

# Pakistan's quest for 'full spectrum deterrence' continues

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By – *Anubhav S Goswami*;

In a bid to boost the firepower of its army along the Line of Control (LOC), Pakistan has bought SH-15 Howitzer from People's Republic of China (PRC) to deter India. These artillery guns were delivered under a contract that the Pakistan Army had signed with China Northern Industries Corporation (NORINCO) after the February-March 2019 tensions with India. The total number of SH-15 to be delivered to Pakistan under the contract is 236, of which some units have been supplied. In this article, alleged capability of SH-15 to fire nuclear shells is discussed with a major focus on Pakistan's advocacy for the use of Tactical Nuclear Weapons (TNWs) in its deterrence posture against India.

## **Howitzer that can fire nuclear shells?**

SH-15 systems are capable of firing 155 mm NATO ammunition as well as indigenous ammunition. They are fitted on the chassis of a truck that can carry 60 rounds of ammunition in four boxes. The range of the SH-15 is said to be 53 km and as this artillery system can be transported via most medium cargo planes like the Y-9, its utility as an extremely mobile munition platform for rapid response teams is immense. Furthermore, in many reports of past and present, it has been said that the SH-15 howitzers are capable of firing nuclear shells. However, this has not been confirmed by any credible source. Nonetheless, SH-15 provides the advantage of having a 'shoot and scoot' system that is best for the use of nuclear shells as it is "easy to hide and easy to use against troop concentration". This article assumes that an SH-15 can indeed fire nuclear shells.

However, the more important ambiguity is over Pakistan's possession of Tactical Nuclear Weapons (TNW). *Does Islamabad possess miniaturised nuclear weapon to fit into an SH-15 Howitzer?* SH-15 could only be made nuclear-capable if Pakistan's attempts to miniaturize its nuclear weapons are successful. Pakistan has been working on a TNW program since 1984; former Pakistani president Pervez Musharraf had claimed in conversation with a top US diplomat that Islamabad had created a "minuscule nuclear warhead" in the latter half of 2011. Another top establishment person, former Foreign Secretary Aizaz Chaudhry, confirmed in Washington DC in October 2015 that Pakistan already possessed low-yield battlefield weapons to counter India's Cold Start strategy. India's Cold Start doctrine envisages a pre-emptive operation virtually from a "cold start" to deny Pakistan the advantage of early mobilisation with Indian "integrated battle groups" (IBGs; divisional-size forces) launching "limited offensive operations to a shallow depth, to capture a long swathe of territory, almost all along the international boundary".

Furthermore, for India, the selling of an alleged nuclear-tipped artillery to Pakistan raises serious questions on China's already notoriously infamous proliferation record, raising the threat quotient vis-à-vis national security even more.. Beijing has mastered a perfect strategy of supplying conventional weapons to Pakistan to keep India alert on its western border. China also secretly transferred nuclear weapon technology and material to Pakistan beginning the 1980s. Islamabad benefited from those assistance to the extent that it enabled them to develop its nuclear deterrent against India. Evidences speak of China passing the entire design for a nuclear weapon to Pakistan in the early 1980s. This was a first where a nation "handed over the full design for a nuclear weapon to a strategic partner". In the case of Islamabad's TNW programme, there's no evidences of China helping Pakistan to miniaturise an atomic bomb. However, Pakistan's short-range ballistic missile, the Nasr (Hatf 9) – a "quick response" tactical nuclear delivery system – is derived from China's WS-2 tactical rocket. Such collaborations in the past gives enough grounds for future China-Pakistan cooperations on TNWs, particularly on nuclear artillery, an open-ended possibility.

### **Nuclear artillery in sync with FSD**

Since it conducted nuclear tests in 1998, Pakistan's nuclear doctrine and force posture evolved from 'minimum credible deterrence' to 'credible minimum deterrence' in line with the dictum of 'full-spectrum deterrence' (FSD). FSD is meant to enhance Pakistan's deterrent capability "at all levels of the threat spectrum," including the strategic, operational, and tactical levels. FSD came into being on Sept 5, 2013 after Pakistan's top body on research, development, production, use and security of the nuclear programme approved and adopted it as the country's nuclear doctrine. The FSD also occupies a critical role in Pakistan's recently adopted National Security Policy (NSP) where the cardinal policy objective is to "deter any aggression by maintaining a cost-effective and adaptive military, focused on modernisation and optimisation of force structures to ensure adequate conventional capability and maintain full spectrum deterrence within the precincts of credible minimum nuclear deterrence, without getting involved in an arms race".

The need for a change in the nuclear doctrine was felt in Islamabad after Pakistani strategists concurred that India's limited warfighting concepts of 'Cold Start' and Pro-Active Operations (PAO) necessitate the requirement of newer range of options for Pakistani decision-makers. Islamabad believes that Full Spectrum Deterrence will help Pakistan deter threats of a limited war under the shadow of nuclear weapons. Doctrines of limited war evolve when there is strategic instability between two conflicting nations. From Pakistan's point of view, strategic instability in South Asia is caused by Pakistan's lack of strategic equivalence with India due to the vast asymmetry in conventional capabilities between the two nations. Former head of Pakistan's all-important Strategic Plans Division (SPD), Lt. General (retired) Khalid Ahmed Kidwai said that to restore strategic stability between Islamabad and New Delhi and make war less likely, deployment less likely of battlefield nuclear weapons became necessary to extend Pakistan's conventional deterrent capabilities.

The NSP also calls for the development of "requisite conventional capabilities" in full-spectrum deterrence to "defend Pakistan's territorial integrity at all costs". In line with FSD, TNWs are meant to provide strong deterrence against India's proactive military doctrines like the Cold Start which, according to Pakistani analysts, calls for up to "eight independent armoured brigades to penetrate up to 50 kilometres (about 31 miles) into Pakistan without crossing Pakistan's nuclear thresholds".

Most military strategists and planners in Islamabad agree that TNWs complete FSD as it allows Pakistan to choose the rung on the escalation ladder at which it can deliberately upscale the war before the country suffers any considerable degradation of its armed forces. TNWs, if fitted in a 155 mm shell with a stated range of 53 km, will add value to Pakistan's deterrence strategy that revolves around escalation dominance at all rungs of the military ladder, from low intensity to conventional and nuclear war.

### **Do TNWs establish strategic stability in South Asia?**

The rationale for FSD is that TNWs would help further stabilize nuclear deterrence and credibility in the South Asian region. However, the experiences of American and NATO commanders that have dealt with TNW's during the Cold War suggests that it is futile "of attempting to develop either doctrine or force structure to employ [TNWS] on the battlefield." Another American officer opines that "rather than contributing to deterrence by offsetting the conventional military superiority of the Soviet Union, the use of tactical nuclear weapons instead would have almost certainly guaranteed uncontrolled escalation in the event of a Soviet invasion of Western Europe". The prime reason for such bleak observation is the *tactical* nature of TNWs, which require some form of delegation of authority to battlefield officers for its deployment in the thick fog of war.

Now on a battlefield, Pakistani TNW launchers could only be deployed dangerously close to the fighting, which would expose them to India's conventional firepower. This is where a battlefront military officer might be confronted with a *use-it-or-lose-it* dilemma that could threaten Pakistan's command and control structure of its TNW forces. Therefore TNWs come with a high risk of being used prematurely when not authorised. Former US

Secretary of State Henry Kissinger described this as the “Mad Major Syndrome”. Pakistan claims to have a strong command and control structure and a reliable communications system for safe deployment of TNWs on the battlefield. Yet, deployment of TNWs will inevitably make Pakistani battlefield officers anxious about its survivability, making the TNWs a highly destabilizing agent for strategic stability in South Asia.

### **India’s concerns in the region**

Since Pakistan’s FSD reserves the *right to first strike* at theatre level, nuclear artillery enjoys a natural advantage over other delivery systems due to its ability to destroy counter-force targets on the battlefield. Counter-force targets could be anywhere from Rajasthan to Drass in Ladakh. According to one report, the howitzers will be mainly deployed in the mountainous plains along the Line of Control in Jammu and Kashmir. However, another study points out that nuclear artillery in the Kashmir region is unlikely due to Kashmir being the bargaining factor for Pakistan, and “destruction of Kashmir by use of nuclear weapons would mean Pakistan losing its bargaining factor”. However, nuclear artillery use in areas like the Kargil, Dras and Batalik sectors is possible. Runn of Katch region in the Rajasthan border also provides much scope for Pakistan’s counterforce operations.

However, the counterforce capabilities of Pakistan’s TNWs are not credible yet. India’s massive advantage in obtaining real-time intelligence, surveillance, and reconnaissance (ISR), and an equal advancement in space-based military capabilities can blunt the counterforce capabilities of Pakistani battlefield nuclear weapons. Critics also question the sufficiency of Pakistan’s fissile material (particularly plutonium) stockpiles that are critical for deploying an adequate number of nuclear artilleries to demonstrate its deterrent value against Indian integrated battle groups (IBGs). Given Pakistan’s limited fissile material, nuclear shells are likely to be deployed in limited numbers.

In addition, academics question the military utility of Pakistan’s TNW program. Physicists such as Pervez Hoodbhoy, A. H. Nayyar, and Zia Mian have claimed that battlefield nuclear weapons will have limited military utility against invading Indian armoured formations. TNWs will destroy only a few Indian tanks and armoured vehicles, thus falling short in their effectiveness in deterrence.

### **Conclusion**

Procurement of SH-15 Howitzer by Pakistan leaves much room for guesswork about its rumoured TNW capabilities. Pakistan’s National Security Policy 2022 stresses extending the nation’s conventional capabilities to “maintain full spectrum deterrence within the precincts of credible minimum nuclear deterrence”. TNWs are seen as an extension of Pakistan’s conventional deterrent capabilities as laid down in Islamabad’s Full Spectrum Deterrence doctrine. It is in this context, a careful observation and study of SH-15’s role in Pakistan’s TNW force structure is critical.

Pakistan believes TNWs are crucial for strategic stability in South Asia. However, low-yield battlefield deterrent by Pakistan will only create a risky cycle of misperceptions between New Delhi's *No-First-Use* policy and Islamabad's unstated policy of *First Strike* at a tactical level. Such doctrinal mismatch will reduce the scope for future crisis management and resolution, posing a great challenge to regional stability.

*Anubhav S Goswami is a Research Associate at Centre for Air Power Studies in New Delhi. Additionally, Anubhav is a Doctoral Scholar at Jindal School of International Affairs, O.P Jindal Global University. His doctoral research is based on the comparative analysis of American Grand strategy in the context of changing world system from Unipolarity to Multipolarity. His research interests include U.S Grand Strategy, Sino-American strategic competition, Taiwan's sovereignty, Indo-US Strategic relationship, Indian Foreign Policy, Indian grand strategic thought and Japanese Foreign Policy.*