



Taking the Long View in a Time of Great Uncertainty

Perhaps Not in My Lifetime

Jack Jekowski
Industry News Editor and Chair of the Strategic Planning Committee

“So today, I state clearly and with conviction America’s commitment to seek the peace and security of a world without nuclear weapons. I’m not naive. This goal will not be reached quickly — perhaps not in my lifetime. It will take patience and persistence. But now we, too, must ignore the voices who tell us that the world cannot change. We have to insist, ‘Yes, we can.’”

— PRESIDENT BARACK OBAMA • APRIL 5, 2009



By any measure, President Obama’s 2009 speech in Prague, Czech Republic — in which he suggested that a future without nuclear weapons was

possible — represented a historic turning point for the world, and contributed to his being awarded the 2009 Nobel Peace Prize. Obama’s efforts during the next seven years included biannual Nuclear Security Summits, the elevation of diplomacy in the U.S. National Security Strategy, the negotiation of the New START Treaty to reduce Russian and U.S. nuclear stockpiles, the Iran Deal (Joint Comprehensive Plan of

Action [JCPOA]) and chairing the U.N. Security Council. These efforts demonstrated a resolve to move that vision forward and create a new international order.¹

Modernizing the U.S. Nuclear Stockpile

Amid that promise of a different future world, however, the Obama Administration also moved forward with plans to modernize the aging U.S. nuclear stockpile, reflecting a position taken during that historic speech in Prague and in subsequent policy documents:

“Make no mistake: As long as these weapons exist, the United States will maintain a safe, secure and effective arsenal to deter any adversary, and guarantee that

defense to our allies ...”

This modernization effort initially included life-extension programs (LEPs) for the U.S. nuclear weapons inventory, and then, subsequently, a plan to update the three legs of the U.S. nuclear triad, as well as command and control systems and the wrap-around infrastructure of the National Nuclear Security Administration’s (NNSA) Nuclear Security Enterprise (NSE). Some have argued that the United States does not need all “legs” of the nuclear triad,² nor the development of a new long-range cruise missile.³ Nonetheless, plans to modernize the U.S. stockpile over the next 30 years continue, now estimated by the U.S. General Accounting Office (GAO) to cost \$1.2 trillion over the next 30 years. The recent CBO report, “Approaches for Managing the Costs of U.S. Nuclear Forces, 2017 to 2046,”⁴ suggests alternative scenarios that would save more than \$100 billion. However, some have questioned the CBO’s scenarios with respect to the overall value of a fully modernized nuclear deterrent that would result from this proposed investment, while others suggest that spending less could actually make the United States safer.⁵

This column is intended to serve as a forum to present and discuss current strategic issues impacting the Institute of Nuclear Materials Management in the furtherance of its mission. The views expressed by the author are not necessarily endorsed by the Institute, but are intended to stimulate and encourage JNMM readers to actively participate in strategic discussions. Please provide your thoughts and ideas to the Institute’s leadership on these and other issues of importance. With your feedback, we hope to create an environment of open dialogue, addressing the critical uncertainties that lie ahead for the world, and to identify possible paths to the future based on those uncertainties that can be influenced by the Institute. Jack Jekowski can be contacted at jjjekowski@aol.com.



The elements of this modernization effort and their costs, as identified in the CBO report, include the following:

- Allocating \$772 billion for the operation, sustainment and modernization of strategic nuclear delivery systems and weapons — the long-range aircraft, missiles and submarines that launch nuclear weapons; the nuclear weapons they carry; and the nuclear reactors that power the submarines.
- Allocating \$25 billion for the operation, sustainment and modernization of tactical nuclear delivery systems — the aircraft capable of delivering nuclear weapons over shorter ranges — and the weapons they carry.
- Allocating \$445 billion for the complex of laboratories and production facilities that support nuclear weapons activities and the command, control, communications and early-warning systems that enable the safe and secure operation of nuclear forces

Specific high-visibility elements of the modernization effort include the following:

- A new ballistic missile submarine (SSBN), designated the Columbia class.
- A new silo-based intercontinental ballistic missile (ICBM) and refurbished silos and other supporting infrastructure for ICBMs through the Ground-Based Strategic Deterrent program.
- A new long-range stealthy bomber, designated the B-21 Raider.
- Refurbishment of the

current-generation D5 submarine-launched ballistic missile (SLBM).

- A new SLBM to eventually replace the D5.
- A new air-launched nuclear cruise missile, the Long-Range Standoff (LRSO) weapon.
- A life-extension program (LEP) for the B61 nuclear bomb that would combine several different varieties of that bomb into a single type, the B61-12 (already underway).
- A LEP for the B61-12 bomb when it reaches the end of its service life, referred to as the Next B61.
- LEPs for the SSBN-related W76 and W88 warheads.
- A LEP to refurbish the W80 warhead that would be used on the LRSO.
- A series of LEPs that would produce three interoperable warheads (called IW-1 through IW-3), each of which would be

compatible with both ICBMs and SLBMs.

Note that all four of the other Nuclear Weapons States (NWSs) are similarly investing in modernization and upgrades to their nuclear stockpiles, and that the cost of modernization in the grand scheme of the overall U.S. budget represents a fraction of a percent of the total U.S. budget for that same time frame.⁶

A New Administration's Perspective

With the election of Donald Trump, the position of the United States on nuclear deterrence appears to be changing significantly. Recently codified in a new Nuclear Posture Review (NPR)⁷ and reflected in the early positions taken by the President in public comments and tweets, and by members of his Cabinet in Congressional testimony⁸ in multiple policy areas, the groundwork for dramatically changing the approach of the Obama Administration has been established. These include:

Suggesting that the U.S. needs to not





only modernize its nuclear strategic deterrent, but perhaps expand the deterrent to Cold War levels.

Stating, regarding the JCPOA, that the lifting of sanctions imposed is not “appropriate and proportionate” relative to Iranian measures to draw down its nuclear program, which threw the decision back to Congress to determine the future path of the agreement. Citing continued testing of ballistic missiles and aggressive policies in the Middle East, including support of Syrian President Bashar al-Assad’s government and groups such as Hamas and Hezbollah — which the United States considers to be terrorist organizations — the Administration is looking either to renegotiate the Iran Deal or to terminate it, with the first step requiring Congress to recommend actions by mid-December.

Engaging in rhetoric that has heretofore been unheard of at the presidential level, including saying that North Korea, as a result of their continued pursuit of nuclear weapons and ICBMs to deliver them, would be met with “fire and fury like the world has never seen.”⁹

So dramatic have these policy changes been that the Senate Committee on Foreign Relations called for a special hearing on November 14, 2017 (the first time in decades) to discuss the presidential authority to use nuclear weapons.¹⁰ This has correspondingly raised concern on a global basis.¹¹

History will tell the story of whether this new approach to global security works, but for now, the words of President Obama in 2009 — “perhaps not in my lifetime” — ring loudly.

Endnotes

1. See the inaugural “Taking the Long View” column for an early timeline of the Obama Administration’s activities to achieve the Prague vision (JNMM, vol. 39, no. 1, pp. 39–41). Also see JNMM, vol. 41, pp. 111–113, for a discussion of how the National Security Strategy was redefined to recognize the importance of diplomacy.
2. See “Nuclear strategists call for bold move — scrap ICBM arsenal,” www.reuters.com/article/us-usa-nuclear-icbm-specialreport/special-report-nuclear-strategists-call-for-bold-move-scrap-icbm-arsenal-idUSKBN1DM1D2
3. See “Cancel the long-range standoff missile,” www.brookings.edu/blog/order-from-chaos/2017/06/28/cancel-the-long-range-standoff-missile/
4. See “Trump plans for nuclear arsenal require \$1.2 trillion, Congressional review states,” www.nytimes.com/2017/10/31/us/politics/trump-nuclear-weapons-arsenal-congressional-budget.html, and the Congressional Budget Office Report “Approaches for managing the costs of U.S. nuclear forces, 2017 to 2046,” www.cbo.gov/system/files/115th-congress-2017-2018/reports/53211-nuclearforces.pdf
5. See “Spending less on nuclear weapons could actually make us safer,” www.washingtonpost.com/opinions/spending-less-on-nuclear-weapons-could-actually-make-us-safer/2017/11/16/396ef0c6-ca56-11e7-aa96-54417592cf72_story.html?utm_campaign=EBB%2011.17.17&utm_medium=email&utm_source=Sailthru&utm_term=.67cc19e6b17f
6. See “US nuclear modernization is not only affordable, but necessary,” <http://thehill.com/opinion/national-security/358574-us-nuclear-modernization-is-not-only-affordable-but-necessary>
7. See www.whitehouse.gov/the-press-office/2017/01/27/presidential-memorandum-rebuilding-us-armed-forces for the Executive Order initiating the NPR, and www.defense.gov/News/SpecialReports/2018NuclearPostureReview.aspx for the report and related materials
8. See <https://armedservices.house.gov/legislation/hearings/fiscal-year-2018-priorities-nuclear-forces-and-atomic-energy-defense-activities>
9. See www.nytimes.com/2017/08/08/world/asia/north-korea-un-sanctions-nuclear-missile-united-nations.html
10. See www.foreign.senate.gov/hearings/authority-to-order-the-use-of-nuclear-weapons-111417 for an archived video of this hearing. Also see “Trump and the nuclear button,” www.washingtonpost.com/opinions/trump-and-the-nuclear-button/2017/11/25/85bb50b2-cafd-11e7-8321-481fd63f174d_story.html?utm_term=.d1226020aa26, and “Trump’s loose talk on nuclear weapons suddenly becomes very real,” www.washingtonpost.com/news/the-fix/wp/2017/10/11/trumps-loose-rhetoric-on-nuclear-weapons-has-become-a-very-real-concern/?utm_term=.adebf7954b18
11. See “Whose finger is on the button? Nuclear launch authority in the United States and other nations (2017),” www.ucsusa.org/nuclear-weapons/us-nuclear-weapons-policy/sole-authority#.Wh5LTbWWyUK