Growing Reliance on Tactical Nuclear Weapons: A Case Study of US, Russia and Pakistan

Muhammad Naveed Qaisar* and Amjad Abbas Khan**

Abstract

This paper argues that, due to their inherent strategic competition, Washington and Moscow rely on low-yield or Tactical Nuclear Weapons (TNWs) to overcome intrinsic geo-strategic uncertainties of international politics. It further explores the nuclear policy of the US and Russia while positing that both states are depending on the use of battlefield nuclear weapons for ensuring nuclear deterrence stability. It also maintains that Pakistan’s policy of full-spectrum deterrence and its declaration to use TNWs, when certain red lines will be crossed, is in line with the policy of above-mentioned states.

Keywords: Tactical Nuclear Weapons, Nuclear Deterrence, Strategic Stability, Nuclear Policy, Full Spectrum Deterrence.

Introduction

During the Cold War, the former Soviet Union was considered conventionally stronger than the US. Its conventional superiority threatened to erode Washington’s extended deterrence guarantees to Western Europe. Therefore, it formulated the policies at the tactical and strategic level so that any conventional attack on Europe could escalate to nuclear war. Hence, NATO heavily relied on the threat of nuclear escalation to thwart the Soviet Union’s interventions.¹

To achieve its desired objectives, the US not only introduced conventional forces but also tactical and intermediate-range nuclear arsenals. Deployment of a tactical nuclear weapon was aimed at involving Washington’s nuclear forces in case of outbreak of any conflict in Europe. Thus, leaving two options: that such weapons either be targeted or used. In the words of S Paul Kapur, “The United States adopted tactical and strategic measures designed to increase the likelihood of nuclear escalation during the Cold War. A high probability of conventional conflict reaching the nuclear level would make conventional conflict more dangerous, thereby reducing the likelihood of Soviet aggression.”

The rationale behind the introduction of such weapons was to ensure that an adversary’s conventional superiority would be countered through the use of battlefield nuclear weapons. However, the debate over the use of TNWs in the overall strategic equation of the Cold War came to an end with the collapse of the Soviet Union in the early 1990s. Consequently, the US emerged as a sole superpower and the international system transformed from bipolarity to unipolarity. In contemporary international politics, most scholars argued that international politics is shifting towards multipolarity. By its very nature, such a system is more prone to conflicts and competition than bipolarity or unipolarity. A bipolar system is less prone to war due to the presence of a fewer number of conflict dyads. Therefore, deterrence is easier because of the lesser probability of imbalance of power. While multipolarity has many conflict-prone situations due to the existence of multiple power dyads. According to Mearsheimer, “…deterrence is more difficult in a multipolar world because power imbalances are common place and, when power is unbalanced, the strong becomes hard to deter.”

Nonetheless, the US-Russia strategic competition between the US and Russia is becoming increasingly prominent. As Dimitri Trenin rightly observed, “Arms races in a number of fields — nuclear and advanced non-nuclear weapons, strategic offence and defence systems, space, cyberspace,

---

Growing Reliance on Tactical Nuclear Weapons

artificial intelligence, robotics and others are becoming more intense.”

Trump administration’s Missile Defence Review January 2018, also expanded the scope of Ballistic Missile Defence (BMD) shield by mentioning China and Russia as the main threats. Such policy also shifted Washington’s long-standing stance on BMD. Earlier, it was stated that the basic objective of BMD was to counter the threat from rogue states, Iran and North Korea for instance. These emerging trends may also lead to an intensification of arms race among great powers. The current administration, in the US, believes that presently it is confronting very complex and demanding international security situation. Therefore, it will have to modernise its nuclear forces to ensure credible nuclear deterrence.

The first part of this paper discusses the contemporary US nuclear policy and its reliance on the use of battlefield nuclear arsenals. The second section analyses Russia’s nuclear policy and its dependence on the use of low-yield nuclear weapons. Its final section explains that Pakistan’s full-spectrum deterrence and its decision to develop battlefield nuclear weapons are meant to ensuring strategic stability in South Asia.

US Nuclear Policy and Tactical Nuclear Weapons

The demise of the Soviet Union led to the termination of the Cold War. As a result, the US emerged as a sole superpower of the world. In the 1990s it was proposed that low-yield nuclear weapons with enhanced guidance and reliability should be produced to limit collateral damage. However, such proposals were shelved due to lack of credible external threats. Meanwhile, in the early 2000s, the Bush administration abrogated the Anti-Ballistic Missile Treaty (ABM) with Russia and intended to develop advanced nuclear weapons. However, in 2010, the Obama administration pledged to work for the complete elimination of nuclear weapons while keeping the option of safe, secure and effective nuclear deterrence intact. He also declared that the primary objective of

---

7 Ibid.
nuclear weapons is to counter any nuclear aggression towards the US, its allies and partners but such weapons would be fired in “extreme circumstances.”

Furthermore, Obama’s policy also maintains that the US “will not use or threaten to use nuclear weapons against non-nuclear weapons states that are party to the NPT and in compliance with their nuclear non-proliferation obligations.” It also suggested that the US could not use nuclear weapons when its vital interests would not be at stake.

The Trump administration is focusing on the great power confrontation and introduced Nuclear Posture Review (NPR) 2010, which, unlike the previous ones, emphasised on strategic stability. It mentioned the introduction of TNWs to the US nuclear arsenal. Therefore, some of the scholars also highlighted the danger of such weapons, which could initiate arms race with China and Russia. In addition, the Trump administration also declared a “no first use” option which appears contradictory to the dynamics of the contemporary strategic environment. The US National Defence Strategy, under the Trump administration, also maintained that strategic competition among great power was emerging and termed it as one of the reasons for global disorder. According to the former Secretary of Defence, James Mattis, “great power competition, not terrorism is now the primary focus of [the] US national security.”

The US NPR 2018 broadened the scope of nuclear weapons in the US military strategy. It strongly recommends employing tactical nuclear capabilities with an objective of deterring adversaries for using such weapons. Likewise, it also calls for the installation of low-yield nuclear weapons.

---

13 Ibid, 137.
arsenals on the Trident-D-5 submarine ballistic missile and on a sea-launched nuclear cruise missile.\textsuperscript{14}

With reference to the NPR 2018, Secretary of Defence Jim Mattis said, “This review rests on a bedrock truth: nuclear weapons have played and will continue to play a critical role in deterring nuclear attack and in preventing large-scale conventional warfare between nuclear-armed states for the foreseeable future.”\textsuperscript{15}

The Trump administration not only introduced limited nuclear options but also changed Washington’s definition of strategic stability and its consequent approach, which states that “they must understand that there are no possible benefits from non-nuclear aggression or limited nuclear escalation. Correcting any such misperception is now critical to maintaining strategic stability in Europe and Asia.”\textsuperscript{16} The NPR 2018 implies that diverse set of factors are affecting strategic stability. America’s such approaches bring it closer to Russia’s: strategic deterrence includes nuclear, non-nuclear and non-military component. The nuclear document also discusses emerging technologies such as cyber-threats to the US command and control system and space-based assets. It can also be surmised that now the US considers conventional and non-traditional threats could have a potential effect on its deterrent capabilities. Such postures shifted Washington’s position closer to that of Russia.\textsuperscript{17}

Moreover, the Trump administration also continues to keep an ambiguous first-use which may lead to inadvertent escalation and spread of nuclear weapons.\textsuperscript{18} In addition, the NPR 2018 also highlighted those conditions under which the US would resort to using such weapons when “significant non-nuclear strategic attacks… on the US, allied, or partner civilian population or infrastructure and attacks on [the] US or allied nuclear forces, their command and control or warning and attack assessment capabilities.”\textsuperscript{19}

\textsuperscript{15} \textit{Nuclear Posture Review 2018} III.
\textsuperscript{17} Ibid.
\textsuperscript{18} Lanoszkael et al., “Nuclear Ambiguity.”
\textsuperscript{19} Smetana, “A Nuclear Posture Review,” 142.
The Trump administration’s idea of introducing a TNW is driven in the context of its strategic competition with Moscow and its escalation dynamics. The rationale behind such policy is Herman Kahn’s concept of “escalation ladder.” According to Kahn, in order to have effective deterrence, it is important to develop the capabilities to dominate across different escalation rungs. In the contemporary international politics, the US perceives that, in the case of a NATO’s conflict with Russia, the latter may exploit the existing gap in the regional deterrence capabilities which could lead to a limited nuclear strike to de-escalate the crises. In the contemporary strategic environment, the US intends to deny the execution of Russia’s military doctrine “escalate to de-escalate” by emphasising its own TNWs. Therefore, the US is developing such types of weapons. According to one estimation, Washington possesses about 760 non-strategic nuclear weapons which can be fired through dual-capable aircraft or sea-launched cruise missiles.

Currently, the US also maintains that threat to its national security has increased since the last NPT review in 2010. Furthermore, the NPR 2018 emphasised that Russia and China continue to engage in modernising their nuclear arsenal which is playing a central role in their military strategies. It further states that the contemporary strategic environment is characterised with uncertainties and risks, therefore, nuclear weapons would play a significant role in preventing nuclear and non-nuclear aggression.

President Trump is no longer interested in arms control treaties, unlike Obama’s administration. Since the release of the NPR 2018, President Trump has hinted at withdrawing from the INF on the pretext that Russia is not honouring such treaty. It is also seriously considering developing Sea Launch Ballistic Missile (SLBM) with low-yield nuclear weapons and a new nuclear-capable Sea Launch Cruise Missile (SLCM).

---

20 Ibid, 144.
23 Nuclear Posture Review 2018, V-VI.
Russia’s Nuclear Policy and Tactical Nuclear Weapons

The disintegration of the Soviet Union and subsequent weaknesses in its conventional forces led to a lowering of the nuclear threshold to compensate for its inferior forces in the early 1990s. Therefore, in its 1993 military doctrine, Russia withdrew from its commitment of “no first use.” Moreover, it broadened the scope of its nuclear forces besides maintaining strategic deterrence. It also tasked its nuclear forces to deter regional conventional conflict. Even in the late 1990s, such trends continued and the Russian nuclear posture aims to terminate conventional aggression at a higher level through the limited use of nuclear warhead in the battlefield. Thus, in the post-Cold War era, Moscow remained heavily dependent on its nuclear arsenals for thwarting external threats. As a result, it lowered its nuclear threshold and readiness to use battlefield nuclear weapons in order to demonstrate its commitment and resolve in conflict.

However, Strategic Arms Limitation Talks (SALT) led to mutual reductions in strategic nuclear weapons of Russia and the US. Meanwhile, the significance of battlefield nuclear arsenals was amplified in Russia’s regional deterrence strategies. Relative to NATO, Russia is also confident that, technologically, it has superiority in the use of such weapons. As estimated, Russia possesses the highest numbers of non-strategic weapons in the world. Other than this, it is also perceived that America’s renewed interests in TNWs also revealed its intention to have a limited nuclear war in Europe while leaving its own territory unscathed.

In 1999, Russia’s inability to stop NATO’s precision strikes in Kosovo, led it to introduce the concept of “escalate to de-escalate.” Russia formulated this strategy with a view to counter NATO large scale conventional attack. Though such policy was not mentioned in the official military doctrine of Russia. However, in 2003, the Russian Ministry of

27 Ibid.
30 It is also estimated that Russia possessed about 2000 non-strategic weapons.
Defence mentioned the strategy of “escalate to de-escalate” in the following words, “forcing the adversary to cease hostilities by threatening or actually delivering strikes of various sizes with the use of conventional and/or nuclear weapons.”

Russia’s doctrine of “escalate to de-escalate” and its repeated military exercises gave an impression that it is ready to use low-yield battlefield nuclear weapons against NATO in order to end the conflict on the terms which are suitable for Russia. Nonetheless, in 2015, a senior US defence official notified congress that the “Russian military doctrine includes what some have called an escalate to de-escalate a strategy that purportedly seeks to deescalate a conventional conflict through coercion threats, including limited nuclear use.” The US strategists strongly believed that “in the event of a major war with the NATO, the Russian plans call for de-escalatory nuclear strikes. That is, Vladimir Putin would order limited nuclear attack early, so as to frighten the US into ending the conflict on terms favourable to Moscow.” The rationale behind such a doctrine is the inferiority of Russia’s conventional forces. Therefore, it explicitly contemplated the use of nuclear weapons in case of a conventional confrontation when its vital interests would be at stake.

Russia’s concept of “escalate to de-escalate” closely resemble NATO’s 1960s “flexible response strategy” with the assumption that in case of a failure of conventional deterrence, NATO would resort to the use of nuclear weapons. It was based on the premise that the Soviet would not use their own nuclear forces because of the fear of assured destruction. In December 2014, the Russian military doctrine maintained that nuclear weapons “will remain an important factor of preventing an outbreak of nuclear military conflicts involving the use of conventional weapons.” It states that Russia’s nuclear threshold is nuclear or WMD attack on its territory, allies or conventional aggression which threatened the existence of the state. On the other hand, Russia’s high official advocated lowering the

---

34 Ibid.
36 Zysk, “Nonstrategic Nuclear Weapons.”
nuclear threshold further since Ukraine crisis. Notwithstanding this, Russia is developing a two-tier nuclear strategy: Global nuclear deterrence which aims to deter a nuclear attack by the threat of retaliation and the regional deterrence strategy which aims to prevent large scale conventional aggression by NATO. It also gives the impression that Russia treats nuclear weapons as useable weapons with the threat of first use option.\textsuperscript{38}

Russia continues to modernise its existing stockpile of nuclear weapons. The scientific director of the Russian Federal Nuclear Centre said that by the end of 2010, Russia would establish infrastructure for the modernisation of its existing nuclear weapons.\textsuperscript{39} Moreover, it is also trying to develop a new generation of fissile material under the umbrella of the Comprehensive Nuclear-Test Ban Treaty (CTBT). In order to enable her soldiers to be equipped with the next generation of nuclear weapons in the coming decades.\textsuperscript{40} Some scholars are of the opinion that Moscow’s strategy of de-escalation by the use of TNWs has a natural tendency towards escalation. Nonetheless, such a strategy may not work as intended and, subsequently, the use of nuclear weapons may eventually lead to counter-mobilisation and counter-nuclear attack rather than de-escalation.\textsuperscript{41}

The Russian defence strategists also remain under the impression that the Obama administration’s broader vision of reduction of the US and Russia’s nuclear arsenals in 2010 under New Strategic Arms Reduction Treaty (START) would undermine its nuclear deterrence credibility. Moreover, they also perceive that they would be more vulnerable in case of effective US missile defence shield and also concerns about the US efforts to develop precision-guided conventional weapons which give the capability to strike anywhere in the world within an hour.\textsuperscript{42}

Moreover, Moscow continues to modernise its strategic forces. This was accelerated as a result of the US withdrawal from the ABM treaty, in 2002, and the disapproval of Russia’s proposal for building collaborative Russia-US/NATO missile defence shield for Europe and development of joint strategic non-nuclear system such as Prompt Global Strike. Consequently,

\textsuperscript{38} Ibid.
\textsuperscript{39} Adamsky, “Nuclear Incoherence,” 109-110.
\textsuperscript{40} Ibid.
\textsuperscript{41} Zysk, “Nonstrategic Nuclear Weapons,” 32.
\textsuperscript{42} Trenin, “Russian Views of US Nuclear Modernization,” 14.
for countering such threats, it is also developing its own nuclear and non-nuclear delivery system with global reach capability. Thus, in the contemporary strategic environment, it seems that nuclear weapons play a central role in Russia’s national security. Indeed, it has more low-yield nuclear weapons than any other country while President Putin would continue to remind the international community about Russia’s nuclear potential and the possibility of limited use of nuclear weapons.

Pakistan’s Full Spectrum Deterrence and Tactical Nuclear Weapons

Pakistan announced successful test of a short-range nuclear-capable ballistic missile in April 2011, for ensuring deterrence at shorter range. This led to a discussion about Pakistan’s decision to introduce TNWs and its likely impacts on Indo-Pakistan deterrence stability dynamics. The global non-proliferation community raised great many concerns regarding Islamabad’s decision to introduce such a weapon in its nuclear posture. But, later argued that such a decision was taken in response to India’s Cold Start Doctrine (CSD) which focuses on low-scale, lightening swift conventional attack on its territory. Since then, Pakistan has been adjusting its nuclear posture with new short-range weapons to retaliate against conventional threats. It is also pertinent to note that in the contemporary regional strategic environment, Pakistan is fully confident that the short-range Nasr missile is fully integrated into its strategic forces.

In March 2015, the former Director General of Strategic Plans Division (SPD), Gen. Kidwai, highlighted following salient points of Pakistan’s Full Spectrum Deterrence:

a) “Pakistan possesses the full spectrum of nuclear weapons in all the three categories: strategic, operational and tactical, with full

---

43 Ibid, 15.
45 Harries, “A Nervous Nuclear Posture Review.”
range coverage of the large Indian landmass and its outlying territories, there will be no place to hide.”  

b) “Pakistan possesses appropriate weapons yield coverage and the numbers, to deter the adversary’s pronounced policy of massive retaliation; the counter-massive retaliation punishment will, therefore, be as sever if not more.”  

c) “Pakistan enjoys the liberty of choosing from target-rich menu, the full spectrum of the Indian counter value, counterforce and battlefield targets.”

In 2013, Pakistan officially declared that credible deterrence must counter the full spectrum of possible threats. While Pakistan’s Army’s Inter-Services Public Relations (ISPR) noted that “Pakistan... would maintain a full spectrum deterrence capability to deter all forms of aggression.” Full-spectrum deterrence is an important development which shifted Pakistan’s deterrence policy not only to counter nuclear but also conventional attack.

However, Pakistan’s decision to develop TNWs raised considerable international’s concerns including in the US for appearing to lower the nuclear threshold to counter conventional threats from its arch-rival India. The US Director of National Intelligence, Daniel R Coats, noted, “Pakistan continues to produce nuclear weapons and develop new types of nuclear weapons, including short-range tactical nuclear weapons, sea-based cruise missiles, air-launched cruise missiles and longer-range ballistic missiles.”

---

50 Ibid.
51 Ibid.
53 Biswas, “Pakistan’s Tactical Nukes,” 171.
54 Ibid.
55 Kristensen, et al., “Pakistani Nuclear Forces, 2018.”
The Trump administration also declared that “We are particularly concerned by the development of tactical nuclear weapons that are designed for use in the battlefield. We believe that these systems are more susceptible to terrorist theft and increase the likelihood of nuclear exchange in the region.”\(^{56}\) The US Undersecretary of State, Rose Gottemoeller, informed the congress, “Battlefield nuclear weapons, by their very nature, pose a security threat because you are taking battlefield nuclear weapons to the field where, as you know, as a necessity, they cannot be made as secure.”\(^{57}\)

Pakistan maintains that such developments are based on its consistent security policy of assuring deterrence stability. Islamabad believes that it is important to introduce deterrence at all levels to reduce the growing asymmetry in conventional arms.\(^{58}\) Therefore, the country has formalised the role of TNWs to deter low-scale conventional attack.\(^{59}\) Subsequently, such developments lower the nuclear threshold for deterring particularly conventional cross-border limited war. Now such weapons have become the symbol of Pakistan’s new military doctrine “Full Spectrum Deterrence.”\(^{60}\)

In December 2017, Pakistan’s National Command Authority (NCA), in its 23rd meeting reiterated “Pakistan’s policy of developing and maintaining Full Spectrum Deterrence, in line with the policy of Credible Minimum Deterrence and avoidance of arms race.”\(^{61}\) The reasons behind such developments are Pakistan’s concerns that the Indian conventional forces are deployed at large against Pakistan and a major portion of its nuclear forces are Pakistan specific.\(^{62}\)

---


\(^{58}\) Yamin, “Tactical Nuclear Weapons (TNW),” 31.

\(^{59}\) Biswas, “Pakistan’s Tactical Nukes.”


\(^{61}\) I Kristensen et al., “Pakistani Nuclear Forces, 2018,” 348-349.

\(^{62}\) Yamin, “Tactical Nuclear Weapons (TNW),” 36.
Some writers also raised the issue of the ineffectiveness of TNWs against the Indian threats. Many others highlighted the dangers of TNWs during the time of crisis because the command and control of battlefield nuclear weapons would be less centralised. On the other hand, the use of such weapons would also break the powerful taboo which has been built in the post-WWII era. Nonetheless, Pakistan maintains that the basic objective of its nuclear weapons is to deter existential threats from India.

It is also argued that in South Asia, the present situation is different from the Cold War era where the US could lose land in Germany before using TNWs against the Soviet Union. Viewing such scenario in Indo-Pakistan hostilities, Islamabad, however, cannot afford to lose territory just because of lack of strategic depth. According to Tughril Yamin, “Losing real estate, even shallow ingress under the garb of the Cold Start Doctrine or the proactive operations is not acceptable. It would, therefore, use all strategic and conventional means at its disposal to enhance deterrence. Enhancing deterrence is the overarching principle of Pakistan’s defensive strategy. Short-range nuclear weapons are just another way of doing that.” Likewise, Pakistan also posits that the development of tactical nuclear weapons is because of limited resources and it does not have the luxury of buying readymade sophisticated defence hardware. Lastly, its arch-rival is rapidly arming which is causing further conventional asymmetry between two states.

Gen. Kidwai said that Pakistan will never allow the deterioration of nuclear capability or efforts to undermine it. However, the latest development of the introduction of the S-400 into India’s air force in 2020 will have implications for strategic stability.

---

66 Ibid., 41.
67 Ibid., 42.
Conclusion

The development of low-yield nuclear weapons has generated interest of strategists which enabled it to deter conventional aggression. While strategic nuclear weapons are not satisfactory for achieving an objective which demanded accuracy, cleanness and limited collateral damage. In the contemporary global strategic environment, both Russia and the US are in a confrontational mode. Both states maintain the central role of nuclear weapons in their national security strategy. In addition, both are engaged in modernisation of the nuclear arsenal. Thus, a new arms race has started between two antagonists with a history of deep mistrust. Such developments are increasing the risk of miscalculation and inadvertent escalation. While, in the face of rising threats from India, Pakistan also perceived that former may initiate any misadventure which could escalate to a nuclear war. Current global trends suggest that TNWs continue to play a significant role in military strategy of the US, Russia and Pakistan. The objective behind such a policy is to cope with the uncertain strategic environment in their respective regions. These states believe in strategic stability which not only includes nuclear but also conventional stability.

---
