ Most other nuclear weapons states are moving in the opposite direction. Russia is heavily investing scarce resources to build up its nuclear capabilities across the board. This is, according to Russian military leaders, Moscow’s highest defense acquisition priority. China, while more opaque, is expanding its nuclear capabilities at all levels in both numbers and qualitative measures. The French and British are also modernizing their forces, though at lower levels. In addition, new nuclear weapons states, including Pakistan, North Korea, and likely India, are also building up their nuclear offensive arsenals. None of those states, or others like Iran, has any apparent intention to reverse the direction of their nuclear build-ups. The United States stands alone in making movement toward nuclear zero the priority goal of its nuclear policy. This priority can be seen in the Obama administration’s acceptance of de facto unilateral U.S. reductions in the New START Treaty and in the administration’s stated policy that the United States will develop “no new nuclear capabilities.”
■ In sum, while existing and emerging nuclear threats are growing, the United States is struggling to define the appropriate role of nuclear weapons in its national security policy. The U.S. nuclear weapons infrastructure is in critical condition and there are major near and mid-term decisions to be made about modernizing the delivery platforms for our strategic forces. Compounding the difficulty for decisionmakers in both the executive and legislative branches are: (1) the fiscal constraints on future U.S. defense budgets as well as those of DOE/NNSA; and (2) the absence of a coherent national strategy that defines the roles and numbers of U.S. nuclear forces according to the related national security objectives of deterrence and defense.

ROLES OF NUCLEAR WEAPONS IN U.S. NATIONAL SECURITY POLICY

■ There is consensus on the general proposition that U.S. nuclear weapons are essential to deter nuclear blackmail or nuclear attack on the United States or our deployed forces by another nuclear weapon state. But even on this basic point, agreement is narrowly constructed.

 › The minimum deterrence movement tends to limit the possibility of such an attack to countries with small arsenals, like North Korea and, in the future, Iran.

 › Those countries with much larger arsenals, specifically Russia and China, are most often not viewed as threats relevant to U.S. nuclear deterrence requirements. This is despite multiple statements especially by Russian civilian and military leaders that the United States is the principal adversary for which the Russian nuclear deterrent is designed. Moreover, as revealed by Russia’s acknowledged preparations for a possible nuclear exchange with the United States in the 2008 Georgia context, Russian leaders think differently about the nuclear relationship with the United States. There is no doubt that in Russian doctrine nuclear weapons are intended for actual use in local, regional, and strategic conflicts. There is little doubt that the U.S. threat of nuclear retaliation remains key to deterrence of nuclear attack and crisis stability.

 ■ Deterring nuclear attack on the United States has never been the sole purpose of the U.S. deterrent. During the Cold War, U.S. nuclear forces were viewed as an essential means to deter large-scale conventional attack, as well as attacks with chemical and biological weapons, against the United States or our friends and allies. The ratification debates on the Biological and Chemical Weapons Conventions make clear that proponents saw U.S. nuclear weapons as key to filling any deterrence gaps that could result from the elimination of U.S. offensive CBW capabilities.

 ■ Following the end of the Cold War, U.S. presidents and other high-level officials have articulated a range of deterrent goals. The George Bush administration reportedly threatened a nuclear response to any use of chemical or biological weapons by Iraq in the first Gulf War. Secretary of Defense William Perry publicly stated that the United States retained all of its options, including nuclear, to deter Libyan use of chemical weapons. President George W. Bush, in the U.S. National Strategy to Combat Weapons of Mass Destruction, stated that U.S. nuclear weapons were an essential element in deterring
chemical and biological use. In contrast, the Obama administration has expressed its aspiration to establish a “sole purpose” doctrine that would apply nuclear deterrence only to nuclear threats. This would leave threats of chemical and biological attack outside of U.S. nuclear deterrence strategies without any basis for confidence that U.S. conventional forces alone can deter such threats.

■ While the United States today may have conventional superiority in many contexts, China is undertaking a major modernization of its military across the board. In particular, China is building a set of asymmetric force options—anti-space, cyber, anti-ship, etc.—to provide it with anti-access/area-denial capabilities to prevent the U.S. military from operating in key areas of the Asia-Pacific. While alternatives to relying on U.S. nuclear forces to deter China from employing such capabilities are clearly desirable and are being sought, the U.S. nuclear deterrent will continue to play a central role as China continues to ascend economically and militarily.

■ Assurance of U.S. allies has always been and remains a critical function of U.S. nuclear deterrence policy and forces. The “nuclear guarantee” is a central element of U.S. security commitments to allies in NATO, as well as with Japan and South Korea. For some allies, U.S. nuclear weapons are seen as essential to deter not only nuclear, chemical, or biological weapons use, but also conventional attack on their territory. By relying on the U.S. nuclear posture for their security, these countries have been able to forgo developing and deploying their own national nuclear forces to meet their security requirements. For this reason, U.S. nuclear weapons—as long as they remain credible, effective, reliable, and safe—are perhaps the most effective tool of U.S. nonproliferation policy.

CAPABILITIES NEEDED FOR THE U.S. NUCLEAR FORCE

■ Size:
  > In the Cold War, the principal factors driving nuclear force size were the need to ensure escalation options in conflict, extend deterrence to allies, and, ultimately, provide an assured destruction capability vis-à-vis the Soviet Union. This was based on assessments of what the Soviet leadership considered most important, as well as on the size and characteristics of the Soviet threat, conventional and nuclear.
  > Any contemporary assessment of the number of nuclear weapons needed to meet U.S. national security requirements must take into account the multiple national goals supported by nuclear forces: deterrence, extended deterrence and assurance of allies, the dissuasion of nuclear competition, and the defense of ourselves and allies if deterrence fails. Consequently, force-sizing must include close consideration of existing and emerging threats, the capabilities of adversaries or potential adversaries, the security needs of allies, as well as the known strategic uncertainties that can be identified. Only on this comprehensive basis can one begin to answer the question of “how much is enough?”
  > To translate deterrence objectives associated with a range of state threats into meaningful force calculations broadly defined, U.S. policy across Republican and Democrat administrations has consistently been to deploy sufficient forces to hold
at risk, in a variety of conflict scenarios, those assets that the leaders of the threat states considered most valuable. In addition, U.S. policy since the 1970s has been to provide the president with numerous deterrence threat options so that the president is not limited to a nuclear assured destruction threat that would likely be incredible and disproportional in response to many possible contingencies in which deterrence must work. The “priority deterrence question” today is “whether we have sufficient force options and diversity to threaten credibly the wide spectrum of targets that opponents may value over the course of decades” (Keith Payne, 2012 congressional testimony). For countries like North Korea, the United States may be able to hold at risk such targets with relatively few offensive forces, but for other potential threats the number will be much higher. In short, U.S. deployed forces must be of a size that allows them to meet different deterrence challenges over time, recognizing the changing nature of the threats the United States may face in the future.

- The size of the U.S. deployed force is also relevant to the assurance of allies. If the United States is perceived as second to others in its nuclear capabilities, the credibility of the U.S. nuclear umbrella and the reliability of the United States as a security partner will be undermined. Also, if U.S. nuclear reductions result over time in force levels equal to or lower than those of countries seen as threats by U.S. allies, these allies may be encouraged to seek their own nuclear weapons.

- While missile defenses and advanced conventional capabilities contribute significantly to deterrence of states like North Korea, these capabilities do not play the same role with states possessing large nuclear forces.

- Characteristics:

  - There has long been agreement on the need to maintain the strategic triad: ICBMs, SLBMs, and strategic bombers. Each leg possesses different attributes that, collectively, strengthen deterrence in even the most stressful operational environments. This assessment was reaffirmed in the 2009 report of the bipartisan Strategic Posture Commission and in the 2010 Nuclear Posture Review. The flexibility, diversity, and resilience that derive from the triad are essential to meet changing security threats over time. Most recently, the commander of STRATCOM has reaffirmed the need to maintain the triad for precisely this reason.

  - Yet, the United States has not taken the decisions or committed the resources to ensure the continuation of the triad: when the United States will field a new strategic bomber with a nuclear role is uncertain, and the ICBM force continues to age with no decision on a replacement missile. As for the ballistic missile submarine (SSBN) follow-on program, the initial operational capability (IOC) has been delayed and the further force reductions desired by the administration may demand further reductions in the number of SSBN.

  - The nuclear weapons program is in a state of growing uncertainty and increasing dysfunctionality. The organizational structure and policy constraints (e.g., the prohibition on developing new nuclear warheads or modifying existing ones for new capabilities) have eroded U.S. nuclear weapons capabilities and require a fundamental re-think.
POLITICAL STRATEGY FOR SUSTAINING THE U.S. NUCLEAR FORCE

- The executive branch has almost always led in the formulation of U.S. nuclear policy and in the establishment of force size and characteristics. A number of presidents from Kennedy to Reagan were primary advocates (with Congress and the public) to gain support for nuclear force modernization. Today, the president is leading the effort to secure further reductions in support of the vision of global zero. The Departments of Defense and Energy approach their responsibilities for the nuclear enterprise in the context of presidential guidance, both formal and informal. Until the presidential priority changes from pushing for further cuts to ensuring the maintenance of an effective nuclear deterrent force over time, there is little chance that the above negative trends will be reversed.

- The legislative branch has traditionally played an important role in nuclear policy and funding force modernization. However, with a number of notable exceptions, few in the Senate or House are knowledgeable of, or actively involved in, the broad set of nuclear policy and capability issues. This loss of awareness of the role nuclear weapons in U.S. security policy is also reflected in the U.S. military, which, exempting STRATCOM and the nuclear navy, no longer treats nuclear forces as a central component of defense planning and resource priorities.

- An educational/awareness-building effort is necessary to achieve support for sustaining an effective nuclear deterrent force for the future—platforms and warheads. This effort should include:
  - A focus on the nuclear modernization programs and trends of Russia and China, their doctrine, force improvements, and statements of leadership. Most attention has been given to proliferating states, such as Iran and North Korea. While such countries do pose deterrent challenges, those challenges are qualitatively and quantitatively different from those of Russia and China. All of these challenges must be included in any assessment of U.S. nuclear requirements.
  - The importance of extended deterrence for U.S. and allied security and for U.S. nonproliferation goals.
  - The current structural problems and policy impediments within the U.S. nuclear weapons infrastructure that produce inefficiencies and undercut the prospects for fashioning an effective and affordable modernization program.
  - An understanding of the priority that must be given to nuclear force follow-on programs in an environment of constrained budgets.

- Finally, developing a strategy for sustaining the U.S. nuclear force should include an arms control component. Arms control can be an effective instrument of state policy, as demonstrated by Russia in the negotiation of New START. Any future arms control must begin with the requirements of key U.S. strategic goals—and strategy must drive preferred numbers, not the reverse. The U.S. arms control agenda must promote rather than undercut these goals through equal outcomes (rejecting further unilateral U.S. reductions and including “nonstrategic” weapons) and effective verification—two failures of the New Start agreement.
Achieving Consensus for a Sustainable U.S. Nuclear Posture

By Lt. Gen. Frank Klotz, USAF (Ret.)

THE CONTEXT

- Senior U.S. officials have repeatedly stated that as long as nuclear weapons exist, the United States will sustain safe, secure, and effective nuclear forces.

- Given this premise, U.S. nuclear weapons are likely to exist for a very long time to come.
  - Despite occasional pronouncements in favor of eventual disarmament, other nations possessing nuclear weapons show little inclination to reduce their stockpiles to zero absent a fundamental change in the international security environment, including the resolution of regional rivalries that could potentially lead to armed conflict.
  - While specific rationales vary from country to country, each nuclear weapon state regards its nuclear arsenal as essential to its own national security.
  - Several current nuclear weapon states are pursuing substantial efforts to modernize, diversify, and, in some cases, expand their existing nuclear forces (Russia, China, France, India, and Pakistan).
  - North Korea and Iran seek to develop both nuclear weapons and delivery systems.
  - Other nations possess the requisite scientific and engineering expertise to develop nuclear weapons, should they ever choose to do so.

- On the other hand, political interest and public support for programs to sustain, much less modernize, remaining U.S. nuclear capabilities have sharply declined since the Cold War ended.
  - Years of deferred decisions, abandoned projects, and underfunding have resulted in
    - a nuclear weapons complex that has been described as “decrepit” in places
    - weapons and delivery systems (aircraft and missiles) that have exceeded their intended design life and include components originally designed, developed, and fielded decades ago
    - chronic aging problems throughout the nuclear enterprise, ranging from vanishing vendors for spare parts to worn-out handling and test equipment.

- Providing for safe, secure, and effective U.S. nuclear forces—for now, and for the foreseeable future—will be possible only if there is broad agreement on what needs to be done and constancy of purpose in actually doing it.
THE ROLE OF NUCLEAR WEAPONS

- Current U.S. policy states that the *fundamental* role of U.S. nuclear weapons is to deter nuclear attack on the United States (central deterrence) and its allies and partner nations (extended deterrence).8

- In fulfilling this fundamental role, U.S. nuclear weapons also serve other important U.S. national security interests, including
  - limiting the ability of nuclear weapon states to use or threaten to use nuclear weapons in an attempt to coerce the United States, and its allies and partners, in crisis or conflict
  - greatly reducing the risk of conventional war among the major powers out of concern that any armed conflict might escalate out of control
  - tamping down any incentive U.S. allies and partners may have to develop indigenous nuclear weapons and delivery systems to protect their own national security interests.

CAPABILITIES NEEDED FROM THE U.S. NUCLEAR ENTERPRISE

*Enduring Value of the Triad...*

- The United States has long maintained a triad of strategic nuclear delivery systems—aircraft, intercontinental ballistic missiles (ICBMs), and submarine-launched ballistic missiles (SLBMs)—as well as at least two different types of warheads/bombs for each category of delivery system.

- The Obama administration’s 2010 Nuclear Posture Review (NPR) Report rightly argues for retaining all three legs as the best way to maintain “strategic stability at reasonable cost, while hedging against potential technical problems or vulnerabilities.”
  - At the same time, it clearly implies the triad might be up for grabs in case of future reductions.9

- Even without further cuts, support for the existing triad could be undermined by the desire to find savings in the defense budget.
  - Even though the ICBM is the least expensive leg of the triad to operate and maintain, it might ultimately be the most vulnerable, since the need to replace the existing Minuteman III missile (around 2030) will follow on the heels of an already-heavy U.S. investment in a new bomber and a new ballistic missile submarine.

- Nevertheless, a triad still has intrinsic, enduring value—particularly at lower numbers.
  - It provides a balanced mix of desirable attributes, including responsiveness, survivability, ability to penetrate defenses, and ability to signal resolve.

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It mitigates against the risks of a failure of a single warhead or delivery system, targeted investment by other nations to counter one or more of the legs, and unforeseen changes in the strategic environment.

It contributes to strategic stability by presenting any would-be adversary with an insurmountably complex targeting problem (especially with widely dispersed, silo-based ICBMs) and thereby reducing any incentive to launch a first strike.

For that reason, the triad should be retained and each leg of the triad should be replaced when it reaches the end of its service life.

However, alternative approaches and configurations should be considered in future systems as a means of enhancing safety and security; reducing research, development, test, and evaluation (RDT&E), operations, maintenance, and support costs; and preserving strategic stability.

As a final note, as is the case today, a portion of the triad should be on alert at all times to guard against surprise attack (however remote the possibility) or an attempt by an adversary to quickly mobilize in order to exert pressure in a crisis.

to avoid the potential for exacerbating a crisis by putting forces on alert from a standing start in response to adverse political or military developments.

...and, U.S. nuclear weapons in Europe...

The 2010 NPR states the presence of U.S. nuclear weapons combined with NATO’s nuclear sharing arrangements provide reassurance to allies and partners who feel exposed to regional threats.10

A broad consensus on the role of nuclear weapons in NATO’s defense strategy has been reaffirmed by two years of studies and two successive NATO summit meetings. There’s little to be gained from prolonging the debate on alliance nuclear policy at this time.

Making some F-35 fighters dual-capable and completing a B-61 Life Extension Program (LEP) are necessary steps to sustaining the presence of U.S. nuclear weapons in Europe.

...and, the people

Highly trained, experienced, and motivated scientists, engineers, technicians, and members of the armed forces are absolutely essential to ensuring the safety, security and effectiveness of U.S. nuclear forces.

Accordingly, leaders at all levels need to regularly acknowledge that they value the contributions made by the individuals who work within the nuclear security enterprise, and that their mission remains essential to defending U.S. national security interests.

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10. Ibid., p. 32.
BUILDING DOMESTIC SUPPORT

The Immediate Past as Prologue

- The basis of a broad-based, bipartisan consensus on nuclear weapons and arms control policy emerged with (1) the 2009 report of the Congressional Commission on the U.S. Strategic Posture,11 (2) the April 2010 NPR, and (3) the debate leading up to ratification of the New Strategic Arms Reductions Treaty in late 2010.

  - That consensus, or more precisely, “bargain,” envisioned continued negotiations with the Russians on further reductions—including for the first time nonstrategic (tactical) and nondeployed (reserve) nuclear weapons—while simultaneously investing resources required to keep the nation’s nuclear weapons infrastructure and remaining forces up-to-date.

- During the New START ratification debate, the Obama administration in fact laid out an ambitious spending profile to deal with the problems of aging infrastructure and forces:

  - $88 billion over 10 years to sustain the nuclear arsenal and modernize infrastructure
  - another $125 billion to sustain and lay the groundwork for replacing the existing triad of systems that actually carry the weapons—manned bombers, ICBMs, and ballistic missile submarines.

- This consensus, or compromise, did not last long.

  - Soon after New START was ratified, arguments against making these investments were voiced by some in Congress, as well as in the “think tank” community and the media.

- During the FY13 budget cycle, senior administration officials reiterated their commitment to modernizing the infrastructure and the delivery systems that underpin nuclear deterrence.

- Nevertheless, pressure for continued reductions will most certainly continue to mount—not so much as a matter of political philosophy, but as a function of budget realities.

Basic Principles

- Reestablishing a consensus along these general lines might be possible, provided the key objectives and concerns of two basic, but not mutually exclusive, schools of thought are addressed:

  - Those who believe that nuclear weapons continue to play an important role in protecting U.S. national security interests, and that the United States must continue to maintain an appropriately effective nuclear deterrent force;

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Those who believe that the United States should continue to lead international efforts to prevent the proliferation of nuclear weapons, reduce the number of nuclear weapons worldwide, and enhance the security of nuclear weapons and fissile material.\textsuperscript{12}

At the same time, achieving consensus must also take into account
domestic political realities (e.g., the widespread aversion within Congress to closing U.S. military bases or significantly realigning missions among those bases)
severe constraints on defense spending now and for the foreseeable future.

With these points in mind, a consensus might be fashioned around the following “basic principles”:

- Regular and sustained dialogue should continue with Russia—and, ultimately, the other nuclear weapon states—on steps to further reduce the overall size of nuclear forces, enhance strategic stability, mitigate the risk of potential misunderstandings about capabilities and intentions, and strengthen measures to prevent nuclear proliferation and nuclear terrorism.
  - The enormous disparity between the United States and Russia in numbers of tactical nuclear weapons should be addressed as a matter of priority.
- The United States should remain committed to maintaining parity with Russia in overall nuclear capability.
- U.S. nuclear forces should only be reduced in the context of a negotiated agreement(s) with Russia and/or the other nuclear weapon states.
- Even if U.S. nuclear forces are reduced in number, a triad of air-delivered, sea-based, and land-based strategic nuclear delivery vehicles should be maintained.
- If the ICBM force is reduced as the result of an arms control agreement, reductions should be balanced across the entire ICBM force and the current three-wing, three-base structure should be maintained.
- A multitiered approach to readiness should be continued with respect to strategic nuclear delivery vehicles under normal conditions (i.e., all ICBMs and some SLBMs on alert; all bombers and some SLBMs off alert).
- The Obama administration should continue to express strong support for the Comprehensive Nuclear Test Ban Treaty (CTBT) and “prepare the ground” for its eventual ratification based on the following rationale:
  - The United States has, in effect, already “paid the price” of treaty membership by having unilaterally refrained from nuclear explosive testing for over 20 years, having invested in the tools necessary to assess weapon reliability without such testing, and having enhanced the means to detect clandestine testing by others.

\textsuperscript{12} This depiction of the two broad approaches to nuclear weapons policy and arms control is taken from former secretary of defense William Perry’s preface to \textit{America’s Strategic Posture}, p. ix.
While the United States probably garners some credit for exercising this self-imposed restraint, it is likely to be in a far better position to rally international pressure against would-be proliferators and to constrain regional arms races if it ratifies the CTBT.

Ratification should be accompanied by the following “safeguards”:

- an explicit statement by the White House that the United States would exercise its rights under the “supreme national interest” provision and withdraw from the treaty if political or technical circumstances so warranted
- continued annual certification by the national laboratory directors that testing is not required to maintain a safe, secure, and effective stockpile
- continued investment in stockpile stewardship tools and national technical means for monitoring possible clandestine testing by others.

Conveying the Message

- An essential element of building and sustaining a consensus is coherent and consistent communication at all levels. To this end:
  - Senior administration and congressional leaders must be willing to speak to the basic principles of a consensus and avoid the temptation to stress or “cherry pick” only those that appeal to a particular support group—on the right or on the left.
  - In the new year, the president should deliver a speech outlining the principles of consensus on a sustainable nuclear posture at a major facility affiliated with the nuclear security enterprise (e.g., Barksdale Air Force Base, Louisiana, or one of the national laboratories).
  - A new high-level, bipartisan commission should be established—based upon the 2008 model, but without a fixed time-limit—to continuously examine and make recommendations with respect to the role and capabilities of U.S. nuclear forces.
1. ROLE OF U.S. NUCLEAR FORCES

- Mission 1: Deter nuclear attack or blackmail against the United States
  - No nuclear weapons state except the United States (and the United Kingdom) accepts the idea of “reducing the role nuclear weapons”

**Russia**

- Nuclear weapons are at the very heart of Russian national security strategy
  - Russian doctrine calls for nuclear first use, including in regional and local war
  - Senior Russian leaders (president, prime minister, defense minister, chief of general staff) routinely make public statements threatening nuclear preemptive strikes
  - Russian strategic bombers periodically violate U.S. airspace as a matter of national policy
  - Russia maintains extremely active strategic nuclear forces modernization programs:
    - Two new types of ICBMs
    - Possible new heavy ICBM
    - Two new types of SLBMs
    - New class of SSBNs
    - New air-launched cruise missile

**China**

- China maintains complete nuclear opacity, masked by an operationally meaningless “no first use” policy
- China maintains active strategic nuclear forces modernization programs:
  - Two new types of ICBMs
  - New SLBM
  - New class of SSBNs
  - Only P5 state continuing to expand its nuclear arsenal

Bottom line: The possibility of a U.S.-Russian confrontation or a U.S.-PRC confrontation, while undesirable and unlikely, cannot be ruled out:

- As a result, the United States must maintain a modern, effective, and reliable deterrent, one that is perceived as such by potential adversaries and in which the U.S. leadership has confidence
- The existence of modern, effective, and reliable U.S. deterrent moderates “great power” behavior and reduces the risk of military confrontation that might lead to conflict or war
Mission 2: Deter nuclear attack or blackmail against U.S. allies

- Russia maintains an arsenal of several thousand tactical nuclear weapons, the largest such arsenal in the world
- Russian nuclear exercises routinely feature nuclear strikes against NATO member countries that border on Russia
- Russian senior leaders routinely make nuclear threats against NATO members
- Russian nuclear bombers routinely violate the airspace of the United Kingdom, Norway, Denmark, and Japan as a matter of policy
- The Russian government clearly views its nuclear weapons as coercive political instruments and uses them as such.
- NATO governments have twice reaffirmed in the last three years (NATO Strategic Concept November 2010 and Chicago Summit/DDPR May 2012) their need to have a U.S. nuclear umbrella that includes forward deployments of U.S. nuclear weapons in Europe
- The Japanese government routinely reaffirms the need for a U.S. nuclear umbrella to deter Chinese and North Korean nuclear threats and blackmail
- The South Korean government routinely reaffirms the need for a U.S. nuclear umbrella to deter North Korean nuclear threats and blackmail

Mission 3: Deter major conventional aggression against U.S. allies

- Despite the widely accepted notion that NATO “enjoys conventional military superiority,” Russia has conventional military superiority against its neighbors who belong to NATO
  - The Georgian experience demonstrates that the Russian army, while not the equal of the Red Army, can seize and occupy territory
  - NATO’s 2010 Strategic Concept recognizes this by designating maintaining NATO’s territorial integrity as the first of the alliance’s three strategic tasks
- South Korea continues to face the threat of major conventional aggression from North Korea
- The U.S. extended nuclear deterrent provides necessary reassurance to the NATO, Japanese, and South Korean governments

2. CAPABILITIES NEEDED BY THE UNITED STATES TO FULFILL MISSIONS 1, 2, AND 3

- The United States must maintain a modern, credible, and effective nuclear deterrent force. This includes a modern and credible supporting infrastructure.
- The United States needs to take active steps to modernize its nuclear forces
The Trident II SLBM is the only system with an ongoing life extension program.

The Ohio SSBN replacement program has deferred the IOC of the first new SSBN by two years, and this will result in an operational force of only 10 SSBNs in the 2030s.

The Minuteman ICBM needs an active modernization effort; currently, the Air Force simply continues to study the issue.

The Air Force needs to clarify whether the new strategic bomber will have a nuclear role; that decision, and the IOC of the new aircraft, will influence strongly whether a replacement for the air-launched cruise missile (ALCM)-B is required.

- By negotiating a New START treaty with a bomber discount, the administration has created a political need for a robust air-breathing leg for the Triad.

As soon as the overall F-35 program stabilizes, the nuclear-capable version of the F-35 needs to enter into production.

An affordable redesign of a modernized B-61 is urgently needed and it must enter into production on a similarly urgent basis.

The “nuclear weapons complex” requires a complete and fundamental restructuring.

Bottom line: The U.S. nuclear deterrent and its supporting infrastructure are in serious danger of losing credibility due to deliberate failures to pursue necessary modernization programs. Unless this trend is corrected, the credibility of the U.S. deterrent at home and abroad will be dramatically undercut, particularly in light of the extremely active nuclear force modernization programs of Russia and China.

3. RECOMMENDED POLITICAL STRATEGY

- I do not propose to describe the various tactical political steps that would be necessary to modernize the deterrent and its supporting infrastructure. It should suffice for our purposes here to note that no program ever succeeds in Washington without the complete support of, and effective leadership by, the executive branch.

- If the president does not commit meaningfully to maintaining a modern, effective, and reliable nuclear deterrent, we will not have one 20 years from now.

  - This support must include ensuring full funding in the president’s budget for programatics and working to obtain full support on the Hill.

  - Effective lobbying of the Congress—to include the necessary but not sufficient component of making a credible case for nuclear forces modernization and restructuring the nuclear weapons complex—is vital; the examples of the Kennedy and Reagan administrations provide case studies.

  - The case for restructuring the DOE/NNSA complex is better addressed elsewhere.
Achieving Consensus for a Sustainable U.S. Nuclear Posture

By George Perkovich

I. STRATEGIC ENVIRONMENT

1.1 The environment of U.S. nuclear policy has changed dramatically and positively since 1945 and even since 1991.

- The firebombing of cities that was commonplace in World War II would be unimaginable today due to moral, legal, and political considerations, as well as technological advances that remove any justification of necessity. This can be seen now most clearly in the debate over the conduct of highly precise, low-collateral damage drone strikes.

- The nuclear taboo.

- Globalization of U.S. (and other) manufacturing and credit arrangements, which raise the self-destructiveness of nuclear war – i.e., with China.

II. DECLARATORY POLICY

2.1 The central issue is first use. I am not arguing for a no-first-use posture, but rather that the challenge in making declaratory policies and corollary decisions centers on first use, which is often obfuscated. Retaliatory use is relatively straightforward, albeit still not simple.

The potential strategic and operational advantages of first use make it tempting, especially if the inhibitions of strategic parity may not exist. Yet, first use still would entail enormous risks against nuclear-armed adversaries, and would also break the nuclear taboo. This taboo profoundly serves U.S. (and other states’) interests: if nuclear weapons are the great equalizer, we are the most likely “equalizee.” Even if first use could be done without devastating retaliation, breaking the taboo (most likely in Asia, again) could seriously undermine the soft power that has been so central to U.S. standing and leadership—at home, among allies, and more broadly.

2.2 The United States is committed via the NPT under terms agreed with its extension in 1995 to diminish the role of nuclear weapons in its national security strategy. (Other states are similarly obligated, which nongovernmental organizations, or NGOs, and others should emphasize more.)

- Too little national and international discussion is devoted to analyzing and clarifying what this means. (Brief elaboration is appended.)

2.3 The most appropriate declaratory policy of the United States would be: the United States possesses and potentially would use nuclear weapons only to deter and retaliate against threats to its existence or that of its allies, guided by the laws and norms of just war.
Such a declaratory policy reflects the inherent right of self-defense and the natural logic that a state will do whatever it needs to ensure its survival. The formulation here is consistent with the International Court of Justice advisory opinion on the legality of the threat or use of nuclear weapons (whose opinion upset many nonnuclear weapon states as being too permissive of nuclear use). It is consistent with norms and rules that the United States now applies for the use of force, including most recently the declaration of principles guiding the use of drones. It is as defensible, or more defensible, politically and morally than any alternative formulation, and, I would argue, does not weaken deterrence signaling vis-à-vis any threat that the United States would realistically need to confront with the first use of nuclear weapons.

In justifying the retention of nuclear weapons, this formulation gives space for the goal of eliminating all nuclear weapons globally. As long as states threaten each other’s existence and do not reassure each other that such threats will not arise in the future, the deterrent power of nuclear weapons will remain too attractive to motivate all states to eliminate these weapons. To achieve the goal of eliminating all nuclear weapons, it is necessary to remove through politics and conflict resolution all threats to the existence of the United States and its allies and partners. This does not mean ending warfare or creating a global government; rather, what is required is agreements between those states that now rely on nuclear deterrence and those that they seek to deter to resolve the sources of potential major military conflict among them. These sets of states can be readily named, as can the issues they must resolve.

Because nuclear weapons themselves pose the clearest and most immediate existential threats, building confidence in the robustness of the nonproliferation regime will be vital both for defense and for the objective of eliminating all nuclear weapons.

When nuclear weapons are the sole threat to the existence of states that possess them, and their allies, then it would be more feasible to eliminate them through mutual, verifiable, and enforceable steps.

2.4 Extended deterrence against nuclear-armed states is today the only function that could require the first use of nuclear weapons by the United States. There is no nonnuclear threat to the United States today that the United States would credibly and justly defeat by first use of nuclear weapons.

While it is vital to “listen to allies” in determining declaratory policies and force postures to reassure them of the extended deterrence commitment, it should also be recognized that the allies collectively have multiple, sometimes divergent views within and among them. U.S. officials and experts often display a selection bias: some say we must listen when an ally wants a nuclear weapon system to remain in Europe, or to be deployed in Asia, but then ignore the same allies or others when they say, “you should ratify the CTBT” or “adopt sole purpose as a declaratory policy.”

The greatest extended deterrence priority should be to build reserves of conventional capabilities in the alliance “bank,” rather than over-leverage the relatively inutile threat of nuclear first use based on arsenals already “on deposit.” (The lesson of the Euro-crisis.)
2.5 The United States can and should downplay the role of nuclear weapons. Those we seek to deter know that the United States has a tremendous nuclear arsenal. They don't need to be reminded. Rather than claim to strengthen deterrence by highlighting threats and stating U.S. resolve to use nuclear weapons if necessary, the United States and its allies would be better off by emphasizing the taboo against using these weapons, putting more political pressure on those states that place greater reliance on first use.

- If Israel can maintain an undoubted nuclear deterrent without declaring its possession of nuclear weapons, let alone brandishing nuclear threats, the United States can maintain its nuclear deterrent with more subtlety.

**III. POSTURE AND ARSENAL QUALITY**

3.1 Prepare to move to dyad based on SLBMs and bombers.

3.2 Fund extension of the Minuteman force through 2030, rather than commit now to a new replacement.

3.3 Modernize bombers (with dual-use capability) and SLBMs, but not a rush.

3.4 Peg future requirements to the larger nuclear environment, expressing the interest in multilateralizing the arms control and reduction processes, while shifting attention to other states that either are building up or planning to.

3.5 Seek a new ALCM capability for penetration from bombers. Key extended deterrence signaling function.

3.6 In light of budget scenarios and nonnecessity of the B-61 beyond political reassurance of allies, undertake B-61 modernization only if allies find the capability important enough to share its cost, and at least two of the Dual-Capable Aircraft (DCA)-basing states in Europe agree to modernize that capability for a nuclear role.

3.7 Don't seek new, lower-yield warheads. The value of low-yield is greater discrimination, proportionality, and the related minimization of civilian casualties and damage. This in turn could add to the credibility of deterrent threats to use these weapons.

- However, the issue is not so straightforward. If developing and deploying lower-yield weapons would be perceived as breaking commitments to end nuclear arms racing, and significantly exacerbate doubts about the nonproliferation regime, the cost-benefit trade-off could be negative. If explosive testing were required to develop a new weapon, the United States would then trigger tests in India, Pakistan, China, Russia, and perhaps other states, exacerbating insecurity and instability from the Middle East through South and East Asia.

- It is not evident that “low”-yield weapons effective enough to destroy deeply buried targets would be low enough still not to cause great harm to civilians, depending where targets were located.
The perception (and reality?) that lower-yield weapons would be more usable (that would theoretically augment deterrence) also produces the perception that the United States is raising the role of nuclear weapons and lowering the threshold for their use. This would have international repercussions and would not necessarily be stabilizing.

There is no evidence to conclude that the actors the United States would seek to deter—say, the leaders of North Korea, Iran, or even China—would care whether the nuclear weapons detonating on their soil were “low” yield or higher yield. To the rest of the world (and to the United States probably), a nuke is a nuke. There is no reason to think that the first use of a low-yield nuclear weapon would significantly reduce the probability of retaliatory nuclear use by others.

I would not disagree that, in principle, having low-yield weapons would be better than relying more on higher-yield ones. Rather, that the marginal “gain” would not outweigh the considerations suggested here.

**IV. BALLISTIC MISSILE DEFENSES**

4.1 Acknowledge the effect that U.S. ballistic missile defense (BMD) programs have on (at least) Russian and Chinese nuclear force planning and strategic and arms race stability, with knock-on effects in India and Pakistan. To minimize these effects, the United States should explicitly and reliably peg the scale and capabilities of mid-course missile defenses to the threat posed by terrorists and states that are not in compliance with the obligations of nonnuclear-weapon states under the NPT. Russia and China have the financial and technical resources to defeat whatever BMD we could deploy, and at lower marginal costs in an offense-defense race; it’s better to recognize this.

4.2 Recognize that it is not persuasive to say to Russia and China that none of the missile defense systems we are developing or considering have the capability to significantly blunt their deterrent forces. They want us to declare, preferably in legally binding ways, that as a matter of policy we will not develop and deploy anti-missile systems that could significantly blunt their second-strike deterrents. When we refuse to do this, our protestations about capabilities ring hollow. If my wife asks me if I will be faithful to her, and I say, “honey, look at me—who would want to sleep with me?” this is not reassuring. A commitment in policy is needed. I think this would be in the U.S. interest given inherent technical doubts about national missile defenses, costs, and the truism that offense can always beat defenses.

**V. NUMBERS**

5.1 To the extent that numbers are a political-perceptual issue domestically and internationally, administrations and congresses will not accept total numbers of strategic weapons lower than Russia or any other potential adversary have.

5.2 Russia (and others) will not accept the United States insisting that it must have more than Russia and China combined, or some such formula.
5.3 Exploring what it would take to persuade China to declare (and transparently confirm) an upper limit on its nuclear arsenal would be worth considerable effort, and would probably have to involve at least Russia, too, and perhaps India (and thus Pakistan). Creating formats for such explorations would be useful for many reasons, even if they did not yield results in the near term.

5.4 NATO and U.S. interests in incorporating Russian short-range nuclear weapons into a reduction process probably dictate that these systems cannot be reduced or eliminated separately.

5.5 Politics, leverage, and Russian interests probably require that further strategic reductions to below 1,000 under New START rules would require including “tactical” weapons within any new ceiling. This in turn would probably require—at least—accommodations on anti-missile systems as discussed above.

5.6 Thus, I don’t imagine it would be feasible to go below 1,000 total deployed weapons (of all types) before 2020, and this only in conjunction with Russia. I would assume that the United States would plan on nearly this entire total being strategic.

VI. INFRASTRUCTURE

6.1 I don’t feel qualified to specify which, if any, currently unfunded proposals for the nuclear weapons complex should be pursued, and generally defer to Linton Brooks.

As I discuss below, I think the following political realities will obtain:

- Sustained funding for modernizing the complex will depend on sustained efforts to diminish the declaratory role of nuclear weapons, to take forthcoming positions in reductions negotiations with Russia, to establish policy perimeters around anti-missile programs pegged to threats from outlaw states, and to ratify the CTBT.

- Significant improvement in the budgeting accuracy and program implementation performance of NNSA and its contractors.

- Renewed growth in the U.S. economy.

VII. MORALE OF FORCES

7.1 Respecting the concerns of leaders of the weapons complex and STRATCOM officers, it is important to proffer a narrative for personnel in the complex and field that affirms their sense of purpose and value to the country, even as the role and number of nuclear weapons diminishes. To this end, I would say:

- Nuclear weapons are the most powerful creations of humankind. They have to be managed with perfection. Period.

- The goal of U.S. nuclear operators is to deter or prevent the detonation of nuclear weapons on the United States or its allies, and also anywhere else. Detonations anywhere mean that deterrence failed. Detonations (or accidents) where and when they
are not intended by the national command authority mean that the personnel in the complex and the field, and those who have oversight over them, have failed.

- The lower the number of weapons, the more valuable are those that remain.
- The verifiable, enforceable elimination of all nuclear weapons, following the necessary improvements of international relations, would be the ultimate success. Mission accomplished. Until that happens, see numbers 1-3 above.

**VIII. POLITICAL STRATEGY**

We have to match reductions, CTBT, and willingness to seek elimination with willingness to provide necessary funding to maintain a secure, safe, reliable, and effective force on the way there.

We emphasize taboo rather than threats. The logic of emphasizing threats may seem compelling to motivate support for spending, but it also motivates charges of war-mongering, etc., and thus pressure for abolition. Emphasizing the taboo says we don’t want to use these things, and we want to raise the costs for anyone who would. But until we are sure that everyone shares the taboo fully, we have to keep our powder dry.

The fewer we have—and we will have some as long as we and allies are not fully confident that existential threats have been resolved—the more important it is for the ones remaining to be as safe, secure, and reliable as possible.

**APPENDIX: NOTES ON DECLARATORY POLICY AND WHY IT MATTERS**

- How could the “role” of nuclear weapons be defined? One measure of the role of nuclear weapons is the type and scale of threats that states claim would justify use of nuclear weapons. Where among the rungs of military capability and doctrine does nuclear use figure, and under what conditions?
- Another element is status: to what extent do nuclear-armed states seek or receive status as a result of their possession of nuclear weapons. The more status and influence are associated with possessing nuclear weapons, the greater the disadvantage of those who don’t possess them.
- What is the benefit of reducing the role of nuclear weapons? In the NPT context, the objective is to meet a demand by nonnuclear-weapon states who seek greater equity in an international system that was created primarily by the post-World War II great powers, and which developing countries had little influence to shape. As developing countries gain greater power in a globalized world, they want more equitable relations with the established powers, five of whom are nuclear-weapon states. Reducing the role of nuclear weapons, in the view of nonnuclear-armed states, is one way to close the gap between the “haves” and the “have-nots.” This may be necessary to gain greater support for strengthening and enforcing nonproliferation rules.
- Of course, nonnuclear-weapon states should be challenged to demonstrate in deeds, not only words, that they would act to strengthen key nonproliferation rules and
procedures, and their enforcement, as nuclear-armed states and allies reduce the role of nuclear weapons.

- Another motivation for seeking reduced roles for nuclear weapons is simply that all states, including nuclear-armed states, would rather face fewer and less prominent nuclear threats.

- Declaratory policy matters because it shapes how militaries and other relevant institutions understand their missions and plan forces and operations.

- Declaratory policy regarding the role of nuclear weapons also matters simply because publics and governments in many states, including nuclear-armed states, feel it matters.

- Arguments to the contrary are often cynical and self-contradictory. For example, when an adversary downplays the profile of the threat it projects, as when China insists it follows a no-first-use policy, U.S. strategists and pundits often take pains to dismiss it as propaganda. But when an adversary speaks bellicosely, as when Ahmadinejad appears to call for wiping the Zionist entity off the map, the same strategists and pundits take it very seriously.

- When some U.S. officials or strategists are seen by others to exaggerate threats to the United States and/or to elicit alarm by calling for new nuclear weapons to strengthen deterrence, we dismiss their concern as an overreaction and say that U.S. nuclear policy does not affect the motivations that others might have to acquire nuclear weapons. But when some in the United States call for declaring that the sole purpose of our nuclear weapons is to deter the use of nuclear weapons by others, some in the U.S. strategic community say that this badly weakens deterrence.

- Clearly declarations about threats and the role of nuclear weapons to meet them do matter. The issue is that, depending on our own perceptions and policy preferences, we disagree on what we should be communicating, to whom, and what the effects of various communications would be.
Appendix D
The Future Security Environment: 2020 and Beyond\textsuperscript{13}

By Stephanie Spies\textsuperscript{14}

International Security Environment

GLOBAL CONTEXT

- There are different characterizations of the nature of the global context
  - Some believe that the international system is more secure and stable than any time during the past century
    - Violent conflict has declined
    - Democratic governance has increased
    - Life expectancy and living standards have improved
    - “The United States faces no plausible existential threats, no great-power rival, and no near-term competition for the role of global hegemon.”\textsuperscript{15}
  - Others believe that the international system is less secure and stable than in previous times
    - Events such as the Arab Spring and the increasing assertiveness of Iran create great uncertainty about stability in important global regions
    - Russia and China may be and could become great-power competitors to the United States

- The international security environment may present more challenges in the long-term
  - Unpredictable and potentially destabilizing dynamics
    - Ongoing civil unrest, leadership transitions, and redistributions of power
  - Introduction of new sources of instability
    - Changes in the nature of warfare


\textsuperscript{14} The author would like to thank the members of the Nuclear Consensus Working Group for their feedback on previous drafts of this paper. Any errors that remain are her own.

- Diffusion of technical knowledge
- Proliferation of advanced weapons systems

**CHINA**

- As a preeminent rising power, China is becoming increasingly assertive
  - Internally: consolidating domestic power through the exertion of authoritarian control in its hinterlands
  - Externally: developing advanced power projection and area denial capabilities in order to consolidate regional power
    - These efforts are intended to bolster China’s “comprehensive national power,” a term it invokes to describe “all elements of state power including economic capacity, military might, and diplomacy.”

- China will continue to seek access to energy markets and natural resources in order to maintain its rapid economic growth, which is vital to regime legitimacy
  - The People’s Liberation Army (PLA) is pursuing capabilities to allow China to assert itself in any regional dispute over resources
    - Securing sea lines of communication through the South China Sea and the Strait of Malacca

- China will continue its assertiveness in territorial disputes, challenging traditional interpretations of the Law of the Sea Convention, potentially resulting in future provocations
  - Could challenge freedom of navigation in the global commons and U.S. alliance commitments in the Asia-Pacific

- China has accelerated its program of military modernization

- Focused on deterring Taiwanese independence

- Enhancing its anti-access area denial (A2/AD) capabilities
  - Developing anti-ship ballistic missiles that, paired with maritime surveillance and targeting systems, could force the U.S. Navy beyond its operational reach and capacity to project tactical power
  - Enhancing air-denial capabilities in the Taiwan Strait

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17. Ibid.
• Amassing anti-ship cruise missiles that could be used to overwhelm the Aegis Defense System, restraining U.S. freedom of action in the broader Asia-Pacific.20

• Pursuing advanced cyber and space capabilities, including anti-satellite capabilities, and acquiring military lasers and directed-energy assets that could be used to compromise U.S. communications and reconnaissance satellites

**Nuclear-related developments**

• China is attempting to vertically proliferate, building up its survivable road-mobile systems and enhancing its silo-based missiles21
  
  • Less than 30 of the DF-31As, a single-warhead mobile ICBM, will be deployed by 2015
  
  • China has “fewer than 50 ICBMs that can strike the United States, but that it probably will more than double that number by 2025.”

• The PLA navy will continue to attempt to develop a credible near-continuous at-sea nuclear deterrent
  
  • The JL-2, an SLBM, is expected to see initial operational capability around 2014

• China maintains a declared “no-first-use” policy, although it remains unclear when that policy may not apply given the lack of transparency in China’s nuclear activities22

• China remains committed to maintain a “damaging retaliatory nuclear strike response” capability, but has not indicated it is attempting to “sprint to parity” with the United States or Russia.

**RUSSIA**

• If Russia continues to expand upon its economic potential and to invest in military capability, it will prove a more important player in the international security environment23

  • To address deteriorating conventional capabilities and an atrophied military industrial base, the Kremlin embarked on a “wide-ranging military reform and modernization program designed to field a smaller, more mobile, better-trained, and high-tech force.”24

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- Not considered capable of posing an existential threat to NATO forces

**Nuclear-related developments**

- Russia’s most recent Military Doctrine, released in 2010, envisions the potential use of nuclear weapons in conventional conflicts if “the very existence of [Russia] is under threat” in regional wars or “large-scale wars”\(^{25}\)

- In 2011, Russia outlined a 10-year nuclear modernization plan\(^{26}\)
  - A new heavy ICBM is expected to replace the R-36M2 by 2018
  - The Russian Defense Ministry signed a contract for five Borei SSBNs to be in service by 2020
  - Calls for the armed forces’ acquisition of the Bulava SLBM
  - Developing precision long-range air-launched cruise missiles

- Preserving rough parity in strategic nuclear forces will continue to enhance strategic stability in bilateral relations and encourage Russia to behave as a “responsible stakeholder” in regional affairs.\(^{27}\)

**KOREAN PENINSULA**

- North Korean insecurity, fears of encirclement, and tensions on the Korean Peninsula remain constant

- Implications of Kim Jong-un’s rise to power remain uncertain
  - Intent on establishing military credentials
  - Neither a substantial escalation of conflict nor collapse of the Kim regime seem likely in the short term

- North Korean military capabilities
  - Nuclear-related activities: has produced at least a handful of plutonium weapons and is likely pursuing a capability to produce uranium weapons
  - Possesses substantial conventional capabilities, including the world’s fourth-largest army and an arsenal of hundreds of short- and medium-range ballistic missiles
    - 70 percent of its military units are within 100km of the demilitarized zone (DMZ), enabling a potential offensive strike against South Korea
  - Possesses submarines, fast-attack watercraft, and guided-missile patrol boats that could be deployed in an eventual A2/AD capacity

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\(^{27}\) Clark A. Murdock, “Impact of Nuclear Parity (or lack thereof) on Strategic Stability, Deterrence, Extended Deterrence, and Assurance” (presentation to the U.S. STRATCOM Deterrence Symposium, LaVista, NE, August 8, 2012).
The United States will remain committed to its alliance with South Korea, including providing military assistance to the South and maintaining extended deterrence on the Peninsula.

**IRAN**

- Iran is sensitive to perceived challenges to its sovereignty and desires an effective military deterrent.
- Nuclear ambitions are unclear
  - Causes for concern: Ongoing research into nuclear weapons components, expanding stockpile of medium-enriched uranium, and failure to uphold Nuclear Non-proliferation Treaty (NPT) obligations
  - Nuclear capability may embolden the regime to challenge U.S. conventional forces in the region or ignite a cascade of proliferation in the Middle East.
- Military doctrine promotes the use of asymmetric tactics and strategic depth to succeed against a technologically superior adversary
  - Acquisition of cruise and ballistic missiles
  - Potential sea denial capability to briefly close or disrupt traffic in the Strait of Hormuz.

**BROADER MIDDLE EAST/NORTH AFRICA**

- The stability of the region will remain uncertain in the future due to the Arab Spring and potential for future contagious uprisings or political disruptions.
- The Palestinian-Israeli conflict, struggling government in Iraq, and ongoing conflict in Syria all remain threats to regional stability.
- The United States may feel compelled to intervene in these conflicts if allied governments or the diversity of oil supplies become threatened.
- Regime changes or other political realignments could test the durability of U.S. basing agreements in the region and potentially jeopardize military installations—which the United States maintains in Oman, the UAE, Qatar, and Kuwait—or disrupt the operations of the Fifth Fleet.

**SOUTH ASIA**

- U.S.-Pakistan relations have become strained due to lack of alignment on counterterrorism efforts.

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Pakistan’s willingness to tolerate destabilizing elements in its border elements and in Afghanistan to preserve strategic depth as a hedge against conflict with India undercuts U.S. efforts to stabilize Afghanistan and prevent terrorism

- Managing India-Pakistan deterrence will remain important to regional stability
- Proliferation concern
  - Potential state collapse or election of an Islamist government could undermine the security of the arsenal
    - Risk of diversion of fissile material to nonstate actors if centralized control is lost

TERRORISM AND VIOLENT ISLAMISM
- United States is currently managing this threat
  - Elimination of Osama bin Laden and the decapitating drone strikes on al Qaeda’s leadership demonstrates that the United States is consistently managing this threat
- Continued U.S. vigilance will be required in the future
  - Must sustain the military’s ability to detect and eliminate safe havens
  - Must maintain partnerships with foreign militaries and law enforcement

DECLINING CAPABILITIES OF ALLIES AND PARTNERS
- Global economic downturn and introduction of austerity measures in allied countries threaten defense budgets and structure, undermining allied capabilities and capacity to provide military support
  - NATO defense spending “is expected to decline by 2.9 percent, after adjusting for inflation, between 2010 and 2015.”
    - Eroding NATO Europe’s capacity for power projection and ability to execute missions requiring robust lift, logistic, and ISR capabilities
    - The United States will be required to assume a greater disproportionate burden of funding and implementation obligation to maintain current alliances
      - Alternatively, the United States may be forced to rethink its alliance relationships

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Physical Environment

CLIMATE CHANGE AND RESOURCE SCARCITY

- Rising sea levels could result in loss of territory and displaced populaces
  - Could increase the demand for U.S. action, particularly with humanitarian assistance capabilities or deployment of peacekeeping forces

- Water shortages and reduced agricultural production could result in conflict over resources and exacerbate tensions in already unstable regions

- Resource conflicts and territorial disputes in regions such as the Arctic could jeopardize important trade routes and regional stability

DEMOGRAPHICS

- Increased population growth in certain regions, “settlement patterns, and movement across borders will have an effect on international security in the upcoming decades”
  - Stressing resources, threatening territorial integrity, and increasing tensions in already unstable regions
  - Potential increases in urban conflicts could impact U.S. security interests and raise the demand for development assistance

Changes in the Nature of Warfare

CYBER WARFARE

- Cyberspace will likely continue to be an attractive domain of warfare
  - Cost-effective means of compromising the networks of an otherwise technologically superior adversary
  - Difficulty of attribution and lack of distinction between state-sponsored and private activities
    - Russia and China “have highly capable and highly visible nonstate cyber capabilities [in the form of ‘patriot hackers’] that interact with their governments” and execute both sanctioned and unsanctioned attacks on foreign networks.
  - Absence of clearly defined rules of engagement or established means of escalation control
  - The number of countries with established military cyber units, the number of attempted cyber-attacks, and the sophistication of cyber-attacks continue to increase

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SPACE

- Space will likely become increasingly militarized and potentially weaponized as it becomes more accessible
  - Proliferation of anti-satellite weapons and nascent space technologies pose a threat to space assets

- The global economy and several militaries will remain dependent on space for the foreseeable future for navigation, communications, and ISR capabilities

CHEMICAL, BIOLOGICAL, AND RADIOLOGICAL WEAPONS (CBR)

- Acquisition and possible use of CBR by state or nonstate actors will remain a concern for the foreseeable future given the high-magnitude impact of such use

- Terrorist groups have expressed interests in acquiring CBR

- State actors are less likely to covertly use CBR due to deterrence
  - But acquisition by a state actor may result in a regional arms race or embolden states to engage in adventurism or sponsorship of terrorism
  - State actors could covertly deliver a CBR weapon
  - The probability of biological weapon acquisition will continue to increase given the spread of biotechnology
Appendix E

An Elusive Consensus: U.S. Nuclear Policy during the First Obama Term

By John K. Warden

By 2008, it was obvious that the U.S. nuclear posture and all parts of the nuclear weapons complex were in need of updated policies, modernized capabilities, and above all, renewed intellectual attention. With the Soviet nuclear threat long since passed, the United States had to determine the appropriate role for nuclear weapons in its national security strategy and invest in whatever capabilities were required. At the same time, the United States needed to decide on an appropriate role for cooperative measures, such as arms control, that could limit nuclear threats to the United States. The Strategic Arms Reduction Treaty (START) was set to expire in December 2009, leaving the United States and Russia without a verifiable monitoring and inspection regime for nuclear weapons.

The Barack Obama administration took office in January 2009, determined to renew the United States’ focus on arms control while also restoring the bipartisan consensus that exited during the Cold War on the U.S. strategic posture. Administration officials, backed by many in the Washington policy community, had a plan that they felt would recapitalize the U.S. nuclear deterrent, improve strategic stability with Russia, and restore U.S. nonproliferation credibility. During his first term, President Obama delivered the Prague speech, signed and ratified New START, helped shepherd through a final document at the 2010 Nuclear Nonproliferation Treaty (NPT) Review Conference, hosted the first Nuclear Security Summit, and substantially increased the budget for the National Nuclear Security Administration (NNSA). Despite these accomplishments, the administration was unable to forge an enduring consensus to support an appropriate U.S. nuclear posture for the coming decades.

While bipartisan consensus is not an end in itself, it is an important policy goal, especially for nuclear weapons policy. A bipartisan nuclear weapons policy sends a clear signal of U.S. intentions to adversaries and allies alike, strengthening U.S. nuclear deterrence and assurance. Perhaps more importantly, bipartisanship helps to sustain support for a set of policies over time. The development and deployment of the next generation of U.S nuclear weapons platforms will require sustained investment over multiple Congresses and administrations that is only possible with bipartisan support.

This article describes what is meant by a sustainable consensus, evaluates the steps that the Obama administration took between 2009 and 2012 to try to unite Democrats and

33. The author would like to thank Clark Murdock for his comments on earlier drafts and Nathan Donohue, Matthew Fargo, and Sarah Weiner for their invaluable research assistance.
Republicans behind a common vision of the U.S nuclear posture, and concludes by offering some lessons learned. The facts and conclusions of this article were informed by more than 20 interviews with policymakers, analysts, and advocates who each played an important role in the attempt to build a consensus and/or closely watched the administration’s efforts. Many of the interviewees are quoted anonymously throughout.

IN SEARCH OF AN ELUSIVE “CONSENSUS”

The idea of a “consensus” seems simple—Merriam-Webster’s defines it as “a general agreement” or “group solidarity in sentiment and belief.” However, those definitions raise at least two questions. First, how far does agreement have to extend in order for there to be consensus? Moreover, what separates a bargain from an agreement? Second, to which groups must the agreement extend? In U.S. foreign policy, consensus can extend broadly throughout the U.S. public or can be achieved more narrowly through bipartisan majorities in Congress. This article focuses on the political dynamics in Washington and distinguishes between three types of policy coalitions relating to U.S. nuclear weapons policy:

- A **consensus** is a coalition of people who agree on the fundamental role and utility of nuclear weapons as well as the appropriate policy and posture the United States should pursue.

- An **agreement** is a policy compromise undertaken by a coalition of people who disagree on the fundamental role and utility of nuclear weapons, but nonetheless agree, to some extent, on the policy and posture the United States should pursue.

- A **bargain** is a political compromise undertaken by a coalition of people who, to a large extent, disagree on both the fundamental role and utility of nuclear weapons and the policy and posture that the United States should pursue, but make concessions to generate sufficient support for a compromise policy.

At the start of the Obama administration, there was a sense among many in the policy community that the bipartisan basis of U.S. nuclear weapons policy had eroded. During the Cold War, the condition of enmity between the United States and the Soviet Union helped to enforce a consensus. According to Charles Kupchan and Peter Trubowitz, “Anticommunism made it politically treacherous to stray too far to the left, and the public’s worries about nuclear Armageddon reined in the right.” However, the extent of the previous consensus has been exaggerated. Among the U.S. public, many supported a strong U.S. nuclear deterrent, but as early as the 1950s, there was a popular nuclear disarmament movement. In Washington, the problem has been even worse. According to one interviewee, “people in the nuclear community so much like to fight about things they disagree about that they forget what they agree about.”

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During the Cold War, there were times that Congress and the president united behind particular policies. For example, during the Richard Nixon administration, the Anti-Ballistic Missile Treaty was signed by Nixon and supported by a broad bipartisan consensus in the Senate; Democrats voted 48–1 in favor, Republicans 40–1.37 Yet later, during the Ronald Reagan administration, U.S. nuclear weapons policy was much more controversial and, while supported by Congress, could enjoy only a narrow agreement between the two parties. Throughout the 1980s, there were various votes to fund research, development, and deployment of the Peacekeeper intercontinental ballistic missile (ICBM). Each successful vote came with the support of some Democrats—at most 12 senators and 91 representatives, respectively—but no vote achieved anything close to a majority of Democrats in favor.38

For the Obama administration, the goal was to find a set of policies that would strengthen U.S. nuclear deterrence, extended deterrence, and assurance while at the same time rescuing the arms control agenda, improving the nonproliferation regime, and recapitalizing the U.S. nuclear weapons complex. Nuclear issues are no longer salient with the public, so a national consensus was out of the question. Instead, a bipartisan consensus in Washington would have been ideal, but an agreement, or even bargain, among key members would have been sufficient.

THE STRATEGIC POSTURE COMMISSION

The attempt to form a bipartisan consensus began during the George W. Bush administration with the creation of the bipartisan Congressional Commission on the Strategic Posture of the United States. The commission was established in the National Defense Authorization Act (NDAA) of Fiscal Year (FY) 2008 and tasked to “examine and make recommendations with respect to the long-term strategic posture of the United States.”39 The commission itself had a broad mandate, but, according to one person interviewed, it was established in order to resolve a specific congressional dispute. By 2008, key members of Congress recognized that the U.S. nuclear weapons complex and nuclear weapons themselves were aging and in need of modernization, but these members were unable to reach agreement on the appropriate way forward. Many members supported a new Reliable Replacement Warhead (RRW), which would have replaced aging weapons with a modern design, while others opposed “new” nuclear weapons and sought an alternate model for warhead modernization.

The debate over the RRW was one of the first signs of an emerging disagreement between groups with different interests and priorities. On the right were those who supported the RRW, believing that it was a needed capability to maintain and enhance U.S. nuclear deterrence in the 21st century. On the left were those who were more concerned with nonproliferation, arguing that developing “new” nuclear weapons like the RRW would harm U.S. nonproliferation credibility internationally.40 The disagreement reflected a more fundamen-

38. Ibid., p. 16.
40. The debate over the RRW was of course far more sophisticated and complex; however, this fundamental disagreement framed much of the debate.
tal chasm: conservatives generally think that the United States can best enhance its security by improving military capabilities, while liberals reason that international cooperation is the most important variable determining U.S. security.41

In September 2008, Secretary of Energy Samuel Bodman and Secretary of Defense Robert Gates released a policy paper in support of the RRW.42 Despite their support, the RRW was defeated in Congress later that year. Rep. Ellen Tauscher (D-CA), who at the time was the chair of the House Strategic Forces Subcommittee, said that the RRW died because it was “presented poorly.”43 Tauscher, who one interviewee noted was an early supporter of the RRW, acknowledged the need for modernization but proposed using tested warhead designs as an alternative.44

The Strategic Posture Commission attempted to build a centrist consensus that could bridge the divide on the RRW and U.S. nuclear posture more broadly. The commission’s final report argues that the United States must have “a strong deterrent that is effective in meeting its security needs and those of its allies” but that this must be integrated into a comprehensive approach that includes “additional cooperative measures of a political kind, including arms control and nonproliferation.”45 Key findings include: that the U.S. nuclear deterrent no longer plays a central role in military planning but still remains crucial for some important problems; that the United States should seek a modest strategic arms control agreement with Russia so there is a successor to START when it expires; and that NNSA requires additional funding and autonomy if it is to maintain a safe, secure, and effective nuclear arsenal. The one issue where commissioners could not generate agreement was ratification of the Comprehensive Test Ban Treaty (CTBT).

The Strategic Posture Commission Report was, according to almost all of the people interviewed, a partial success. It came to the important conclusion that a sustainable U.S. nuclear posture would require both modernization of the nuclear arsenal and additional arms control agreements, and it developed compromise language that set the parameters for a potential way forward. It was also well-timed: the commission’s interim report was delivered to Congress the month before Obama was inaugurated. Perhaps just as important, one analyst noted, many of the key contributors to the Posture Commission—including Ashton Carter, Michele Flournoy, James Miller, and Bradley Roberts—went on to serve in important positions in the Department of Defense and took many of the commission’s ideas with them.

While the commission was successful in finding agreement on a set of words, it came short of its primary goal: to develop a working bipartisan consensus that could drive U.S. nuclear posture for the coming decades. To some, the problems started with the way the

41. Kupchan and Trubowitz, “Grand Strategy for a Divided America.”
44. Tauscher was originally a supporter of the RRW but withdrew her support after it was clear that the program was a political nonstarter.
45. Perry et al., America’s Strategic Posture, p. xv.
commission was constructed; according to a person familiar with the process, the commissioners were chosen by members of Congress and “came with expectations from their sponsors.” During their deliberations, fundamental differences emerged over the security environment (in particular, the threat posed by Russia), the importance of committing to a world without nuclear weapons, and the CTBT. Disagreements were so stark that near the end of the process, there was doubt about whether a compromise would be possible. According to one account, Secretary William Perry, the commission’s chair, was unhappy with the emerging product and threatened to withdraw. At the conclusion, each of the commissioners was willing to sign the compromise document, but Perry insisted that the report include a separate “chairman’s preface” that would reflect his personal views. The Posture Commission’s agreement, however, was described by one observer as a “very thin veneer.” After the report’s release, the commissioners were unwilling to unite as a group and truly commit to and advocate the compromise. As a result, the commission report was selectively quoted—“cherry picked” according to one observer—by Democrats and Republicans alike to emphasize their positions, but it was never used to drive a bipartisan compromise.

OBAMA’S FIRST YEAR

Consumed with other priorities (including assembling a completely new government), President Obama used his first year, in terms of nuclear policy, largely to set the groundwork for the interrelated initiatives that he would enact in 2010. One interviewee said that, of the subcabinet individuals involved with nuclear issues, the vast majority appointed by Obama had centrist records. Nonetheless, the president made headlines on April 9 in Prague when he argued that the United States should “seek the peace and security of a world without nuclear weapons,” while also maintaining a “safe, secure, and effective” nuclear arsenal “as long as these weapons exist.” Clarifying the timeframe when nuclear disarmament might occur, Obama said, “This goal will not be reached quickly—perhaps not in my lifetime.” In the rest of the speech, Obama outlined a policy agenda that very much resembled the compromise present in the Strategic Posture Commission Report, including the need to pursue a follow-on arms control agreement with Russia and modernize U.S. nuclear weapons and related infrastructure. The one place where Obama demurred was in calling for the ratification of the CTBT.

While the rhetoric of the president’s speech was in some ways novel, and certainly in contrast with the Bush administration’s positions, the underlying policy was not new. The speech was preceded by a set of editorials coauthored by Henry Kissinger, Sam Nunn, William Perry, and George Shultz, which argued that the United States should make a world free of nuclear weapons a long-term policy goal. Moreover, as a party to the NPT, the United States had already committed “to pursue...effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament.” Secretary Gates, who was


retained from the Bush administration, supported disarmament as a long-term goal, but he said it would not be reached in the near term.\footnote{49} Nonetheless, Obama’s Prague vision was always a thorn in the side of those attempting to build support for a sustainable U.S. nuclear posture. Many on the right felt that the president’s disarmament rhetoric strayed from the centrist agreement; critics interpreted the long-term goal as dangerous and naïve and worried that it would complicate efforts to secure funding for modernization. According to one partisan, once zero was established as a goal, it “became corrosive”—any step taken by the administration was perceived as a step toward zero. Perhaps more important, the renewed focus on nuclear disarmament made it difficult to justify substantial, medium-term investments in nuclear arsenal modernization. Some believers in zero, perhaps more optimistic about the future security environment than the president, did not want to invest billions of dollars recapitalizing capabilities that were on their way to extinction.

In May, the United States and Russia officially began to negotiate the terms of New START, hoping to have a new treaty negotiated before START expired in December 2010.\footnote{50} By the end of the year, the administration was unable to reach an agreement with Russia and had made little progress in securing needed funding for nuclear arsenal modernization. Early in 2009, the Senate proposed to include $1 billion in funding for NNSA, including complex modernization funds, in the U.S. Recovery and Reinvestment Act.\footnote{51} However, funding for the nuclear weapons complex was opposed by many in the arms control community and was not included in the final version of the bill.\footnote{52} The Obama administration’s FY 2010 budget request for NNSA eliminated spending for the RRW (which had not received money from Congress in the last two budgets) and asked for $6.3 billion for nuclear weapons work at the Department of Energy—an increase of $4 million.\footnote{53} Republican lawmakers, including Rep. Rodney Frelinghuysen (R-NJ), ranking member of the House Appropriations Energy and Water Subcommittee, were critical of the administration for proposing what was essentially a flat (and in their view inadequate) budget for NNSA weapons activities.\footnote{54} Nonetheless, appropriators in the House and Senate approved the FY 2010 NNSA budget at levels close to the administration’s request.

Going forward, the fates of New START and nuclear modernization became increasingly intertwined. A bipartisan group on national security-minded senators, sensing both a challenge and an opportunity, requested that President Obama submit an estimate of the cost for

\footnotesize{\begin{itemize}
\item \footnotetext{51} H.R. 1, amendment no. 98, 111th Cong. (January 30, 2009), http://www.gpo.gov/fdsys/pkg/BILLS-111hr1as/pdf/BILLS-111hr1as.pdf.
\end{itemize}
nuclear modernization (in FY 2011 and the out years) alongside New START.55 The final FY 2010 NDAA, which was signed by the president in October, made the link official. In Section 1251, it requires the administration to report to the Defense, Appropriations, and Relations Committees on its plan to “enhance the safety, security, and reliability of the nuclear weapons stockpile of the United States,” “modernize the nuclear weapons complex,” and “maintain the delivery platforms for nuclear weapons.”56

THE NUCLEAR SPRING

In the first half of 2010, the Obama administration moved from planning to implementation. A set of nuclear-related policies were introduced in such rapid succession that some referred to early 2010 as the “Nuclear Spring.” These interrelated policies revealed both the administration’s understanding of the substance of a bipartisan agreement and also its strategy for coalition-building.

On February 1, the Obama administration released its FY 2011 budget request along with the Quadrennial Defense Review report and Ballistic Missile Defense Review report. The FY 2011 budget requested $11.2 billion for NNSA, a 13.4 percent increase from FY 2010, including an approximately 10 percent increase in the budget for weapons activities. As part of the rollout for the budget, Vice President Joe Biden delivered a speech at the National Defense University that reiterated the twin goals of pursuing a world without nuclear weapons while also maintaining a “safe, secure, and effective arsenal as long as we still need it” (including investing in nuclear complex modernization).57 However, unlike during the previous year, the administration backed its rhetorical commitment with a substantial increase in its request for NNSA’s budget—a unilateral olive branch to Republicans who were more concerned with strengthening the U.S. nuclear deterrent than arms control and nonproliferation. Liberals, by contrast, were impressed with the perceived success of the 2010 NPT Review Conference, which was able to generate a final document in part because of Obama’s emphasis on nuclear disarmament as a long-term goal.

The administration’s nuclear policy was further clarified in April when it unveiled its Nuclear Posture Review (NPR) report and the details of New START. Key aspects of the NPR include: balancing the long-term pursuit of a world without nuclear weapons with near-term investments in the U.S. nuclear deterrent; making the prevention of nuclear proliferation and nuclear terrorism a top priority; and reducing the role of nuclear weapons by issuing a revised declaratory policy and emphasizing the increased relative importance of conventional capabilities. With very few exceptions, the NPR followed the recommendations of the Strategic Posture Commission. According to one interviewee, the NPR was “as close to a deal that [the administration] could have come up with, even though people on the right were

unhappy, particularly with changes in declaratory policy.” Moreover, the NPR was formulated in an arduous interagency process that attempted to unite all relevant executive constituencies. As a result, many in the administration hoped that the NPR could serve as the basis for a bipartisan consensus.  

New START was a similarly modest step that was in line with the recommendations of the Strategic Posture Commission. The treaty limited deployed, treaty-accountable nuclear warheads at 1,550 for each country and allowed seven years for implementation. It also kept in place—albeit in an updated and simplified form—many of the original verification procedures from START that Democrats and Republicans alike saw as stabilizing. Nonetheless, when New START was sent to the Senate for advice and consent it faced stiff opposition. Conservatives, including some who had served on the Posture Commission, argued that the reductions were too steep and that verification was too weak. Explaining the difference, one interviewee said that it was easy for conservatives to agree to “arms control” without specifics, but it would take a much deeper commitment to support a treaty negotiated by the Obama administration. Centrist Republicans, by contrast, had few objections to the details of the treaty, but wanted to ensure that the administration had an adequate plan for weapons modernization before it was ratified.  

Along with New START, President Obama sent a report to Congress—as required in Section 1251 of the NDAA—outlining the administration’s plan to modernize the nuclear weapons complex and strategic systems. The administration proposed spending approximately $80 billion over 10 years on nuclear complex modernization, including the construction of a Uranium Processing Facility (UPF) and Chemistry and Metallurgy Research Replacement (CMRR) facility, as well as $100 billion on updated nuclear delivery systems over the same period. The president continued to demonstrate his commitment in September when he supported a continuing resolution for FY 2011 with an anomaly for NNSA. While most programs’ budgets stayed flat, NNSA’s was increased by $624 million to $7 billion, including a 10 percent increase for nuclear weapons programs and complex modernization.  

However, the president had a difficult time getting New START across the finish line. At the time, many in the administration held out hope that they could generate a bipartisan agreement. Administration officials made a special effort to convince Senator Jon Kyl (R-AZ) to support ratification; Kyl was seen as the leading voice of the Republican opposition, and some in the administration believed that with his support the majority of the Republican caucus would follow. In response to the concerns of Kyl and others, the administration released an update to the 1251 Report that raised the complex modernization estimate to $85 billion over 10 years, including an increase of $600 million in FY 2012 and $4.1 billion over the next five years (compared to the original 1251 Report).  

To formalize the commitment, the final  

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58. The NPR says, “A balanced, integrated, and sustained strategy will require a strong bipartisan consensus. Forging such a consensus is a central purpose of this NPR.” See U.S. Department of Defense, Nuclear Posture Review Report, p. 2.  
60. According to an interviewee familiar with the process, the change was caused in part by updated construction profiles done by NNSA. The estimated cost of the CMRR facility was raised from $3 billion to $3.7–$5.8 billion, and the estimated cost of UPF was raised from $1.3 billion to $4.2–$6.5 billion (for each range, the lower number is 50 percent confidence, and the upper number is 85 percent confidence).
“Resolution of Advice and Consent to the Ratification of the New START Treaty” states that the United States is committed to maintaining its nuclear weapons infrastructure, providing resources “at a minimum at the levels set forth in the President’s 10-year plan provided to the Congress pursuant to [the 1251 Report].”

On December 22, a bipartisan coalition in the Senate offered its advice and consent in favor of ratification of New START; 13 Republicans joined 58 Democrats in voting for the treaty, while 26 Republicans, including Sen. Kyl, voted against it. With only 71 votes in favor, New START received less support in the Senate than any previous arms control agreement that was ratified. Many of the people interviewed felt that Kyl never had any intention of voting for the treaty. Instead, one interviewee argued that Kyl wanted to raise the price of New START such that the administration would have no carrots left to offer for ratification of the CTBT, which Kyl more adamantly opposed. Defenders of Kyl argue that he was truly on the fence until the end. According to one interviewee, “Kyl thought that modernization was the price for New START to be considered, not ratified.”

Nonetheless, President Obama signed New START on February 2, 2011, and, reflecting the Resolution of Ratification, confirmed his commitment to recapitalize the strategic nuclear triad, work toward a follow-on agreement with Russia on nonstrategic nuclear weapons, and accelerate the design of and request full funding for the construction of the CMRR building and the UPF. Those commitments, along with the provisions of New START, made up the contours of a bargain between the executive branch and the Senate. Unfortunately, the bargain was far short of a sustainable agreement.

The failure to generate a bipartisan agreement is not surprising given the broader political context. In recent years, Congress has been more polarized than at any time since Reconstruction. Driven by a number of factors such as gerrymandered districts and more partisan news, the Republican Party has moved ideologically to the right, while the Democratic Party on average has remained in about the same spot. The obvious result is that compromise on divisive issues is nearly impossible, as demonstrated by the fight over health care reform. Unfortunately, national security policy is not immune from polarization. According to one interviewee, the Republican caucus in Congress decided to oppose all administration priorities, including New START, after the health care debate in 2009 and early 2010. More broadly, studies of bipartisan foreign policy have concluded that while foreign policy threats do contribute to bipartisanship, other positively correlated variables include a strong national economy and regionally diverse electoral conditions; generating bipartisan foreign policy

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has always been difficult, even during the Cold War.\textsuperscript{65} Therefore, in 2010 and 2011, when the economy was weak and the Congress was ideologically polarized, the conditions were ripe for partisanship, even on an issue as sensitive as the U.S. nuclear posture.

**THE UNRAVELING OF THE BARGAIN**

Unfortunately, the bargain on modernization was tenuous from the beginning. Some in the Obama administration and the arms control community saw the second 1251 Report as an estimate for the cost of modernization over the next 10 years, which would be accompanied by additional reductions in the U.S. nuclear arsenal. By contrast, Republicans in Congress, along with others in the administration, saw the 1251 Report as a commitment by the president to meet particular budget numbers in exchange for ratification of New START. According to one interviewee, “the administration committed to the capabilities in the 1251 Report, not the numbers.” Under the surface, there was also a lack of consensus within the administration. The White House felt, one interviewee argued, that it was “burned” by the Department of Defense (DOD) on the NPR; the National Security Staff thought that not enough of the Prague vision made it in the final document.

The difference between the two perspectives was clear in March 2011 when National Security Adviser Tom Donilon gave a speech at the Carnegie Endowment’s conference in which he announced that the administration was “making preparations for the next round of nuclear reductions,” including looking at “potential changes in targeting requirements and alert postures.”\textsuperscript{66} One person interviewed argued that the agreement on the U.S. strategic posture—to the extent that it existed in the first place—started to fall apart after Donilon’s speech. It incited vociferous protests from Republicans in Congress and conservatives outside of government who feared that the administration would subordinate sound strategy to ideologically driven reductions.

While Donilon’s speech did reopen debate over the future of the U.S. nuclear force, it did not upset the bargain over nuclear complex modernization. In April, NNSA submitted to Congress its FY 2012 Stockpile Stewardship and Management Plan, which highlighted that the administration’s budget request of $11.7 billion for NNSA for FY 2012, including $7.6 billion for weapons activities, was $600 million more than the previous year’s.\textsuperscript{67} The first real crack in the bargain came in June, four months after New START entered into force, when the Republican-led House Appropriations Energy and Water Development Subcommittee cut the president’s budget request for NNSA, including an approximately $700 million cut in weapons activities.\textsuperscript{68} Not having been part of New START ratification, the House, one interviewee


argued, had “no ownership” over the deal on nuclear modernization. In response, the Democrat-led Senate Appropriations Subcommittee on Energy and Water Development, which had historically protected NNSA from House cuts, followed suit and approved a budget that was higher than the House’s but lower than the president’s. The Senate’s decision, according to many of the people interviewed, was influenced by the mandatory spending caps of the Budget Control Act (BCA), which was signed a month before the Senate appropriators decided to cut NNSA’s budget.

After the NNSA budget was cut, a number of arms control advocacy groups sensed an opportunity and became more vocal in pushing for additional cuts to nuclear weapons budgets. Many on the left, several interviewees noted, thought that the modernization deal was “too high a price for the CTBT, let alone New START,” and, therefore, were more than willing to accept lower budget numbers.

Plans for modernization came under additional strain in 2012. In February, the Obama administration requested $11.5 billion for NNSA in FY 2013, $7.6 billion of which was for nuclear weapons activities. The overall budget increased 4.9 percent over the FY 2012 appropriation; the weapons account increased by 5 percent. However, in March Energy Secretary Steven Chu and Defense Secretary Leon Panetta submitted a letter to Congress that argued that “the realities and the timing of the passage of the BCA, the NNSA appropriation for FY12 and other constraints” forced the administration to make changes to the long-term plan for nuclear modernization, including “stretching out the life extension programs,” “deferring construction of Chemical and Metallurgical Research Replacement facility (CMRR) for at least five years, and using existing facilities to meet near-term plutonium needs.”

A majority of the blame for the unraveling of the nuclear complex bargain lies with the changing budget realities in the two years after the original 1251 Report, including the BCA requirement to reduce the defense budget by $487 billion over 10 years. The renewed emphasis on fiscal discipline in Washington also created a chasm between Republican defense hawks, who continue to fight for nuclear weapons programs, and budget hawks, who would like to trim overall federal spending, including at both the DOD and NNSA.

However, some blame also lies with the Obama administration. The president overreached when he committed to simultaneously pursue the construction of the CMRR facility and the UPF. The cost estimates for both buildings had increased substantially, and, at the

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70. It should be noted, however, that this advocacy campaign followed the BCA and the original cuts by the House appropriators, not the other way around.
outset, there were doubts about whether NNSA would have the money to execute two large construction projects and a major life extension program for the B-61 gravity bomb concurrently. The problem was compounded by internal problems at NNSA that prevented the organization from effectively predicting and controlling costs of major projects.

The administration made a second mistake, according to one person interviewed, in not selling the change in its plutonium strategy to Congress early in the process. Delaying CMRR, and therefore going back on the commitment that Obama made to Congress when New START was approved, generated a great deal of bipartisan animosity and distrust in Congress. Eventually, the administration released an alternate plutonium strategy that most consider satisfactory, but the damage was already done. According to one interviewee, for opponents, CMRR had already become “symbolic of the commitment to fundamentals.”

CONCLUSION

Despite the best efforts of many in the administration, there was never a “consensus” on the role of nuclear weapons in U.S national security strategy during Obama’s first term, or even more narrowly on a specific way forward for both arms control and modernization of the U.S. nuclear arsenal (and its accompanying complex). Instead, there was an agreement on a set of words in the Strategic Posture Commission Report and a bargain between the White House and Senate Republicans, negotiated around the ratification of New START.

Both the agreement and the subsequent bargain were tenuous from the beginning. The agreement highlighted in the Strategic Posture Commission concealed underlying disagreement about the security environment, the need to move toward a world without nuclear weapons, and the enduring role and importance of nuclear weapons. The New START bargain was similarly flimsy. Some in the Obama administration saw the second 1251 Report as a nuclear modernization cost estimate, which would be accompanied by additional reductions in the U.S. nuclear arsenal over the next 10 years. Republicans in Congress saw it as a spending floor that was agreed to in exchange for ratification of New START.

However, a large part of the blame for the inability to generate a consensus, agreement, or even sustainable bargain, lies with the political circumstances in Washington. Polarization made a consensus or agreement highly improbable. At the beginning of Obama’s term, Republicans and Democrats in Congress were more polarized ideologically than at any time during the Cold War. To make matters worse, New START was considered after an extremely divisive debate over health care reform. Even a sustainable bargain proved elusive. After the administration endorsed the second 1251 Report, the Budget Control Act passed, causing both Congress and the administration to reevaluate their priorities and make difficult tradeoffs. As a result, the New START bargain started to fray.
RECOMMENDATIONS

For the United States to find agreement on a sustainable path forward, policymakers and experts must find areas of compromise on capabilities and policies to pursue despite enduring disagreements over the security environment, the need to move toward a world without nuclear weapons, and the role and importance of nuclear weapons. For such a bargain to endure, it must include a place for both a modernized nuclear arsenal and cooperative measures such as arms control and a strong nonproliferation regime. Ironically, funding for modernization, a stronger Republican priority, will be easier to achieve during a Democratic administration, while additional arms control (or reductions in the U.S. arsenal) will be easier to achieve during a Republican administration. Under these circumstances, the party in the White House will have natural allies across the aisle.

Congress’s increased focus on controlling budgets and curbing the deficit—exemplified by the Budget Control Act—will make securing funding for next-generation nuclear delivery systems and the nuclear weapons complex even more difficult in the future. In any case, it is remarkably hard to implement long-term programs given the way the U.S. budgetary process works. As one interviewee put it, “no long-range plan survives first contact with the next budget cycle.” Even the best-intentioned administration has to deal with annual budget requests, appropriating committees more interested in water projects than nuclear weapons, and the additional uncertainty created by continuing resolutions. Going forward, it is necessary to reevaluate what is affordable, making hard decisions between what is required and what is nice to have. Part of the solution must be increased efficiency, including better cost-estimates and project management, at both NNSA and the weapons labs.

A future bargain on nuclear policy must extend throughout the executive and legislative branches, ensuring that all parts of the government are invested in maintaining necessary funding. To sustain such a bargain, the administration must be prepared to consult with Congress early and often, especially when it plans to alter its strategy or funding priorities.
About the Authors

Clark A. Murdock, a senior adviser at CSIS, specializes in strategic planning, defense policy, and national security affairs. He joined CSIS in January 2001 and subsequently co-authored (with Michele Flournoy) *Revitalizing the U.S. Nuclear Deterrent* (CSIS, 2002). He is the principal author of *Improving the Practice of National Security Strategy: A New Approach for the Post-Cold War World* (CSIS, 2004). And he is the lead investigator of a two-year study on U.S. Defense Department reform entitled *Beyond Goldwater-Nichols: Defense Reform for a New Strategic Era* (CSIS, 2004). He now leads the Project on Nuclear Issues, building a networked group of young professionals in the nuclear community. In 2000, Murdock was a visiting professor at the National War College, where he taught courses on military strategy, the national security process, and military innovation. From 1995 to 2000, he served as deputy director of the U.S. Air Force’s headquarters planning function, where he helped define a coherent strategic vision for 2020 and institutionalize a new long-range planning process. Prior to joining the Air Force, Murdock headed the Policy Planning Staff in the Office of the Under Secretary of Defense for Policy; from 1987 to 1993, he served as the senior policy adviser to House Armed Services Committee (HASC) chairman Les Aspin; and prior to HASC, he was employed at the Central Intelligence Agency. He also taught political science for 10 years at the State University of New York at Buffalo, during which time he authored *Defense Policy Formation: A Comparative Analysis of the McNamara Era* (SUNY, 1974). Dr. Murdock is an honors graduate of Swarthmore College and holds a Ph.D. from the University of Wisconsin at Madison.

Stephanie Spies is a program coordinator and research assistant at the Center for Strategic and International Studies (CSIS), where she works with the Defense and National Security Group and the Project on Nuclear Issues (PONI). She is responsible for leading a number of PONI initiatives, including the yearly conference series, the Nuclear Scholars Initiative, the Live Debate Series, and editing publications such as *Nuclear Notes* and the *Conference Series Journal*. She previously interned for PONI and has been a frequent contributor to the *PONI Debates the Issues* blog. After receiving a B.A. from Northwestern University in political science and French, she joined CSIS as a recipient of the William J. Taylor Jr. debate internship. As a debater for Northwestern, she was the Top Individual Speaker and Champion of the 2011 National Debate Tournament.

John K. Warden is a master’s candidate in the Security Studies Program at Georgetown University, concentrating in U.S. national security, and a research assistant at the Center for Strategic and International Studies (CSIS), where he serves as executive director of the PONI Next Generation Working Group on U.S.-China Nuclear Issues and Relations. For the
last three years, Warden has worked on various projects relating to nuclear deterrence, arms control, missile defense, and U.S. alliances as a research assistant and program coordinator for the Project on Nuclear Issues (PONI) and Defense and National Security Group (DNSG). He was executive director for the PONI Next Generation Working Group on U.S.-Russian Arms Control, coordinated the CSIS U.S.-Japan-ROK Track II Trilateral Dialogue on Nuclear Issues, and twice directed the PONI Nuclear Scholars Initiative, including editing the accompanying journal. Warden has published articles in Proceedings Magazine, PacNet, and 2012 Global Forecast and was a frequent contributor to the PONI Debates the Issues blog. He earned his B.A. in political science and history from Northwestern University and remains involved with the Northwestern Debate Society as an assistant coach and visiting instructor.
Cover photos: (Top) Four B-2 Spirits, like this one flying over the Pacific Ocean, arrived at Andersen Air Force Base, Guam, Oct. 7 as part of a continuous bomber presence in the Asia-Pacific region. (U.S. Air Force photo/Staff Sgt. Bennie J. Davis III) (Bottom) President Barack Obama delivers his first major speech stating a commitment to seek the peace and security of a world without nuclear weapons in front of thousands in Prague, Czech Republic, April 5, 2009. (Official White House Photo by Pete Souza)