

# Indian Army's Evolving Punitive Tactical Strike Doctrine

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## Abstract

Indian Small Arms System (INSAS) rifle failed quality test. “Soviet era MiG-21s fall from the sky they are called as flying coffins.” Sukhoi SU-30MKI ejected one of the Indian pilots without warning. India remained world largest arms importer from 2013 to 2017. Rao Inderjit Singh, the then India Defense Minister for State in July, 2018 informed Indian parliament that India signed 182 contracts for arms procurement. It allocated U.S. \$ 66.9 billion as defense budget. India is procuring S-400 Ballistic Missile Defense System, 4.5 generation multirole combat jets, upgrading tanks, nuclear submarines Seahawks, Chinooks and Apache helicopters. Indian forces are being trained to fight in chemical, biological, nuclear and radiological environment to ensure full spectrum escalation dominance. Dangerous provocative Punitive Retaliatory Comprehensive Tactical Strike in Balakot vis-à-vis Pakistan to introspect weakness and enemy's countermeasures. New military technologies are therefore procured to overcome existing gaps and launch swift surprising tactical strikes and reduce or ideally deny available countervailing options to the enemy. Commingling of nuclear and conventional forces increases chances of accidental and deliberate nuclear war in the region.

**Key Words:** India, Pakistan, Apache, S-400 Ballistic Missile Defense, Rafale.

## Introduction

India's locally produced defense equipment e.g. Indian Small Arms System (INSAS) rifle failed quality test. "Soviet era MiG-21s fighter aircrafts fall from the sky they are called as flying coffins," (2019). Hindustan Aeronautics Ltd assembled Sukhoi SU-30MKI ejected one of the Indian pilots without warning (Pubby, 2014). Indian army's major defense equipment is obsolete. Locally manufactured defense equipment e.g. Arjun tanks, bullet proof jackets and light combat aircraft near enemy border (2018). Approximately 68 percent of the Indian army's equipment is outdated. India can only supply ammunition to its military for ten days in case of war (Abi-Habib, 2019). United States (US) \$ 250 billion are allocated in pursuit to train, modernize, technologically expand, procure and equip India military. Modern-day military technology will be procured to tackle evolving security challenges, fight and win asymmetric, conventional, two-front, sub-conventional chemical, biological and nuclear war. Bureaucratic hurdles, delayed supplies and budgetary issues are delaying modernization programme.

Rao Inderjit Singh, the then India Defense Minister for State in July, 2018 informed Indian parliament that India signed 182 contracts for the procurement of arms in past three years. 62 contracts were signed for navy, 79 for army and 41 for the air force with local and foreign vendors. Likewise, 169 additional contracts were approved (2018). US designated India as major defence partner for spending 15% of its defense budget to buy US military hardware (Pandey, 2018).

India remained world largest arms importer from 2013 to 2017 (Pieter D. Wezeman, 2019). India could not sustain its position due to delayed arms deliveries of combat aircrafts ordered from Russia in 2001 and submarines ordered from France in 2008. India procured Mi-17-V5 helicopters from Russia; maritime surveillance planes, the Boeing P8-I from the US, Unmanned Aerial Vehicles (UAVs) and radars from Israel. Indian government allocated U.S. \$ 58 billion for defense budget in 2018. It is 2.1 percent of Indian gross domestic product (GDP) (India vs Pakistan, 2019). Indian defense budget for the fiscal year 2020-21 was \$ 66.9 billion (Behera, 2020) and fiscal year 2022-23 is \$ 70.2 billion (Pandit, 2022).

Indian air force (IAF) needs 42 squadrons of fighter jets to protect Indian Western border with Pakistan and Northern bordering China. It has 32 active squadron or 900 combat aircrafts (Singh, 2019). Indian navy has one aircraft carrier, 16 submarines, 13 frigates and 75 combat aircrafts. Indian military has 3,565 tanks, 3100 infantry fighting vehicles, 336 armed personnel carriers, 9719 pieces of artillery and it has developed nine different types of missile capabilities (India vs Pakistan, 2019). Missile types include cruise missiles, air launched, submarine launched tactical/battlefield, short range, medium range and intercontinental ballistic missiles (ICBMs). India can hit targets in any part of Pakistan.

This academic research discusses procurement of selected advance military technology and up-gradation of aging military equipment by India. It probes does India fulfill pre-requisites for operationalizing evolving Punitive Tactical Strike Doctrine under newly announced Land Warfare

Doctrine (LWD)? Military revamp emboldens Indian leadership to fight under nuclear overhang. Indian military is carrying out preparations to fight in chemical, biological, nuclear and radiological environment and win nuclear war. Is India prepared to fight war in chemical, biological, nuclear and radiological environment?

Military readiness and robust military technology requires Indian National Command Authority (NCA) to empower junior ranking officers to launch nuclear weapons. Counterforce temptations is lowering nuclear threshold. Indian military modernization and doctrinal changes are destabilizing regional strategic and crisis stability. In the long run it creates nuclear quandary for Indian Command and Control (C2).

### **Indian Land Warfare Doctrine 2018: Emerging Punitive Strike Doctrine**

On January 4, 2017 Indian Chief of Army Staff (COAS) General Bipin Rawat officially acknowledged the existence of Cold Start Doctrine (CSD) (III, 2017). On December 14, 2018 Rawat introduced LWD. It is comprehensive document highlighting multidimensional elusive internal and collusive external perceived threats. Doctrine emphasizes incorporating emerging robust military technologies to enhance Indian military's operational capabilities at tactical levels and increase credibility of nuclear deterrence. The new offensive and defensive fighting force comprises of three strike corps. Each corps consists of an infantry division (comprises of less than ten thousand soldiers) and two armored divisions each with 450 tanks (Gady, 2017). It includes artillery, air-defense, support units and helicopters. LWD requires Indian Armed Forces (IAFs) to adopt super ready status of strategic and conventional forces, quick formations and enhanced cooperation among all branches of Indian military as a prerequisite to launch swift joint military operation at tactical levels. LWD aims to offset threats, overwhelm the enemy at every level of conflict (tactical, operational and grand) or escalation rungs by maintaining full spectrum escalation dominance posture. It will maintain deterrence by punitive measures at tactical level.

Indian army tested evolving punitive strike doctrine on February 26, 2019 by carrying out aerial strike in Balakot (Ahmed, Hashmi, & Kausar, 2021). Islamabad was warned that in response to Pakistan sponsored terrorism in Indian Occupied Kashmir (IOK) India reserves the right to execute punitive retaliation vis-a-vis Pakistan. It was believed punitive measures will dissuade the enemy from sponsoring terrorist activities and evolve credible deterrence at the tactical levels.

Indian military is gradually moving in the direction to prepare itself for fighting future wars e.g. Network Centric Warfare doctrine aims at connecting Indian soldiers, to achieve military objectives and avoid collateral damage. Incorporation and deployments of sophisticated military technology by Indian military will certainly encourage counterforce temptations at tactical levels. It increases Pakistan's prevalent security dilemma and lowers nuclear threshold. India's invading agile mechanized infantry will coerce Pakistan to use tactical nuclear weapons (TNWs) in future conflicts. Conversely, page twelve of the LWD addresses the threats posed by TNWs. It discusses war fighting in a "chemical, biological, radiological and nuclear environment," (Indian Army:

Land, 2018). Military exercises Gagan Shakti and Vijay Pahaar were conducted to prepare Indian forces situations involving breach of nuclear threshold. LWD is evolved to carryout punitive retaliation to punish the adversary at tactical level. It highlights that in case of collusive threat (Sino-Pak) all available resources will be employed against primary threat and secondary threat will be deterred through employment of strategic forces. On January 10, 2019 Rawat reiterated that India is perfecting offensive war fighting strategy against Pakistan (Overviewing India's Military Modernization: 2019 and Beyond, 2019). This strategy is based on five features.

1. It aims at launching military operations at tactical levels to achieve military objectives through swift actions involving IBGs.
2. It is based on element of surprise involving rapid IBGs from several directions. IBGs once operationalize would catch Pakistani forces by surprise. Since, Pakistan has deployed tactical nuclear weapons (TNWs) near border so Pakistan would be faced with either use it or lose it dilemma. Indian provocative strategy inherits the danger of crossing Pakistan's nuclear threshold.
3. This military strategy is offensive in nature it aspires to take the war into enemy's territory.
4. It is a provocative strategy and aims at expanding theater of war from land to air to ocean.
5. It aspires to quickly seize Pakistani territory and hold it as a bargaining chip before international community could concede in India-Pakistan conflict. Denial of asymmetric catalytic nuclear posture further heightens probability of nuclear weapons use.

### **Up-gradation, Procurement and Deployment of Selective New Military Technologies**

India is transforming preexistent defense structure established for the production, procurement or up-gradation of military hardware. This section discusses the following issues;

- a. Up-gradation and procurement of selective cutting-edge defense equipment in search to operationalize punitive strikes at tactical levels under the banner of LWD.
- b. Indian military exercises to master the art and fight in chemical, biological nuclear and radiological environment.

### **Up-gradation, Procurement and Deployment of Selective Advanced Military Technologies: Prerequisite for Punitive Retaliation**

In 2004, India announced to carryout punitive retaliatory attacks against Pakistan. However, India lacked resources wherein Indian war fighting strategy remained a policy paper. In present circumstances New Delhi is gradually procuring new and replacing or up-grading aging military hardware. It signed contracts to procure robust military hardware to tilt balance of power (BOP) and conventional force asymmetry in its favor. Consequentially, India is gradually paving the way for executing earlier publicized assertive war fighting strategy by introducing LWD with changes owing to qualitative changes introduced by both India and Pakistan. LWD, controversial surgical strikes e.g. at Line of Control (LOC) to Balakot attack and hostile statements issued by Indian government officials prove abovementioned claim. It increased Islamabad's preexistent security

dilemma, threat perception and chances of conventional war leading to deliberate or accidental nuclear war. South Asian strategic stability is at risk due to Indian massive military modernization program and deployment of large scale offensive capabilities.

This section highlights Indian military capabilities are developing false sense of security (Ahmed & Kausar, An Illusion of, 2019). It is encouraging Indian leaders to cross Pakistan's nuclear threshold by executing punitive retaliation against Pakistan. Uncertainty, rising regional strategic temperature and suspicion is further increased owing to the statements issued by Indian defense minister Rajnath Singh that India took "great precaution" only terror camp in Balakot was targeted. It neither attacked Pakistan nor its Army. However, things may change if the neighboring country does not mend its ways (2019). On September 12 General Rawat threatened to take over Pakistani Kashmir as a result of military operation. Prior to that Union minister Jitendra Singh had said that "next agenda is retrieving parts of Pakistan Jammu and Kashmir and making it a part of India," (2019). On September 21, 2019 Rawat threatened to cross Pakistani border to inflict damage to Pakistan military in surprise military operation (2019). Indian minister for External Affairs Subrahmanyam publically issued an irresponsible statement. Subrahmanyam threatened to take physical control of Pakistani Kashmir. Military might as claimed earlier has created false sense of security in the minds of Indian decision makers. Indian leaders apparently are obsessed with war hysteria. In January, 2020 Indian incumbent military chief General Manoj Mukund Naravane proclaimed to take gain control if Indian parliament will issue orders (2020). Following section briefly discusses procurement and deployment of robust military technology and its impact on Indian military war fighting strategy.

### **T-90MS Tank**

India has 1067 T-90MS tanks yet in April, 2019 Indian Cabinet Committee on Security (CCS) approved procurement of 464, upgraded T-90MS tanks from Russia worth US \$ 1.93 billion. It was aimed at replacing Soviet era T-72 tanks and raising a core of ten armored regiment. On November 6, 2019 Indian Ministry of Defense and Ordnance Factory Board (OFB) signed contract for license development of T-90S MBTs. India operates 65 regiments comprising of 3,000 Main Battle Tanks (MBTs). It will receive additional 1,657 T-90MS tanks during the year 2022-2026 (Dubey, 2016). It is part of the two tier strategy first, future ready combat vehicle (FRCV) project (2019). Second, India plans to modernize army by manufacturing T-90MS tanks under license at the Heavy Vehicle Factory (HVF), in Avadi near Chennai. India has already deployed 18 regiments or 900, T-90S Bhishma tanks along border with Pakistan (2017). Deployment is aimed at improving Indian army's readiness. However, these developments are increasing strategic temperature, prevalent trust deficit and intensifying security dilemma.

Deployment of additional tanks in Rajasthan and Punjab near India-Pakistan border (Negi, 2019) will increase Indian firepower against Pakistani defenses. Mechanized infantry will support swift actions against the arch rival, maintain element of surprise and shallow maneuvers. Special features of T-90MS tank will support India in operationalizing LWD. T-90MS tanks include the

PKUZ-1A protection system against nuclear, chemical and biological weapons and electromagnetic protection system. T-90MS tanks can take down enemy helicopters as they are equipped with 6P7K anti-aircraft gun (2019), anti-tank guided missile with precision strike rate and night vision. T-90MS tanks will have protection system, a tank fixed radar to detect and destroy incoming tank within five KMs range and anti-tank missile (Raghuvanshi, 2017). Contrarily, Pakistani tanks have a range of three to four KMs (2018). T-90MS tanks are equipped with "highly sophisticated control system," (T-90 MS Tanks: Future Guardians of India's Border) to transfer the pictures from operational areas to the command structures, reconnaissance units and Unmanned Aerial Vehicles (UAVs). It can be operated in desert and high altitude areas. Agile tanks can maneuver according to the tactical situation.

Mechanized infantry is being raised to overcome Indian military's weaknesses prior to operationalizing LWD even at night and support future surgical strikes inside Pakistan. Modern military technology enables India today to deploy its forces within 36-48 hours on Pakistani border and operationalize LWD. Powerful mechanized infantry can easily overwhelm Pakistani tanks apparently it can only be stopped by TNWs. However, element of surprise endows India to destroy Nasar batteries. Conventional asymmetry actually creates threats for Pakistan. Consequentially, Islamabad's nuclear threshold will lower. It can fire tactical nuclear weapons (TNWs) in future crisis. Procurement of T-90MS tanks is part of the plans to operationalize offensive blitzkrieg strategy/ conventional operations. Mechanized infantry is deployed near Pakistani border as it is the backbone for successfully operationalizing the LWD. Swift operations are aimed at achieving military objectives before international community can intercede in India-Pakistan crisis. It ensures India to acquire its politico-military objectives and enjoy qualitative and quantitative edge over Pakistan in case of war.

### **S-400 Ballistic Missile Defense System**

In October, 2018 India signed an agreement worth \$ 5.43 billion to purchase five squadrons of S-400 Ballistic Missile Defense (BMD) System from Russia (Raza, 2018). Each squadron will comprise of two battalions and it will have radars, approximately eighteen launchers and sixteen additional missiles. Number of launchers and missiles can vary depending on the deal. Delivery of S-400 to India will start by the end of 2021 it will be completed by April 2023. It is equipped with five different kinds of missile ranges short range 9M96E (40 KMs), 9M96E2 (120 KMs), long range 48N6 (250 KMs) and longer range 40N6E (400 KMs) (Bryen, 2017). S-400 will enable New Delhi to operationalize offensive strategies (counterforce strikes, disarming first strikes, Land Warfare Doctrine or Cold Start Doctrine) as it can destroy Pakistani fighter jets, ballistic, cruise missiles and ground installations inside Pakistani territory (Raza, 2018). S-400 can shoot down 80 targets simultaneously aiming each target with two missiles it will increase confidence of the Indian air force. Pakistani fighter jets have little chances to evade 9M96E2 with 120 KMs range. It can intercept targets with low hypersonic over Mach fifteen (2019). It engages targets five meters off the ground (Bryen, 2017). Indian BMD poses potent threat to Pakistani lighter, un-stealthy and

even under development fifth generation fighter jets. India has deployed first battery in Punjab (Chaturvedi, 2021). It was earlier planning to deploy S-400 at Himachal Pradesh enabling IAF to cover entire airspace over Kashmir. BMD System would enable India to shoot down Pakistani fighter jets inside Pakistani airspace e.g. over Islamabad if it is deployed at Jalandhar. Likewise, S-400 BMD in Amritsar will endow India to neutralize Pakistani aircrafts hovering over Peshawar (Ahmad, 2016). Pakistan air force (PAF) fighter jets Falcon 20 electronic warfare aircraft and Airborne Warning and Control System (AWACS) cannot hover over its own airspace as S-400 will make Pakistan's airspace as no-fly zone for PAF jets in the event war breaks out with India. It will be impossible for PAF fighter crafts to engage in aerial fight with adversary.

Indian air force sanctioned forty two squadrons presently it is operating thirty one. In 2024-25 aging fleets of India fighters will be de-inducted from the service. It will induct thirty six Rafale fighter jets yet it cannot fulfill requirements of Indian air force. S-400 BMD System successful deployment will fill the gaps originating from shortages of fighter crafts. It will overcome Indian defense requirements. Contrarily, PAF will neither be able to protect Pakistani air space nor be able to potently respond to incursion of Indian fighter planes. Engaging in aerial combat with Indian fighter jets in future is presumably impossible. S-400 once deployed will widen the prevalent conventional military gaps between India-Pakistan this system erodes regional strategic and crisis stability. Consequentially, India will authorize disarming strikes against Pakistan's counterforce assets. It increases the probability of operationalizing General retired V.P. Malik's Cold Start Doctrine and Bipin Rawat's brainchild "LWD." Indian leadership will believe that deployment of Rafale and S-400 BMD System makes it impossible for PAF to encroach in the Indian airspace. Overconfident Indian leadership will authorize counterforce strikes considering S-400 and Rafale as ultimate security guarantors against Pakistan's retaliation. BMD System tilts balance in Indian favor. It poses considerable challenges to Pakistan's security.

In addition India is gradually rejecting the notion of CMD, Pakistan proposed nuclear restraint regime and increased Islamabad's prevalent security dilemma. Conversely, Islamabad will have to lower down its nuclear threshold by changing its nuclear posture from recessed to ready status or super ready status. Development of assured second strike capability, nuclear launched submarine, additional stocks of cruise missiles, decoys, MIRVs has become imperative for Pakistan. In pursuit to evade Indian S-400 Pakistan will have to launch swarm attack to penetrate Indian air space. Pakistan's poor economy is an additional challenge to develop and deploy advance fighter crafts and missile forces. S-400 deployment is increasing strategic temperature in the region by fueling missile/nuclear arms race and eroding crisis and strategic stability.

### **Nuclear Submarines**

India is spending an enormous defense budget for research, development, to modernize, equip and train its navy it will become second largest navy of Asia in near future. It is speculated to join the rank of world's top five navies by 2030 (Mizokami, 2018). India endeavors to develop the blue water navy and ranked as global power. India is operating four German Class HDW Class

submarines and nine Russian Kilo Class Submarines (Peri, 2019). In 2005, India and France signed the transfer of technology agreement worth \$ 3.75 billion to manufacture Scorpene class conventional submarines at Magazon Dock Limited, Mumbai (Peri, 2019). India is working on the manufacturing of six Scorpene submarines. First submarine class Kalvari joined Indian Navy in December, 2017. Second, Scorpene Class Khanderi joined navy on September 28, 2019 (Peri, 2019). Third, Scorpene series Karanj is undergoing sea trials and soon it will join Indian navy. India and Russian Federation signed an agreement on March 7, 2019 to lease Russian K-322 Kashalot (Akula II- Class) nuclear powered submarine for ten years (Gady F.-S. , 2019). Moscow and New Delhi are discussing the modalities to transfer the K-391 *Bratsk* and K-295 *Samara* submarines to the Indian navy on lease.

India developed nuclear capable (submarine launched K-4, 3,500 KMs range) (Shaurya (K-4)) ballistic and cruise missile (Brahmos 290 KMs and Nirbhay 1000 KMs) (Ulah, 2018) in pursuit to complete nuclear triad. K-4 is solid fuel propelled missile it will be deployed on Indian underdevelopment submarines. Indian robust naval capabilities and assured second strike capability poses existential threat to Pakistan's security. It has dire implications for South Asian strategic stability and Indian nuclear doctrine. New Delhi is planning to develop K-5 and K-6 nuclear capable longer-range missiles and MIRVs capabilities (Ulah, 2018). Indian growing navy requires the development of additional stocks of nuclear warheads, submarine launched ballistic and cruise missiles, MRVs and MIRVs. Indian nuclear establishment authority refused to place eight of its nuclear reactors under International Atomic Energy Agency (IAEA) supervision to produce large stockpiles of weapons grade fissile material consistently for future nuclear capable ballistic and cruise missiles inventories. New Delhi is expanding nuclear facilities to enrich fissile material and reprocess spent fuel. It is unquestionably running world's largest and fastest growing nuclear program. Certainly, New Delhi's naval combat capabilities reject the notion of CMD pledged in Indian nuclear doctrine. Current pace of Indian nuclear program is moving towards overkill capabilities. Third, Indian development of large-scale submarine launched nuclear capable missiles would require Indian National Command Authority (NCA) to delegate nuclear launch authority to junior ranking naval commanders. NCA's assertive control on nuclear weapons use would be mere functional. Fourth, nuclear weapons deployment at sea inherently discards the notion of "No-First Use." Indian submarine equipped with K-15 or other nuclear capable short-range missile would be required to patrol near Pakistani coastal area. Consequentially, it would be prone to Pakistan's anti-submarine warfare capabilities. If Indian submarine equipped with nuclear missile is detected during crisis or in the midst of war Indian junior ranking naval commander would be faced with "Use it or lose it Phenomenon." Fifth lack of reliable communication system between Indian navy and Command Control and Communication Center (C4) further worsens Command and Control (C2) problems. It would have dire consequences for crises control, efficacy of nuclear deterrent and regional strategic stability. Communication breakdown during crises would increase probability of nuclear annihilation. Because naval commander will presume that enemy has destroyed India in nuclear attack consequently, he will authorize massive nuclear attack against enemy. Sixth, assured second strike capability vis-à-vis Pakistan and deployment of S-400



BMD System would result in replacing preexistent strategy of massive punitive attacks with first strike counterforce temptations.

### **AH-64E (I) Apache Attack Helicopter**

On July 27, 2019 India received four AH-64E Apache attack helicopters at Hindon Air Force Station (AFS) in Ghaziabad, outside New Delhi (Gady, 2019). India received these helicopters under a deal worth \$ 2.2 billion for the procurement of 22 AH-64E (I) Apache and 15 CH-47F Chinook helicopters to gradually replace aging Mi-25/35 helicopters. India's 125 H Squadron inducted these helicopters into service on September 3, 2019 at Pathankot airbase, remaining 14 helicopters will be delivered by 2020. 125 H Squadron will consist of ten AH-64E (I) Apache helicopters and an additional chopper in reserve. Apache is equipped with night vision capabilities, radar system to trace, detect and classify 128 moving targets in a minute and engage 16 targets on land and in the air e.g. enemy choppers and UAVs. Each AH-64E can carry eight longbow hellfire air-to-surface missiles to destroy enemy tanks (Negi, 2019). It will pose a formidable threat to Pakistan's 51 mechanized armored infantry in all weather and even at night in future conflicts. An Apache can fire Stinger Block I-92H air-to-air missiles and it is equipped with electronic warfare capabilities for fighting network-centric aerial warfare (Gady, 2019). It can receive and transmit data/pictures from and to battlefield. Data/pictures can be transmitted to airborne warning and control system (AWACS). AH-64E (I) attack helicopters have long standoff capabilities and ability to control Unmanned Aerial Vehicles (UAVs). It can penetrate enemy defense lines and inflict heavy damage to enemy land and mechanized forces. Low flight makes it undetected to enemy radars. It can easily operate in mountainous terrain so it is deployed at Pathankot IAF station to fortify Indian defenses against Pakistan. Likewise, Indian army aviation corps is planning to initially acquire six helicopters. It is planning to raise overall three squadrons of AH-64E helicopters by inducting thirty-nine helicopters. Lethality of the AH-64E gives India a qualitative edge over Pakistan. Efficacy of AH-64E against its targets makes it desirable weapon system to support Indian land and air forces in future operations at tactical level. It will rise to the stature to become one of the mainstream weapons to support operationalization of the LWD. Its acquisition by Indian armed forces is recognition of the fact that India is seriously working on lines to operationalize IBGs in future crisis.

### **CH-47F (I) Chinook**

Indo-US growing strategic partnership is fortifying Indian defense. On February 2, 2019 India received ahead of schedule delivery of four CH-47F Chinook helicopters delivery at Mundra port in Gujrat (Gurung, 2019). In July, 2019 Boeing delivered two more CH-47F Chinook helicopters to Indian authorities. Delivery of helicopters had to be completed in March, 2020. In May, 2020 Indian air force officials confirmed that Boeing successfully handed over the remaining five helicopters. Today, fifteen Chinook helicopters are in service it demarcates vigor of country's defense planners to fulfill country's defense requirements and modernize armed forces.

CH-47F will replace Mi-17 medium lift, Mi-26 heavy lift and Mi-35 attack helicopters. India signed a deal to buy fifteen CH-47F helicopters for Indian air force. It can operate at day and night to support military missions, and airlift heavy machinery, light vehicles, troops, fuel and artillery guns e.g. howitzers to mountainous areas and Siachin glacier. In India-Pakistan case it will support Indian military operations against Pakistan in IOK e.g. to airlift M777 Ultra-Light Howitzer or heavy machinery for constructing military infrastructure in mountainous regions.

It is astonishing that Mi-26 can airlift heavy equipment than Chinook helicopters Comptroller and Auditor General raised this point in its report (Gurung, 2019). Chinook will take more sorties as compared to Mi-26 helicopters. In war like situations additional sorties will increase expenditure and enemy's chances to hit it. Consequentially, crew lives will be endangered.

### **Sikorsky MH-60R Helicopters**

In May, 2019 India finalized a deal worth \$ 900 million to procure Sikorsky for 24 MH-60R helicopters for navy and other branches of Indian armed forces (Mcleary, 2020). Three MH-60R Seahawk will be inducted in Indian navy to track and destroy Chinese drones, surface ships and submarines. However, these helicopters will pose potent threats to Pakistan's small submarine and surface ships. In February, 2019 Pakistan detected presence of Indian submarine near its coastal areas. Certainly New Delhi will adopt horizontal escalation posture (open second front) in future conflicts to pressure Pakistan strategic planners.

### **Rafale Medium Multirole Combat Aircraft**

IAF is fourth largest air force in the world it has over fifty air bases across India. It has refueling aircrafts, combat jets and it is planning to procure over 400 latest fighter jets (Munir, 2019). On September 23, 2016 India and France signed €7.87 billion intergovernmental agreement for the procurement of 36 Rafale multi role fighter jets. First, fighter jet was received by Indian defense minister Rajnath Singh in France (2019). First batch of five aircrafts arrived and deployed at Ambala AFS, Western Command at Haryana state on July 29, 2020 (Gupta S. , 2020). First squadron comprising of eighteen fighter jets will be stationed at Ambala AFS to destroy any target in Pakistan in less than three minutes (2017). However, counterforce targets situated in Pakpattan, Sahiwal, Okara, Kasur, Lahore and Samundri airbase will become prime targets. India is planning to sign agreement for the procurement of another thirty six Rafale fighter aircrafts (Chan). If deployed at Amritsar or Adampur AFS Rafales would pose threats to Pakistan's counterforce assets in Sialkot, Kasur, Faisalabad, Lahore and Gujranwala. Pakistani airbases situated in Samundri, Mureed, Sargodha and Mianwali will become vulnerable to preemptive strikes. Likewise, nuclear power plants in Khushab and Chashma Mianwali will also come under threat from Rafales in the midst of war.

Deployments at Awantipur AFS pose dangers to counterforce targets in Punjab and Khyber Pakhtoon-Khwa Provinces including Abbottabad, Jehlum, Kharian, Lahore, Faisalabad, Gujrat,

Sialkot, Gujranwala, Rawalpindi, Islamabad as well as air force bases situated at Samundri, Peshawar, Kohat, Mianwali, Sargodha, Mureed and Rawalpindi. Additional dangers include easy access to Kahota, Chashma and Khushab nuclear power plants. If deployed at Bhuj (Gujrat) AFS commanded by South Western Air Command it will pose threats to Karachi, Gawadar, Hyderabad, Larkana, Khairpur, Bhawalpur, Rahim Yar Khan and Jacobabad. Karachi and Gawadar naval and airbases can come under target if French manufactured aircrafts are deployed either at Naliya, Jaisalmer (Rajasthan) or Jamnagar (Gujrat) or Jodhpur (Rajasthan) AFS. Deployment at Nal-Bikaner (Rajasthan), Jaisalmer, Phalodi, Utarlai (Rajasthan) and Jodhpur AFS can cover targets in three provinces e.g. Sindh Karachi, Hyderabad, Larkana, Khairpur, Gawadar, Quetta, Pasni in Balochistan and Multan, Dera Ghazi Khan, Sahiwal, Lahore, Faisalabad, Gujranwala and Rahim Yar Khan in Punjab province.

Second squadron will be deployed at Hasimala AFS West Bengal. By April, 2021 India will receive 16 Rafale and by April, 2020 the consignment will be delivered to Indian government (2019). Deal enables India to transfer technology from France. Dassault Reliance Joint Venture production facility started production at Nagpur. Hyderabad facility will have engine maker Safran. It will boost India's make in India initiative. Rafale multirole fighter jets can be deployed on land and aircraft carriers for delivering nuclear missiles and to carry out deep penetration missions inside enemy territory. Rafale requires two F-16s for counter-challenge. Pakistani fighter jets can easily be tracked from a distance without being tracked, carryout anti-ship, close air-support, in-depth strikes and reconnaissance missions. Multirole combat aircraft is equipped with SPECTRA System for identifications, longer range detections and localization of threats. SPECTRA System allows pilot to adopt defensive system including radar jamming, radar decoying or infrared (Chinese Su-35 v/s. Indian Rafale: - Why Su-35 wouldn't pose any serious threat to Indian Airforce). It can fire 2500 round per minute, detect and destroy any target on land with SCALP standoff missile 300 KMs range (can be launched from Mirage 2000), Russia will sync 1.5 Mach Anti-Radiation Kh-31PD Missile capable to hit targets within 250 KMs range with Rafale to destroy enemy air defense/radar stations. Russian assistance will let Rafales to launch Brah Mos-NG Supersonic Cruise Missiles. French manufactured combat aircraft is equipped with Meteor air-to-air missile capable of destroying its targets within 150 KMs range (Khattak, 2019). Unprecedented combat capabilities e.g. longer range missiles and radar system allows India to pose pivotal security challenges to Pakistan's security by operationalizing offensive operations against Pakistan with close air support provided by multirole combat aircrafts. It is capable of hitting moving and fixed targets inside Pakistan while flying in Indian airspace. Pakistani combat aircrafts lack these capabilities consequentially Rafale aircrafts will enhance Indian defense capabilities.

### **Brah Mos Missile**

Brah Mos missile has different versions. N1 version is developed to fire it from surface ships. Brah Mos-A capable to hit its targets within range of four hundred kilometers is a supersonic cruise

missile. Air version can be fired from SU-30MKIs. Presently, two SU-30MKIs are retrofitted with Brah Mos-A. Tejas, Rafale and MiG-29s will be retrofitted with light version Next Generation (NG).Block I, II & III missiles are capable of destroying enemy's targets on land, in the air and floating. Brah Mos missiles will pose serious security challenges for Pakistan. Political leadership and security establishment of India is aware that country is slowly discarding Credible Minimum Deterrent (CMD) posture and operationalizing overkill capacity. Brah Mos-A and NG missiles provides India SOW capabilities. Indian air force while remaining in the India air space will repeat Balakot like attacks in future. Further, S-400 BMD System will create additional problems for PAF and dissuade it from carrying out punitive retaliatory proportional attacks.

Missile	Range	Speed	Deployed	Possession	Status
Block I	290 KMs	Mach 2.8	North Rajasthan	Army	In Service
Block II	290 KMs	Mach 2.8	Southern Rajasthan	Army	In Service
Block III LACM	450 KMs		LAC	Army	In Service
Brah Mos NG/SLCM	290 KMs	Mach 3.5	-	Navy	In Service
Anti-Ship	300 KMs	Mach 3	-	Navy	Under Development Phase
Hypersonic CM	600 KMs	Mach 6	-	Navy	Under-Development Phase
Brah Mos-NG	290 KMs	Mach 3.5	Halwara	Air Force	Under-Development Phase
Brah Mos-A	400 KMs	Mach 2.8	Halwara	Air Force	Trial Phase
Brah Mos ER	800-1000 KMs				Under-Development Phase

Source: Author's own.

### **Indian Military Exercises: Perfecting Punitive Retaliatory Comprehensive Tactical Strike Doctrine**

Gagan Shakti Military Exercise was carried out from April 10 till 23, 2018(Gupta, 2018)to test the readiness of Indian armed forces. Aim of the exercise was to enable Indian military to carryout offensive operations at night and during the day time against Pakistan and China. Second, it aimed at to train Indian armed forces to operate in extreme terrain and in intense weather conditions. Third, Gagan Shakti aimed at to perfect the synergy among all branches of the Indian armed forces ("Gagan Shakti" 2018: 13 key points from Indian Military Largest Ever Exercise Along Pakistan Borders, 2018). Fourth, to ensure that Indian armed forces can operate after absorbing Chemical, Biological or Nuclear attacks (Mitra, 2018). Fifth, exercise focused on to relocate assets from one sector to another in case of two front war. Sixth, it aimed at maximizing the impact of joint military operations. Indian conventional force posture is aimed at tilting the (BOP) in its favor or to counterbalance enemy. It is evident that Indian forces are being trained for carrying forward operations in enemy territory. Gagan Shakti confirms India is paving the way for limited war under nuclear overhang. It is seriously planning to launch offensive operations supported by naval and air power against Pakistan in pursuit to carry-out lethal pre-emptive strikes or disarming strikes

against Pakistan's counterforce assets or nuclear facilities or seize control of thin strips inside Pakistan and use it as a bargaining chip during negotiations. It would certainly cross Pakistan's nuclear threshold resulting in TNWs use so Indian military is being trained for nuclear war fighting. However, New Delhi wants to put the onus of nuclear weapons use on Islamabad to build a case against Pakistan declare it a pariah state and rollback its nuclear weapons program.

India carried out military exercise Vijay Prahara in May, 2018 (Vijay Prahara' Exercise Under Way in Rajasthan, 2018), at Suratgarh, Rajasthan. Over, 20,000 soldiers from the Army's South Western Command participated in it to test the synergy between Indian military and air force. Significant aspects of the exercise included (Mitra, 2018), first, to ensure smooth coordination between Indian military and India air force. Second to prepare Indian military to fight even after nuclear threshold is crossed. Third, to improve intelligence, surveillance and reconnaissance capabilities hence locate and destroy enemy's TNWs. Fourth, to perfect Indian military and air force readiness and enable them to carryout swift operations.

Indian military acquisition of sophisticated military technology and military exercises conducted under General Bipin Rawat's leadership resulted in the introduction of Indian Land Warfare Doctrine (LWD) in December, 2018. It comprehends Indian military threat perception, focus, future plans to acquire and incorporate technologically advanced robust weapon systems in Indian military to facilitate operationalization of offensive tactical operations.

## **Conclusion**

India is revamping its military by procuring and deploying robust military hardware to ensure full spectrum escalation dominance, tilt BOP in its favor, operationalize IBGs under the LWD or execute tactical/punitive surgical strikes to establish regional hegemony. In 2004, New Delhi orchestrated plans to carryout swift operations against Pakistan. It failed to operationalize CSD. However, on September 29, 2016 it carried out controversial surgical strike in Pakistan administered Kashmir. Indian military exercises Gagan Shakti, Vijay Prahara and LWD created false sense of security in the minds of Indian strategic planners. It led to February 26, 2019 Balakot strike. Pakistan's countermove exposed weaknesses in Indian punitive retaliatory tactical/ surgical strikes doctrine. Author believes tactical strikes will not be repeated unless India procures Rafales, T-90MS tanks, retrofit SU-30MKIs with Brah Mos-A missiles, CH-47F Chinook, AH-64 E (I) Apaches, S-400 BMD System and Falcon radars. Procurement and subsequent deployments of abovementioned weapon systems will be completed by 2025 hence it will embolden decision makers in New Delhi to operationalize IBGs or carryout surgical strikes against targets in Pakistan. BMD System requires Pakistan to accelerate development of decoys, MIRVs, MRVs and tactical batteries to launch swarming attacks in pursuit to hit targets on India soil.

The substance of the matter is overarching conventional military disparities in Indian favor accentuates operationalizing punitive retaliatory comprehensive tactical strikes. Secondly, deployments of nuclear forces require Indian NCA to delegate authority to junior rank Indian

military, naval and air force officers in crisis situations. It creates “nuclear quandary,” at tactical and C2 levels. It would result in nuclear predicament in future crisis.

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