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MEMORANDUM

To: Foreign Policy Advisors, Presidential Campaigns

From: Guy Quinlan, President, and John Burroughs, Executive Director, Lawyers Committee on Nuclear Policy, New York City (johnburroughs@lcnp.org, (212) 818-1861, www.lcnp.org)

Re: **Policies Regarding Nuclear Arms Control and Disarmament in the Next Administration**

Introduction and Summary

A key U.S. foreign policy is the pursuit of the peace and security of a world without nuclear weapons. That policy recognizes that ‘nuclear security’ in the broader sense requires the global elimination of nuclear weapons. It serves to protect the safety of Americans and all peoples. It is in keeping with American values. And it is legally required by Article VI of the Nuclear Nonproliferation Treaty¹ and by the universal obligation largely based on Article VI, as stated by the International Court of Justice, “to pursue in good faith and bring to a conclusion negotiations leading to nuclear disarmament in all its aspects under strict and effective international control.”²

This memorandum outlines policies that the Lawyers Committee on Nuclear Policy (LCNP) recommends be adopted by the next administration in order to vigorously pursue the peace and security of a world without nuclear weapons. While we recognize the importance of measures relating to non-proliferation and nuclear security, the focus of this memorandum is on nuclear arms control and disarmament. In summary, LCNP recommends that the next administration:

- 1) *Pursue multilateral negotiations on the global elimination of nuclear arsenals.*
- 2) *End new nuclear weapons modernization programs which are expensive, provocative, and destabilizing, including the program for a new nuclear Long Range Stand-Off Air-Launched Cruise Missile and the program for replacement of the current generation of land-based intercontinental ballistic missiles (ICBMs) with the new “Ground Based Strategic Deterrent”.*
- 3) *Ratify and work to bring into force the Comprehensive Test Ban Treaty, and to negotiate a prohibition of the production of fissile materials for nuclear weapons and obligations to secure, reduce, and eliminate existing stockpiles of weapons-usable fissile materials.*
- 4) *Pursue negotiations with Russia on bilateral reductions of the U.S. and Russian nuclear arsenals.*

¹ “Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control.” Article VI, Nuclear Nonproliferation Treaty.

² *Legality of the Threat or Use of Nuclear Weapons, International Court of Justice, Advisory Opinion of 8 July 1996, I.C.J. Reports 1996, p. 226, para. 105(2)F (unanimously adopted).*

5) *Lower the operational readiness of U.S. nuclear forces to reduce the risks of nuclear war and to facilitate moving forward on nuclear disarmament.*

6) *Initiate a moratorium on flight testing of hypersonic precision weapons.*

7) *Drastically reduce the role of nuclear weapons in the U.S. national security posture in accordance with the U.S. policy objective of non-use of nuclear weapons forever and with the requirements of international humanitarian law protecting civilians from the effects of warfare.*

These recommendations are explained below.

Recommendations and Rationales

1) *Pursue multilateral negotiations on the elimination of nuclear arsenals.* The United States is not participating in the 2016 UN Open-ended Working Group Taking Forward Multilateral Negotiations on Nuclear Disarmament, nor did it participate in the 2013 Open-ended Working Group. The United States also has had a longstanding position of opposing commencement of negotiations on complete nuclear disarmament in the Conference on Disarmament. This approach must change. There is no reason not to at least begin negotiations on the legal architecture for a world free of nuclear weapons. The aim should be a Nuclear Weapons Convention that prohibits and eliminates nuclear arms worldwide. Every achievement requires a beginning.

U.S. support for and participation in multilateral negotiations on nuclear disarmament is completely consonant with the policy of pursuing the peace and security of a world without nuclear weapons and is legally required by NPT Article VI and the universal obligation articulated by the International Court of Justice. A continuing refusal of the United States and other states possessing nuclear arsenals to meet that obligation is not only extremely unwise due to the risks and costs, material and moral, of ongoing reliance on nuclear weapons; it also undermines international law generally, and therefore undermines a workable and sustainable international order capable of meeting the multiple challenges facing the world.

Negotiations can be pursued in United Nations forums, in the NPT review process, or in other settings, such as Nuclear Disarmament Summits building on the success of the Nuclear Security Summits. Within the context of such negotiations, or separately, an official international body or mechanism should be created to monitor nuclear weapons. Such an institutional capability would help develop reliable information and thus the trust needed for a workable process of nuclear disarmament. Other measures, unilateral, bilateral, and plurilateral, can and should be pursued and implemented while the negotiations, which may take years, are underway.

2) *End new nuclear weapons modernization programs which are expensive, provocative, and destabilizing, including the program for a new nuclear Long Range Stand-Off Air-Launched Cruise Missile and the program for replacement of the current generation of land-based intercontinental ballistic missiles (ICBMs) with the new “Ground Based Strategic Deterrent”.*

Several aspects of the current plans for modernization of the nuclear arsenal appear to violate treaty obligations of the United States under Article VI of the Nonproliferation Treaty and specific commitments which the United States has made during the NPT review process. Such violations could have grave consequences at a time when the entire nonproliferation regime is under severe

pressure. All of the NPT nuclear weapons states, including the United States, have repeatedly acknowledged the need to comply with Article VI. For example, at the 2010 NPT Review Conference all the participating state parties made an explicit commitment to pursue policies “fully compatible” with “the objective of achieving a world without nuclear weapons.”³

Specifically, at the 2000 Review Conference and again in 2010, the state parties committed to “a diminishing role for nuclear weapons in security policies to minimize the risk that these weapons will ever be used and to facilitate the process of their total elimination.”⁴ As to modernization, all parties to the NPT have explicitly recognized “the interests of non-nuclear weapons states in the constraining by the nuclear weapons states of the development and qualitative improvement of nuclear weapons and ending the development of advanced new types of nuclear weapons.”⁵ Under fundamental international law principles of good faith,⁶ all parties to the NPT are obligated to refrain from actions contrary to its purposes and objectives. Consistent with these obligations, the United States has frequently affirmed that it will diminish the role of nuclear weapons in national security policy,⁷ will not develop new nuclear warheads,⁸ will not extend the life of warheads in ways that support new military missions or provide new military capabilities,⁹ and will not “pursue new military missions or new capabilities for nuclear weapons.”¹⁰ But some aspects of the current modernization program seem to be clearly inconsistent with these commitments.

A prime example is the Air Force program for a new, enhanced nuclear Long Range Stand-Off Air-Launched Cruise Missile. A non-governmental analyst has assessed that the new system will be more capable than the current one in multiple respects, including range, accuracy, and stealth.¹¹ Committing tens of billions of dollars to a weapons system not to be deployed before 2027 scarcely seems consistent with good faith efforts to end the arms race “at an early date” pursuant to NPT Article VI, and arguments advanced by the Air Force for this program raise other specific concerns:

- While acknowledging that the United States already has an ample supply of ground-launched and submarine launched ballistic missiles capable of hitting all of the LRSO ALCM’s intended targets, spokespersons for the military have been quoted as saying that the LRSO ALCM will provide “lower yield options” and “more targeting flexibility.”¹² This amounts to saying that the new weapons system will provide new nuclear capabilities, directly contrary to the assurances discussed above. It could also lower the threshold at which nuclear weapons might actually be employed in combat, in direct contradiction to the NPT commitment to “minimize the risk that these weapons will ever be used.”

³ 2010 Final Document, Action Plan on Nuclear Disarmament, Action 1, Vol. 1, p. 20.

⁴ 2000 Final Document, 13 Practical Steps, Article VI, Vol. 1, p. 15, para. 9.

⁵ 2010 Final Document, Action Plan on Nuclear Disarmament, Vol 1, p. 20, B(iv).

⁶ See, e.g., Vienna Convention on the Law of Treaties, Article 26.

⁷ E.g., U.S. Department of Defense, Nuclear Posture Review Report, April 2010, p. 5.

⁸ Id., p. 39.

⁹ Id.

¹⁰ Statement by President Barack Obama on the Release of Nuclear Posture Review, April 6, 2010, <https://www.whitehouse.gov/the-press-office/statement-president-barack-obama-release-nuclear-posture-review>.

¹¹ Stephen Young, “Just How New is the New, Nuclear-armed Cruise Missile,” January 13, 2016, Union of Concerned Scientists blog, <http://allthingsnuclear.org/syoung/the-new-cruise-missile>.

¹² See Hans Kristensen, “W80-1 Warhead Selected For New Nuclear Cruise Missile,” October 10, 2014, http://fas.org/blogs/security/2014/10/w80-1_lrso/.

- In explaining why the Air Force needs both a new penetration bomber and the LRSO ALCM, spokesmen have asserted that future improvements in air defense might render the new bomber vulnerable, and that the LRSO ALCM could create gaps in such defenses permitting the bomber to get through.¹³ However, since the United States has already invested heavily in conventional missiles such as the Joint Air-to-Surface Standoff Missile for this same mission, this would mean increasing rather than decreasing the role of nuclear weapons in national security policy, again directly contrary to the NPT commitments discussed above.

Also troubling is that the Air Force reportedly envisages continued possession of as many as 500 nuclear-armed cruise missiles, 20 of which can be carried by a single bomber.¹⁴ The New START treaty does not limit the number of deployed warheads per bomber. Accordingly, as reductions proceed of treaty-limited items, unregulated cruise missile (potential) deployments could become a very significant factor in the U.S. posture and undercut the reduction trend.¹⁵ Apart from the fact that it is difficult to understand why such a capability could be necessary, since the Pentagon has already found that the deployed warhead limits under the treaty could safely be reduced further, it would surely provoke a seriously destabilizing Russian response, and thus be completely inconsistent with good faith efforts to negotiate an end to the arms race.

Serious issues of treaty compliance are also presented by the proposal to replace the current generation of land-based ICBMs with the new Ground Based Strategic Deterrent. Even assuming that the land-based leg of the triad needs to be retained – although experts such as former Secretary of Defense Perry have argued that it should be eliminated because it is unnecessary, destabilizing, and increases the risk of accidental war¹⁶ – a recent RAND study concluded that the existing ICBM force could be effectively maintained for a fraction of what the new GBSD would cost.¹⁷ The GBSD will have a new guidance system and upgraded arming, fuzing, and firing units, and apparently will be more accurate.¹⁸ Aside from the likely increases in capability, the planning and spending to perpetuate U.S. reliance on nuclear forces for decades to come, combined with the absence of negotiations on elimination of nuclear arsenals, demonstrates a lack of good faith in meeting the obligation to negotiate disarmament, and erodes the trust needed for a process of disarmament.

Referring to the B61-12 gravity bomb program and other programs to increase the accuracy of U.S. nuclear weapons and to provide more low-yield options, a former official who helped develop the modernization programs said: “Minimizing civilian casualties if deterrence fails is both a more credible and a more ethical approach.”¹⁹ However, an approach involving more precise guidance

¹³ Id.

¹⁴ Hans M. Kristensen and Robert S. Norris, “United States nuclear forces, 2016,” *Bulletin of the Atomic Scientists* (Vol. 72, No. 2), at pp. 69, 70.

¹⁵ See “W80-1 Warhead Selected For New Nuclear Cruise Missile,” *supra* n. 12.

¹⁶ See Hope Hodge Heck, “Former SecDef: Remove ICBMs From Nuclear Triad,” December 18, 2015, <http://www.military.com/daily-news/2015/12/18/former-secdef-remove-icbms-from-nuclear-triad.html>.

¹⁷ RAND Corporation, “The Future of the U.S. Intercontinental Ballistic Missile Force,” 2014, <http://www.rand.org/pubs/monographs/MG1210.html>.

¹⁸ Hans M. Kristensen and Robert S. Norris, “US nuclear forces, 2015,” *Bulletin of the Atomic Scientists* (Vol. 71, No. 2), at p. 112.

¹⁹ William J. Broad and David E. Sanger, “As U.S. Modernizes Nuclear Weapons, ‘Smaller’ Leaves Some Uneasy,” *New York Times*, January 11, 2016, quoting James N. Miller, former Under Secretary of Defense for Policy.

systems and an enhanced ability to hit hardened targets is contrary to the U.S. policy and NPT commitment not to create new nuclear weapons capabilities. It should also be noted that the goal of “minimizing civilian casualties” in an exchange involving just a fraction of the nuclear weapons in the world is completely unrealistic. In addition to immediate and large-scale deaths, injuries, and illness, there is scientific evidence that a regional nuclear war, such as a conflict between India and Pakistan using 50-100 Hiroshima-sized weapons, would cause catastrophic climate cooling, a major reduction in world agricultural production, and global famine.²⁰

Similar instances pervade the current plans for modernization of the arsenal. The continuing development deep into this century of enhanced and enormously expensive nuclear weapons systems, many of them with added capabilities, is clearly inconsistent with the NPT goals of reducing nuclear risk and advancing progress toward genuine nuclear disarmament. Recent discussion of cutting conventional forces, in order to pay for the new nuclear weapons, further contravenes the commitment under the NPT to diminish, not increase, the role of nuclear weapons in national security policy.

The new administration should end the Long Range Stand-Off Air-Launched Cruise Missile program, the Ground Based Strategic Deterrent program, and the B-61 modernization program. It should also review other programs, including for new generations of nuclear-armed submarines and bombers,²¹ and for modernization of the nuclear infrastructure,²² for their compatibility with NPT commitments and pursuit of the peace and security of a world without nuclear weapons. Another important factor is that the modernization programs are a significant part of the unsustainable projected spending of about one trillion dollars over the next three decades on maintaining and replacing U.S. nuclear forces.²³

3) *Ratify and work to bring into force the Comprehensive Test Ban Treaty (CTBT), and pursue negotiation of a prohibition of the production of fissile materials for nuclear weapons and obligations to secure, reduce, and eliminate existing stockpiles of weapons-usable fissile materials.* These measures have long been understood as crucial to cessation of the nuclear arms race, disarmament, and non-proliferation. Moreover, ratification of the CTBT is probably the single most important near-term step the United States could take to strengthen the non-proliferation and disarmament regime. It would also likely improve relations with Russia, which has ratified the

²⁰ See, e.g., Robock and Toon, “Self-assured Destruction: The Climate Impacts of Nuclear War,” Bulletin of the Atomic Scientists 2012, <http://climate.envsci.rutgers.edu/pdf/RobockToonSAD.pdf> ; “Nuclear Famine: Two Billion People at Risk? Global Impacts of Limited Nuclear War on Agriculture, Food Supplies and Human Nutrition,” International Physicians for Prevention of Nuclear War and Physicians for Social Responsibility (2d ed. 2013), www.psr.org/assets/pdfs/two-billion-at-risk.pdf.

²¹ See “U.S. Nuclear Modernization Programs,” Arms Control Association, December 2015, <http://www.armscontrol.org/factsheets/USNuclearModernization>.

²² See, e.g., “Trillion Dollar Trainwreck: Out-of-control U.S. nuclear weapons programs accelerate spending, proliferation, health and safety risks,” a report from the weapons communities of the Alliance for Nuclear Accountability, April 2016, http://www.ananuclear.org/s/trillion_trainwreck.pdf.

²³ See, e.g., Jon B. Wolfsthal, Jeffrey Lewis, Marc Quint, “The Trillion Dollar Nuclear Triad,” James Martin Center for Nonproliferation Studies, January 2014, http://www.nonproliferation.org/wp-content/uploads/2016/04/140107_trillion_dollar_nuclear_triad.pdf.

CTBT, and help stave off possible Russian testing.²⁴ The various obstacles to progress are not insuperable; they can be overcome with determination and creativity if a high enough priority is put on success. Provisions regarding fissile materials can be negotiated within a process to negotiate complete nuclear disarmament, or on a separate, parallel track for a stand-alone treaty.

4) *Pursue negotiations with Russia on bilateral reductions of the U.S. and Russian nuclear arsenals.* Such reductions should address both warheads and delivery vehicles, include tactical and non-deployed warheads, and for the first time provide for the verified dismantlement of warheads. The negotiations should address as necessary other strategic systems affecting nuclear postures such as missile defenses and conventionally-armed missiles. In particular, there is an urgent need to reinstate and develop controls on missile defenses lost when the George W. Bush administration withdrew from the Anti-Ballistic Missile Treaty. To stimulate such negotiations, to demonstrate the U.S. commitment to nuclear disarmament and reducing the role of nuclear weapons, and for budgetary reasons, the next administration should also unilaterally reduce the U.S. arsenal. This step is consistent with the Pentagon assessment that the arsenal can be further reduced and is supported by independent analysts.

5) *Lower the operational readiness of U.S. nuclear forces to reduce the risks of nuclear war and to facilitate moving forward on nuclear disarmament.* Such de-alerting of nuclear forces could be carried out in staged reciprocal steps with Russia. It could begin with the most destabilizing systems, the land-based missiles. De-alerting would reduce the danger of accidental or unauthorized launch, lessen the risks that poor decisions with catastrophic consequences would be made in crisis situations, and fulfill US. NPT commitments.

The danger of accidental launch is illustrated by a number of publicly known incidents. One was in 1979 when William Perry, then an undersecretary of defense, was told in an early morning telephone call that computers were showing 200 nuclear-armed missiles on their way from the Soviet Union to the United States.²⁵ The risk of accidental launch, or unauthorized launch, is increasing with developments in cyber warfare and the threat of malicious hacking by states and terrorist groups. A commander of U.S. Strategic Forces has testified before the Senate to being “very concerned with the potential of a cyber-related attack on our nuclear command and control and on the weapons systems themselves.”²⁶ Of course the United States has devoted great effort to developing safeguards against these threats, and presumably Russia has also. But, as the Defense Science Board noted in a recent report, security against unauthorized launch can never be complete, because would-be attackers enjoy a built-in advantage over the defense: “The complexity of the software defending our networks continues to increase exponentially over time, due to increased complexity of the systems they

²⁴ See “William J. Perry on nuclear war and nuclear terrorism,” December 8, 2015, <http://thebulletin.org/william-j-perry-nuclear-war-and-nuclear-terrorism8961>.

²⁵ William J. Perry, *My Journey at the Nuclear Brink* (Stanford University Press, 2015), p. 52; Robert Burns, The Associated Press, December 29, 2015, “Former Pentagon chief Perry: nuclear dangers are growing,” <http://www.militarytimes.com/story/military/pentagon/2015/12/29/former-pentagon-chief-perry-nuclear-dangers-growing/78015460/>.

²⁶ Timothy Farnsworth, “Study Sees Cyber Risk for US Arsenal,” *Arms Control Today*, April 2013, https://www.armscontrol.org/act/2013_04/Study-Sees-Cyber-Risk-for-US-Arsenal.

attempt to protect, yet the size of software code used for the average successful attack remains nearly constant.”²⁷

Moreover, even a hypothetically perfect security system against cyber-attack would not resolve the intolerable dangers of requiring life and death decisions to be made in a few minutes. A panel of international military experts chaired by a former Vice Chairman of the U.S. Joint Chiefs of Staff recently warned that “[i]n general, warning and decision timelines are getting shorter, and consequently the potential for fatal human error in nuclear control systems is growing larger.”²⁸ The danger is greatly exacerbated by the high risk of communications failure in times of crisis. A recent study by Chatham House of past crisis situations, based on declassified documents, interviews, and testimony by participants, found numerous instances in which critical information was unavailable, misunderstood, or simply not passed on to decision makers.²⁹ Problems caused by the subjective, incomplete, and sometimes erroneous information available may be further complicated by the extreme psychological distress experienced by participants and decision makers.³⁰

In the Final Document of the 2010 NPT Review Conference, and in the Thirteen Steps agreed to at the 2000 Conference and reaffirmed in 2010, the nuclear weapons states undertook to diminish the role of nuclear weapons in security policies, and to pursue concrete steps for the lowering of their operational readiness, in order to reduce the risk of these weapons actually being used.³¹ Despite these commitments, the United States and Russia still maintain hundreds of nuclear missiles on short alert, ready to be launched on a few minutes notice. The mounting frustration of the non-nuclear weapons states over this situation is a further source of pressure on the nonproliferation regime. In 2014, the UN General Assembly overwhelmingly adopted a resolution calling for the lowering of nuclear weapon alert levels, with the United States, Russia, United Kingdom and France casting the only negative votes.³²

Progress on the lowering of alert levels could be made without the necessity for Congressional action, by staged unilateral initiatives with expectations of reciprocity, by informal understandings, or by executive agreement. To the extent that technical or strategic issues might be perceived as obstacles to some elements of de-alerting, they should be the subject of expedited study in search of solutions.

²⁷ Department of Defense, Defense Science Board, *Task Force Report: Resilient Military Systems and the Advanced Cyber Threat*, January 2013,

<http://www.acq.osd.mil/dsb/reports/resilientMilitarySystems.CyberThreat.pdf>.

²⁸ Report of the Global Zero Commission on Nuclear Risk Reduction (Gen. (Ret.) James Cartwright, Chair), 2015, http://www.globalzero.org/files/global_zero_commission_on_nuclear_risk_reduction_report.pdf.

²⁹ Patricia Lewis et al., “Too Close for Comfort: Cases of Nuclear Near Miss and Options for Policy,” Chatham House, 2014.

³⁰ E.g., after a 1983 incident where a Soviet radar malfunction erroneously reported an incoming U.S. missile strike, the lieutenant colonel who made the crucial decision that it was a false alarm later reported that he and other participants had been in “a state of shock.” Lewis, *supra* n. 27, p. 24. A U.S. Senator who was present at a 1979 NORAD incident, in which a training tape of a simulated Soviet attack was mistakenly connected with the central warning system, later testified that “panic broke out. It was a very frightening and disconcerting thing.” Hearing before Committee on Foreign Relations, “Nuclear Arms Reduction Proposals,” U.S. Senate, 97th Congress, Second Session, April-May 1982, Government Printing Office.

³¹ 2000 Final Document, Vol. 1, p. 15; 2010 Final Document, Vol. 1, pp. 19, 21.

³² Decreasing the operational readiness of nuclear weapons systems, A/RES/69/42, 2 December 2014, adopted by a vote of 166 to 4, with 11 abstentions.

6) *Initiate a moratorium on flight testing of hypersonic precision weapons.* The United States is currently pursuing Conventional Global Prompt Strike (CGPS) and other programs for the development of hypersonic precision weapons (HPW). Russia and China are also developing HPW. Many questions have been raised as to the cost of HPW projects, the lack of a clear mission statement, and unresolved issues as to operational feasibility.³³ The most serious dangers of HPW programs, however, lie in their potential for strategic destabilization, an accelerated arms race, and the blocking of opportunities for further reductions in nuclear arms.

Although the United States has not identified attack on an adversary's nuclear command and control systems as a mission of HPW, the ability of a boost-glide HPW missile to fly under radar could make such a use plausible. The perceived potential for such use has been cited as a major obstacle to negotiations for any further U.S.-Russian nuclear arms reductions. Moreover, if the non-nuclear status of U.S. weapons leads to their use, that may in turn lead to nuclear use. Among other factors, the potential for a CGPS attack to be mistaken for a nuclear attack has been widely recognized.

U.S. plans for CPGS have involved only conventional warheads, but there is no technical barrier to application of technologies developed for CGPS to nuclear weapons delivery. Indeed, Chinese and Russian HPW program goals appear to include new nuclear weapons delivery systems. The potential for intensified qualitative arms racing, including to defeat missile defenses as they continue to be refined, is increasing.

Although no country yet has a fully operational non-ballistic missile capable of speeds greater than Mach 5, HPW programs are advancing rapidly, and the window for a possible test ban could close in

³³ Recent literature and testimony include:

M. Gubrud, R. Nagappa and T. Zhao, "Going Too Fast: Time to Ban Hypersonic Missile Tests?", *Bulletin of the Atomic Scientists*, September 2015, <http://thebulletin.org/2015/september/going-too-fast-time-ban-hypersonic-missile-tests-us-response8718>

M. Gubrud, "The Argument for a Hypersonic Missile Testing Ban," *Bulletin of the Atomic Scientists*, September 2, 2015, <http://thebulletin.org/argument-hypersonic-missile-testing-ban7412>

J. Acton, "Prompt Global Strike: American and Foreign Developments," Testimony, House Armed Services Subcommittee on Strategic Forces, December 8, 2015, <http://carnegieendowment.org/2015/12/08/prompt-global-strike-american-and-foreign-developments/iocc>

J. Acton, "Why Do We Need Hypersonic Strike Weapons, Exactly?", *Defense One*, September 17, 2014, http://www.defenseone.com/ideas/2014/09/why-do-we-need-hypersonic-strike-weapons-exactly/94379/?oref=d-river&mkt_tok=3RkMMJWWfF9wsRonva%2FIZKXonjHpfsX66ugqXqCg38431UFwdcjKPmjr1YIERcp0aPyQAgobGp5I5FEIQ7XYTLB2t60MWA%3D%3D

J. Acton, *Silver Bullet? Asking the Right Questions About Conventional Prompt Global Strike*, Carnegie Endowment for International Peace 2013, <http://carnegieendowment.org/files/cpgs.pdf>

"DOD Needs to Strengthen Implementation of Its Global Strike Concept and Provide a Comprehensive Investment Approach for Acquiring Needed Capabilities," GAO-08-325, April 30, 2008, <http://www.gao.gov/products/GAO-08-325>.

the relatively near future. Since HPW missiles would not be anyone's preferred option for use over a prolonged period, because of their high cost and relatively small payload, discontinuing HPW development would not sacrifice any strategic advantage.

A test ban – which could initially take the form of a non-legally binding moratorium, with an invitation to open negotiations – would be relatively easy to verify, and it would be effective as well, because no one could rely on HPW for a preemptive surprise attack without repeated flight testing.

7) Drastically reduce the role of nuclear weapons in the U.S. national security posture in accordance with the U.S. policy objective of non-use of nuclear weapons forever and with the requirements of international humanitarian law protecting civilians from the effects of warfare. The 2010 Nuclear Posture Review Report states the objective with admirable clarity: “It is in the US interest and that of all other nations that the nearly 65-year record of nuclear non-use be extended forever.”³⁴ That objective is wholly consistent with, indeed compelled by, the application of the law of armed conflict, including international humanitarian law (IHL), to nuclear weapons. The longstanding U.S. position is that nuclear weapons operations, like any military operations are subject to IHL. That position was adopted by all states participating in the 2010 NPT Review Conference, including the United States and the four other NPT nuclear weapon states. The Final Document expresses the Conference's “deep concern at the catastrophic consequences of any use of nuclear weapons, and reaffirms the need for all states at all times to comply with applicable international law, including international humanitarian law.”³⁵

U.S. armed forces' understanding of application of IHL is of course well advanced and entrenched. The Joint Chiefs of Staff, for example, have recognized that: “Attackers are required to only use those means and methods of attack that are discriminate in effect and can be controlled, as well as take precautions to minimize collateral injury to civilians and protected objects or locations.”³⁶ The reality is that nuclear weapons, with their uncontrollable blast, heat, radiation, and fire-generating effects, are indeed weapons of mass destruction whose use in typical scenarios is inherently incompatible with IHL.³⁷ Thus the law and the policy objective of non-use by any state of nuclear weapons are completely in accord.

In determining the role of nuclear weapons in the U.S. national security posture and guidance for their employment, the new administration should 1) emphasize the requirement of compliance with the law of armed conflict including IHL; 2) highlight the policy objective of non-use and its legal underpinning; 3) prescribe an extremely high threshold for even considering use of nuclear weapons, including with respect to the option of second use, if such consideration is not ruled out altogether; 4) require that in determining such matters as targets and lethality requirements, minimization of civilian casualties be an overriding factor, for example by selecting targets in non-urban areas in any second use scenario; 5) require that limitations be implemented consistently throughout the government and that agencies, services, and officials refrain from provocative statements which appear to indicate a readiness to use nuclear weapons in a wide range of circumstances.

³⁴ P. ix.

³⁵ P. 19, A(v).

³⁶ Joint Chiefs of Staff, Joint Pub. No. 3-60, Joint Targeting E-2 (2007)

³⁷ See Charles J. Moxley, Jr., John Burroughs and Jonathan Granoff, “Nuclear Weapons and Compliance with International Humanitarian Law and the Nuclear Non-Proliferation Treaty,” *Fordham International Law Journal* (Vol. 34, 2011), pp. 595-696, <http://icnp.org/wcourt/Fordhamfinaljoint.pdf>.