

Deterrence consistency and counters against evolving Cold Start Doctrine

© 2018, CommandEleven. All rights reserved.

For more information about receiving this, or other CommandEleven analysis documents, please visit <http://www.commandeleven.com/>.

REPORT AUTHORS

"Deterrence consistency and counters against evolving Cold Start Doctrine" was researched, compiled and written by **Ahmed Ibrahim**, Contributing Analyst to CommandEleven.

ABOUT COMMANDELEVEN

CommandEleven is a research organization focused on Pakistan's national security aspects and enhancing global understanding and collaboration opportunities for the nation.

Founded in 2015, CommandEleven provides situational awareness to facilitate a better understanding of the key dynamics that effect Pakistan from a national security perspective, especially in relation to terrorism, insurgencies and extremism.

CommandEleven seeks to inform and guide public policy and decision makers in government, business and military through a rigorous program of publications, conferences, digital medias, policy briefings and recommendations.

Visit <http://commandeleven.com> for more information or contact info@commandeleven.com.

TABLE OF CONTENTS

INTRODUCTION	4
EVOLUTION OF COLD START	5
SHORTCOMINGS OF INDIAN CAPACITY IN LIEU OF COLD START	8
CONVENTIONAL OPTIONS FOR PAKISTAN TO CONSIDER	9
MAINTAINING NUCLEAR DETERRENCE	10
CONCLUSION	12

INTRODUCTION

Following the strategy of Sheltered Pursuit¹, Pakistan completed its nuclear program and tested its weapon capability on 28th May 1998 in response of Indian nuclear tests in following year. Introduction of nuclear weapons in South Asia radically changed the threat environment. Pakistan, a credible military power but weaker economy with subsequent geographic and diplomatic shortcomings is subjected to existential threats posed by India. This indicates why nuclear weapons have granted Pakistan ultimate sense of security by rendering Indian option of initiating armed conflict in South Asia out of scope.

Indian response to Pakistan nuclear weapons, which created stability–instability paradox in South Asia, was in shape of Cold Start Doctrine. The basic idea which is actively projected by Pakistan till today is that the dangers of ignition of conflict can be averted by assuring that any conflict, even initiated on a limited scale, will ultimately turn into nuclear war. This notion reduces the likelihood of conventional war, an area where India prevails, and thereby increases the potency of proxy warfare, an area dominated by Pakistan in Indo–Pak war theatre. The aim of Cold Start is to explore deficiencies in nuclear deterrence posture of Pakistan for ‘punishing’ Islamabad in response of Kashmir borne low intensity conflicts. Though Cold Start Doctrine successfully exploited the shortcomings in Pakistan’s defenses but Pakistan assertive response in shape of Tactical Nuclear Weapons development & deployment under the banner of doctrine Full Spectrum Minimum Deterrence (FSMF) has undercut the impunities India enjoys at the sub–conventional level.²

Maintenance of this deterrence is crucial for stability in South Asia though this stability exists in wrapping of ‘Nuclear Peace’. Deterrence is dynamic in nature which depends on several elements for maintaining its feasibility. These elements are also called ‘Cs’ of deterrence. In general, three ‘Cs’ are put into consideration i.e. Credibility, Capability and Communication. However, due to evolution of threat nature, the three–dimensional concept of Deterrence is now enlarged to include a fourth dimension called Consistency. For Pakistan, it is important to maintain Consistency of its Capability, Credibility and Communication for discouraging India from conducting undesirable actions in South Asian war theatre. New Delhi inclusion to modernize its conventional forces, supported by its rapidly growing economy, may pose threat to deterrence stability. India is looking to enhance its conventional prowess up to the level, where at least theoretically it will be able to locate, track, engage and destroy Pakistan nuclear assets which serves as ultimate tools of deterrence. Once that condition is achieved, at least allegedly, it will breach the deterrence barrier that exist in shape of nuclear weapons, leading to devastating conflict in South Asia.

¹ Vipin Narang, ‘Strategies of Nuclear Proliferation: How States Pursue the Bomb.’ *International Security* 41, no. 3

² Ali Ahmed, ‘Comparative Strategy’ *Cold Start the life cycle of a Doctrine*, pp 457

EVOLUTION OF COLD START DOCTRINE

Since its independence India has fundamentally kept a Defensive posture which was termed by Former Defense Minister George Furnandes as posture of 'Defensive Defense'. India maintained Sundarji Doctrine (1981–2004) which was focused on holding the enemy offense by seven holding corps and later launching offense by three strike corps situated deep in Indian territory. Operation Parakarm (2002–03) propelled by Indian Army in response of Militant Attacks on Indian parliament exploited the flaws in Sundarji doctrine. It lacked elements of surprise, strength in strike was insufficient and forces were too bulky in size to maneuver. Failure of Operation Parakram marked collapse of Sundarji Doctrine exposing the vulnerabilities in Indian armed forces war fighting strategy³.

To overcome the deficiencies in India's conventional war fighting strategy, a new concept of limited war under the name Cold Start was established. Existence of this new concept is acknowledged only recently by Indian top military brass otherwise, until now it was covered under the Curtin of 'proactive strategy'⁴. It was aimed at developing capacity to launch a retaliatory conventional strike against Pakistan that would inflict significant damage to Pakistan army before international community could intervene, and at the same time, pursue narrow enough aims to deny Islamabad justification to escalate the clash to nuclear level. Cold Start Doctrine offers numerous advantages over Sundarji doctrine, like it possesses the element of surprise, strike forces are small in size thus easy to maneuver, distributed forces offer bigger challenge to enemy intelligence assets and it can inflict limited but credible damage via bite & hold strategy with-out giving Islamabad justification to use nuclear weapons. This doctrine reorganized Indian army offensive power from three strike corps to eight division sized Integrated Battle Groups (IBGs). These IBGs would strike Pakistan at multiple fronts swiftly under the cover of Indian air force & naval aviation assets. At the same time holding corps (renamed as Pivot Corps), boasted by additional armor and artillery, would man defensive positions and undertake limited offensive position when necessary. Instead of delivering knock-out blow to Pakistan, goal is to make territorial gains (50–80km deep) that could be used in post conflict negotiations to extract concessions from Islamabad. Speed of operation will give little or no time to international community to intervene in conflict.⁵

Military requirement of Cold start borne limited operation includes mobile armored units with sufficient fire power to breach enemy positions, well trained & well-equipped infantry packed in mechanized formation, sophisticated situation awareness & intelligence gathering assets and air support units all coupled through robust command & control systems.

³ Walter C. Ladwig III "A cold start for hot wars? The Indian army new Limited war doctrine", *International Security*, Volume 32 (2007) pp159–164

⁴ The Wire, 'Why General Bipin Rawat acknowledged the Cold Start Doctrine?' <https://thewire.in/101586/cold-start-pakistan-doctrine/>

⁵ Walter C. Ladwig III "A cold start for hot wars? The Indian army new Limited war doctrine", *International Security*, Volume 32 (2007) pp.164–166

Since March 2004, Indian armed forces have conducted six military exercises in lieu of Cold Start. First exercise, *Divya Astra (March 2004)* held in Rajasthan Thar desert including several elements of army and air force. This was very first exercise since failure of Operation Parakraw and focused on assessing integrated fire power of military and air force against fixed enemy targets. *Vejra Shakti (May 2005)* the second exercise organized in Plains of Punjab was inclined in testing the offensive capabilities of defense-oriented pivot corps (XI Corps) in conjunction with IAF. Six months later, third exercise named *Desert Strike (November 2005)* was conducted in Rajasthan Thar desert, inclined towards similar objective. Only differences were the involvement of XX1 strike corps instead of pivot corps and desert terrain against Plain terrain of Punjab sector. *Sanghe Shakti (May 2006)*, largest exercise by far, was drilled by II Strike Corps in Plains of Punjab close to border with Pakistan. Sanghe Shakti tested the ability of strike corps to rapidly move and then explore the gaps in enemy defense lines created in result of surprise offense of pivot corps. *Ashwamedh (April 2007)* included I Strike Corps of Indian army and Air force strike air crafts again in Rajasthan Thar desert. These drills were arranged in a pattern to assess both the army's ability to boast its combat prowess via networking advanced sensors with its weapons systems, as well as its capacity to provide logistical support to mobile units under realistic war conditions. Past year *Satrujeet (April 2016)* exercise also saw participation of I Strike Corp to re test its battle centric warfare capabilities in deep enemy territory coupled with air support from IAF. What special about these drills was display of area bombardment by large number of Pinaka MLRS and CBRN specific units which undergo their task of detecting and removing radioactive contamination in battle-zone under day/night conditions.⁶

The developments made through out these exercises indicates the consistency in plans to evolve Indian strategic planning of Cold Start with respect to threat it may be facing in future. For dealing with threat of Pakistan's Tactical Nuclear Weapons, four areas of working can be indicated. *First* is advance reconnaissance & intelligence gathering capacity. Indian armed forces must have modern information gathering proficiency in the shape of MALE UAVs (IAI Heron), AEWCs, Advance Targeting Pods (ATPs) and mobile ground radar units supplemented by Military Satellites. It will allow to reduce fog of war and will provide clear battlefield understanding about the assigned targets. *Second* is stand-off strike capability of Indian army and Indian Air Force. Integration of stand-off strike capability for Indian army ground units (Multiple Rocket Launch Systems like Pinaka & Ground Launched Cruise Missile like Brahmos) and Indian air force air crafts (Air Launched Cruise Missiles and Smart bombs with Range extension kits) is in process. IAF has already exhibited its precise stand-off strike expertise in exercise Iron First back in 2016⁷. Indian army displayed its assets in shape of Pinaka MLRS during Shatrujeet exercise which can out range Nasr Missile system⁸. *Third* is formulation of capability to intercept incoming missiles/rockets with nuclear payload. This involves integration of mobile air defense systems with

⁶ Walter C. Ladwig III "A cold start for hot wars? The Indian army new Limited war doctrine", *International Security*, Volume 32 (2007) pp.177-182

⁷ The Diplomat, 'Iron First Exercise' <https://thediplomat.com/tag/iaf-iron-fist-exercise/>

⁸ Times of India, 'Army hones proactive strategy with massive exercise in Thar' <https://timesofindia.indiatimes.com/india/Army-hones-proactive-strategy-with-massive-exercise-in-Thar/articleshow/51834944.cms>

ability to intercept rockets, quasi ballistic missiles and cruise missiles at low and medium altitude. Purchase of land version of Barak-8 (MR-SAM) from Israel is landmark step in this respect⁹. Though real feasibility of practical implications of this system in Indian army is unknown, but in a hypothetical case, it's safe to assume that such system, mounted on mobile chassis, will provide Indian army ability to intercept Nasr missiles, thus saving IBGs moving under its cover. Although Nasr Missile has vector thrust allowing it to adopt maneuverable trajectory, but combination of layered air defense in shape of MR-SAM and Tunguska/Shilka SPAAG may lower the probability of successful Nasr strike. *Fourth* area is about survivability in contaminated environment. As exhibited in Shatrujeet exercise, where focus was also given to improve Chemical Biological Radiological Nuclear (CBRN) protection of land forces¹⁰. Dedicated CBRN units were seen participating in Great Thar desert with crew trained to survive contaminated environment. These CBRN units indicate a remarkable approach which can be followed by Indian army in near future, in compliance with the first wave of IBGs will be well protected by CBRN units and will be able to survive and complete assigned mission despite of becoming victim of tactical nuclear strike.

To conclude these four steps, it can be said that Indian armed forces are formulating capacity to detect TNWs from stand-off distance and strike it pre-emptively with accuracy to clean the path for advancing IBGs. If some batteries of Nasr BFMS survive initial pre-emptive surgical strikes and manage to launch nuclear payload over IBGs, then those missiles could be intercepted or even if they manage to hit, their destructive potential remain minimum or at least not sufficient to halt armored invasion dead on tracks.

Another characteristic ingredient of Indian war fighting planning is to achieve deterrence against Pakistan TNWs with own TNWs. Current Indian ambiguous Nuclear posture of No First Use (NFU) and policy of Massive Retaliation in response to nuclear strike anywhere on its forces may look very deterring, but on practical grounds it actually undermines Indian deterrent posture. Its illogical and non-pragmatic to retaliate on massive scale in response of limited nuclear strike of counter force nature. Recent development and testing of multitube **Prahaar Missile System; which** is a short-range, solid propellant, road-mobile ballistic missile designed for tactical strikes against close range targets and can be armed with nuclear warheads¹¹, provides a workable platform for Indian strategic thinkers to device low yield nuclear deterrence of their own against that of Pakistan.

Indian military preparedness might look compact on paper but will be practically very risky to 'test' in real battle grounds. The biggest risk is the wrong assessment by Indian Military establishment that once they develop this potential, they will be able to neutralize Pakistan's TNWs threat. This assessment will collapse the nuclear deterrence shaped by Nasr BFMS to keep Cold Start a theoretical or an exercise tool at best, not a practical strategy for war fighting.

⁹ Jane's 360, 'India approves Army MR-SAM acquisition'

<http://www.janes.com/article/68324/india-approves-army-mr-sam-acquisition>

¹⁰ DPR, Spoke person of India MoD

<https://twitter.com/SpokespersonMoD/status/723405656313602048>

¹¹ MISSILE THREAT CSIS, 'Prahaar at a glance'

<https://missilethreat.csis.org/missile/prahaar/>

SHORTCOMINGS IN INDIAN CAPACITY IN LIEU OF COLD START

Despite of repeated drills conducted in preparation of Cold Start Doctrine, several rifts still exist in capabilities of Indian armed forces. Unless and until these problematic loop holes are not filled with appropriate solutions, it will be too hard for India to practically implement any doctrine of limited war. Several areas of concern, related to tangible and non-tangible elements, are as follows.

First is related to Indian air force preparedness. Cold Start is primarily an Indian Army product and Indian Air Force (IAF) has sought to embrace its roles in this doctrine under the supervision of army. IAF believes that assigning fighter squadrons to army IBGs will reduce its numerical superiority over PAF. IAF is already facing delays in replacement programs of its out dated air crafts. Subsequent failures in development of LCA Tejas to replace Mig21¹² and delays in procurement process of Dassault Rafale¹³ to replace Mig27 have forced IAF to cannibalize its fighter fleet. This led to shrinkage of fighter active fleet of IAF fighter jets, undermining already undermined IAF numerical advantage over PAF¹⁴. This situation is made worse by poor sortie rates and high crash rates of IAF active fighter squadrons. Moreover, Cold Start collides with IAF doctrine of air to air combat and strategic bombing. This unification of two different doctrinal postures has made IAF operational duties complex and expensive¹⁵. IAF simply do not have capability to simultaneously full fill its primary role of air defense and ground strike along-side secondary duty of providing close air support to Indian army IBGs. These points, backed by typical inter-service rivalry, proves that practically IAF simply do not have capability to support Indian Army in Cold Start as well as conduct its primary role of air combat and ground strike missions at the same time.

Second is about Indian army arsenal which still do not have few armaments compulsory for implementing Cold Start base limited war invasion. Absence of Mobile Self-Propelled Artillery (SPA) which can move and provide artillery support to IBGs is major shortcoming in Indian army arsenal. SPA is important for striking enemy fortifications and defenses as well as for providing artillery cover against enemy forces under which ground forces advance further. Its critical for holding the captured objective against enemy counter invasions by providing long range ground based bombardment capability. Though Indian army have plenty of Multiple Launch Rocket Systems (MLRS) with long range strike capacity but lack of precision, rapid reload ability reduce their comparative efficiency vis-à-vis SPA.

Presence of insufficient numbers of Attack Gunship helicopters in Indian possession is *third* major deficiency. Attack Gunships fly at low altitude along-side IBGs for providing flexible close air support to advancing units against variety

¹² Jane's 360, 'India's Tejas program suffers more delays'

<http://www.janes.com/article/72988/india-s-tejas-programme-suffers-more-delays>

¹³ NDTV, 'India to buy 36 Rafales instead of 126: IDM Manohar Parrikar'

<https://www.ndtv.com/india-news/india-to-buy-36-rafale-jets-instead-of-126-says-defence-minister-manohar-parrikar-767499>

¹⁴ Bharat Verma, 'Indian Defense Review', 'Modernization of Defense Forces' pp276-280

¹⁵ Shashank Joshi, 'Journal of Strategic Studies', 'India's military instrument: A doctrine still born' pp525-527

of enemy targets. IAF currently operates roughly dozen Mi35 Hind which are in phase of replacement by much advance American AH64E Gladiator gunships. The deal for purchasing AH64E from Boeing is in stalemate due to mutual power politics between air force and army. This stalemate has delayed AH64E acquisition thus undermining Indian close air support potential. Although home grown light gunships including HAL Rudra and HAL LCH, once deployed, will be available to full fill needs of IAF and IA requirements. But such light gunships will not be able to survive hostile environment of Cold Start particularly when Pakistan air defense prowess is put into consideration.

Indian security forces are rapidly overcoming these shortcomings in its capability by procurement of more capable platform. E.g. IAF may be looking forwards to enhance its quality edge over PAF by induction of more Rafales. Having such advance air craft will boast IAF capability for Cold Start based operations. Instead of six squadrons of Mig27 for ground strike role, three squadrons of Rafale will actually enhance Indian forces strike capability¹⁶. As far as Self-Propelled Artillery is concerned, Indian army in near future will be fielding South Korean K9 Thunder SPA¹⁷, thus full filling the much-needed gap in Indian army formations. Lastly, Indian homegrown HAL LCH in large numbers will be able to supplement the role in conjunction with limited number of much advance AH64E Gladiators. In fact, LCH is managed to achieve its theoretical claimed territory, it will grant Indian army competence to manage close air support missions on its own instead of relying on IAF.

Above mentioned points indicate that though India has some serious lapse in its capability but these laps will be filled in near future. For Pakistan, exploiting these weaknesses may work as per now, but will be out of scope in longer run. Being conventionally and economically less capable state in comparison, it will be critical for Pakistan to explore new smart option for both its nuclear and conventional forces.

CONVENTIONAL OPTIONS FOR PAKISTAN TO CONSIDER

Neutralizing Cold Start by staying with in non-nuclear domain may be difficult but achievable. Pakistan is already working in several key areas to supplement its efforts for countering any Cold Start borne invasion. First, Pakistan is actively working to increase its reconnaissance and situation awareness capabilities by inducting more Air-borne Early Warning and Control Systems (AEWCs). With current fleet of 3 Erieye and 4 ZDK03 and 3 more Erieye on order, PAF will be operating 10 AEWCs in near future¹⁸ which will help not only to eradicate the

¹⁶ Financial Express, 'Rafale deal signed: How fighter jet will greatly add to IAF fire power against Pakistan & China' <http://www.financialexpress.com/india-news/rafale-deal-signed-how-the-fighter-jets-will-add-greatly-to-iafs-firepower-against-pakistan-and-china/388914/>

¹⁷ LiveFist, 'India's Fastest deal: Make in India K9 Guns to start deliveries in 11 months' <https://www.livefistdefence.com/2017/04/indias-fastest-deal-makeinindia-k-9-guns-to-start-deliveries-in-11-months.html>

¹⁸ Air Force Monthly, 'Pakistan to get more Erieyes' <http://www.airforcesmonthly.com/2017/05/19/pakistan-to-get-more-erieyes/>

surprise element of Cold Start but also will also strengthen PAF air to air potential to challenge IAF qualitative & quantitative superiority. *Second*, induction of advance air defense systems in association with capable radar unit for thwarting IAF jets away from Pakistan air space. Credible air defense with strike range more than that of IAF stand-off munitions will keep IAF at bay, neutralizing much needed air protection over Indian IBGs. *Third*, modernizing the armor and anti-tank capabilities by inducting more capable Main Battle Tanks and Anti-tank units. *Fourth*, increase the capacity of Pakistan Air Force as far as ground strike missions are concerned. Though PAF has achieved vast experience in Counter Insurgency & Counter Terror Operations (COIN-CT Ops) in Western war theatre, however the challenges of Eastern war theatre are vastly different. Integration of more capable air to ground munitions, particularly anti-tank guided missiles with capability to be launched from air craft, gunship and Unmanned Combat Aerial Vehicle (UCAV) will provide sufficient potency to engage armored columns. Thus, upgradation of PAF anti-armor proficiency is need of time. *Fifth*, developing Ra'ad ALCM or Babur LACM as carrier for smart anti-tank munitions. These sensors fused guided bomblets, similar to American AGM-154 SOW¹⁹, will be carried by Air Launch Cruise Missile and disperse these bomblets over enemy armored formations. These bomblets strike vulnerable top spot of armor, destroying them with precision with-out risking friendly units. Pakistan has yet to develop such capability but Gids Hijara Anti-Tank cluster bomb development can be considered as first step forward in this regard. Same munitions can be packed inside Ra'ad ALCM giving PAF capability to halt armored invasion dead on its track without using any weapon with nuclear payload.

MAINTAINING NUCLEAR DETERRENCE

For Pakistan, it will be essential to maintain credibility of its nuclear capability with consistency as far as modernizing its Battle Field Nuclear Missiles are concerned. Steps are needed to augment nuclear deterrence vis-à-vis Indian advancement in conventional might. Recent testing of extended range Nasr missile (70km) is indicator that Strategic Planning Division is actively exploring all available options to keep intended utility of Nasr BFNW in future threat environment. Six such available options can be speculated. *First*, increasing the range of Nasr, a step proven by recent test of Nasr-ER with range increment by 10kms (total 70kms range)²⁰. Greater strike range will complicate enemy calculations, specifically as far as its stand-off strike capabilities are concerned. *Second*, enhancing the speed of missile by using better quality engine motors and solid-state fuel for more thrust. More the speed, less reaction time will be available for enemy to respond. *Third*, taking into account the possible capacity building in Indian army to intercept Nasr midflight might reduce the total missile number striking enemy forces. This reduction of successful strikes will compromise the intended inflicted damage and thus can be overcome by simply increasing the number of missiles. This can be done either by increasing the number of missiles per launcher or increasing number of launchers in each missile battery. Initially, Nasr with two

¹⁹ Raytheon, 'JSOW weapon system'

<https://www.raytheon.com/capabilities/products/jsow/>

²⁰ The Diplomat, 'Pakistan tests NASR, improving range'

<https://thediplomat.com/2017/07/pakistan-tests-its-nasr-short-range-ballistic-missile-system-improving-range/>

tube TEL was tested on 19th April 2011²¹. Later, number of missile tubes were increased to four and were tested first time on 5th Nov 2013²². Ever since no further change has taken place in TEL design, but technical possibility does exist, at least hypothetically. Other option is increasing the total number of TEL in each battery. But this area of discussion falls in category of pure presumption as no information about deployment and operational pattern of Nasr BFNW is available on open sources. *Fourth*, by putting in use advance composite material for making missile frame instead of metals and alloys. Using composite material will make missile expensive but will reduce the weight of missile along-side its Radar Cross Section (RCS) and heat signature. Reduction in weight mean increment in speed and inflight maneuverability. Reduction in RCS and heat signature mean low radio and thermal detectability of missile by radar units of active and passive nature. This lower profile which can be included in domain of 'stealth' will render any missile defense system useless, jeopardizing any sort of countermeasures enemy can put against it. *Fifth*, using enhanced radiation warheads (Neutron warheads) instead of 'conventional' nuclear warheads as payload of Nasr BFNW. Back during Cold war, popular opposition cancelled the proposed U.S. Enhanced Radiation Warheads (neutron bombs), which might have increased the utility of TNWs against Soviet armored forces²³. This type of enhanced radiation nuclear weapons has comparatively less blast yield, but have very high radiation emission. This radiation contamination, specifically inert neutron radioactivity can easily penetrate through thick armor, killing the crew inside, making them ideal to stop armor dead in its track. For development of such destructive weapon, expertise in Thermonuclear weapon is necessary. There is no reliable data available on open sources to confirm or deny existence of thermonuclear technology in Pakistan Nuclear Program. Therefore, no solid claim can be made regarding nature of nuclear warhead in use with Nasr BFNW. *Sixth*, improvement in security of tangible and non-tangible components of TNWs. Tangible security measures involve security of missile unit and safety of crew. While non-Tangible security measures includes reliability of command & control and communication systems. Most significant threats against Nasr BFNW will be Indian stand-off munitions and cyber-attacks. Tangible safeguards can be applied by forming layered ground & air defenses and non-tangible safeguards works by increasing security of mutual connectivity between Command & Control, nuclear forces and forward deployed assets.

These six credentials can serve as areas of development which will keep deterrence posture of Pakistan in shape against Cold Start in future.

²¹ Express Tribune, 'Pakistan successfully test fires nuclear capable Hatf IX' <https://tribune.com.pk/story/152425/pakistan-test-fires-nuclear-capable-missile/>

²² First Post, 'Pakistan test fires short range Nasr missile' <http://www.firstpost.com/world/pakistan-test-fires-short-range-missile-nasr-1211441.html>

²³ Richard Witz, 'The Historical Context' *Tactical Nuclear Weapons and NATO*. pp. 7

CONCLUSION

The security dilemmas which shape threat environment of South Asia has triggered arms race with nuclear and conventional armaments build up. Pakistan TNWs have served as tool of deterrence to lower down nuclear threshold and sabotage Indian concepts of limited war doctrine. However, along-side nuclear option, Pakistan is slowly building up its capacity to resolve conventional problem with conventional solution. But constraints in shape of limited economic and diplomatic assistance will hinders such upgradation plans. India on the other hand enjoys and will continue to enjoy conventional superiority and will keep exploring out of box options to find vulnerable spots in Pakistan defenses.

Cold Start doctrine itself offers no 'end point'. Though there is very much flexibility in its operation but it fails to wind up limited war in a balanced manner. Bite and Hold strategy provides understanding about 'biting' but gives no explanation about 'holding'. The lack of conclusive strategies, both political & military types, indicates that at best Cold Start Doctrine can be used for coercive purposes or as a 'patch' to enhance the war fighting capabilities of Indian armed forces.

With advancement in technology and thinking process, more strategies and complex doctrinal postures will establish but it's in collective interest of India and Pakistan that none of them consider the option of fighting real war. If any state ever attempted to practice this option then its either due to miscalculation of its own potential or will be the result of faulty assessment of opponent strength. Dynamic equilibrium of deterrence is crucial for peace & stability in South Asia. No matter how much prowess one state will achieve, its opponent will always have options to counter balance the strategic equation to avoid situation which could bring conflict in region.

ABOUT COMMANDELEVEN

CommandEleven is a research organization focused on Pakistan's national security aspects and enhancing global understanding and collaboration opportunities for the nation.

Founded in 2015, CommandEleven provides situational awareness to facilitate a better understanding of the key dynamics that effect Pakistan from a national security perspective, especially in relation to terrorism, insurgencies and extremism.

CommandEleven seeks to inform and guide public policy and decision makers in government, business and military through a rigorous program of publications, conferences, digital medias, policy briefings and recommendations.

Visit <http://commandeleven.com> for more information or contact info@commandeleven.com.