

A PRESCRIPTION FOR DISASTER: TRUMP’S NUCLEAR POSTURE REVIEW

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The Nuclear Posture Review (NPR) released February 2, 2018 at the Pentagon would increase the risk of war, fuel a dangerous and ruinously expensive arms race, and threaten the survival of the entire nonproliferation regime. Prepared by the Department of Defense in consultation with other agencies, the review was approved by the White House.

New nuclear weapons capabilities

Deploying low-yield warheads on submarine-based ballistic missiles would increase the risk of actual use, breaking a taboo which has lasted (although with some close calls) since 1945. Reliance on supposedly more “usable” weapons would lower the threshold and give more legitimacy to their use by other states as well as the United States. The NPR argues that more low-yield weapons are needed to deter limited escalation by other countries, in apparent reference to the “escalate to de-escalate” scenario raised by the Russian Defense Ministry, but that scenario – a hypothetical invasion of Russia by a NATO army – would never occur in real life. Indeed, the development of several nuclear weapons systems described by Russian President Vladimir Putin in his March 3 speech demonstrates that the Russians in fact are concerned about the overall strategic balance especially in view of U.S. deployment of missile defenses – not about battlefield scenarios for limited use. Thus one of the systems is a multiple warhead ballistic missile capable of taking a defense-evading unconventional flight path

Modification of existing warheads to make them low yield – assuming that it would be practicable¹ – is completely unnecessary, since the arsenal already contains low-yield weapons. The commander of U.S. Strategic Forces has testified before Congress that the existing arsenal provides “a variety of options to respond to any number of threats.”² The development of duplicative and unneeded weapons systems is a wasteful diversion of funds from other needs, including conventional defense readiness.

“Controlled” nuclear escalation is a dangerous fantasy. As a commander of StratCom recently informed Congress, “anyone who employs a nuclear weapon in the world has created a strategic

¹ The outgoing head of the National Nuclear Security Administration has said that the NNSA is stretched to full capacity now. Aaron Mehta, “As Trump seeks new nuke options, weapons agency head warns of capacity overload,” *Defense News*, January 24, 2018.

² Testimony of General Hyten before House Armed Services Committee, March 18, 2017.

effect, and all nuclear weapons are strategic.”³ In addition to its massive and savage immediate humanitarian consequences, escalation to an exchange of dozens of nuclear weapons employed in urban areas would cause planetary disaster. Scientific studies indicate that even a regional nuclear war, using a minute fraction of the world’s nuclear arsenal, could severely disrupt world agriculture, and put two billion people at risk of famine.⁴ An exchange of even the reduced U.S. and Russian arsenals permitted under New START could cause nuclear winter conditions lasting for years and possibly threaten the survival of the human species.⁵

The proposed development of faster and stealthier delivery systems, by further decreasing warning and decision times, would increase the risk of nuclear war by accident or miscalculation. On several occasions already the world has come within minutes of war through human or computer error.⁶ In 2015 a commission of military experts chaired by a former Vice Chairman of the Joint Chiefs of Staff warned that “in general warning and decision timelines are getting shorter and consequently the potential for fatal human error in nuclear control systems is growing larger.”⁷ A 2017 report by the UN Institute for Disarmament Research documents ways in which the risk continues to increase due to developments in nuclear technology.⁸

The proposed Long Range Stand-Off Air Launched Cruise Missile (LRSO ALCM) is a prime example. The destabilizing effects of cruise missiles have been extensively discussed, but proponents of the LRSO ALCM argue that it will not increase instability because it would merely replace an existing ALCM. That argument, however, is not supported by the facts, since the LRSO ALCM would introduce new capabilities, including additional stealth features.⁹ Further, the existing ALCM is carried only by B-52s, whereas the LRSO ALCM would be deployed on the new stealth bomber, increasing the risk that it could be seen as a potential first strike weapon. Similar issues would be presented by the proposed new submarine-launched cruise missile. It additionally could have a low-yield warhead option subject to the criticisms made above regarding the low-yield warhead proposed for submarine-based ballistic missiles.

Arms control

The NPR fails to address the dangerous impasse in arms control negotiations. Rapid developments in nuclear weapons technology are increasing risks of accidental war, yet bilateral and multilateral negotiations among nuclear weapon states are at a standstill. There is an especially urgent need for serious negotiations, including expert-level technical discussions, on systems which can be

³ Note 2, supra.

⁴ www.psr.org/assets/pdfs/two-billion-at-risk.pdf.

⁵ Alan Robock and Brian Toon, “Self-assured Destruction: The Climate Impacts of Nuclear War,” *Bulletin of the Atomic Scientists* 2012, available at <http://climate.envsci.rutgers.edu/pdf/RobockToonSAD.pdf>.

⁶ See, e.g., William J. Perry, *My Journey at the Nuclear Brink*, Stanford University Press, 2015; Eric Schlosser, *Command and Control*, Penguin Books, 2013.

⁷ 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.

⁸ United Nations Institute for Disarmament Research, “Understanding Nuclear Weapon Risks,” 2017, <http://www.unidir.org/files/publications/pdfs/understanding-nuclear-weapon-risks-en-676.pdf>.

⁹ 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>.

perceived as potential first strike weapons, including stealth cruise missiles and hypersonic boost-glide vehicles.

The NPR also is irresponsible concerning longstanding arms control measures. It says the United States will not ratify the Comprehensive Nuclear-Test-Ban Treaty; negotiations on a Fissile Materials Cut-off Treaty are not mentioned; and no other multilateral measure is identified as worth pursuing.

Concerning the U.S.-Russian relationship, the NPR notes that New START can be extended for five years in 2021, but does not commit to pursuing its extension or to further bilateral measures to reduce the two countries' nuclear arsenals. The message conveyed is that nothing is possible until the dispute over compliance with the Intermediate Nuclear Forces Treaty is resolved, and more broadly until a more cooperative relationship with Russia is established.

It is true, as the NPR says, and deplorable that following conclusion of New START negotiations in 2010, Russia refused engagement on the ambitious program of bilateral nuclear arms reductions – to include non-strategic nuclear arms and, for the first time, verified dismantlement of warheads – proposed by the Obama administration. The NPR does not seriously address, however, the Russian concerns motivating its position, among them U.S. missile defense programs, to which Russia objects strenuously, as was most recently demonstrated by Putin's speech; development of U.S. conventional long-range strike capabilities; and, not least, the continuing expansion of NATO (thus NATO membership for Georgia remains on the table). And, of course, the U.S.-Russian relationship was and is greatly strained by the Ukraine crisis and the Russian annexation of Crimea, and now by apparent Russian interference in the 2016 U.S. elections.

It is a daunting list of obstacles. But it must also be remembered that the United States and Soviet Union undertook nuclear arms control during the Cold War, and that the unspeakable risks posed by nuclear weapons – especially the U.S. and Russian arsenals with their capacity to end civilization – create an overwhelming imperative to overcome obstacles. Thus it is important, as the NPR rightly says, to “rebuild trust and communication” with Russia. To enable progress on all arms control issues, all relevant senior State Department positions should be filled, without further delay and at appropriate levels of expertise.

Launch on warning

No possible upgrade of nuclear command and control would justify leaving land-based nuclear missiles on “launch on warning” alert. The NPR rightly states that improvements in nuclear command, control and communication (NC3) are needed, among other things, to guard against increasing dangers of cyber attack. But, as the Defense Science Board has noted, security against unauthorized launch can never be complete because 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 the increased complexity of the systems they attempt to protect, yet the size of software code used for the average successful attack remains nearly constant.”¹⁰ Moreover, even a hypothetically perfect defense against hacking would not eliminate the dangers of

¹⁰ Department of Defense, Defense Science Board, *Task Force Report: Resilient Military Systems and the Advanced Cyber Threat*, 2013.

requiring life and death decisions to be made within a few minutes. A recent study by Chatham House of communications in past crisis situations found numerous instances in which critical information was unavailable, misunderstood, or simply not passed on to decision makers.¹¹ Problems caused by incomplete and sometimes erroneous information may be further complicated by the extreme psychological stress experienced by participants.¹² If land-based ballistic missiles are retained, they should not be kept ready for launch on a few minutes notice.

Non-nuclear strategic attacks

Use of nuclear weapons in response to “non-nuclear strategic aggression”, which the NPR emphatically declares an option, would violate principles of international humanitarian law. We do not believe that any use of nuclear weapons could meet the obligation, which the United States has repeatedly recognized,¹³ to comply with international humanitarian law (IHL), also known as the law of armed conflict, above all because their massive and indiscriminate effects make it impossible to distinguish between military targets and civilian populations and infrastructure. In addition, given the conventional superiority of the U.S. military, any use of nuclear weapons against non-nuclear aggression would violate the principles of necessity and proportionality. Under the IHL principle of necessity, only that kind and degree of force can be used which are reasonably necessary to accomplish the military objective. The principle of proportionality prohibits using weapons the effects of which on civilian persons or infrastructure, or on the environment, is likely to be disproportionate to the military objective.

The NPR’s expansion of the role of nuclear weapons also increases the risks of nuclear war. In particular, cyber attacks will be considered a possible reason to resort to nuclear weapons. This approach would support, for example, a U.S. first use of nuclear weapons in response to Russian cyber and other non-nuclear attacks on civilian infrastructure in a war in Europe.¹⁴ A similar scenario is possible in a conflict with North Korea. In addition to lowering the threshold for use of nuclear weapons, identifying cyber attacks as a possible basis for responsive use of nuclear weapons

¹¹ Patricia Lewis et al., “Too Close for Comfort: Cases of Nuclear Near Miss and Options for Policy,” Chatham House 2014.

¹² E.g. after a 1983 incident in which 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*, 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 erroneously 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.

¹³ E.g., Secretary of Defense, “Report on Nuclear Employment Strategy of the United States Specified in Section 491 of 10 U.S.C.,” June 12, 2013, pp. 4-5: “The new guidance makes clear that all plans must also be consistent with the fundamental principles of the Law of Armed Conflict. Accordingly, plans will, for instance, apply the principles of distinction and proportionality and seek to minimize the collateral damage to civilian populations and civilian objects.”

¹⁴ See Bruce Blair, “A new Trump administration plan makes nuclear war likelier,” Washington Post, January 13, 2018, at https://www.washingtonpost.com/news/posteverything/wp/2018/01/13/the-trump-administrations-new-nuclear-plan-makes-nuclear-war-likelier/?utm_term=.2a55bd561ec0.

is problematic because such attacks may be hard to attribute.¹⁵ It is further true that U.S. policy may very well be emulated by some other nuclear-armed states, compounding the risks.

The non-proliferation regime

NPR proposals threaten the survival of the entire nonproliferation system. The NPR correctly notes that the Nonproliferation Treaty (NPT) is already under severe pressure, but fails to mention the primary source of that pressure: failure by the nuclear weapon states to comply with their treaty obligation, under Article VI of the NPT, reaffirmed in 2000 and again in 2010, to negotiate in good faith for “the total elimination of their nuclear arsenals leading to nuclear disarmament.”¹⁶ The NPR’s endorsement of existing plans to replace and upgrade land-, sea-, and air-based nuclear forces and the implicit reliance on those forces for decades to come betrays a lack of good faith in relation to that obligation. In 2017, non-nuclear weapon states loudly and clearly voiced their frustration with the lack of compliance by adopting the Treaty on the Prohibition of Nuclear Weapons. The NPR would make the situation worse: by adding new nuclear weapons, and multiplying the situations in which they might be used, it would violate a commitment under the NPT 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.”¹⁷

U.S. failure to ratify the Comprehensive Nuclear-Test-Ban Treaty (CTBT) has been a further source of pressure on the NPT. The NPR would raise that pressure, perhaps to the breaking point, by declaring that the U.S. “does not support ratification” of the CTBT. This could lead to a breakdown of the worldwide testing moratorium which has been observed since 1998 by every country except North Korea.

Conclusion

Congress should refuse to fund the provocative elements of the NPR, including the proposals for low-yield warheads on submarine-launched missiles, the sea-based cruise missile, and air-launched cruise missile. Beyond that, Congress and the American public should reject the NPR’s paradigm of indefinite and expanded reliance on nuclear weapons. The United States must get on track dramatically to decrease the role of nuclear arms and energetically to work for the achievement of a world free of nuclear weapons.

¹⁵ Regarding attribution of the WannaCry malware attack to North Korea, see <https://www.whitehouse.gov/briefings-statements/press-briefing-on-the-attribution-of-the-wannacry-malware-attack-to-north-korea-121917/>, December 19, 2017.

¹⁶ 2000 NPT Final Document, 13 Practical Steps, Article VI, Vol. I, p.14 para. 15(6); 2010 Final Document, Action Plan on Nuclear Disarmament, Vol. I, p. 19, 1(A)(ii).

¹⁷ 2000 NPT Final Document, 13 Practical Steps, Article VI, Vol. I, p.15, para. 15(9).