



US NUCLEAR POSTURE REVIEW 2018: AN OVERVIEW

By
Malik Qasim Mustafa
Senior Research Fellow/Editor

Edited by
Najam Rafique

March 02, 2018

(Views expressed in the brief are those of the author, and do not represent those of ISSI)



In February 2018, the US Department of Defense released its new Nuclear Posture Review: 2018 (NPR) with an aim to protect the US, its allies and partners.¹ Under its NPR 2018, the US believes that despite its 85 per cent reduction in nuclear stockpile, Russia and China are modernizing and expanding their nuclear weapons; and the nuclear ambitions of countries like North Korea and Iran and notion of nuclear terrorism remains a global danger. The US considers that Russia and China are trying to revise the post-Cold War international order and norms of behavior and Russia wants to change the map of Europe through the use of force.

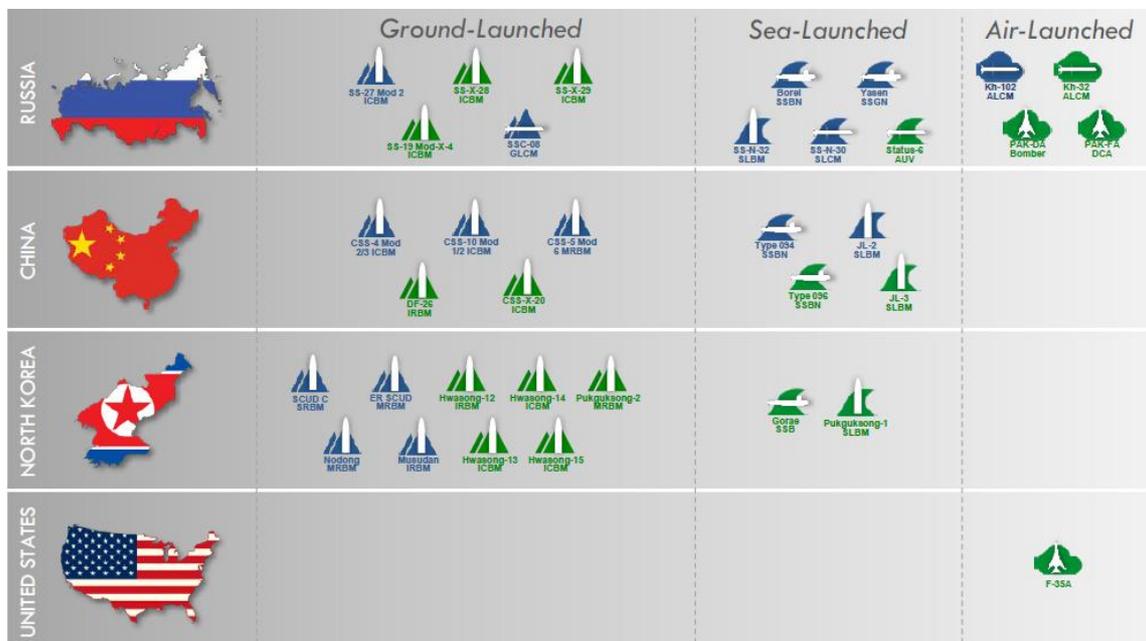
The NPR 2018 asserts that Russia and China are:

- Pursuing asymmetric ways and means to counter the US conventional capabilities;
- Increasing the risk of miscalculation and the potential for military confrontation with the US, its allies and partners;
- Developing counter-space military capabilities to deny the US the ability to conduct space-based intelligence, surveillance and reconnaissance (ISR); nuclear command, control, and communications (NC3); and positioning, navigation, and timing;

¹ 'Nuclear Posture Review: 2018' (US Department of Defence, February 2018), <https://media.defense.gov/2018/Feb/02/2001872886/-1/-1/1/2018-NUCLEAR-POSTURE-REVIEW-FINAL-REPORT.PDF>.

- Both seek to develop offensive cyberspace capabilities to deter, disrupt or defeat the US forces dependent on computer networks;
- Both are fielding an array of anti-access area denial (A2/AD) capabilities and underground facilities to counter the US precision conventional strike capabilities and to raise the cost for the US to reinforce its European and Asian allies and partners and;
- Russia may also rely on threats of limited nuclear first-use, or actual first-use, to coerce the US, its allies and partners into terminating a conflict on terms favourable to Russia.²

In the figure below, the US NPR 2018 illustrates the difference between its efforts to reduce the salience of nuclear weapons and the contrary actions of others over the past decade.



Source: *Nuclear Posture Review: 2018 (US Department of Defence, February 2018)*

Some of the major element of the US nuclear policy and strategy outlined in the NPR-2018 can be described in the following terms:

- Uncertain international security environment has reintroduced the great power competition, where other nuclear powers have not followed the US lead, which has exposed it to an uncertain future security environment.

² Ibid.

- Enhances the role of nuclear weapons to achieve the US national objectives, deter nuclear and non-nuclear attack, assure allies and partner under extended deterrence, achieve its national objective if deterrence fails and hedging against an uncertain future.
- Devising tailored strategies and flexible responses against contemporary and future threats, with a particular focus against Russia, China, North Korea, Iran and diverse uncertainties.
- Modernization of the US nuclear infrastructure and current and future capabilities.
- Policies to deal with issues like nuclear terrorism, non-proliferation and arms control.

To perform all these roles, the US NPR 2018 considers that, “the current threat environment and future uncertainties now necessitate a national commitment to maintain modern and effective nuclear forces, as well as the infrastructure needed to support them. Consequently, the US has initiated a series of programs to sustain and replace existing nuclear capabilities before they reach the end of their service lives. These programs are critical to preserving our ability to deter threats to the Nation.” With reference to great power competition, it states that the US will apply a tailored approach with flexible capabilities to effectively deter across a spectrum of adversaries, threats and contexts. For Russia, the effective US deterrence would mean that any miscalculation by Russia will incur ‘incalculable’ and ‘intolerable’ costs for Moscow, as the US president will have a range of limited and graduated option, including a variety of delivery systems and explosive yields.³

As far as a tailored approach for China is concerned, NPR 2018 highlights that the US will maintain the capability to credibly threaten intolerable damage and that it, “is prepared to respond decisively to Chinese non-nuclear or nuclear aggression. The US exercises in the Asia-Pacific region, among other objectives, demonstrate this preparedness, as will increasing the range of graduated nuclear response options available to the President.”⁴

For North Korea, the US will ensure the ability to impose intolerable costs on the Kim regime as the US and allies have defensive and offensive capabilities to intercept and otherwise defeat North Korea’s missile capabilities, and thereby limit or preclude North Korea’s ability to conduct effective missile strikes.⁵ For Iran, the NPR 2018 clearly states that the US deterrence strategy includes the capabilities necessary to defeat the Iranian non-nuclear, strategic capabilities, including the US defensive and offensive systems capable of precluding or degrading Tehran’s missile threats.

³ Ibid.

⁴ Ibid.

⁵ Ibid.

The US has also assured its effective extended deterrence to its allies and partners. This includes a number of measures such as enhancing the readiness and survivability; replacing ageing aircrafts and weapon system, military training and exercises, maintaining of flexible and adaptable nuclear and non-nuclear capabilities; continued investment in missile defense system and modernization of nuclear capability and infrastructure.

With reference to hedging against diverse uncertainties and future challenges, NPR 2018 highlights four categories of potential risks: geopolitical risk; technological risk; operational risk and programmatic risk. It outlines following major steps to prevent emergence of these challenges: early detection of challenges and their resolution; risk reduction through diplomacy; dissuade adversaries from seeking advantage and measures to mitigate potential consequences.

With reference to modernization of nuclear infrastructure and capabilities, NPR 2018 outlines that there is need to increase diversity and flexibility of US nuclear triad and non-strategic nuclear capability, and should ensure the following:

- Provide survivable, responsive capabilities to ensure adversaries do not attempt a disarming first strike;
- Demonstrate resolve through the positioning of forces, messaging, and flexible response options;
- Ensure the US can respond to a broad range of contingencies with tailored options and;
- Mitigate the risk of a technological failure or adversary breakthrough while providing adaptability to changes in the security environment.

NPR 2018 highlights the significance of the US nuclear triad until its planned replacement programs are deployed. The replacement programs include:

- Replacement of 14 OHIO-class SSBNs with 12 COLUMBIA-class SSBNs;
- Replacement of 400 single-warhead Minuteman III, Intercontinental Ballistic Missile (ICBM) with Ground Based Strategic Deterrence (GBSD) program in 2029.
- Replacement of 46 nuclear-capable B-52H and 20 nuclear-capable B-2A with the next generation bomber, the B-21 Raider, in the mid 2020s.
- Replacement of B-83-1 and B61-11 gravity bombs with B61-12 gravity bomb in 2020.

- Replacement of 25-years old Air-Launched Cruise Missiles (ALCM) with Long-Range Stand-Off (LRSO) cruise missiles.
- Replacement of ageing dual capable aircraft (DAC) with nuclear capable F-35 fighter aircraft.

In addition to the replacement of triad, the US will enhance the role of its non-strategic nuclear weapons. It will modify its existing Sea-launched Ballistic Missile (SLBM) to provide a low-yield option and will pursue a modern nuclear-armed Sea-launched Cruise Missile (SLCM). Along with this, the US will also take a number of initiatives to carry out Nuclear Command, Control and Communications (NC3) modernization. The NC3 modernization would be aimed at strengthening protection against cyber threats; protection against space-based threats; enhance integrated tactical warning and attack assessment; improve command post and communication links; advance decision support technology; integrate planning and operations and reform governance of the overall NC3 system.⁶

NRP 2018 also provides a road map for modernizing the US nuclear arsenal and infrastructure. This road map includes completion of Life Extension Program (LEP) of nuclear warheads; advancing and warhead replacement program; exploring future warhead requirements; enhancement of advance technology capability and enhancement of the computational, experimental, and testing capabilities needed to annually assess nuclear weapons.

NPR 2018 is a stark departure from its predecessor - NPR 2010, which was aimed at maintaining stability. It seems that the US has enhanced the role of nuclear weapons in its respective nuclear policy and strategy and has shifted its focus to compete with other major nuclear powers. NPR 2018 would undermine the efforts of the international community to achieve the goals of a comprehensive nuclear disarmament. The US increasing reliance on low-yield nuclear weapons could send a signal of possible use of nuclear weapon. This will fuel an arms race among major nuclear powers to develop low-yield nuclear weapons for limited use.⁷ NPR 2018 has also raised questions on the Russian and Chinese nuclear doctrines. The Chinese Ministry of Defense has criticized the US NPR 2018 for “playing up” threats posed by China’s nuclear program.⁸ Experts are suggesting that the NPR 2018 would provide a justification for China to develop low-yield nuclear

⁶ Ibid.

⁷ Katrina Vanden Heuvel, “Nuclear Posture Review Signals a New Arms Race,” *Post and Courier*, February 24, 2018, https://www.postandcourier.com/opinion/commentary/nuclear-posture-review-signals-a-new-arms-race/article_ee8f059e-18d1-11e8-a5db-9fc48b977783.html.

⁸ “China Criticises US Nuclear Posture Review,” *Jane’s 360*, February 5, 2018, <http://www.janes.com/article/77606/china-criticises-us-nuclear-posture-review>.

option.⁹ Similarly, the NPR 2018 is also going to counter the Russian nuclear strategy of “escalate to de-escalate,” which also envisages the use of nuclear weapons at lower level. This could escalate the Russia-US rivalry and could undermine deterrence stability.¹⁰ This growing reliance on low-yield nuclear weapons by major powers will increase chances of limited nuclear use and there is likelihood that any small conflict could escalate into a full scale nuclear exchange. Such developments are detrimental to international peace and security.

⁹ Raymond Wang, “Making Sense of Chinese Reactions to the US 2018 Nuclear Posture Review,” *Diplomat*, February 27, 2018, <https://thediplomat.com/2018/02/making-sense-of-chinese-reactions-to-the-us-2018-nuclear-posture-review/>.

¹⁰ “The Nuclear Posture Review and Russian De-Escalation: A Dangerous Solution to a Nonexistent Problem,” *War on the Rocks*, February 20, 2018, <https://warontherocks.com/2018/02/nuclear-posture-review-russian-de-escalation-dangerous-solution-nonexistent-problem/>.