Role of Tactical Nuclear Weapons in Deterrence Stability: Comparison of NATO countries and South Asia

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Introduction

The security environment of a nuclear state is intrinsically linked to the perceived utility of nuclear weapons as a tool for defense. Tactical Nuclear Weapons/battlefield weapons can reinforce the credibility of nuclear deterrence if their deterrent value is clearly signaled to the adversary. Furthermore, short-range ballistic missiles may support strategic stability if a causal relationship can be established with all other military factors.¹ The conventional force asymmetry between two adversarial powers deepens the sense of insecurity of the weaker side, forcing it to rely more on nuclear weapons to deter aggression.

Tactical Nuclear Weapons (TNWs) were a late entrant to nuclear/strategic environment in the Cold War era, in early 1970s, but they played a significant role in strengthening deterrence and avoidance of war between the adversaries. TNWs have also been introduced in South Asia in the last few years. This article attempts to study the role of TNWs in strengthening deterrence in South Asia by comparing their role with their deployment in NATO countries during the Cold War.

Though TNWs were introduced in Europe in early 1970s yet there is no single agreed upon definition of a tactical nuclear weapon. These are generally characterized by a lower yield and shorter range as compared to a long-range/high yield (strategic) nuclear weapon. TNWs are also sometimes referred to as battlefield nuclear weapons. From the Western perspective, TNWs are defined as short-range missiles from as little as (2-4 kilometers to a maximum of 500 kilometers)², low-yield weapons (0.4 - 40 kilotons to a maximum of 150 kilotons).³ According to the Department of Defense Dictionary of Military Terms; the tactical use of nuclear weapons is defined as "the use of nuclear weapons by land, sea, or air forces against opposing forces, supporting installations or facilities, in support of operations that contribute to the accomplishment of a military mission of limited scope or in support of the military commander's scheme of maneuver, usually limited to the area of military operations."⁴

Tactical Nuclear Weapons: Place in Deterrence Theory

A state's military strategy and defense posture are shaped by its geography, history, strategic circumstances and economic profile as well as by its core values. The most important goal for each state, strong or weak, is the attainment of security against internal and external threats. Security strategy also means preserving state's capacity for independent decision-making, thereby ensuring it can pursue its national objectives in an environment free of external coercion.⁵

Deterrence involves the acceptance of the assumption that nuclear weapons are the best guarantee against aggression, in spite of the fact that their possession involves the risk of accidental war. Deterrence theory maintains that the enemy would be deterred from aggression, if a state possesses nuclear weapons, as it is believed to be rational, and because it is aware of the consequences.⁶

The rationale of tactical nuclear weapons in the deterrence theory can be better understood by the ideas of Luttwark, one of the modern teachers of strategy. He stated that the military operation's connotation and linear logic follows the Latin dictum "if you want peace prepare for war". In actuality, military strategies pursue this paradoxical logic.

Strategic Environment which Led to the Deployment of TNWs in Europe

After World War II the parameters of strategic environment in Europe were drawn by the containment policy of the West against Soviet expansion in Western Europe. As had been graphically stated by Churchill, "From Stettin in the Baltic to Trieste in the Adriatic an iron curtain has descended across the continent. Behind that line lie all the capitals⁹ of the ancient states of Central and Eastern Europe. All cities are in Soviet sphere, and all are subject to very high, increasing control from Moscow." ¹⁰

The strategic environment fundamentally changed when growing worries arose regarding the intentions of erstwhile USSR. These apprehensions were related to the Soviet detonation of an atomic bomb in 1949, and in the outbreak of the Korean War in 1950. With the benefit of aid and security umbrella political stability was gradually restored to western Europe and the post-war economic

marvel began. New allies joined the North Atlantic Treaty organization NATO including Greece and Turkey in 1952 and West Germany in 1955.¹¹ With that European political integration had taken its first hesitant steps.

The creation of North Atlantic Treaty organization (NATO) was also a significant strategic development in response to the threat posed by the Soviet Union. In fact, the Alliance's creation was part of a broader strategic move to serve three purposes; deterring Soviet expansionism, forbidding the revival of nationalist militarism in Europe through a strong North American presence on the continent, and encouraging European political integration.¹²

In reaction to NATO's formation the Soviet Union and seven of its European satellite states signed a treaty establishing the Warsaw Pact on May 9, 1955. 13 Warsaw Pact emerged as a mutual defense organization that put the Soviets in command of the armed forces of the member states. This pact called on the member states to come to the defense of any member attacked by an outside force. 14 It also set up a unified military command under the Soviet Union. The introduction to the treaty establishing the Warsaw Pact articulated the reasons for its existence. This revolved around the then western Germany, "which is being remilitarized, and her inclusion in the North Atlantic bloc, which increases the danger of a new war and creates a threat to the national security of peace-loving states." 15 Post Warsaw Pact Europe settled into an uneasy stand-off, symbolized by the construction of the Berlin Wall in 1961. During this time, NATO adopted the strategic doctrine of "Massive Retaliation", which essentially meant that in case of an attack from the Soviet Union, NATO would respond with nuclear weapons causing widespread destruction of Russia.

This threat of "Massive Retaliation", in the opinion of western strategists, deterred former Soviet Union from the use of force and allowed NATO members to focus their energies on economic growth rather than on maintaining large conventional armies. But, in the 1960s this troubled but stable *status quo* began to transform. Cold War tensions were re-ignited as conflict in Cuba erupted, and in parallel American involvement in Vietnam escalated. Thus, the conventional balance in Europe underwent significant changes in the three decades during 1950s and 70s. NATO's qualitative superiority in conventional weapon technology was off-set by a comprehensive modernization of Soviet forces and an overall quantitative increase. The primary threat that NATO was always concerned with was the

possibility of an attack from the Soviet Union. The close proximity to former East Germany and the Soviet Union made the Western European states more susceptible to conventional ground and air war.¹⁷ Adjusting to this development NATO and the United States abandoned the 'massive retaliation' model and adopted 'Flexible Response' as their new nuclear doctrine.¹⁸ Flexible response was considered a more suitable strategy for maintenance of security and integrity of the North Atlantic Treaty area within the concept of 'forward defence'.¹⁹

This allowed NATO to mix and match conventional and nuclear capabilities with layers of graduated response. It also enhanced NATO's conventional defense posture by offering military responses which would be short of a full nuclear exchange in the event of a conflict. This response was to deter Soviet aggression and thus preserve peace.

As the threat of a conventional war with the Soviet Union persisted many European countries became uncertain of US guarantees of defending Europe from a Soviet invasion. Thus began a large debate within NATO to determine the way to deter the increased Soviet threat and within this context TNWs provided an assurance of deterrence stability.²⁰

Tactical Nuclear Weapons were made a key element of NATO's nuclear posture and a significant part of flexible response in early 1960s.²¹ TNWs were a subclass of nuclear weapons intended to shake adversary's military confidence and increase Alliances' reassurance.²² It, therefore, created a common deterrence culture within which joint planning for nuclear contingencies could be conducted, and normalize conventional imbalance.²³

The TNWs played a role in stabilizing deterrence and reduced the possibility of escalating a conventional war between NATO and the former Soviet Union. Since the fall of the Soviet Union, Russia, began to seriously rely on its nuclear arsenal and its tactical nuclear weapons in particular. This was the reversal of polarity, over the past two decades, initiated with the fall of the Berlin Wall, and significantly reshaped the environment in which tactical nuclear weapons had come into play.²⁴

In short, NATO's nuclear policy evolved over a few decades, from an expansive view on the uses of nuclear weapons to a more limited view. NATO's tactical

nuclear capabilities contributed positively to deterrence and stability during Cold War and are likely to continue to do so in the foreseeable future.

South Asia's Strategic Environment: Comparison with NATO Countries

There are some striking similarities between Pakistan's and NATO's nuclear deterrence policy. Common factors can be traced to the early 1950s when TNWs were introduced by NATO to augment defense against a possible invasion by superior conventional Soviet forces. Like Western Europe in the past Pakistan today faces an adversary with superior conventional military forces and finds that by a greater reliance on nuclear weapons it can contain the opponent's conventional advantage.

The strategic environment of South Asia is however, more risk prone than that of NATO countries looking at their high conflict record, historical baggage, and unresolved disputes. India's significant conventional military edge over Pakistan becomes the baseline for the analysis of South Asian strategic environment, and to find answers to the questions whether Indian political and military leaders might use military force and whether they would accidentally cross a Pakistani nuclear "threshold/redline." Masood quotes Former Indian Army Chief General (retd) Deepak Kapoors that, "The possibility of limited war under a nuclear overhang is still a reality in South Asia." On the other side, Pakistani strategists continually examine whether and how its leadership would decide to employ nuclear weapons in order to respond to an Indian conventional military aggression. According to a Pakistani strategist "Pakistan continues to maintain deliberate ambiguity in its nuclear use doctrine, however, the cardinal principle of Pakistan's nuclear policy remains hinged to deter all forms of aggression, mainly from India." ²⁶

Evolution of South Asian strategic environment can be examined in the context of the track record of Indo-Pak conflicts since 1947-48 war. In 1947-48 Pakistan seized a sizeable portion of the princely state of Jammu and Kashmir.²⁷ In 1965 major battles were fought along a relatively small portion of the nearly 2,000-kilometer boundary between the two states.²⁸ Then 1971 war was an unpleasant military experience for Pakistan on multiple levels, both military and political.²⁹In this case, conventional force mismatch with India resulted in a catastrophe for Pakistan. However, nature of military conflicts has changed since the last full-scale

war four decades ago with the induction of nuclear weapons by both the adversaries.

Other factors that add to the complexity in South Asian strategic environment are geographical proximity between the adversaries. As a result of historical baggage and mutual animosity, India embarked upon a nuclear program which culminated in nuclear tests in 1998. Pakistan followed suit. Since then, the existence of nuclear weapons, along with bilateral and third-party diplomatic efforts, played a significant role in neutralizing the escalation of several crises that erupted in 1999 (Kargil), and 2001-02 military stand-offs and prevented them from becoming full-scale wars.³⁰

Promulgation of Indian military and nuclear doctrines was the most significant development in South Asian strategic environment which obliged Pakistan to address the perceived security threat. From early 1980s, the Sundarji doctrine³¹ remained the dominant military ideology for India's military planners until 2004. According to this doctrine, a large number of Indian Military formations were deployed on its western border to coerce Pakistan. Indian Army Chief revealed, in April 2004, a new military doctrine, the Cold Start.³² The core objective of this doctrine was to build Indian capability to launch a conventional strike on a wide Pakistani front in the shortest possible time without crossing Pakistan's nuclear threshold. This doctrine aimed at limited war objectives, and Indian planners hoped to deny Islamabad the rationale for a nuclear response targeting major Indian cities.³³

The Cold Start Doctrine (CSD) envisages reorganizing holding corps into at least eight smaller division-sized Integrated Battle Groups (IBGs) that are to be forward deployed away from three strike corps by combining mechanized infantry, artillery, and armor. It resembles the tactics of Soviet Union's operational maneuver groups. The IBG's would mobilize swiftly to make ingress into Pakistani territory 50-60 kilometers deep within a short time period of 72-96 hours, like the German blitzkrieg against the French in 1940s. The idea is to surprise Pakistani armed forces.³⁴ According to Walter Ladwig's analysis, "As the Indian Army enhances its ability to achieve a quick decision against Pakistan, political leaders in New Delhi may be more inclined to employ force in a future conflict with potentially catastrophic results."³⁵

Faced with challenges posed by Indian CSD, and constrained by a much smaller economy which did not allow it to build a conventional force capability at par with that of India, Pakistan has turned towards inducting TNWs. Pakistani strategists calculated that TNWs would be the most effective deterrent against the Cold Start Doctrine of the Indian military.

The development of short range surface to surface ballistic missile, NASR, by Pakistani scientists and engineers has made the deployment and delivery of TNWs possible. NASR has a range of 60 km, and can carry nuclear warheads of appropriate yield with high accuracy, and possesses shoot and scoot attributes. This quick response system addresses the need to deter evolving threats, especially at shorter ranges.³⁶ In addition, the induction of this missile manifested that Pakistan has succeeded scientifically in miniaturizing its nuclear weapon designs to the extent that these can be launched by tactical and cruise missiles. More precisely, Pakistani defensive military formations would have the capability to use nuclear strikes to annihilate the offensive rapid armored thrust of the aggressing IBG forces. It is a credible deterrent strategy against the war-fighting proactive Indian strategy of Cold Start Doctrine. Talking at the launch of NASR the director General of the Strategic Plans Division (SPD), Lieutenant General (retd) Khalid Ahmed Kidwai stated that "NASR is a very important milestone in consolidating Pakistan's strategic deterrence capability at all levels of the threat spectrum."37

For all the above reasons the development of short-range weapon systems capability was a well-considered rational choice for Pakistan. It remains within the confines of its defensive doctrine as TNWs capability is designed to deter the Indian aggression against Pakistan by leveraging the asymmetry in the conventional forces of the two countries. This seems to follow the same course that NATO and the erstwhile Warsaw Pact did in the 1960s. If strategic stability was sustained with the so-called TNWs in East-West relationship in Europe, the rational actors in South Asia would also remain similarly deterred. Also, going by the history of crises between Pakistan and India since the induction of nuclear weapons in each state's arsenal, it is evident that that de-escalation begins much below the nuclear threshold.³⁸

Conclusion

During the Cold War period flexible response doctrine was a successful attempt to come to terms with a new security reality in Europe. Schulte has maintained that, although the nuclear weapons complexes cost the United States and the Soviet Union trillions of dollars, TNWs specifically spared NATO countries the enormous cost of maintaining large standing conventional armies.³⁹ He also states that while they contributed to the security dilemma during the Cold War, TNWs were a major cause of stability: they improved the correlation of forces from the NATO's perspective and did not lend themselves to "bolt from the blue scenarios" because they were embedded as a viable option to retain conventional forces.⁴⁰

Deployment of TNWs in Europe played the role of a balancer and provided a timely solution for future crisis stability. As a result, the technological aspects of TNWs helped the states in Europe in achieving their national security goals by maintaining strategic stability despite huge conventional force disparities.

Today South Asia is faced with a security situation similar to the one confronted by western European countries during the Cold War. Pakistan, a weaker power in comparison, is in no position to enhance its conventional force capabilities to match that of India. Threatened by its much larger enemy, particularly after the adoption of the Cold Start Doctrine by the former, Pakistan's development of TNWs is an attempt to reinforce strategic stability. In other words, it is a technological response to a conventional doctrinal challenge. Consequently, as in the case of NATO, for Pakistan TNWs are defensive weapon systems designed to counter perceived offensive threats.

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Endnotes:

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