

# U.S.I. JOURNAL

**INDIA'S OLDEST JOURNAL ON DEFENCE AFFAIRS**

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**Vol CLI**

**JANUARY-MARCH 2021**

**No 623**

## USI LATEST PUBLICATION DURING 2020 and 2019

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OP-2/2020**	"Chinese Intransigence in Ladakh : An Overview" By Maj Gen PK Mallick, VSM (Retd)	295	2020
OP-2/2019**	"Unpacking SAGAR (Security and Growth for All in the Region)" By Cdr Subhasish Sarangi	150	2020
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CMHCS-2**	M/s Manohar Publication, New Delhi "Laddie Goes to War – Indian Pilots in WWI" By Mr Somnath Sapru	1250	2020
R-106**	"India and China Building Strategic Trust" By Maj Gen Rajiv Narayanan, AVSM, VSM (Retd) & Professor Qiu Yonghui	1950	2020
R-107**	"Strategic Year Book 2020" Edited by Maj Gen BK Sharma, AVSM, SM & Bar (Retd)	1850	2020
R-108**	Lt Gen GS Katoch, PVSM, AVSM, VSM (Retd) and Dr Roshan Khanijo "The End of an Era India Exits Tibet - India Tibet Relations 1947-1962, Part-4" By Claude Arpi	1950	2020
R-109	"China, The Rising Aerospace Power-Implications for India" By Air Marshal Anil Chopra, PVSM, AVSM, VM, VSM (Retd) M/s Pentagon Press	995	2020
R-110	"Non-Contact Warfare : An Appraisal of China's Military Capabilities" By Brig Vivek Verma M/s Pentagon press	1295	2020
Brief ** History 1870-2020 Adm-1/ 2020	"A Brief History of the United Service Institution of India (USI)" By Col VK Singh, VSM (Retd)	750	2020
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e-mail: [director@usiofindia.org](mailto:director@usiofindia.org)

[dde@usiofindia.org](mailto:dde@usiofindia.org)

[cs3@usiofindia.org](mailto:cs3@usiofindia.org)

[ddadm@usiofindia.org](mailto:ddadm@usiofindia.org)

[ci@usiofindia.org](mailto:ci@usiofindia.org)

[cafhr@usiofindia.org](mailto:cafhr@usiofindia.org)

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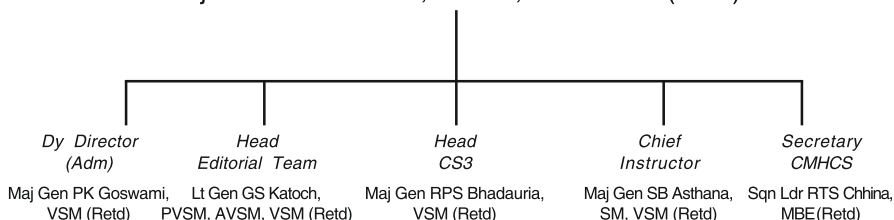
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3. The article should be in Arial Font, size 12 and English (UK). Avoid use of symbols like %, & and so on unless unavoidable to explain a point. The date style should be 24 Jun 2020, except in the citations where it will be Jun 24, 2020. Abbreviations if any, should be used in their expanded form the first time and indicated in brackets.
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5. The author will receive a copy of the issue of the Journal in which his/her article appears along with three offprints. A suitable honorarium will also be paid after the article is published.

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1. Endnotes are notes added to the main body of a paper or an article, in which the author directs readers to sources referred to or to add extra comments of his or her own. Endnotes are placed at the end of the paper/article. A superscript number (1,2,3,4) at the end of the sentence signals the reader to look for the corresponding endnote at the end of the article. The endnotes should be numbered consecutively, starting from '1'. Citations should include the author's name title of the book (in *Italics*), publishing information (in parenthesis) and pages consulted, all separated by commas. Citations should be in the Chicago Manual of Style (CMS) format. A quick reference is available at:

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Some examples are given below:-

<sup>1</sup> Michael Baxandall, *Painting and Experience in Fifteenth-Century Italy: A Prime in the Social History of Pictorial Style*, (Oxford University Press, London, 1988), p 45.

<sup>2</sup> Lina Bolzoni and Pietri Coral. *The Culture Memory*, (Bologha: Societa editrice Il Mullno, 1992), p 45.

2. Use of *ibid*, *op. cit.* and *loc. cit.*

*Ibid*, refers to the immediate preceding reference; *op. cit.* refers to the prior reference by the same author and *loc. cit.* is used instead of *op. cit.* when reference is made to a work previously cited and to the same page in that work. For example:

<sup>4</sup> R Polrer, *Learning Physics*, (Academic, New York, 1993), p 4

<sup>5</sup> *Ibid*, p.9.

<sup>6</sup> T Elliot, *Astrophysics*, (Springer, Berlin, 1989), p.141.

<sup>7</sup> R Millan, *Art of Latin Grammar*, (Academic, New York 1997), p. 23.

<sup>8</sup> Elliot, *op cit.*, p148.

<sup>9</sup> Elliot, *loc, cit.*

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## **Course Members**

During Jan-Mar 2021, 95 Officers registered for Course Membership.



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# Editorial

Dear Readers,

We are happy to bring out for you the USI Journal for the 1st Quarter of the year 2021. For 150 years the USI has chronicled military affairs, encouraged and inculcated the love for writing and reading in the officers of the armed forces, and most importantly, spread knowledge amongst its readers. Following this hallowed tradition, the USI conducts three essay competitions every year. This issue includes three prize winning essays for the year 2020.

The Gold Medal Essay Competition Group 'A' winning essay is carried as the lead article. The subject is 'Emerging Dynamics of Warfare – Role of Artificial Intelligence (AI) and Robotics and how India can Exploit It' by Commander Manish Chowdhury.

The next article is by a former Director USI and distinguished soldier, Lieutenant General Satish Nambiar, PVSM, AVSM, VrC (Retd). He was the first Force Commander and Head of Mission of the United Nations Protection Force in the former Yugoslavia (UNPROFOR), during 1992-93. With that background and his subsequent close association with the United Nations activities, he writes on 'India and the United Nations Peacekeeping' and gives out candid and farsighted recommendations.

This is followed by the Gold Medal Essay Competition Group 'B' winning essay titled 'Space the Next Frontier: Opportunities and Challenges for India' by Major (now Lieutenant Colonel) CS Chahar.

The next article 'Ski Himalaya: Making the Impossible, Possible' will greatly appeal to those who relish the mountains, especially on our Northern borders. Two veteran mountaineers, Lieutenant Colonel Harish Kohli, VSM (Retd) and Brigadier Krishan Kumar, VSM (Retd) get together to give a vivid description of the Ski Himalaya expedition 1995 which they participated in, and the former lead. They round it off with some applications to current operational requirements from the lessons learnt.

This journal carries the second article of the trilogy regarding the Ex-Servicemen Contributory Health Scheme (ECHS) by Major General Ashok Kumar, VSM who writes on the 'Veteran Medical Care Support System in the USA: Part I'. The last part of the trilogy will appear in a future issue of the journal.

Brigadier (Dr) SP Sinha, VSM (Retd) gives an insight into the Regimental system of the Indian Army and the impact of changing values, which are inevitable, in the article titled 'Regimental Soldiering: Changing Values'. He is the author of the recently released book titled 'Traditions and Customs of the Indian armed Forces'. This is followed by an article by Ms Rachna Bisht Rawat – an accomplished military historian – who enthalls the reader with "Battle Tales" which are remarkably interesting historical anecdotal stories from the army.

The prize winning essay of the Lieutenant General SL Menezes Memorial Essay Competition by Group Captain PA Purohit on the subject 'Post-Independence India: Evolution of Jointmanship in the Military and Lessons Learnt' is the next article. The article chronicles the slow yet inexorable march towards Jointmanship in the modern Indian military. The next article titled 'IAF Transition towards a Network-Centric-Knowledge Based Force' by Wing Commander Mukesh Kumar Singh and Dr Vikas Gupta highlights the imperative for the IAF to transition towards a network-centric-Knowledge Based Force. The article is based upon a study done by the authors regarding Knowledge Management in the IAF. They write that this should be something which of relevance to the complete military.

'China's Expanding Role in UN Peacekeeping' by Colonel Shailender Arya brings out how Chinese peacekeeping efforts are intertwined with Chinese economic interests. The overall aim seems to expand Chinese influence across the world. Another China focused article is by Prof Sangeeta Thapliyal who writes about the 'Political Developments in Nepal and the Chinese Involvement'.

In a Counterterrorism (CT) environment in the rarest of rare cases a crime may get committed by a soldier. How the offender must be not spared, but those who get unwittingly drawn in the

vortex be dealt with some consideration, emerges in a personal narrative article titled 'Standing Up for a Few Good Men' by Lieutenant General KJ Singh, PVSM, AVSM & Bar (Retd).

In the first Review Article, Shri Prabhat P Shukla, IFS (Retd) writes about the book 'The End of an Era: India Exits Tibet, India-Tibet Relations [1947-1962]' by the noted Tibetologist Claude Arpi. This is the fourth and final volume in Claude Arpi's tetralogy on India-Tibet relations from 1947 to 1962. Such painstaking research on this subject is unlikely to be found elsewhere.

In the second Review Article, Major General VK Singh writes about the book 'Watershed 1967 - India's Forgotten Victory over China'. He brings out why recording biased military history is a dangerous trend and requires to be controlled. It builds up a false sense of security and is professional dishonesty.

The issue also carries four short reviews of the following books:

- Jinnah: His Successes, Failures and Role in History  
By Ishtiaq Ahmed  
Reviewed by Lt Gen Ghanshyam Singh Katoch, PVSM, AVSM, VSM (Retd)
- Internal Security: A Psychological Approach  
By Maj Gen Sanjay Bhide, YSM, VSM (Retd)  
Reviewed by Maj Gen Jagatbir Singh, VSM (Retd)
- Non-Contact Warfare: An Appraisal of China's Military Capabilities  
By Brigadier Vivek Verma  
Reviewed by Maj Gen Sanjeev Chauhan, YSM
- Aatma Nirbhar Bharat (Self-Reliant India): Challenges and Opportunities  
By Brigadier (Dr) Rajeev Bhutani  
Reviewed by Shri Gaurav Kumar

We always look forward to your feedback and suggestions which could be put on the USI blog and which we will carry as letters to the editor – a format which is not adequately used by

members or other readers. As always, the USI Journal will attempt to maintain our standards of inquisitive and fruitful research and original writing.

Happy Reading!

The Editorial Team

Lt Gen Ghanshyam Singh Katoch, PVSM, AVSM, VSM (Retd)  
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Consultant Editor

# Emerging Dynamics of Warfare — Role of Artificial Intelligence (AI) and Robotics and how India can exploit it

**Commander Manish Chowdhury®**

*“History Honours the Valorous”*

## **Abstract**

*Contemporary and future full-spectrum warfare would predictably be hybrid in nature, spanning into physical and conceptual dimensions — the former, a swift, intense and short-duration combat against an armed adversary and the latter, a sustained struggle for control and support of the domain of interest. Artificial Intelligence (AI) is fascinating as pursuit of machines to match human decision-making ability, albeit at a higher level of promptness and accuracy — both key components in tactical level of war fighting — hold vital promises for multi-dimensional warfare in fields of command and control, cyberspace, economic aggression, network centric operations, fail proof and predictive analysis of intelligence, deployment of autonomous unmanned platform, autonomous detection-acquisition-classification and engagement of targets, maintenance and upkeep of battle logistics and assets to name a few fields. This paper, while elaborating on conventional AI based force multipliers, also suggests futuristic unexplored application of AI to tilt the balance of power in own favour. The paper concludes with clear and non-utopian recommendation of future roadmaps, containing necessary change management and temporal action plan involving all stakeholders, to*

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®**Commander Manish Chowdhury** is presently posted as an instructor in Indian Naval Academy, Ezhimala. He holds an M Tech degree in Radar and Communication and is an alumnus of Naval College of Engineering, Lonavala and Naval War College, Goa. This is the edited version of the paper which won the first prize for USI Gold Medal Essay Competition (Group A) 2020.

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*support India's necessity to remain relevant in changing dynamics of warfare through development and deployment of AI and robotics.*

## Introduction

**What's Past is Prologue.** Since time immemorial, victory has always adorned the crown of the most versatile. Ancient examples range from defeat of western crusaders in battle of Hattin (AD 1187) at the hands of the Saracen forces<sup>1</sup>, to primordial violence combined with psychological intimidation resulting in occupation of major chunks of Central Asia and China by Ghengis Khan between AD 1201 to 1227<sup>2</sup>. However, with paradigm shift in technological advancement, diversity of contemporary overt and covert warfare has spanned to physical, psychological and cognitive domains.

In view of unbearable cost of victory in prolonged war, contemporary war would be of short duration and high intensity. It will serve a political objective and be fought concurrently in multiple domains. Artificial Intelligence (AI) holds promise to make machines match human decision making ability, albeit with prompter reactions and higher skill level. AI will be integral to fulfilment of each component of Clausewitzian Trinity<sup>3</sup> of warfare; in augmenting conventional combat potential of forces and reducing human casualties while gradually impregnating military systems. This will be tailor made for wartime environment, when multiplicity and multitude of data is extreme, decision periods are short, and effectiveness of decision is absolutely essential. This article focuses on the boundless potential of the AI in emergent war fighting and suggests a future roadmap of relevance.

## The Emergent Face of War

**Evolving Dynamics of Warfare.** The era of large scale conventional inter-state wars is nearing a natural demise, marking the rise of ambiguous, protracted and indecisive conflict in a complex environment. Present conflicts are aimed at deterrence and stabilisation rather than intent to change a regime or defeat a rogue state. Large-scale prolonged conflicts involving the ground invasion of one country by another will be an exception rather than a practice.<sup>4</sup> The focus will be on small wars since the cost of conflict could become intolerable even to the global community in



view of intertwined nature of national and international interests. Following are the major components of contemporary warfare:

- **Hybrid War.** It is characterised by full spectrum wars in the physical and conceptual dimensions in undefined battle space that can be waged from within the territorial boundary of a state, from the rear and the flank.<sup>5</sup> Hybrid conflicts would demand seamless theatrical coordination exploiting Network Centric Warfare (NCW)/ Network Centric Operations.<sup>6</sup>
- **Remote Control War.** Boots on ground and loss of own soldiers and resources in a hostile environment can be limited by employing AI embedded robotics and autonomous systems.
- **No Contact War.** It involves strategies implemented and embedded to effect coercion through desired political, economic, and psychological effects including intimidation, subversion, and destabilisation of key points and neutralisation of command structure in a politico-military-economic system.
- **Outsourced War.** Outsourced combat personnel hired through private security agencies in 'train, assist, enable and abandon' model are major components of overt and covert wars.
- **War of Collusion.** This includes sponsored creation of unrest and armed conflict in the enemy land through citizens of the enemy side.
- **Cyberspace Warfare.** This comprises disruptive use of electronics and computers-based means, for accessing, controlling and disabling of opponent's economic focus areas, command and control networks, research facilities, civilian assets, and military facilities.
- **Information Warfare.** Perception management through propaganda, social media representation and psychological operations are proven and potent weapons to incite proxy war, insurgency and discontent hailing from anti-incumbency.

## **Modern Warfare – Redefined Arsenal**

In modern warfare, superiority will be achieved with following abilities:

- Military strength complemented by a strong economy, immense industrial capacity and deeper diplomatic outreach.
- Ability for collection and accurate processing of multisensory diverse data to facilitate threat perception and decision making under dynamic multiple threat environments.
- Synthesis of mission specific intelligence regarding strength and weaknesses of enemy and subsequent rapid response mechanism and prediction of future course of action by the enemy.
- Reduction in human casualties by use of unmanned systems including localized swarms for accurate reconnaissance, precision targeting and strike and post-strike damage assessments for assured destruction/ effects — at minimum cost.
- Dominance in information and cyber warfare, perception management, psychological operations and economic warfare.
- Automated maintenance/repair to reduce downtime of equipment,.
- Maintenance of optimum operational logistics.

## **Relevance of AI and Robotics – The Ambidextrous Warriors**

**Concepts.** The following concepts merit attention:-

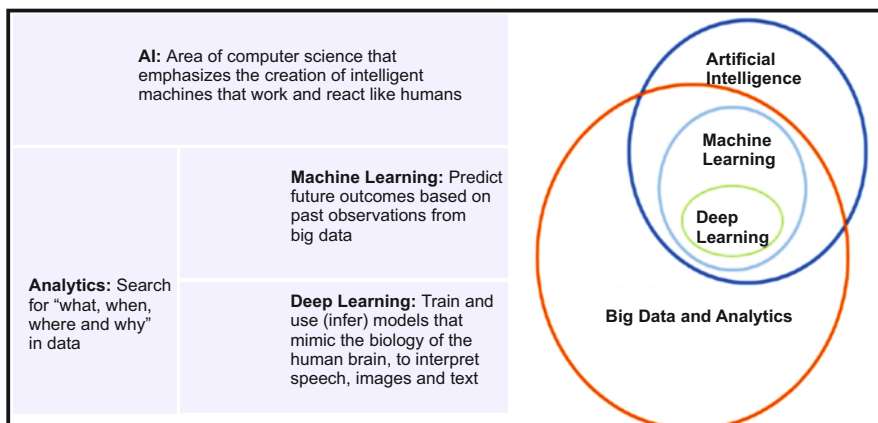
- **AI.** AI algorithms can emulate behaviours associated with human intelligence like planning, learning, reasoning, problem solving, perception, motion, and manipulation and, to a lesser extent, social intelligence and creativity.<sup>7</sup> AI possesses potential to outweigh human efficiency in big data analytics, pattern recognition, evaluation, prediction, and automation. It would improve economy of efforts by automation of time-consuming tasks and render accurately interpolated interpretation of available data in thousands of simultaneous

dimensions vis-à-vis dimension limited analysis by human minds.

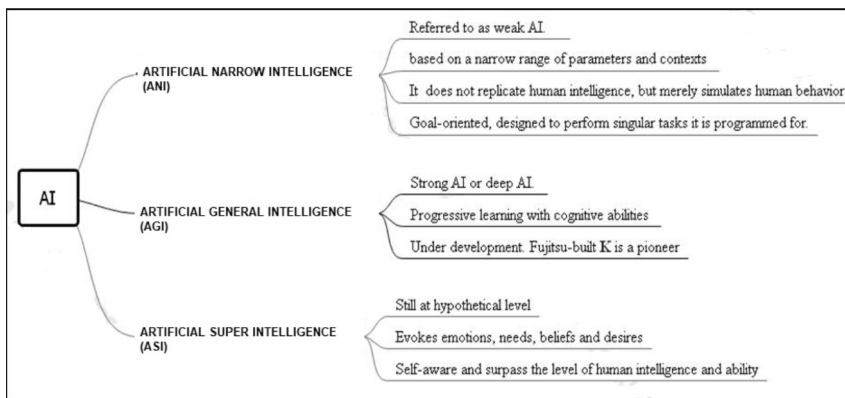
- **Machine Learning (ML).** ML is an application of AI wherein machines are given access to data and are allowed to analyse and act upon them based on an embedded algorithm in supervised/unsupervised/reinforced way. Through ML, AI systems get progressively better even at tasks that it is not specifically programmed to undertake. Figure 1 below demonstrates major subsets of AI. Based on capability and characteristics, classification of all real and hypothetical AI systems is represented by Figure 2.

- **Robotics.** A Robot is “A powered machine capable of executing a set of actions by direct human control, computerised control, or a combination of both. At a minimum, it is comprised of a platform, software, and a power source”.<sup>8</sup> Unmanned robotic systems owe their decision making abilities to AI and ML.

‘The peacetime military application of AI would encompass NCW, intelligence, realistic simulations and war gaming, maintenance and inventory management, cyber security and data processing. The additional applications during conflicts would encompass Command, Control, Communication, Computer, Intelligence, Surveillance and Reconnaissance (C4ISR), cyber warfare and intensification of conventional capabilities.



**Figure 1 : Graphical Representation of AI, ML and DL as Subsets<sup>9</sup>**



**Figure 2 : Types and Characteristics of AI capabilities<sup>10</sup>**

### **Analysis of Battlefield Applicability of AI and Robotics: Conventional Applications.** These are as explained below:

- **Network Centric Operations.** It is manifested by intra and inter platform networking of sensors, communication systems, Decision Support System (DSS) and weapons and creation of a single source of information or “Common Operating Picture”<sup>11</sup> for truly integrated multidimensional battle groups. Introduction of ML algorithm in available Combat Management Systems (CMS) would result in effective threat evaluation by identifying an entity as potentially hostile and, thereafter, allocation of priority and resource against it, based upon interpreted level of threat. It will flatten the command and control hierarchy, enhance precision and reduce latency.
- **Unmanned Operations.** With applicability in land/air/surface/sub-surface domains, narrow AI based unmanned vehicles (UVs) in autonomous/supervised modes can be used for varied functions like surveillance, detection, classification, protection of own forces, sacrificial missions, precise targeted killing, explosive neutralisation and dirty jobs, while minimising cost and human casualty. In naval scenario, deployments of underwater UVs equipped with SONARs along with conventional surface groups can enhance sub-surface surveillance horizon and assure protected passage. Monitoring and recording of signatures of all ships/submarines transiting various choke points or contentious grounds by suitably

deployed UVs can serve as training data for AI/ML based detection/engagement systems.

- **Autonomous Weapons.** Human-supervised autonomous weapon systems are designed to allow human operators to override operation of the weapon system, but can select and engage targets without further human input after activation.<sup>12</sup> However, Lethal Autonomous Weapon Systems (LAWS), though legally controversial, can undertake the above operations without human supervision.

- **Loitering Munitions.** Narrow AI based, man-in-the loop, loitering munitions can be deployed around designated area to seek, recognise and destroy intended targets with a reaction time better than traditional means (e.g. IAI Harop). It can be very effective in immobilising tanks, electronic warfare (EW) platforms, thus, halting enemy advance.

- **Mine Countermeasures and Deployment.** Robotic Autonomous Systems (RAS) are best suited for detection, identification, localisation and neutralisation of mines. Post recognition of the mine type, it can be destroyed either by placing a charge on it or by simulating suitable acoustic and magnetic signature for detonating the mines.<sup>13</sup> Furthermore, signature specific cognitive mines can be developed for precise denial of passage.

- **Unmanned borders.** Automated systems with data harvested from multiple sensors like Battle Field Surveillance Radar, motion sensor, IR sensor, hyper spectral imaging and gravity gradiometer with/without interfaced weapon systems can monitor India's vast borders at sensitive and inaccessible locations as tireless omnipresent sentry with minimal human involvement.

- **Cyber Warfare.** It is mooted that relying on human intelligence alone in cyberspace is a losing strategy. AI-enabled tools can be trained to detect anomalies in broader patterns of network activity, thus, presenting both defensive and offensive capability in more comprehensive and dynamic manner. The damages caused by cyber-attacks can range from disabling economic and industrial power points to mislead/neutralise military systems, including propaganda and 'deep

fakes'<sup>14</sup>. The extreme financial losses imposed by such attacks can force the enemy into submission without bloodshed. Taking over control of networked military hardware/ weapons, masquerading, deliberate insertion of error in positioning data can severely deter tactical ability of opponents in the fog of war.

- **Improved Sustainability of Forces.** Use of drones to render urgent logistic support to own troops engaged in action in inaccessible areas can reduce casualties and increase sustenance. Powered exoskeletons with brain wave reading ability and suitable light weight and high capacity power sources, will enhance mobility and agility of infantrymen while preventing injury.

- **Swarming Drones.** Use of AI embedded autonomous swarming drones with cloud intelligence for cooperatively collective data processing appears to be the future of detection, data relaying, weapon delivery and defensive systems at lesser cost in the long run. These are most suitable for under water operations, where communication with a central control station is the biggest challenge, and in accompanying manned aerial missions as 'Loyal Wingman'<sup>15</sup>.

- **Logistics Management.** Pattern analysis based forecast for resource management, including optimisation and automated initiation of relevant spare procurement, will ensure optimal level of inventory sans exorbitant carrying cost.

**Breaking the Stereotype: Proposed Applications.** These are elucidated in the following paragraphs:-

- **Lambs to Lions – Metamorphosis.** Limitation in the strike range of existing weapon systems are best bridged by weapon carrying Indian Navy (IN) ships in view of existing limited deep strike capacity of IAF assets. AI based systems can pioneer preparation of virtual structural modification plan to convert requisitioned civil shipping of Indian origin for contingency measures in case of loss of warships. Retrofitting of modular missile silos interfaced to semi-autonomous release system and data-linked with sensor carrying military platforms would increase reach and quantum of firepower of battle groups with reduced need for operational turn around.

- **Signature Management.** In ship designing stage, fusing structural drawing, stability criteria and individual vibration signature of machineries, ML based interpolation can recommend positioning and mounting of machineries to minimise acoustic signature. Further, modelling of machinery regimes to mimic merchant shipping or platforms of lower strategic importance can be undertaken to deceive signature specific mines/torpedoes/ loitering munitions during conflicts. Suitable ML module impregnated into Integrated Platform Management System (IPMS) can shift to such regimes in an autonomous way based on assessment of threat levels.
- **Forecasting Enemy Course of Action (CoA).** Predictive analytics by machines can forecast the enemy future CoA based on data inputs like statistical traits of enemy, availability and mobilisation of war assets, terrain/battlefield dynamics and prevalent diplomatic/economic/ political scenario. The same can assist in significantly time compressing the war room sessions.
- **Tactical Decision Assist.** Victory in battle is largely achieved through tactical moves by the commanders based on perceptions, experiences and procedures. ML embedded Decision Support Systems (DSS) with training data comprising of force level, statistics of past decisions and situational intelligence can assist in efficient Multi Criteria Decision Making (MCDM). Such systems can supplement human competence, reduce reaction time and can be designed to suggest pseudorandom yet effective maneuvers to achieve element of surprise.
- **Navigation at Sea.** Using deep learning AI algorithms, the data from multiple sensors of the bridge like Global Positioning System (GPS), Automatic Identification System (AIS), radars, cameras, weather systems etc. can be evaluated to provide actions/alerts to avoid navigational hazards, thereby, ensuring safe navigation of ships at sea.
- **Battlefield Awareness.** AI based fusion and analysis of multi-layered terrain map along with weather condition, imagery, soil structure and enemy position can suggest



composition of strike forces and positioning of artillery, requirement of air support etc. for superior mobility and maximum effectiveness.

- **Data Acquisition and Fusion.** Neural network enabled prediction of acoustic signature of enemy ships/submarines can be undertaken by interpolating open sourced structural data fused with generic information of equipment fitted onboard such assets. The same can be used as training data for embedded ML to recognise the enemy.
- **Prescriptive Maintenance.** Predictive maintenance of machineries and equipment by collation of embedded sensor data by predictive algorithm can minimise breakdowns and unnecessary periodic routines. The same is presently used in F-35's Autonomic Logistics Information System by USAF.<sup>16</sup> ML based systems can combine equipment parameters, documentation and repair history to recommend repair methods by maintainers with average skills in minimal time.

## **Issues Ailing Progress in Field of AI and Robotics**

**Absence of Enabling Data Ecosystems.** Miniscule access to actionable data, robust data network, reliable repository and lack of formal regulations for anonymity of data has caused negative catalysis in India. Further, limited availability of resident subject experts, low industrial participation, prohibitive cost of imported technology and, finally, lukewarm response by universities, governments and stakeholders, until 2016, have all been proved detrimental.

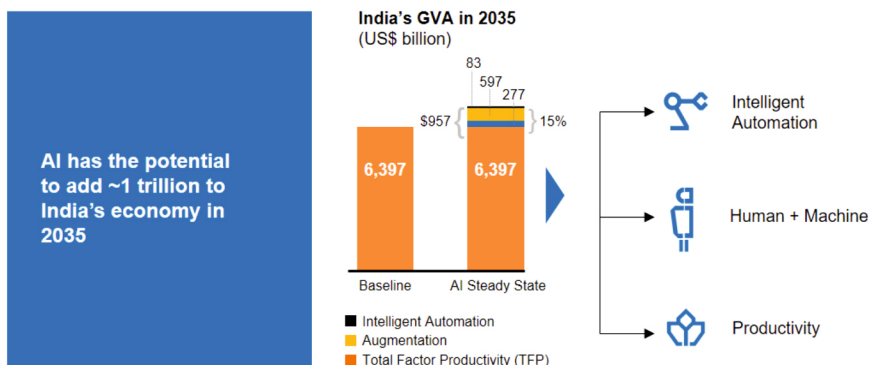
Despite competence in design and implementation of cutting edge technology, contribution of Indian IT companies like TCS, Wipro and Infosys in development of AI/ML in India has been insignificant in view of negligible automation incorporated in Indian industries. Ironically, from 2001 to 2016, only 14% of all research publications on AI/ML have come from industry, with universities contributing to 86%.<sup>17</sup> Objective to develop military AI systems, singularly and dedicatedly, through Defence Research and Development Organisation (DRDO) has served us no good, whereas involving industry and discrimination at later stage between civil and military specific implementations would have been the right way.



## Recommended Way Ahead

**Short Term Roadmap (3-5 Yrs).** The proposed short term roadmap is aimed at bridging capability and resource gaps, and preparation of framework for development in following ways:

- Identification of mission specific military systems meriting focus of AI investments is the starting point. Armed forces must issue Problem Statement Documents to industry, Public Sector Undertakings (PSUs) and academia and review the proposals for selection of potential technology developers. Shortlisted organisations are to be tasked accordingly.
- Limited import, deployment and study of AI embedded military systems would enrich understanding of design philosophy and algorithms, paving way for indigenous development.
- India needs access to better data and human talent for managing and processing it. The Indian government needs to source data through Indian data handling organisations, and collaboration with international allies. Further, practice of transparency over data and its investments in civilian AI research would enable monitoring and auditing of civilian AI research, assessment of priorities, and identification of new initiatives.
- Funding in fields of AI and robotics in defence sector around the world is far outmatched by that in the commercial/ industrial sector. Progress in relevant field in isolation is not feasible. Implementation of AI alone stands to effect growth of \$ 1 trillion in Indian economy. Figure 3 refers<sup>18</sup>. Collective discussion with the industry would ensure higher participation and funding by industry. Development of relevant technology and expertise are to be aimed at applicability in industry and military alike, with joint funding. Once optimal expertise and capabilities are reached, defence specific modules may be designed and augmented through DRDO/ Centre for Artificial Intelligence and Robotics (CAIR)/ Aeronautical Development Establishment (ADE), PSUs, Weapons and Electronics Systems Engineering Establishment (WESEE) and selected industries under non-disclosure clause.



**Figure 3 : Potential of AI towards Growth in Indian Economy**

- In addition to existing apex body, Defence Artificial Intelligence Council (DAIC), Innovations for Defence Excellence (IDEX) was formed as a 'not for profit' company [as per Section 8 of the Companies Act 2013, by the two founder members – Hindustan Aeronautics Limited (HAL) and Bharat Electronics Limited (BEL)] to work with AI incubators, designated Centre of Research Excellence (CORE) and International Centres of Transformational AI (ICTAI). IDEX must track upcoming start-ups/Micro, Small, and Medium Enterprises (MSMEs) and innovators while opportunistically investing in the promising ones including offering joint Intellectual Property Rights (IPR).
- Dedicated standing panel for AI shall be formed with members from armed forces, academia, PSU, industry and DRDO. The organisation shall be tasked with organising and monitoring of AI and robotics challenges, hackathons across entire country in open category to build awareness, generate interest and shortlist promising technologies. The empowered panel shall facilitate scaling-up, indigenisation and integration of shortlisted ideas and manpower in manufacturing facilities for successfully piloted technologies. The analogy would stand true to major global AI/ML firms which draw talent directly from universities and start-ups.
- To improve information symmetry, collaboration between stakeholders, boost data mining and sharing and to encourage the development of sustainable AI/ML solutions at optimum price and laid timelines, there exist a need to establish a

dedicated directorate at Integrated HQs MoD and command levels with additional manpower sanction. The proposal is in consonance with Niti Aayog recommendations<sup>19</sup> for integrated operations.

**Medium Term Roadmap (6-10 Yrs).** The proposed medium term roadmap is aimed at implementation of indigenously developed narrow AI/ML technology in defence and fielding of first set of products for following applications while beginning the prototype testing for autonomous systems:

- **Gradual Impregnation of Narrow AI.** Increased impregnation of narrow AI in defence applications (for surveillance, classification, DSS, recognition, maintenance support, mine countermeasures etc.) are to be monitored through dedicated wing of central coordinating bodies like DAIC and IDEX<sup>20</sup> with participation from academia and industry. The organisation should be free of non-specialist civil servants and must be headed and run with achievers of relevant field including defence services. The reporting channel should be short, to prevent India's notorious procedural delay and bureaucratic intervention. Available indigenous robotic UV technology (e.g. Daksh, Muntra by DRDO, Adama by L & T) is to be integrated with AI capabilities through IT majors and defence start-ups through funded projects. Indigenous integration of battlefield/maritime sensors with existing CMS systems is to be undertaken to prevent disclosure of equipment data to external agencies.
- **Control on DRDO Budget and Delivery Schedule.** Performance of DRDO in field of AI has been less than enthusiastic. The budgeting of DRDO is independent of intervention by armed forces and the buyer is mostly left with compulsion to buy substandard products delivered after excessive delay. Political intervention in involving armed forces towards allocation of Technical Development Fund (TDF) to DRDO and setting project timelines shall be considered.
- **Expanding Collaboration.** Expansion of collaboration with world leaders in AI for exchange of respective strengths and bridging of respective constraints will aid the cause. Wide introduction of AI/ML specific technical courses in IITs, NITs and Centres of Educational Excellence should be implemented

for significantly increasing AI trained manpower. India with cheap technical workforce, second largest Science, Technology, Engineering, and Mathematics graduates (after China), can contribute in reducing cost overheads in exchange for access to research facility, credible data and guided expertise building. The time seems ripe for focused diplomatic efforts to enter collaboration with established state players like USA and Japan in backdrop of anti-Chinese sentiments due to COVID-19 and Chinese misadventures in IOR.

- **Funded Research.** Despite significant progress in IT sector, the nascent level in subfield of AI Research in India by industry can be attributed to lack of research funding and uncertain buyer base. Collaboration with Venture Capitals is especially important as the private sector will continue to remain the leaders in pursuing this niche technology. Dedicated funding for start-ups, MSMEs and academic institutions with clear statement of requirement and well defined timelines is the need of the hour. The funding can be conditional wherein non-performance within agreed timelines would attract heavy liquidity damages. Additionally, research facilities of DRDO/CAIR and reference equipment of tri Services are to be made available for testing and field trials of products at all stages. Obsession of defence services with completed products on no-cost, no-commitment (NC-NC) basis is to be discarded to support indigenous development.

- **In House Expertise Building.** Infrastructure building, staffing and subsequent inclusion of B Tech / M Tech courses in AI /ML at premier defence institutes like Indian Naval Academy (INA), National Defence Academy (NDA), Military College of Electronics and Mechanical Engineering (MCEME), Military College of Telecommunication Engineering (MCTE) and Air Force Technical College (AFTC) would develop dedicated in house expertise amongst primary users.

- **Departure from User/ Buyer Approach.** With available talent pool, armed forces must graduate from role of buyer/ user to active stakeholder in technology development. Deputation of suitable young officers/men to research labs without harm to their military career can turn up object oriented

progress. Stagnated officers with relevant area expertise may be deputed with research and application labs for prolonged duration or as lateral entry for best exploitation of their expertise.

**Long Term Roadmap (11-15 Yrs).** Maturing of AI capability for Multi-Criteria Decision-Making (MCDM), cloud intelligence, data collecting and processing ability would follow if short and medium term goals are met on time. India will need to be strategic in its own efforts to integrate AI applications in its weapons systems. Significant indigenous technological progress by 2030 will pave way for alliance with worthy international partners on equal terms and lead to faster development, implementation and, most importantly, regular update in technology.

## Conclusion

The Balance of power since world wars has always tilted in favour of nations with superior economic, military, industrial and technical leverage. The future application of AI and robotics for national security must encompass duality of effecting economic growth to support development of military technology and strong military muscle to protect national economic interests. Government think tanks, Niti Ayog, DAIC and IDEX must synergise building of robust ecosystem in following manners:

- Adopt AI in conventional industry by creating a sense of urgency. Accelerate augmentation of industrial production capacity using AI and robotics.
- Build credible source and repository of data. Import AI solutions for immediate kick start of projects.
- Plan and create a Moon-Shot event to draw worldwide attention and project future potential of AI in India.
- Identifying, recruiting and incentivising AI specialists of Indian origin, from international subject leaders in AI, for mentoring projects in India.
- Involved agencies shall be empowered to make decisions and maintain pace. The same would help iterative reorientation of the projects and resources in right direction.

Finally, recent launching of Naval Innovation and Indigenisation Organisation (NIIO) by Honourable Raksha Mantri on 13 August 2020 for end user to interact with fostering innovations, is in the right direction. The organisation, with Naval Technology Acceleration Council (N-TAC) and Technology Development Acceleration Council (TDAC), will hopefully contribute to the cause for the Indian Navy. This is essential to be emulated by the army and air force within provisions of Draft Defence Acquisition Policy (DAP 20). However, the good intents would bear fruit only if practiced in a time bound manner rather than fading with time. It is strongly opined that creation of an independent Ministry of Defence Procurement (MoDP) should be considered to bring in higher efficiency than the present under growths of MoD. Till such time, insistent resonance between existing organisations for development and implementation of AI and robotics towards concurrent growth of military capabilities and economic progress would achieve favourable balance of power<sup>21</sup> for India in the prevailing amalgamated world of constructive, defensive and offensive realism.

## Endnotes

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# India and the United Nations Peacekeeping

**Lieutenant General Satish Nambiar (Retd)®**

## **Abstract**

*The author with his extensive experience in United Nations (UN) Peacekeeping writes that Peacekeeping is a 50-year-old enterprise that has evolved rapidly in the past decade from a traditional, primarily military model of observing ceasefires and force separations after inter-State wars, to incorporate a complex model of many elements, military and civilian, working together to maintain peace in the dangerous aftermath of civil wars. He brings out the differences between peacekeeping and peace building and brings out that strong military capabilities are a must for peacekeeping while continuity and civilian expertise is best for peacebuilding.*

## **Introduction**

**A**s one of the founding members of the UN, India's contribution to the maintenance of international peace and security has been second to none. In no other field of activity has this been manifested more than in UN peace operations commencing with our participation in the operations in Korea in 1950. Over the years, India provided commanders, military observers, staff officers, contingents, and, in later years, civilian police to many of the UN missions deployed to keep the peace in various parts of the world. The use of armed military contingents was first authorised by the UN Security Council (UNSC) for deployment with the UN Emergency Force in the Gaza Strip and the Sinai, after the Arab-Israeli war in 1956. From 15 November 1956 to 19 May 1967, eleven infantry battalions from India successively served with this force, total of over 13000 all ranks. The initial success of this force

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®Lieutenant General Satish Nambiar, **PVSM, AVSM, VrC (Retd)** was the first Force Commander and Head of the United Nations Peacekeeping Mission in the former Yugoslavia (UNPROFOR), and a former Director of the USI. He was conferred the Padma Bhushan on 26<sup>th</sup> January 2009 for his contribution to national and international security affairs.

led the Security Council to readily accept a request by the Republic of the Congo in 1960 for intervention, on attaining independence from Belgium, for which India provided two successive brigade groups during the period 1960-64.

Since then, Indian contingents have been part of UN peacekeeping operations in Cyprus, Namibia, Cambodia, Mozambique, Somalia, Angola, Liberia, Rwanda, Congo, Sudan/South Sudan, Lebanon, the Golan Heights, Sierra Leone, Ethiopia/Eritrea, and so on. As it happens, India has participated in every peacekeeping operation in Africa, except the current one in Mali.

### **Capacity Building for the United Nations**

India has a somewhat unique and enviable record in terms of the contribution for training of UN peacekeepers today. A Centre for United Nations Peacekeeping (CUNPK) was established under the United Service Institution of India in September 2000 at Delhi, with support from the Ministries of External Affairs and Defence, and Army Headquarters. Since then, this Centre, besides overseeing the training of contingents earmarked for peacekeeping operations, undertakes/conducts training courses for our sub-unit commanders, military observers, and officers earmarked for deputation on staff appointments. It is a measure of our commitment to the UN that a minimum of fifteen vacancies on each of the international courses that are conducted (about twice a year) are offered to developing countries, with all expenses incurred on travel from home country and back, training, accommodation and meals borne by the Ministry of External Affairs, Government of India.

A number of developed countries like the USA, UK, Australia, Japan, Norway, Singapore etc. also subscribe to these courses on a self-financing arrangement. It is indeed a matter of great satisfaction and pride that, in the last twenty years, the CUNPK has established itself internationally as a Centre of Excellence, and is now often called upon to conduct specialised international courses on behalf of the UN Department of Peacekeeping Operations (DPKO), as also joint initiatives with other countries and with international organisations like the International Committee of the Red Cross (ICRC).

### **Dilemmas and Challenges of UN Peacekeeping Today**

In preparing ourselves for continued participation in UN peacekeeping operations into the 21st Century, we must take into

account the radical changes in the nature of the peacekeeping commitment. UN peacekeepers are increasingly being sent to regions where civil-war type situations prevail; where there are no agreements or if there are, these are rather tenuous, or broken without compunction; where the consent or cooperation of the belligerent parties cannot be relied upon; where constitutional authority does not exist in many cases or if it does, there is limited control.

In such situations, today's peacekeepers are not only required to keep the warring parties apart to the extent they can but are increasingly called upon to undertake peace-building operations; safeguard humanitarian relief operations, monitor human rights violations, assist in mine clearance, monitor state boundaries or borders, provide civilian police support, assist in rebuilding logistics infra-structure like roads, railways, bridges, and to support electoral processes.

Protection of civilians has become a mandated task for almost all UN peacekeeping missions deployed these days; a task with many ramifications that need to be understood by the political and military leadership. There is a great deal that can be stated on the subject but for the purpose of this paper, a few important points are made. Use of force for protection and implementation of the mission mandate was first resorted to in the United Nations Operation in the Congo (ONUC) in the early 1960s. As mentioned earlier, India had two successive brigade groups in that mission and this was used to launch combat operations against mercenaries and Katangese rebels led by Moise Tshombe. In the process, the Indian contingent suffered a number of fatalities (36) and many more injured (124). Hence, this is not a new concept or phenomenon. But it needs to be carefully calibrated and located within a credible political framework, both locally and internationally. This invariably poses problems because of inadequate political support to missions that are set up. Regional players, as also the major powers, pursue their own agenda that in many cases do not necessarily complement the mission mandate.

The use of force demands that appropriate resources be made available. In almost all UN missions deployed today, this is wanting because those who have the resources, both in terms of trained manpower and equipment (namely, the developed world), are not participating in UN peacekeeping operations. If UN

peacekeeping is to remain effective, the developed world must return to the commitment. And this should go beyond the present arrangement of seeking positions in senior management and command, to provision of 'boots on the ground'. The connotations of the use of force must be clearly understood by Security Council members who mandate it, the staff at UN HQ, and by troop contributors; and the concept imaginatively evolved. Peacekeepers must be mentally and physically attuned to the fact that the use of force will mean inflicting casualties on belligerents, and that casualties may well be incurred by members of the force. Following up on the views expressed above, this author is of the view that there is an imperative need for troop contributor countries like India to deliberate, analyse and address the following three issues in context of the calls being made for deployment of UN peacekeepers:

- To deal with terrorism.
- To prosecute operations under the Responsibility to Protect (R2P) regime.
- Peace-building being mandated as a task for UN peacekeepers.

### **Deployment of UN Peacekeepers to Deal with Terrorism**

On the issue of use of UN peacekeepers to deal with terrorism, there would be no disagreement with the postulation that dealing with terrorists attacking UN peacekeepers deployed in a mission area is one thing while the Security Council mandating the deployment of a UN peacekeeping force to deal with terrorism in a member state is an entirely different issue. To buttress the argument about dealing with the former situation, the author's personal experience provides an example for what our approach should be. A few months after his return to the rolls of the Indian Army in March 1993 having declined an offer of extension in the assignment as the Head of Mission and Force Commander of the UN mission in the former Yugoslavia (UNPROFOR), the Government of India and Army Headquarters were grappling with the task of putting together a brigade group sized force for deployment to Somalia as part of a UNSC mandated peacekeeping mission following the withdrawal of the US led forces that had been deployed there without achieving the intended results.

General Bipin Joshi, who had by then taken over as the Chief of the Army Staff (and incidentally had experience as a young staff officer in the rank of Captain in United Nations Emergency Force in the Gaza Strip and the Sinai in the early 1960s), asked for any suggestions in context of the author's recent experiences. The only recommendation that will be related in context of the current discussions is the one the author made about equipping the contingent. In context of his personal experience in UNPROFOR (where he incidentally did not have any Indian personnel under his command other than one staff officer), he advised the Chief that while we may take note of the list of items of equipment the contingent was expected to take with it, and for which the UN HQ would reimburse costs, we should ensure the contingent was equipped with enough 'muscular' capacity to deal with anyone who dared challenge its authority. As a consequence, the contingent went in not only with its normal complement of personal and support weapons and ammunition but with a troop of tanks, a battery of heavy mortars, and a couple of attack helicopters. In the event, their presence certainly conveyed a message to the local fighters. A bunch of renegade fighters who tried to take on a patrol was given such a lesson that no further attempts were made. As it transpired, the tank troop did not have to fire a single round of tank ammunition, nor did the heavy mortar battery go into action; but their very presence and the message conveyed that they would be used if required was deterrent enough.

The attack helicopters came in handy ironically in a situation that called for providing assistance in extricating elements of the Pakistani contingent that was under attack. Hence, there is no question that should 'spoilers', 'renegades', 'terrorist groups' etc. engage our troops in the course of execution of mission tasks, they must be dealt with as in combat situations; given an option to surrender, or eliminated. Needless to say, this also calls for support to the troops and contingents from the top military and political leadership against the ubiquitous human rights activists.

The author's reservation on the subject is about calls at various forums in recent times for the UN Security Council to mandate deployment of UN peacekeepers to deal with terrorists operating within member states. In my view, should there be a need for the UN to deal with such contingencies, the Security Council should mandate a Chapter VII enforcement operation under

a regional organisation or a lead country; in which case, combat operations using all means at the disposal of member states should be launched against the organisation or group. The problem really is that the powers that have the clout in the international arena including the UN (namely the developed countries that have the trained manpower and state-of-the-art equipment resources) invariably try to avoid having their hands tainted by participating in such interventions, and, hence, try and palm these off to the developing countries to handle under the convenient façade of UN peacekeeping. It is time that countries like India call this bluff.

### **Deployment of UN Peacekeepers under the R2P Regime**

There is an increasing tendency within sections of the international community to try and cloak some interventions, and possibly UN peacekeeping missions, under the 'Responsibility to Protect' (R2P) regime. As someone who was a member of Kofi Annan's High Level Panel that recommended the adoption of the concept in the 2005 World Summit, the author's personal view is quite unambiguous – R2P is not for UN peacekeeping. If there are situations of genocide, war crimes, ethnic cleansing, and crimes against humanity that the international community determines merits action, it is for the Security Council to mandate intervention in terms of Chapter VII of the UN Charter by military forces under the aegis of a regional organisation or under a lead nation. It is not only hypocritical but positively unacceptable that the powerful countries that run things at the UN try and avoid this responsibility by dumping it (as for dealing with terrorism) on the developing world, again under the façade of UN peacekeeping. In rounding off this observation, a quote from a book written by a fellow member on the High Level Panel, and former Foreign Minister of Australia, Gareth Evans – 'The Responsibility to Protect, Ending Mass Atrocity Crimes Once and for All' – at the Brookings Institution in 2008 is relevant. He states, "The divide between the Western world and the developing countries is somewhat starkly and possibly ironically highlighted by the fact that three major instances where R2P intervention could plausibly have been justified on strong humanitarian grounds, since they protect people seriously at risk from the actions of their own governments, were categorised as intrusions on sovereignty. The first instance was India's action in December 1971 in East Pakistan where large scale genocide and displacement was occasioned by the brutal suppression of



the local population by the national authorities. The second case was Cambodia where Vietnam's actions brought to a halt the atrocities inflicted on the population from 1975 to 1978 by the Khmer Rouge. The third case was Tanzania's overthrow in 1979 of the murderous Idi Amin regime in Uganda. One cannot but cynically conclude that the Western world labelled these instances as aggression because the actions were initiated by developing countries".

### **Peace-building Being Mandated as a Task for UN Peacekeepers**

The decision to make 'peace-building' part of the mandate of UN peacekeepers is a retrograde step because whereas there is little doubt that military personnel are more than capable of undertaking peace-building activities when required, and have done so to great effect on many occasions, it is not a task they should be additionally burdened with. Firstly, they are not trained for it; and secondly, the fact that they move out of the mission area on completion of tenures of six months or a year makes them unsuitable for tasks that require sustained effort over a prolonged period. This is a task for other UN agencies organised for the purpose, and international/regional governmental and non-governmental organisations that have been set up, funded, and mandated for just that sort of work. It was, therefore, with good reason that in defining the elements of peace operations, the Brahimi Panel Report clearly enunciated that "United Nations peace operations entail three principal activities: one - conflict prevention and peace-making; two - peacekeeping; and three - peace-building". And went on to state that "Long term conflict prevention addresses the structural sources of conflict in order to build a solid foundation for peace. Where those foundations are crumbling, conflict prevention attempts to reinforce them, usually in the form of a diplomatic initiative. Such preventive action is, by definition, a low-profile activity; when successful, it may even go unnoticed altogether".

### **Conclusion**

Peace-making addresses conflicts in progress and attempts to bring them to a halt, using the tools of diplomacy and mediation. Peacemakers may be envoys of governments, groups of states, regional organisations or the United Nations, or they may be unofficial and non-governmental groups, as was the case, for example, in the negotiations leading up to a peace accord for

Mozambique. Peace-making may even be the work of a prominent personality, working independently.

Peacekeeping is a 50-year-old enterprise that has evolved rapidly in the past decade from a traditional, primarily military model of observing ceasefires and force separations after inter-State wars, to incorporate a complex model of many elements, military and civilian, working together to maintain peace in the dangerous aftermath of civil wars.

Peace-building is a term of more recent origin that defines activities undertaken on the far side of conflict to reassemble the foundations of peace and provide the tools for building on those foundations, something that is more than just the absence of war. Thus, peace-building includes – but is not limited to – reintegrating former combatants into civilian society; strengthening the rule of law (for example, through training and restructuring of local police, and judicial and penal reform); improving respect for human rights through the monitoring, education and investigation of past and existing abuses; providing technical assistance for democratic development (including electoral assistance and support for free media); and promoting conflict resolution and reconciliation techniques.



# Space the Next Frontier: Opportunities and Challenges for India

Lieutenant Colonel CS Chahar®

## Abstract

*Use of space has fast spread to countries across the globe with enormous implications for security since each state seeks to develop offensive as well as defensive capabilities in space to pursue its security and other interests. India, too, was quick to recognise the potential of space exploration in the development of the country. With a modest start in year 1967 involving launch of first indigenously built sounding rocket from Thumba, the Indian space program has come a long way. The Indian space program has been a civilian one since its inception. With the growing dependence of the armed forces on space-based assets the military applications of this technology cannot be ignored. With each passing day the reliance on space assets is increasing manifold. It is important not only to launch more satellites to meet the growing demand of civilian use but also to meet its military applications. While it is essential to have adequate space assets to meet the ever-increasing requirements of communications, it is prudent to develop an effective anti-satellite weapon system as deterrence against any threat to these space assets. The article argues that if India is to maintain itself as a credible military power into the 21st century, it must exploit this medium.*

*“Expand on both sides as it is a Quote and not part of Abstract is no ambiguity of purpose. We do not have the fantasy of competing with the economically advanced nations in the exploration of the moon or the planets or manned space-flight. But we are*

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®Lieutenant Colonel Chandrapal Singh Chahar was commissioned into the Corps of Army Air Defence in 2007. He is an alumnus of OTA Chennai and the prestigious Defence Services Staff College, Wellington. This is the edited version of the paper which won the first prize for USI Gold Medal Essay Competition (Group B) 2020.

*convinced that if we are to play a meaningful role nationally, and in the comity of nations, we must be second to none in the application of advanced technologies to the real problems of man and society."*

*Dr Vikram Sarabhai*

## Introduction

**M**ankind has always been fascinated by what lies above them. The quest to explore this sphere has led to various inventions and discoveries over the decades. Space as a medium for exploration has enthralled many and has been articulated in fantastic fictional as well as ancient mythological stories. From the invention of the hot air balloon, man has come a long way and now there are even arguments that the next war will not be fought on ground but in space.

The space age and practical astronautics commenced with the launching of Sputnik-1 by the Soviet Union in October 1957, and the subsequent formation of the National Aeronautics and Space Administration (NASA) in the US in 1958. During the next two decades, more than 1600 spacecraft of all varieties were launched, mostly in earth orbit. By 1986 several thousand objects, mostly spent upper stages of space-launch vehicles, and inert spacecraft were circling the earth, and operational spacecraft numbered about 300. Manned and unmanned space probes have provided a great new source of scientific data on the nature and origin of the solar system and the universe. Moreover, many practical benefits have been derived from earth-orbiting satellites, including improved global communications, weather forecasting, navigational aids, reconnaissance of the earth's surface for the location of mineral resources, and for military purposes.

Military use of space started with the launch of an American reconnaissance satellite in 1960. Since then, the benefits from the space-based support operations were realised quickly and these operations were extended to surveillance, navigation, communication, and weather monitoring. Use of space has fast spread to countries across the globe with enormous implications for security since each state seeks to develop offensive as well as defensive capabilities in space to pursue its security and other interests.

India, too, was quick to recognise the potential of space exploration in the development of the country. To India's credit, she has concentrated her efforts on civilian applications of space technology to make economic and social improvements. With a modest start in year 1967 involving launch of first indigenously built sounding rocket from Thumba, the Indian space program has come a long way. In the past four decades, India has launched about 100 satellites for various scientific and technological applications like communication, meteorological observation, telemedicine, tele-education, disaster warning, radio networking, search and rescue operations, remote sensing, and scientific studies of the space. The Indian space program has been a civilian one since its inception. With the growing dependence of the armed forces on space-based assets, the military applications of this technology cannot be ignored. If India must maintain herself as a credible military power into the 21st century, it must exploit this medium.

### **Growth Trajectory of Indian Space Technologies**

India launched its first indigenously built satellite, *Aryabhata*, on 19 April 1975 on board a Soviet Cosmos 3-M rocket. This was followed by *Bhaskara-1* in June 1979 and *Bhaskara-2* in November 1981. India then launched indigenous experimental satellites, Rohini-2 and Rohini-3 after initial failures. In late 1980s, India developed two main satellite systems, Indian Remote Sensing (IRS) system and Indian National Satellite System (INSAT), and two launch vehicles, the Polar Satellite Launch Vehicle (PSLV) and Geosynchronous Satellite Launch Vehicle (GSLV). On the way, Indian Space Research Organisation (ISRO) faced many failures, but it learnt quickly and came out stronger post every failure. Since its first launch in 1975, ISRO has sent more than 100 satellites into orbit including a few on behalf of foreign customers.

**Indian Remote Sensing System.** Indian scientists, like Sarabhai and Professor PR Pisharoty, realised the potential of remote sensing in India. India is affected by natural disasters on a regular basis and the lack of forewarning in 60s and 70s caused innumerable losses of life along with adverse effect on the economy. This prompted Indian scientists to develop means for remote sensing and earth observation satellites to provide early warning of the impending disasters. Starting with IRS-1A in March

1988, a series of IRS satellites have been launched. Presently there are almost 30 remote sensing satellites in operation, making the IRS system the largest civilian remote sensing satellite constellation in the world. The data from these satellites is utilised for several applications including land use/cover mapping for agro-climate zone planning, wasteland mapping, forest cover mapping, wetland mapping, crop acreage and production estimation, coastal zone regulation mapping, natural resources information system, etc.

**Indian National Satellite System (INSAT).** The first generation INSAT series of satellites was constructed in early 80s with the help of Ford, a US company, since India lacked indigenous capability in construction of heavy satellites. The first of the INSAT series satellites was launched on 30 August 1983. During the next two and half decades, India launched 24 satellites. Presently there are 11 active satellites with 175 transponders on board, making the INSAT system one of the largest domestic satellite communication systems in Asia-Pacific Region. The services provided by these satellites include telecommunications, weather forecasting, disaster warning, distant education, telemedicine facilities, and Search and Rescue operations.

**Satellite Launch Vehicle (SLV).** Indian scientists gained experience while working on the Nike-Apache and Centaur rockets supplied by the US and France respectively. This experience was used to develop the indigenous Rohini series of rockets in the mid-1960s. Later, under the aegis of Dr APJ Abdul Kalam, India developed the first indigenous launch vehicle named Satellite Launch Vehicle (SLV). Three of the Rohini series of satellites were launched with the help of SLV during the period 1979-83. Having tasted success with the SLV in launching small satellites, ISRO commenced development of Augmented Satellite Launch Vehicle (ASLV) and PSLV. The initial two flights of ASLV were failures while the later two flights successfully launched the *Rohini Satellite Series* in the year 1992 and 1994. PSLV, in the meanwhile, was first launched unsuccessfully in 1993. However, in the very next year PSLV was successfully launched on 15 October 1994, placing the IRS-P2 in a sun-synchronous polar orbit. Since then, PSLV has launched 52 satellites / space crafts (25 Indian and 27 foreign Satellites) into a variety of orbits including the launch of Chandrayaan-1 on 22 October 2008.

**Geosynchronous Satellite Launch Vehicle (GSLV).** While the PSLV programme was still under way, India started working on development of a bigger launch vehicle capable of putting more than two-ton INSAT satellites into Geosynchronous Transfer Orbit (GTO). The aim was to overcome dependence on the European Ariane space vehicles for launching INSAT series of satellites. However, cryogenic engines were essential for this project and India lacked this technology. Initially, India got into an agreement with Russia for supply of two such engines with transfer of technology arrangements. However, US threatened to impose economic sanctions against the two space agencies on the grounds that cryogenic technology could be used to launch intercontinental ballistic missiles (ICBMs). Thus, seven readymade cryogenic engines were supplied by Russia without the transfer of technology. The first of these engines was used to place GSAT-1 into a GTO aboard its indigenously developed GSLV on its maiden flight on 18 April 2001. With this, India joined select nations having capability to launch two-ton class satellites into the GTO. Till date, India has had four successful flights of GSLV placing in orbit GSAT-1, GSAT-2, EDUSAT and INSAT-4CR. With the successful test of the S200 solid fuel booster early this year, the third most powerful in the world, payload capability for a GTO will be enhanced to four tonnes and ten tonnes for a near-earth orbit at an altitude of about 300 km.

## **Satellite Technologies**

India's foray into the domain of space began with satellites. While India's launch vehicle technologies were still evolving, Indian scientists had begun launching experimental devices, restricted to studying aspects like earth's atmosphere, weather prediction and studying magnetic fields. Efforts came to fruition in 1975 with *Aryabhata*, the first Indian satellite, launched in April that year aboard a Russian rocket. Designed to conduct experiments in X-ray astronomy, aeronomy and solar physics, Aryabhata gave ISRO valuable insight and experience in building and operating a satellite. This was followed up with *Bhaskara I* and *II* satellites launched in June 1979 and November 1981, respectively. Both satellites were India's first low orbit Earth Observation Satellites and carried TV and microwave cameras as part of payload to collect data on telemetry, oceanography, and hydrology.

Since these early achievements, ISRO has evolved technologically and created an extensive satellite development program. Today, ISRO develops indigenous satellites for following disciplines:

- Communication Satellites.
- Earth Observation Satellites.
- Experimental Satellites.
- Navigation Satellites.
- Small Satellites.
- Space Science and Exploration Satellites.

### **Threat to India's Space Assets**

An initial assessment reveals that space assets today face multifarious threats which can broadly be classified as below:

- Attack on space based assets include:
  - + Dazzling or blinding of satellite sensors.
  - + Hit-to-kill anti-satellite weapons.
  - + Pellet cloud attacks on low orbit satellites.
  - + Attack by micro-satellites used as space mines.
  - + High-altitude Nuclear Detonations (HAND).
  - + Space Debris.
- Attack on Earth based assets include:
  - + Physical attacks on satellite ground stations.
  - + Electronic warfare (EW) such as jamming communications, and command and control systems/links and cybernetic attack.
  - + Natural threats like space weather and debris from asteroids and comets.

For a closer analysis, we can classify and study the threats to space-based systems as follows:

- Threats to ground based assets.
- Threats due to Directed Energy Weapons (DEW).
- Threats due to Kinetic Attack Weapons.
- Cyber Threats.

### **Utilisation of Existing Technologies for Space Warfare**

For India to safeguard its space assets in short term and long term, it is prudent to assess what capabilities are in existence, in any form, which can aid the development process. These are elucidated below:

- **Space Situational Awareness.** In 2015, India operationalised an indigenous Multi-Object Tracking Radar at Satish Dhawan Space Centre, Sriharikota, which can track 10 different objects at a range of 1000 km simultaneously. Concurrently, ISRO Telemetry, Tracking and Command Network (ISTRAC), Bengaluru, has a network of ground stations at Bengaluru, Lucknow, Sriharikota, Port Blair, Trivandrum, Mauritius, Brunei, and Biak (Indonesia). India is also planning to build a station in Vietnam. Since 2009, India has operationalised Swordfish radar as part of ballistic missile defence system to track incoming enemy missiles. This radar has the required fundamentals to track space-based objects also with some modifications.
- **Protection from Space Debris.** Presently, India relies on data compiled by NASA to ascertain threats to its orbital assets. Since changing the course of debris is difficult, the best possible immediate solution is to track potentially threatening debris and change the course of the functional hardware. Future solutions can include more accurate tracking of debris and measures to lower their orbit for eventual burn out in the atmosphere. Closer association with Inter Agency Space Debris Coordination Committee (IADC) and developing satellite bodies which can withstand minor impacts are some of the other steps which can be taken.



- **ASAT Capability.** On 27 March 2019, India tested an anti-satellite weapon during an operation code named 'Mission Shakti'. The target of the launch was a satellite in low earth orbit which was hit with a kinetic kill vehicle. The test put India on an equal footing to US, Russia and China, the countries with such capability in the world till date. The test potentially enables India to claim the right to be involved in the formation of future international norms and guidelines with regards to militarisation of outer space.
- **Resource Redundancy.** Creating redundancy in assets is financially constraining for a developing country like India. While some redundancy in critical resources like imaging and navigation can be created, this capability cannot be applied across the spectrum of Indian resources. Redundancy in non-critical assets can, therefore, be created by sharing resources of other nations through partnerships and also by becoming economically sound.
- **Quick Responsive Launch.** Solid fuel-based rocket technology is the prerequisite for this capability. India has already demonstrated indigenous achievements in this respect through the PSLV and Agni-V launches. Hence, the fundamental technological requirements exist. However, the financial aspect of keeping a credible number of such platforms ready for launch, and their security, takes a toll in its full implementation.
- **Application of Small Satellites Technology.** In June 2017, NASA launched a satellite made by an Indian student. The most important facet of this launch was the fact that it was the world's lightest satellite ever launched, fully 3-D printed, weighing 64 grams and sized 3.8 cm cube. Designed to measure radiation levels, it fell into the sea after a few days. This adequately proves that the necessary technologies for manufacturing small satellites are present in India. However, more research needs to be carried out in placing appropriate tools on these platforms. International restrictions on conduct of orbital tests to prevent space debris do constrict the



research and development to some extent but using simulation tools and computers, these can be carried out. Hence, India needs to make considerable effort to actualise this tool.

- **Ground Based Weapons.** India too has embarked on various projects to develop DEW by Defence Research and Development Organisation (DRDO), Centre for High Energy Systems and Sciences (CHESS), and Laser Science and Technology Centre (LASTEC). As per reports, DRDO and CHESS conducted a test in Karnataka using 1 KW laser to hit a target 250 m away. Hence, the technologies are still distant which can be used to target or neutralise an adversary's orbital satellites using DEW.
- **Cyber Attacks.** Indian efforts in this sector are restricted to few nodal agencies. It is not clearly known about the efficacy of their capabilities; however, it can be safely assumed that in a global environment where everything from power stations to financial sectors are interlinked, carrying out a cyber-attack to shut power to ground based command stations, intercept ground to satellite communications to gain control of orbiting satellites is not impossible. India must, therefore, incorporate this aspect in the overall cyber doctrine and exploit it as a low risk and cost-effective tool.
- **Attack on Ground Based Infrastructure.** India today possesses adequate capabilities to identify and target enemy's ground-based space infrastructure. Use of ballistic and guided missiles and sabotage action are just some of the means available today. India further needs to enhance its intelligence acquisition capabilities in form of espionage and satellite imaging to accurately locate such infrastructure and engage them.

### **Path India Should Follow**

As India grows economically, it is equally important to develop its military might commensurately. With each passing day, the reliance on space assets is increasing manifold. It is important not only to launch more satellites to meet the growing demand of civilian use but also to meet its military applications. While it is essential to

have adequate space assets to meet the ever-increasing requirements of communications, it is prudent to develop an effective anti-satellite weapon system as deterrence against any threat to these space assets.

Presently, India should continue to launch satellites primarily for civilian use but with limited military capabilities. Gradually, the focus should be shifted to its military applications by launching full-fledged military satellites. By 2025 AD, India should have adequate military satellites in space to develop indigenous regional positioning system, in contrast to global positioning system, to assist weapon guidance systems and precise navigation.

At the same time, India should collaborate with other developed nations to develop advanced space technologies, as it may not be economically feasible for India to pursue a high-level space programme alone. Moreover, it may not be prudent to spend already meagre resources just to develop obsolete technologies while the developed nations are already acquiring new technologies. However, over dependence on any other nation to promote space programme may not be prudent. Above all, an important and new principle of war, that of 'Space Superiority' has been accepted by the superpowers while the developing space powers have introduced the 11<sup>th</sup> principle of war – the 'Principle of Cooperation in Space'.

Though India could continue to work for the demilitarisation of space by taking active participation in various international treaties and agreements, it should not ignore the ineffectiveness of these treaties so far. ASAT systems have become necessary and the concepts which are being kept in view while designing such systems should be of interest to the emerging space powers like India as they would be thinking in the same terms within the next decade. Also, tactical space weapons such as ASAT are of great significance. India should design ASAT systems to attack the strategic space systems which, although not weapons themselves, are vitally important in animating and informing the weapons of mass destruction which await their commands on earth. Further, space is considered a strategic area which is vital for military, commercial and scientific programmes. India as an emerging space power certainly would like free entry without any restrictions whatsoever, quite apart from its ventures in space.

With the growing advancements in anti-satellite system, including particle beams, radio frequency weapons and orbital interceptors as well as signal jammers and other electronic warfare devices, India should step up its technological research and application of spacecraft survivability measures. Most of the satellites in space today harbour few self-protection features, a situation that should change with the design of next-generation spacecraft that will be called on to operate during crisis situations and warfare.

Today, the value of the global space industry is estimated to be \$350 billion and is likely to exceed \$550 billion by 2025. Despite ISRO's impressive capabilities, India's share is estimated at \$7 billion (just 2% of the global market) covering broadband and Direct-to-Home television (accounting for two-thirds of the share), satellite imagery and navigation. Already, over a third of transponders used for Indian services are leased from foreign satellites and this proportion will rise as the demand grows. India must look into this aspect and has to collaborate with partners to increase its share in the global space market.

Developments in Artificial Intelligence (AI) and big data analytics have led to the emergence of 'New Space'. New Space entrepreneurship has emerged in India with many start-ups which seek value in exploring end-to-end services in the Business-to-Business and Business-to-Consumer segments using New Space. However, these start-ups are yet to take off in the absence of regulatory clarity. Hence, they need an enabling ecosystem, a culture of accelerators, incubators, venture capitalists, and mentors that exist in cities like Bengaluru which is where most New Space start-ups have mushroomed. India has to transform these start-ups into full-fledged industries to accelerate India's dominance in space.

Another revolution underway is the small satellite revolution. Globally, 17,000 small satellites are expected to be launched between now and 2030. ISRO is developing a small satellite launch vehicle (SSLV) expected to be ready in 2021. It is a prime candidate, along with the proven PSLV, to be farmed out to the private sector. In this context, The Assembly, Integration and Testing (AIT) role, which is restricted to ISRO, must now be outsourced.

India should have a time-bound space programme and should try to develop both offensive and defensive weapons with their supporting command and control networks to form an integrated system for the conduct of nuclear war. However, looking at the present capability, it is a distant dream both, economically and technologically. To offset this limitation, India should try to acquire these technologies from other space powers by entering into technology transfer agreements through continued diplomatic efforts.

With the Ministry of Defence now setting up a Defence Space Agency and a Defence Space Research Organisation, ISRO should now actively embrace an exclusively civilian identity. With increasing competition, complexity and demand for space-related activities, there is a growing realisation that national legislation is needed to ensure overall growth of the space sector. A 'New Space' law for India should aim at facilitating growth of India's share of the global space economy to 10% in the coming decade.

## **Conclusion**

Each new frontier that man has discovered has become a new battleground. Land, sea, air and even cyberspace are apt examples of this fact. Space too has not been spared by this transformation. As nations discovered increasing uses of space, there emerged a need to secure unrestricted access to space. Satellite based communication, studies of weather and ground, and navigation have become enmeshed in individual lives as also in the story of national growth and security. This enforces a need on nations to protect its own space access and deny the same to an adversary, if required. However, maintaining the diminishing balance between an offensive and a defensive posture in space is the challenge facing India. Unlike China, which unabashedly carries out ASAT tests, India has to play by international norms and rules.

However, this adherence to international norms and rules must not be seen or interpreted as a handicap. In the larger perspective, as India rapidly grows into a space faring superpower, it must act with responsibility. An important factor which does limit India's unrestricted exploitation of space is economics. Being a developing country with limited financial resources, the authorities must balance between the immediate advantages of investing in infrastructure and social development and the long-term benefits of space technology. But India's peace-oriented approach to space

is vehemently challenged by its neighbourhood. China, and Pakistan assisted by China, are serious concerns to India's security objectives. Sharing the space technology with Pakistan, China has created adequate doubts in the minds of Indian authorities about its intentions to use space as another dimension for conflict manifestation. This forces India to prepare itself to fight for its access to space and use of space-based platforms.

The most suitable way ahead then appears to be rapidly advancing space technologies used by ISRO in aspects discussed above and creating infrastructure to transform these capabilities for military use at short notice. As India cannot carry out actual tests of its space warfare capabilities in space due to fear of debris, the vast computational resources like supercomputers can be used to simulate such weapons with high precision. India must strive to forge ahead in space technologies and compete with the best in the world in this business. Missions like *Mangalyan*, *Chandryan I* and *II* should become the pinnacles of India's technological prowess and establish deterrence in the minds of any potential adversary about the scope of India's space-based warfare capabilities. In a symbiotic relationship, the milestones achieved by ISRO can be amalgamated into the missile development program to develop increasingly reliable, accurate and lethal missiles, and a quick and responsive missile defence system.

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# Ski Himalaya: Making the Impossible, Possible

Lieutenant Colonel Harish Kohli (Retd)<sup>®</sup> and  
Brigadier Krishan Kumar (Retd)<sup>#</sup>

## Abstract

*In 1995, commanders at several levels claimed that it was not only difficult but also extremely dangerous to cross the high passes of the Himalaya in deep winter. The sceptics were proved wrong when an eight-member Ski Himalaya Expedition, with two officers, the author and the then Lieutenant Colonel (later Brigadier) Krishan Kumar traversed in the deep winter from the Karakoram Pass in Ladakh to Lipu Lekh, where Uttarakhand meets Nepal. This is a short narration of that epic expedition. For ease of narration it is in the First Person. At the end some recommendations are given.*

## Prologue

Since ancient times, the Kashmir valley and Lakakh, had been of great geo-strategic significance and an economic hub, connecting Indian sub-continent with Central Asia and the rest of the world. Three major 'corridors' or trade routes contributed to this aspect; the Tibetan route, from Leh to Lhasa, which went over the Karakoram Pass into Central Asia; the Changchenmo route from Leh to Xinjiang, which crossed via the Kailas range; and the extreme eastern route, via Chang Tang and Pangong Lake, from Leh to Khotan. "The latter, however, was rarely extensively used, because of fear of marauding Tartar tribesmen".<sup>1</sup>

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<sup>®</sup>Lieutenant Colonel Harish Kohli, VSM (Retd), is an explorer, adventurer and climber and one of the most widely travelled people in the Himalaya. His adventures include a traverse of the Himalaya on foot and skis, a solo attempt on Mt Everest, running across Iceland and a solo ski-sailing adventure across Finnmarksvidda, Norway's largest plateau near the Arctic Circle. He is also the author of 'Across the Frozen Himalaya' and recipient of the National Adventure Award. The opinions expressed here are the author's.

<sup>#</sup>Brigadier Krishan Kumar, VSM (Retd) is from the Madras Regiment. An Avid mountaineer, he has been an Instructor Class and Deputy Commandant at the High Altitude Warfare School, Gulmarg. He is a member of the Indian Mountaineering Foundation.



In Himachal Pradesh Buddhist sages crossed over the Kaurik route into Spiti valley and further east, in today's Uttarakhand, the region's Bhotiyas, known as the trans-Himalayan traders used at least six high Himalayan passes including the Mana Pass and Lipu Lekh. The importance of these mountain passes for local economy and cultural exchange is well documented in history. However, they lost its relevance in 1947, with India's partition and closing of the traditional trade routes across the Indo-Tibet border.

Many of these passes now remain closed for trade but the concept of connectivity has revived in the form of China-led Belt and Road Initiative (BRI), which is opening up new corridors, including the Trans-Himalayan Economic Corridor in our neighbourhood. Although "the two ancient civilisations intersected long before the Han dynasty in China and the era of Emperor Ashoka the Great, in India"<sup>2</sup>, history indicates that China has remained an unreliable neighbour. Hence, it is prudent to ensure greater vigilance over our border, both in summer and in winter, once considered impossible.

### **Virtual Top of The World**

The adventure wasn't without its mishaps and the fight against the vagaries of weather was extreme. So deep was the snow on the first day of the start of the expedition on 17 February 1995, that it took us almost twelve gruelling hours to reach the Karakoram Pass from its nearest post Daulat Beg Oldi, that in summer would take just four hours. As the descent began, the light breeze turned into a storm and then into a blizzard, plummeting the temperature to minus 58 degrees Celsius.<sup>3</sup> Later that night, when we reached the base, two of the members were frostbitten, one of them later losing seven of his fingers. But for the expedition, it was only the beginning of their adventure, which became one of the momentous journeys in mountaineering history.

Undaunted, we climbed up the Depsang Plateau, the 'veritable top of the world'. "All around appeared mountain ranges, none of which were less than 6,100m high, while to the west rose two lofty peaks; yet in the distance they seemed below us, for the land around sloped away down on all sides. In whichever direction we looked the sky appeared below us."<sup>4</sup> A blinding squall of snow exposed the skeletons of ponies as we descended into the Kazi Langar, 'the red hole', and followed the bleak route named "via



dolorosa”<sup>5</sup> because of the many lives it has claimed, both human and animal.

The trail beyond Chongtash passes through a sheer-sided valley with the sky just a slit directly overhead, covered by a grey canopy that further darkens the valley. We came out of the cleft near Sultan Chusku and crossed Kataklik Pass, a round bump on which we climbed at leisure. Ladakh is a ‘land of passes’, where the valleys are not deep and passes not particularly high, although they can be about 5,500–6,000 metres. Prayer flags fluttered in the breeze on the top, from where we had the most wondrous view. To the north, the slopes of a mountain range glowed in shades of rust brown, green and black, fissured by innumerable clefts filled with glaciers. Deep in the valley below, shining like a sheet of white linen spread out before us, was the Shyok River, which we followed.

Here, we decided to make sledges that we called ‘skoddies’. Each skoddy consisted of three skis and three ski-sticks, held together with clamps and pulled by a long sling. We made two sledges, one for each team, the Huskies and the Mastiffs, the latter named after the breed to which my dog Druk (of the Trans-Himalaya Expedition) belonged. Skiing over the frozen Shyok, we camped beside the Galwan Nullah, named after Gulam Rasool Galwan, the caravan leader from Leh, who had served many caravans on the route, including that of Sir Francis Younghusband.

Ahead of the Changchenmo trade route, that once led to Xinjiang, a narrow gorge at Darbuk, ‘gateway to hell’, linked Shyok valley with the desolate, trans-Himalayan plateau called Chang Tang. The altitude here, rarely falls below 4,250m and temperatures plunge below 40 degrees Celsius, making it the cruellest environment on earth. Here, near an abandoned village of Muglib, we noticed with a mixture of awe and fear, a snow leopard. That fear, forced us to sledge away from the ridge line and into the centre of the frozen Pyangong Lake, that extended for about 30 kilometres or more. It was like a lunar landscape, only more shrivelled.

## **The Middle Country**

Separating Ladakh from Spiti valley is the 5,580-metre high Parang La route. Along the way, we occasionally saw herds of gorals or

ibex, making us aware that we were being constantly watched by a snow leopard, but from where was hard to identify. Sledging over the frozen Tsomo Riri lake, we reached Norbu Sumdo, where a dilapidated hut stands as a sad reminder to the past glory of the 'free highway', that once connected Kulu and Lahaul with the distant lands of Central Asia.

Here we followed the Parang Chu flowing down from the south-west of the Parang Pass, which we crossed on 20 March. Making a steep descent across, we camped in a gorge no more than 15-25 metres wide and after a near escape from an avalanche and more sightings of the snow leopard, reached Kibbar in Spiti valley.

Spiti, sometimes known as the 'middle country', because of its location between Tibet and the Indian plains, is one of the few valleys in the Himalaya that runs east-west. The mean elevation is about 4,570 metres and the peaks exceed 6,000 metres. For centuries, it has remained isolated from the rest of the world, and even today, during winter, the passes that give access to the valley are blocked by snow. This isolation provided a perfect location for the meditating Buddhists monks who established gompas or monasteries, including Tabo, the most sacred monastery after Tholing in Tibet and the oldest in Spiti.

After a visit to Tabo monastery, which houses some of the greatest Buddhist art treasures in the world, we skied down to Sumdo where Spiti joins the Sutlej. From here we followed the Tirung River, to reach Chitkul Pass, the top of which offered a grand view, encompassing a long valley with a snow-laden pine forest.

## **House of The Gods**

In Sangla valley, we were joined for a short while, by new members from the USA, Australia and the UK, who were appalled to learn that they had to ski with packs loaded with supplies to last 10 days. Moving ahead, the perfect sunny day, turned bad quickly and thick snow fell. It was April, when tonnes of warm snow could come rolling down without the slightest warning. Waiting, I considered, would be at the cost of running short on rations, so we moved on.

Crossing the Lamkhaga Pass (5,282m), the wind was unbearably cold, but skiing down with heavy rucksacks – even on a precarious glacier where crevasses were commonplace – was great fun, although we all took spills with comic regularity. The mountain passes in Western Himalaya in general, offered an easy climb from the north, but offered steep descent. However, after some distance, it also offered some of the best ski slopes running for many kilometres and hours of fun.

Entering the Bhagirathi valley at Harsil, ‘stone of the lord’, we reached the snout of an enormous glacier, called Gaumukh, ‘the cow’s mouth’. Overlooking the glacier was the Mahadeo-ka-linga, now known simply as Mt Shivling. Moving across on the 20-kilometre long Chaturangi glacier, a subsidiary of the main Gangotri glacier, snow bridges dropped under our weight, creating a booming sound, which echoed across the valley and our hearts pumping like a run-away train.

Every few days, the weather became a complete ‘white-out’ as it was on Kalandani Khal (6,000 metres), where it was more by luck than judgement that we managed to avoid a disastrous fall into a deep crevasse. That night, the wind hooted like jackals baying at the moon. The tent swayed in gusts that exceeded Force-8 but it stood fast. Although it was a horrible night, the view that greeted us in the morning was correspondingly magnificent. We were at 5,600 metres and all around us lay such glorious mountains as Kamet, Abi Gamin and Mana. Now that we had got used to the weight of our rucksacks, it was great fun skiing for miles down the valley, past Arwa Tal, and along a narrow gorge to Mana, where we enjoyed a refreshing bath in the thermal springs of Badrinath.

We were now in a mountaineer’s domain, with high mountains passes, which also provided one of the highest and longest ski slopes in the world. Passing through the valley of flowers, we climbed towards the Bhyunder Pass. After a strenuous climb through ‘white-out’ conditions, we erroneously managed to camp on a shoulder above the pass. So, it was the first time that we actually skied down to the pass and continued on a long ski run, which lasted until late afternoon. I have since skied in many interesting places around the world and ski-sailed across Finnmarkvidda, north of Norway, but this remains to be the best ski-run of my life.

Further east of Malari, is Lapthal, the summer village of the Bhotias that was once occupied by the Tethys Sea, which dried up after the supercontinent Gondwanaland crashed into the Asian continent about 40 million years ago. Even today, you can find stunning physical evidence in the form of marine fossils. A herd of mountain goats scampered up the mountains as we skied towards Khingru Dhura (5,274 m) and Unta Dhura passes (5,394 m), which were steep and prone to sudden avalanches, offering some scary moments.

### **A Serendipitous Journey**

Empty houses greeted us in Milam. Once a buzzing village with about 600 families that flourished as the trading centre with Tibet, it now lies in ruins. We were now north of Mt Nanda Devi sanctuary, India's second highest mountain and as far one could be from civilisation. The prospect of discovery excited us.

Crossing a narrow stream at Samgaon, we travelled north towards the Kwalgang glacier, an alien landscape, at the far end of which was an ice fall. It took us two days to find our way to the top. The pass was 50 metres wide and filled with rock debris from the 6,000-metre peaks that stood over it. There was no cairn on the pass, such as passing travellers customarily build, nor did we see any traces of human activity along the route. All indications suggested that we were the first to discover and stand on this ridge, so we made a large cairn on the top and named it 'Ski-Himalaya'.

The next day was exceptionally clear, offering a panoramic view of the Garhwal Himalaya dominated by Mt Nanda Devi. We could see both its main and secondary peaks with an incredible saddle in between. It was a view never before seen from this direction. Ahead was a wide-open glacier, named Chhiring Tashi, bounded by steep ridges, beyond which was a conical peak that seemed about 5,500 metres. After a careful recce, we found a narrow gully that led us to a ledge and, by late afternoon, we reached a col, about 200 metres long, on which we camped and named it 'Rajiv Gandhi'. It was in tribute to Gandhi for allowing me, as a young officer, to sit in his cockpit to gain a new perspective of the Himalaya, while flying from Delhi to Srinagar.

In the south was the Zaskar range, with its innumerable peaks glowing in the setting sun. The most prominent – Suli, Chhiring We and Bamba Dhura, all above 6,000 metres – dominated the skyline. Negotiating a narrow gully, which was a perpetual rock chute, we fixed a rope along its steepest stretch. Across the gully was an ice-field, at the edge of which was a col but the approach was blocked by a rock-band and a hanging glacier. The pass itself was razor-thin and the gradient so steep that there was not enough space even for two people to stand together. A nasty wind blew, but we retained our humour and called it the ‘Dennis Pass’, to mark the little menace in all of us.

While skiing to Gunji, we saw a smaller version of Mt Kailash called Chhotta Kailash. There was a large lake nearby, the only one in the valley still filled with water, with a frozen shelf, occupying the position of Manasarowar. The climb ahead was gradual until we reached a conspicuous saddle on our right – the new Lipu Lekh Pass, which is connected by road with Taklakot on the Tibet side. We decided to cross over a spur on the left to reach the traditional pass, which is now neglected. Beyond Lipu Lekh we could see the lofty tableland of Tibet, which varies around 4,000 metres above sea-level, and standing clear in the centre were the ranges of Gurla Mandhata. To the left and beyond was another mountain, which in my imagination could have been Mt Kailash. There is no more sacred spot in the Himalaya, and a perfect place to end our great ski adventure.

## Epilogue

Thus, on 24 May 1995, we completed the first ever ski traverse from the Karakoram Pass to the Lipu Lekh Pass, a 2,000-kilometer epic through the coldest winter in the previous two decades. The Ski Himalaya expedition crossed over twenty passes, including three that were hitherto unknown, thus proving that the thought ‘impossible to cross the high-passes in the Himalaya’, during winter is just a state of mind.

Valuable lessons were learnt during the expedition. Some of them which can be recounted without infringing security issues are given in the paragraphs which follow.

- **Military Commando Expeditions.** Every expedition should be valued against its benefits that would eventually help bridge

information-gaps of our border, support training for futuristic tasks or eventually strengthen the Army's strategic plan. For instance, past expeditions to Mt Kanchenjunga and Mt Everest and mountains above 26,000 ft (with some exceptions) have not benefited the Army in any way but for momentary glory. It is recommended that the Army, must encourage smaller expeditions (based on section strength) that are self-sufficient, work on their own power or with very little administrative support and whose expertise can be utilised, when required, for strategic and commando operations.

- **High-Altitude Recce Teams.** It is recommended that High-Altitude Recce Teams (HARTs) be formed, comprising of experienced High-Altitude Warfare School (HAWS) qualified individuals and participants of mountain expeditions. These HARTs along with individuals from Special Forces should be tasked to patrol the high-passes along the LAC in extreme weather conditions. These HARTs should be able to assemble at short notice in the eventuality of any large-scale Chinese incursions to mount a Fabian defence along the LAC, using harassing and attrition tactics to delay advance.
- **Mechanised Expeditions.** The difficult mountainous terrain offers great advantage to those who occupy the heights first. Once a defensive position at height is occupied, it may be very difficult to dislodge them. Our first line of defence in many of the forward areas is relatively static and could potentially be outflanked by small detachments. Also, all along the Line of Actual Control (LAC), we have seen narrow roads through deep valleys, used for the movement of our conventional forces which can be easily sabotaged. The only areas where the terrain flattens out are Ladakh, Northern Sikkim and to some extent Northern Tawang, where mechanized forces could be effectively used. Such routes must be reconnoitred by tracked or wheeled vehicles.
- **Eco Expeditions.** We are all aware of the environmental disaster the mountaineers have created on Mt Everest and special expeditions are now being organised to bring back the rubbish for safe disposal. Unknown to the world, the armies posted on the Himalaya have created a bigger environmental challenge for which we, as individuals must be responsible.

It is therefore recommended that Army should encourage Eco Expeditions to bring back the waste from the posts along the Sino-Indian border and establish a proper procedure for its disposal.

- **Tribal and Local Forces.** There are large clusters of no-man's land where human intelligence (HUMINT) could be critical in detecting Chinese grey zone operations. This in the past has been gained from nomadic herders, religious pilgrims and resident tribal populations. It is recommended that HUMINT along the LAC should be enhanced by training officers in the local languages of the tribes that live along the border. Also, the use of tribal forces, with an innate knowledge of the terrain and local conditions in strategic no-man's land areas could help reduce future incursions.

## Endnotes

<sup>1</sup> International Journal of Culture and History, 2015. Vol. 2, No. 2

<sup>2</sup> A new beginning for China-India relations could transform Asia by Patrick Mendis, 2018

<sup>3</sup> The coldest recorded temperature in the Himalaya is minus 62 degree in Daras on 19 Feb 1995.

<sup>4</sup> H. W. Bellow: Kashmir and Kashgar: A narrative of the journey of the embassy to Kashgar in 1873-74, Trubner & Co., 1875.

<sup>5</sup> Sven Hedin: *Trans-Himalaya, Discoveries and Adventures in Tibet*. Macmillan and Co. Ltd., 1909.



# Veteran Medical Care Support System in the USA: Part I

Major General Ashok Kumar®

## Abstract

*This article gives out some salient aspects of Veteran Affairs Health Care System (VAHCS) addressing Health Care of veterans in USA. This is the second article — part of a Trilogy— the first article having been published in USI Journal Apr - Jun 2020 on 'Evolution of Medical Care Support System in India'. It is a well-known fact that USA has the oldest and largest Veteran Healthcare System in the world. It's genesis is as old as 1865 and it has evolved in a robust system for veterans' health care and has large number of positives which can be emulated and adopted in Indian environment. This article covering various facets of Veteran Medical Care Support System in the USA is in two parts wherein this part is focusing on historical evolution, organisational details and eligibility conditions to avail benefits including Enrolment Priority Groups. Part II, which will be published in a subsequent issue, will focus on Medical Benefits, Medically Related Travel, Lodging & Daily allowance and other important aspects of execution / delivery of healthcare of veterans which is the key to its effectiveness.*

## Introduction

The United States of America (USA) has one of the largest and probably the best Veteran Medical Care System in the world known as Veteran Affairs Health Care System (VAHCS). The veteran medical care in the US is provided by Veterans Health Administration (VHA) under the Department of Veteran Affairs (VA).

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®Major General Ashok Kumar, VSM is a serving Army Air Defence Officer (General Cadre) and has been involved in health care of ESM & their dependents as MD ECHS for almost two years. The officer is making a comprehensive study of the veteran health care system. This is the second article of trilogy being published as part of the said study.



VHA is a government department and VAHCS is funded by the US Government. The VHA provides health care to approximately 9 million US Veterans with an approximate annual budget of \$85 Billion USD<sup>1</sup>. This article takes a detailed look to understand the salient aspects of this mega medical scheme for veteran community of USA examine the feasibility of emulating best practices.

## **The VHA**

The VHA is the largest of three administrations that make up the US Department of Veterans Affairs. VHA provides medical care to US armed force's veterans. VHA has evolved from a facility established for the federal veteran soldiers of the Union Army after the American civil war. It has progressed through various reforms over a period of time. A National Soldiers and Sailors Asylum was established in 1865 by a decree by the President of the US. It was renamed as the National Home for Disabled Volunteer Soldiers in 1873 which was the first federal institution created specifically for volunteer soldiers. It provided medical care and housing for thousands of Civil War Veterans and became the model for Veterans' hospitals later. Veterans of World War I became eligible for full benefits, including health care in 1919. The US President ordered additional consolidation through the creation of the Veterans Administration in 1930. In 1998, President Ronald Reagan upgraded Veterans Administration to a Cabinet-level Executive Department and it was then named the Department of Veterans Affairs. The Department of Medicine and Surgery of the Department of Veteran Affairs was renamed the Veterans Health Administration in 1991. Today VHA operates one of the largest Veteran health care systems in the world and continues to meet Veterans' changing medical, surgical and quality-of-life needs. VHA has opened outpatient clinics, established telemedicine facilities and other services to accommodate a diverse Veteran population. It continues to cultivate ongoing medical research and innovation to improve the lives of US Veteran population. The support provided to US veterans encompasses a very large canvas of life as against being limited to treatment of ailments.

## **Veteran Affairs Health Care System (VAHCS)**

Eligible Veterans receive medical benefits, through VAHCS run by VHA. Once a veteran is enrolled in the VAHCS, he/she is assured of medical services as and when required. Health care is delivered

through highly qualified and dedicated health care professionals to meet the needs, irrespective of the treatment program and the location. VAHCS has nationwide coverage and new locations continue to be added to the system as per requirement. Presently, there are around 1,255 Veteran Affairs Health Care Centres nationwide. VHA's state-of the art electronic medical records allow health records to be completely portable throughout the country. If a member is travelling or living temporarily at a location away from primary treatment facility, one can seek treatment at any VAHCS facility anywhere across the US. This portability gives exclusive ease of availing medical benefits which is so critical as one grows older.

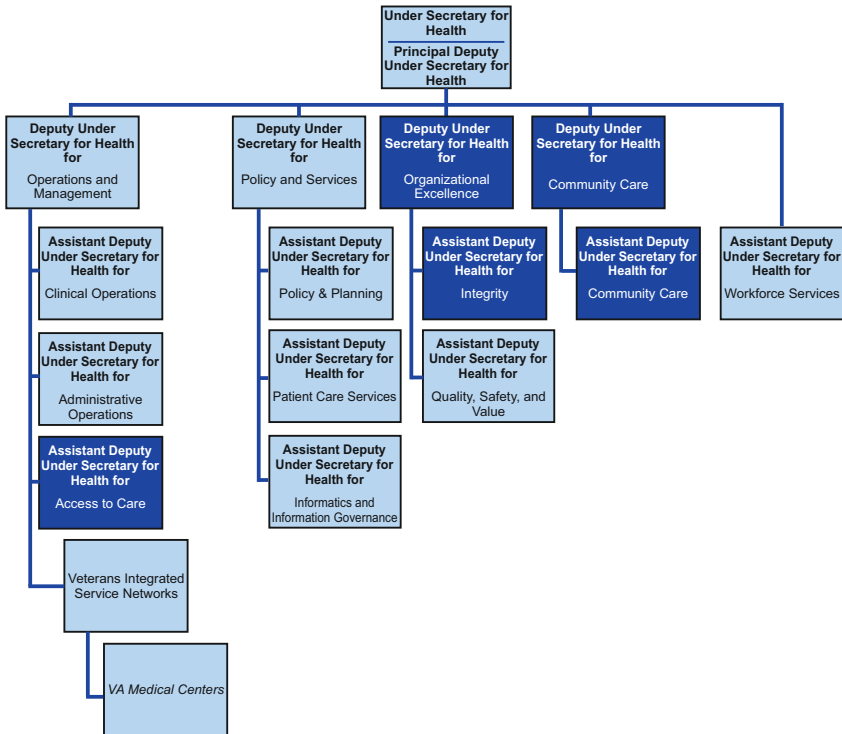
Generally, health care services will be provided at a VHA facility. This may be on-site during hospitalisation, at one of the primary or specialty care clinics or Community Based Outpatient Clinic (CBOC) or Health Care Centre (HCC), in a VA Community Living Centre or in a Residential Care facility. While VHA operates over 1255 healthcare facilities, not all services are available at every location. Sometimes, patients may need to travel to another VHA facility or VHA will authorise the patient to receive care at a Community Hospital / health centre [in US most private hospitals are classified as Community Hospitals/Health Centre] to receive the necessary treatment. In such cases, VHA will find the place best suited for the patient to obtain the required services based on medical need.

## **Organisation**

The VHA is America's largest integrated health care system, providing care at more than 1,255 health care facilities, including 170 medical centres and 1,085 outpatient clinics, serving 9 million enrolled Veterans each year<sup>2</sup>. The Office of the Under Secretary for Health (USH) is responsible for the management of VHA, the nation's largest integrated health care system. The four statutory missions of VHA are:

- To develop, maintain, and operate VAHCS for eligible Veterans.
- To administer a program of education and training for health care personnel of VAHCS.

- To conduct health care research.
- Provide contingency support for Department of Defence and Department of Health and Human Services (HHS) during times of war or national emergency.



## Functions and Activities

The Under Secretary for Health manages the VHA. Function and activities of VHA are as under :

- Define ethics, vision, goals, principles, policies, and the command and control structure.
- Communicate VHA's vision, aims, principles, policies, to the Office of the Secretary, other VA departments, Veterans Service Organisations (VSOs) and other internal and external stakeholders.
- Establish committees, advisory groups, and review bodies as necessary to provide information and advice to the Under Secretary for Health.

- Implement VHA policies and programmes.
- Establish standards, policies, and positions regarding national workforce issues.
- Develop policies that provide equal treatment of Veterans through the most cost-effective means.
- Monitor the quality of health care with a goal of being a leader in the field of health care delivery.
- Define policies that articulate VHA's role in national health care reform initiatives.
- Planning of research programs, capital asset planning and management, and information management.
- Administers a program of education and training for health care personnel of VAHCS.

## **Eligibility**

Anyone who has served in the US Armed Forces (army, naval, or air service) on active military duty and didn't receive a dishonourable discharge may be eligible for VA health care benefits. Some of the details are as under:

- If enlisted after 07 September 1980, or entered active duty after 16 October 1981, the person must have served 24 continuous months or the full period for which he was called to active duty. This minimum duty requirement may not apply for the conditions given below:
  - ☐ Was discharged for a disability caused/aggravated by active-duty service, or
  - ☐ Was discharged for a hardship or "early out", or
  - ☐ Served prior to 07 September 1980.
  - ☐ As current or former member of the Reserves or National Guard must have been called to active duty and completed the full period for which he was called to active duty. If a person had or has active-duty status for training purposes only, he doesn't qualify for VA health care.

- A person may qualify for enhanced eligibility status (meaning he will be placed in a higher priority group, which makes him more likely to get benefits) if at least one of the conditions listed below are met:
  - ☐ Receiving compensation from VA for a service-connected disability.
  - ☐ Discharged for disability due to service or disability that got aggravated during service.
  - ☐ Recently discharged combat Veteran.
  - ☐ In receipt of VA pension.
  - ☐ Former prisoner of war (POW).
  - ☐ Received the award of Purple Heart which is given in the name of president to those wounded or killed while serving on or after 05 Apr 1917 with US military (instituted on 22 Feb 1932).
  - ☐ Received a Medal of Honour which is the USA's highest and most prestigious personal military decoration to recognise acts of valour.
  - ☐ Served in Vietnam between 09/01/1962, and 07/05/1975.
  - ☐ Served in Southwest Asia during the Gulf War between 02/08/1990 and 11/11/1998.
  - ☐ Served at least 30 days at Camp Lejeune between 01/08/1953, and 31/12/1987.
  - ☐ Served in a theatre of combat operations after 11/11/1998, and was discharged or released from active service on or after 29/01/2003, and didn't receive a dishonorable discharge.

## **Enrollment Priority Groups**

Priority Groups indicate wide reaching effort of the US Government to reach out to veterans. Eligible veterans are categorised into eight groupings<sup>3</sup> based on disability, income, and special status. VA health care services are prioritised to “service-connected veterans” who were injured or became ill serving their country.

Details of these groupings<sup>4</sup> are as under:

- **Priority Group 1**

- ☐ Veterans with 50% or more service-connected disabilities.
- ☐ Veterans who are unemployable due to service connected conditions.
- ☐ Veterans who have been accorded the Medal of Honor (MOH).

- **Priority Group 2.** Veterans with disabilities between 30% to 50%.

- **Priority Group 3**

- ☐ Veterans who are former POWs.
- ☐ Veterans awarded the Purple Heart Medal.
- ☐ Veterans discharged for a disability that was incurred or aggravated on duty.
- ☐ Veterans with service-connected disabilities between 10% to 30%.
- ☐ Veterans awarded special eligibility classification “benefits for individuals disabled by treatment or vocational rehabilitation”.

- **Priority Group 4**

- ☐ Veterans who are receiving aid and attendance or house bound benefits.
- ☐ Veterans who have been determined to be catastrophically disabled.

- **Priority Group 5**

- ☐ Nonservice-connected Veterans and non compensable service connected Veterans rated 0% disabled with annual income and /or net worth below the VA national income limit and geographically-adjusted income limit for their resident location.

- ☐ Veterans receiving VA pension benefits.
- ☐ Veterans eligible for Medicaid programs.
- **Priority Group 6**
  - ☐ Compensable 0% service-connected Veterans.
  - ☐ Veterans exposed to Ionizing Radiation during atmospheric testing or during the occupation of Hiroshima and Nagasaki.
  - ☐ Project 112/SHAD participants.
  - ☐ Veterans of the Mexican border period or of World War I.
  - ☐ Veterans who served in the Republic of Vietnam between January 09/01/1962 and 07/05/1975.
  - ☐ Veterans of the Persian Gulf War that served in the Southwest Asia Theatre of combat operations between 02/08/1990, and 11/11/1998.
  - ☐ Veterans who served on active duty at Camp Lejeune for not fewer than 30 days beginning 01/01/1957 and ending 3/12/1987.
  - ☐ Veterans who served in a theatre of combat operations after 11/11/1998.
  - ☐ Currently enrolled Veterans and new enrollees who were discharged from active duty on or after 28/01/2003, are eligible for the enhanced benefits for 5 years post discharge.
- **Priority Group 7.** Veterans with gross household income below the geographically adjusted income limit (GMT) for their resident location and who agree to pay copays.
- **Priority Group 8.** Veterans with gross household incomes above the VA national income limit and the geographically-adjusted income limit for their resident location and who agree to pay copays.

## Summary

A closer look will reveal that the USA Veteran Health Care System occupies a place of primacy in the Government of USA which extensively supports it in terms of infrastructure and finances. The evolution has resulted in a network of facilities giving a distinct quantitative and qualitative edge to defence veterans which can be emulated in India as well. The third part of this trilogy which will follow in a forthcoming issue of the USI Journal will clearly articulate the contours of delivery of healthcare services and will be having valuable take aways for our Ex-servicemen Contributory Health Scheme (ECHS).

## Endnotes

<sup>1</sup> “Annual Budget Submission - Office of Budget”. Retrieved 23 April 202, [www.va.gov.com](http://www.va.gov.com)

<sup>2</sup> Veteran Affairs, VHA. Retrieved 20 April 2020, [www.va.gov/health](http://www.va.gov/health).

<sup>3</sup> Veterans Health Administration. Retrieved 07 Jun 2020, [www.va.gov/health](http://www.va.gov/health)

<sup>4</sup> US Dept of Veteran Affairs. Retrieved 30 Dec 2019, [www.va.gov.com](http://www.va.gov.com)



# Regimental Soldiering: Changing Values

Brigadier (Dr) SP Sinha (Retd)<sup>®</sup>

## Abstract

*The article looks at the Regimental system of the Indian army, especially in the Infantry. It recounts its advantages and values and gives the reader a feel of the functioning of the system in war and peace. The author embellishes the article with glimpses of Regimental life as he saw and experienced it. He states that the Regimental values like discipline, obedience of orders, comradeship and harmonious officer-men relationship required to be reset in view of social changes were taking place.*

**S**oldiering may be defined as the activity of a person engaged in military service. Regimental soldiering in the context of this essay implies service in the regiment of infantry, armour and artillery, but mainly infantry and armour. But regimental soldiering has a wider meaning that encompasses not only professional life in the regiment but the entire gamut of relationships between soldiers and their officers — professional, personal, emotional, cultural and at times beyond the pale of all the above. Regimental soldiering is the *raison d'être* of life in infantry.

For officers and men, the battalion/ regiment becomes his second home; in fact, young officers and men spend more years in the regiment than with family at home. It is in the regiment that ties of friendship are formed that last a lifetime. Officers and men of the battalion/regiment go through the hardships of training to prepare them for the test in battle. And when time comes, they go to war together not knowing who will die and who may survive, but each deriving strength from the closeness of the other, keeping the memory of the dead alive in some corner of their heart, grieving silently, but getting along with life amongst the survivors, the regimental bond now becoming stronger than before.

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<sup>®</sup>**Brigadier (Dr) SP Sinha, VSM (Retd)** was commissioned in 9 Gorkha Rifles in June 1960. He retired in August 1994 after nearly thirty-five years of distinguished service in the army. He is a prolific writer, author and an accomplished military historian with a number of books and articles to his credit.

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Battalions become much like a family, held together by intangibles — leadership, camaraderie, tradition, and kinship. In this sense, a rifle platoon, the lowest fighting sub-unit is the closest microcosm of the idea of family; it is the sub-unit where the relationship between the led and the leader is “immediate, continuous and real.” There is no place for make-believe, excuses, or explanations. In a platoon everything is transparent; there is no place to hide.

Regimental life among many other things is the product of the regimental system; a system wherein a soldier once enlisted in the regiment and then posted to one of the battalions of the regiment after receiving basic training at the regimental Centre remains on the battalion roll till the end of his service. He may go out on extra-regimental employment or instructional appointment for short periods but will return to his parent battalion or regiment. This means that troops of the combat arms (mainly infantry and armour) serve through their military career in the same battalion or the regiment. This applies equally to officers, who are trained at military academies to be a commissioned officer in the Indian Army. Once an officer cadet, after his pre-commissioning training, is allotted his arm or service and in the case of infantry and armour his regiment as well, the officer becomes an inseparable part of the regiment.

The regimental system as it is understood today was created by the British in 1922 when the infantry was re-organised in regimental groups. At that time class composition was an important component of the regimental system. The regimental system still operates in the Indian Army, but many changes have been introduced in tune with the ‘Republican’ constitution of India. The legacy of ill-conceived ‘martial races’ has been abandoned. In some of the older regiments, recruits are still drawn from specified classes, but new regiments draw their recruits on either regional or ‘All India’ basis.

The Indian Army was modeled on the pre-independence British Indian Army and many attributes of regimental soldiering have been imbibed from that time. But the practices of the past have evolved with the changing times; the evolution, however, has been gradual for any abrupt change or break from the past had the risk of upsetting the balance. During the period between the two World

Wars, the officers in the regiments of the Indian Army were overwhelmingly British with a sprinkling of King Commissioned Indian Officers (KCIOs). Here is a description of a regimental officer's routine that existed before the Second World War:

*"His day started before dawn when his bearer brought him a cup of tea. Soon after dawn he would be on parade for PT, riding school, range duty, weapon training, dummy thrusting, bayonet practice, close order drill or whatever. Then to the mess for breakfast, and after breakfast more parade, stables, office work, until luncheon. The two hours after luncheon would be spent working with 'Munshi' for a language exam, or a promotion exam, or studying for the staff college (which during hot weather was also a euphemism for Persian PT or afternoon kip.) Then after a cup of tea some sort of exercise: polo or schooling polo ponies, tennis or golf or squash at the club, hockey or football or tent pegging with the men."*

*"Bachelor officers normally dined formally in mess resplendent in mess kit; married officers generally dined in the mess only on the weekly guest-night when a toast was drunk to the King Emperor. After dinner there might be a visit to the cinema, or perhaps a hop to the club, for which one did not wear mess-kit but a dinner jacket. The latest joined subaltern was probably made the Mess Secretary. This was the routine in military stations, five days in a week. (Sundays and Thursdays were holidays). The orderly officer of the day would have other duties like making rounds of sentries, turning out the guard and walking round the horse lines at unexpected times. The hot weather was given over to leave and individual training. Collective training started in early autumn, first at troop/platoon level, then the squadron/company level working up to brigade and perhaps divisional training by February."*<sup>2</sup>

In 1930s hardly anyone expected that there will soon be another world war. Hopes for active service were limited to the Frontier for which the Indian Army was well trained, but it was neither equipped nor trained for the World War. The Second World War changed the easy flow of life in the regiments; the focus of soldiering also changed to training for war but the regimental compact between officers and men remained unbroken that helped

to adjust to vagaries of the World War. But on occasions when communication between officers and men broke down, the result was tragic as in Singapore in 1942.

The routine in the battalions in peace stations did not change much after independence from what it was in the period between the two world wars. When I joined the battalion of a Gorkha regiment (3/9 GR) in July 1960 at Jabalpur, the routine was much the same. The commanding officer, the second in command and the company commanders except one, were commissioned during the war or soon after. There was only one company commander who had graduated from the Indian Military Academy (IMA) at Dehradun.<sup>3</sup> Junior officers, below the rank of field officer (Major), were commissioned through the IMA. There were a number of decorated JCOs and NCOs who had taken part in the 'Chindit' operation or had taken part in operations in J&K against Pakistani invaders in 1947-48.

On joining the unit, I was given the command of a rifle platoon. I trained, played and for one month dined with my platoon. Young officers (YOs) had to learn and pass regimental language examination (Gurkhali); it was mandatory. The ability to converse in regimental language was important to connect with the troops. I was expected to read the two volumes of regimental history (pre-independence), but there was hardly any guidance from senior officers; this was because prior to independence Indian officers could not serve in Gorkha regiments; they were transferred to Gorkha regiments on the eve of independence mostly from regiments that went to Pakistan on partition. Senior JCOs filled the void in educating the customs and traditions of the Battalion. YOs had to know all men of their platoon by name. (The above practices were followed in other regiments as well with variations in conformity with customs and practices in those regiments)

Newly commissioned officers had to pass 'Retention Examination' within two years of joining the regiment. The syllabus included knowledge of regimental history, working knowledge of regimental language, customs and practices and practical test in fieldcraft and section/platoon drills. This was a good grounding for young officers. I cannot recall why this excellent practice of grounding a newly commissioned officer in the regiments went out practice sometime after the disastrous 1962 war.

Games and adventure sports have always been intrinsic to soldiering in the regiments. Sporting culture has, however, evolved with changing times. In the cavalry regiments polo was popular and between the world wars many indulged in pigsticking, which was dangerous and exciting but cruel. An offshoot of pigsticking was tent pegging, which is still a popular sport in the cavalry<sup>4</sup>. A subaltern in the infantry who did not go out shooting — *shikar* or *blood sport* — was considered lacking in military virtues. It was emphasized that the sport inculcated ‘killer’ instinct, fieldcraft and stealth. Unfortunately, as *shikar* became popular and fashionable, it also became unregulated and played havoc with wildlife. The tiger population began to disappear, and many species of birds and animals became extinct. The situation became so critical that there was a world-wide movement against wanton killing of wildlife; fortunately, regimental priorities changed with the times and unregulated *shikar* became taboo. Today, officers have become enthusiastic wildlife conservationists and protectors of wild life. They still shoot but with their cameras.

Games are inseparable from regimental life. Units found time for games even during collective training and exercises. It was a sight to see the whole battalion out on playing fields, dressed in company color shirts, kicking, hitting, dribbling, or throwing a ball. Games period was like being on parade. Before the debacle in 1962, I remember senior officers placing games in two categories — troop games and officers’ games — football and hockey (games that were popular amongst troops) were troop games and squash, tennis, golf etc. were officers’ games. The differentiation, which I think was a legacy from our colonial past, was intriguing. This invidious view of games is no longer prevalent but the culture of sports that celebrates creating gladiators at the cost of mass participation has done more harm than good for the future of sports and more importantly for building esprit-de-corps.

Paradoxically, passion for sports can manifest in extreme ways. The one recurring complaint of infantry battalions in the last few decades has been that sub-unit commanders seldom get their men together for training for war; one of the reasons often listed is organising formation level sports. I recall when I was commanding a brigade (1986-88), my three battalions did nothing for nearly three months in two consecutive years other than making the decrepit polo ground fit for Northern Command Athletics and then

organising and conducting the meet. Interestingly, it is not a new phenomenon. This is what Lt GW Lathbury wrote in 1936:

*“Despite the fact that an officer’s spare time has been considerably reduced, only a small proportion of the extra period spent with his regiment is devoted to the essential side of soldiering, which is training for war. One might say that the time is divided in the following proportion: one-third training for war; one-third barrack soldiering or interior economy; while the remaining time is not infrequently taken up in maintaining the Army in what it tends to become, a glorified sports organization.”<sup>5</sup>*

There are other aspects of regimental soldiering that have changed. When I joined the Battalion in 1960, officers were expected to be physically robust, force march 50 km in field service marching order (FSMO) and shoot straight. Young officers were expected to call on married officers, organize mess functions, familiarize with spirituous and fermented beverages and how they were served. Life had a pattern and there was bond of a family. Aspirations were limited; all that an officer aspired professionally was to be able to command the battalion. This regimen was considered adequate for the type of warfare envisaged then or in near future. Intellectual pursuits were not discouraged but there was no guidance or encouragement either. Officers had not heard of perspective planning or thoughts on the changing nature of war although the army had been fighting insurgency in Naga Hills since 1956.

The pattern changed after 1962. Traumatized by the defeat by the Chinese, the army developed professional ethos. There was not much time for social and mess functions, regular dinner nights or dressing up in ceremonials. New weapons and equipment were introduced and innovative ways to fight with them were evolved. I remember repugnant practices like the use of ‘thunder boxes’ by officers as dry latrines in field were discarded in the wake of experiences in 1962. The use of words like ‘sweeper’ and ‘mehtar’ (person who cleared night soil) went out of the vocabulary. The professionalism of regiments improved; professional competence was built upon the foundation of regimental pride, one complementing the other.

The victory in 1971 War was a watershed event in the annals of Indian military history. There was newfound confidence and



professionalism in the Indian Armed Forces. Regimental officers were exposed to new trends in warfare and the impact of technology and new weapons on the conduct of war. While the professional horizon of regimental officers expanded, the training curriculum was crowded and took away a large chunk of their time away from their unit and sub-units, which adversely affected practical training and officers-men relationship.

Then, without much warning, a set of circumstances developed in the decade of 1980s, which provided an impetus to Pakistan to wrest Kashmir from India. The proxy war started by Pakistan in 1989 had entered a dangerous phase that engulfed the valley in violent uprising not seen before. The nature of threat and the way to fight had changed and the burden of fighting and winning the proxy war fell primarily upon infantry.

The army had battle tested operating procedures for conventional war but the 'no war no peace' scenario that it faced in Kashmir where a violent insurrection had broken out, posed an altogether different set of challenges. The army has come a long way from the early days of counter-insurgency operations in Naga and Mizo Hills when the battalions were groping with the manner of fighting the insurgents to the present, when the counter-insurgency doctrine is hinged on the amorphous 'winning the hearts and minds' (WHAM) of the populace. Insurgent wars had passed through many phases — guerilla war, low intensity conflict, proxy war and terrorism and yet no clear and unambiguous rules of engagement have been laid down. Human rights organizations have added to the woes of soldiers by their biased reporting, which are invariably loaded against them, painting them as trigger happy and rapists. Such an image has adverse psychological effect on soldiers. Infantry battalions have borne the maximum brunt and casualties. The unceasing deployments of infantry battalions in counter-insurgency operations, unambiguous rules of engagement, focus on results measured by number of terrorists eliminated and 'no mistake' syndrome have together led to the situation where neither officers nor men are enthusiastic about regimental soldiering.

As decades passed, regimental values began to change. Regimental values like discipline, obedience of orders, comradeship and harmonious officer-men relationship required to be reset in

view of social changes were taking place. I recall my interview with the commanding officer for the first time in June 1960 after commissioning; it was short and lasted only a few minutes. After exchange of pleasantries, I was advised, "work hard; the army has people that look after your three Ps - pay, posting and promotion - so don't let these bother you." There is a generational change from that advice to the concerns of regimental officers today when even junior officers worry about their postings and transfers. There was a time when regimental officers were reluctant to be posted out from the battalion and many petitioned the Colonel of the Regiment to get them back to the battalion. The situation has reversed; motivation to serve with troops is on the wane.

The relationship between soldiers and officers is an important component of life in a regiment; it may be called the regimental compact or covenant that obliges the officer to look after the welfare of men under his command in all its dimensions — training, pay and allowances, leave, medical care, career progression, family welfare and spiritual fulfillment. In return the men give unconditional loyalty to the officer and do his bidding, confident that the officer will put their interest and the interest of the regiment before his own. The underlying sentiments that inform the regimental compact are formed over a period. I recall as company commanders in the unit, we kept record of every aspect of individual's personal and professional details. Officers ensured that casualties<sup>6</sup> (that affected an individual's pay and allowances were correctly and promptly published. If an individual had a problem at home, say, some land dispute or harassment of the family, the commanding officer took it up with the district administration. As time passed, the response of civil administration became lackadaisical and finally a stage was reached when the complaint was not even acknowledged. The broader compact between the soldier and the civil administration that obliges the latter to mitigate the grievances of soldiers has no place in its charter. This has had an unintended consequence; the soldier has come to believe that regimental officers have no influence on the government. He therefore hobnobs with the local administration and political class for redress of personal problems; in many cases with criminals who wield greater influence than elected leaders. Such a situation is hardly conducive to strengthening trust between regimental officers and men.



The challenges for the regimental officers, particularly the commanding officers of infantry battalions, are becoming perilous. The complexity of their job in the army that is officially at peace but forever in war as described by one of its former chief, Gen Shankar Roychowdhury, has no parallel in any other profession. Regimental officers are under increasing pressure; on one hand they must honor the regimental compact and on the other to faithfully carry out orders of the top brass, one quite often in conflict with the other. The commanding officer and his officers are always 'in line of fire.'

### Endnotes

<sup>1</sup> Charles Chenevix, *The Indian Army: And the King's Enemies 1900-1947*, (Thames and Hudson, London, 1988), p118

<sup>2</sup> Ibid, 119

<sup>3</sup> Before independence, Gorkha Regiments were officered exclusively by British officers. Other regiments had both British and Indian officers.

<sup>4</sup> Byron Farwell, a renowned military historian, has written a fascinating account on the subject of polo playing, tiger hunting and pig sticking in his book titled 'Armies of the Raj'.

<sup>5</sup> Lathbury GW, 'Wasted Time in Regimental Soldiering' Journal of the RUSI, Vol xxxi, Feb-Nov 1936

<sup>6</sup> Formal publication of occurrences in service which directly or indirectly affect pay and allowances.

# Battle Tales

Ms Rachna Bisht Rawat®

## Abstract

*The author has been chronicling wars for a while. She has found that the most fascinating part of the exercise has been the interaction with the magnificent soldiers who fought these wars and came back to us and can now tell us not just their own stories but also those of the braves who could not return. The article narrates some of those stories that she has gathered.*

## Introduction

Veterans are all very different from each other but what makes them stand together as a clan is the dignity, honesty and courage in their old eyes. I have sat with Subedar Kala Singh (who fought alongside Param Vir Chakra recipient Subedar Joginder Singh in 1962) on a cot pulled into the shade in the wheat fields of Chehalanwala village of Punjab, I have had coffee with Major General BR Verma, AVSM, who was battalion adjutant in the Battle of Dograi (1965) with Brigadier (then Lieutenant Colonel) Desmond E Hayde, MVC, I have had phone conversations with Colonel (then Major) SS Cheema, who fought shoulder to shoulder alongside Colonel (then Major) Hoshiar Singh, PVC, in the Battle of Jarpal, having received from him, more than once, a virtual rap on the knuckles for not being attentive enough. From these amazing soldiers, who walk with pride, who speak with sincerity, who, for me, are a class apart, I have heard some intriguing war anecdotes that are shared below.

### ***Karela, upar se neem chadha — “He was stricter than strict”***

Lance Naik Karam Singh of 1 Sikh not only received the Param Vir Chakra for the exemplary courage he displayed in the Battle of Tithwal in 1948, but he also already possessed a Military Cross awarded to him for his bravery in the Burma War in 1944 which

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®Ms Rachna Bisht Rawat is a journalist and writer with more than 20 years of experience. She has worked with newspapers including Delhi Middy, The Statesman, Financial Express, Indian Express, Deccan Herald and The Hindu, has been attached with the Leicester Mercury in the United Kingdom. She has authored five books on the Indian Army.

he fought under the British. Karam Singh was the first living soldier to wear a PVC on his shirtfront. He lived for 77 years, rose to the rank of Honorary Captain, and died peacefully in his home in 1993. Subedar Kala Singh, who was Karam Singh's *sahayak*, narrated an amusing story about him.

In the early 1960s, Karam was posted to the Sikh Regimental Centre in Meerut where he was asked to procure sugar for soldiers from a nearby mill. He soon discovered that the corrupt mill owner, who was well-connected, soaked the bags of sugar in water to make them heavier before they were being weighed to make a quick buck. Furious, Karam Singh declared that he will not pay for wet bags. The mill owner threw his high connections in Karam's face and pushed him, daring him to take action. Karam lost his temper and gave the man a sound thrashing. Upon the mill owner's complaint, Karam Singh was dismissed from service for beating up a civilian. Not one to take injustice lying down, he sought an audience with the President of India, marched there with all his war medals, managed to convince the President of his sincerity and was promptly reinstated. Much to the delight of the soldiers, a proud Karam Singh was back in uniform, twirling his lush moustache. *'Ek toh wo sardar tha, upar se uske paas medals thei. Karela wo bhi neem chadha, aisa tha Karam Singh saheb'* — He was a Sikh, and that too heavily decorated. He didn't just go by the book; he wrote the book. Such was Karam Singh saheb — the 81-year-old Kala Singh saheb told me, with a twinkle in his faded old eyes. Both of us sat together chuckling for a long time.

### **Major Shaitan Singh's Radio**

Subedar Ram Chander and Havildar Nihal Singh, SM, both in their late seventies, told me the heartbreaking story of Major Shaitan Singh, PVC. They were both in Charlie company of 13 Kumaon in October 1962 when their company — with a strength of 124 (of whom 113 eventually died in action) — put up 40-pounder tents on a deserted slope in Rezang La. These Ahirs from Haryana, who had never seen snow in their lives, were tasked with defending Chushul, 30 kms away, with no artillery cover, hardly any warm clothes and written orders from the Brigade Commander that 'they should fight to the last man and the last round if the Chinese attacked'.

What the completely isolated company did have was an old radio set and a quiet and gentle company commander who was completely opposite to what his name meant. *‘Unka naam Shaitan tha par woh devta thei,’* — his name meant demon/naughty, but he was an embodiment of god — is what Ram Chander saheb told me. The soldiers, he said, would shiver in the freezing winds with just cotton trousers, jerseys, and light coats to protect them. Most of them would suffer from splitting headaches and the nursing assistant would move from bunker to bunker handing out medicines. But in their free time they would sit down together and listen to the radio. ‘We would hear about attacks on other posts by the Chinese and we would boil in rage. Shaitan Singh saheb would be sitting with us listening quietly. We would tell him *‘Sahab hame ek baar mauqa mil jaaye toh ham bhi jam kar ladenge’* — Sir, if only we get the chance, we will put up a ferocious front. Saheb would just smile gently. But when the post was under attack, Major Shaitan turned into a fearless lion inspiring his men to fight. *‘Saheb ne kaha, aap veer Ahir hain. Jam kar ladne ka time aa gaya hai’* — Saheb told us, you are fearless Ahir warriors. It is time to prove your mettle (Ahir being the soldiers’ caste; it comes from the Sanskrit word Abhira meaning fearless, in Hindi). Even after he was hit by a shell splinter and his left arm was bandaged, Major Shaitan directed operations and moved from bunker to bunker, inspiring bravery. Of course, we all know the ultimate Major Shaitan Singh story where he told the two men carrying him to safety to leave him behind and save their own lives. *‘Ye meri company hai, main yahin marna chahta hun’* — This is my company, I want to take my last breath here — is what he said to his radio operator Ram Chander, one of the last people to see him alive.

Brigadier RV Jatar (Retd), also from 13 Kumaon, recounted another incident about Major Shaitan, this one from before the war, when he and another officer from 13 Kumaon were travelling by train and chanced upon an astrologer. Just for fun, they both asked him to read their hands. When the astrologer saw Major Shaitan’s hand, he appeared stunned but all he said was he saw great glory ahead. “If he saw death as well, we don’t know. He did not say it”, Brigadier Jatar remembered.

### **A Shared Toothbrush**

While recounting the Battle of Haji Peer (1965) Brigadier Arvinder Singh (Retd) of 1 Para, who was then a young company commander, narrated this interesting anecdote to me.

Of the five officers who participated in the operation, Major (later Lieutenant General) Ranjit Singh Dyal, MVC, was the only one carrying a toothbrush. One morning, when he was brushing his teeth, he noticed the other officers watching him wistfully. He generously offered his toothbrush to Major Arvinder, who brushed his teeth with it and then passed it on to Captain Vaswani and so on and so forth. Ultimately all five officers brushed their teeth with Major Dyal's toothbrush and then awaited some food. The starving jawans had managed to catch two goats which they cooked in paraats (deep plates) that they had found in a deserted animal shelter. They had also managed to find some salt but it wasn't enough for all of them, so the officers were offered the partially cooked meat with salt while the jawans ate it bland. Decent food finally came to them on the morning on August 31 when Flight Lieutenant LK Dutta (actress Lara Dutta's father), who happened to be Major Ranjit Singh's coursemate, came to know that the soldiers were stuck without food and he flew his helicopter there and though he could not land, he dropped packets of *puri-aalu* so that the hungry men could have a hearty meal.

Brigadier Arvinder recounted another amusing anecdote to me. During the 1971 war, his Delta company captured 14 Pakistani soldiers. When they were presented before him for interrogation, one of them asked him in chaste Punjabi, '*Saheb ji, tu 1965 mein Haji Peer pass te si?* (Sir, were you at Haji Peer Pass in 1965?)' When he replied in the affirmative, the cheeky POW jubilantly told him that he had been there as well and had been taken POW then too. '*Par tussi Major de Major hi rah gaye, main te Lance Naik te Havildar ban gaya*'. (But you are still a Major, while I was a Lance Naik then and now, I have been promoted to the rank of Havildar!)

### **The Bad Boys Who Slew a General**

This war anecdote comes from the Battle of Asal Uttar, 1965. I heard it from Lieutenant Colonel Hari Ram Janu (Retd), SM, of 4 Grenadiers, who was the company commander of Charlie company in the Battle of Asal Uttar. This also happened to be Param Vir Chakra CQMH Abdul Hamid's company. Grenadiers Shafiq, Naushad and Suleiman were notorious as the bad boys of the battalion, breaking rules and getting into trouble all the time. They now stand out in the military history of the world as the only three-foot soldiers who slew a General in battle.

On the morning of 10 September, around 11 am, the Pakistani General Officer Commanding came down the road (alongside which the soldiers of 4 Grenadiers were alert in their trenches) in a jeep driven by his Commander Artillery, with his Rover jeep following. Though the Grenadiers, who were hiding in trenches along the road, had been given orders by then Lieutenant Janu to lie low and not show themselves, Grenadier Suleiman (who was in a trench with fellow Grenadiers Shafiq and Naushad) disregarded them as always, and stood up to see who was coming. The GOC mistook him for a Pakistani straggler, stopped and called out to him. When he did not listen, the General stepped out of the jeep and walked across to the trench, reaching for his pistol. By then, Shafiq and Naushad also stood up, rifles pointed at the General and looking desperately towards where they knew their Company Commander was, waiting for orders to fire. Sensing the danger they are in, Lieutenant Janu — who had been watching — immediately called out ‘fire’ and a volley of bullets hit the bewildered General who collapsed on the spot. The Commander Artillery also received a burst of bullets to the forehead and slumped forward on the steering wheel. All those inside the Rover jeep were also shot except for the driver who managed to turn it and drive away. A few minutes later, a message passed on the GOC’s Rover was intercepted which said ‘*Bade Imam mare gaye*’ —The elder Imam (leader) has been killed. This revealed to Janu the identity of the officer his boys had shot down, which was later confirmed.

After ceasefire was declared on 21 September, Lieutenant Janu was surprised to see Pakistani soldiers approaching his location with a white flag. They had with them a lady dressed in white. Chairs were pulled onto the road and the lady was asked to take a seat. With tears in her eyes, she told Lieutenant Janu that she was the widow of the Commander Artillery who had been shot down by his men. She requested him for the body of her husband. Lieutenant Janu expressed his helplessness since the body had already been handed over to higher authorities. He assured her that her husband was a very brave soldier and that he had been buried with full military honours befitting an officer of his rank. He offered her his condolences and a cup of tea, which she graciously accepted and was then respectfully seen off.

## **‘Can’t Salute my PM’**

One of the most heartrending war stories I have heard is of Maha Vir Chakra recipient Major Bhupinder Singh of Bravo Squadron, 4 Horse. After an exemplary showing in the battle, having destroyed four enemy tanks, his tank was hit by a Cobra missile that blew up its gun while the tank driver was burnt alive. Though Major Bhupinder managed to pull out his loader, he was severely burnt and being treated in the Delhi Base Hospital when Prime Minister Lal Bahadur Shastri came on a visit to meet hospitalised soldiers. When he came to Major Bhupinder’s bed, he noticed tears in the officer’s eyes. He patted his head affectionately and said, ‘Major, you belong to one of the finest armies in the world. Tears do not become you’. To this the Major, who was almost completely covered in blood since his wounds could not be bandaged, and in intense pain, whispered, ‘Sir, I am not pained because of any injury. I am anguished because a soldier is not able to salute his Prime Minister’. The Major succumbed to his injuries after a few days. A deeply moved Prime Minister Shastri quoted this episode many a time in public gatherings.

## **Not Without My Golf clubs**

A 1971 war story that I heard from Mukesh Khetarpal, brother of the 21-year-old Second Lieutenant Arun Khetarpal of Poona Horse, one of the youngest Param Vir Chakra awardees, was about the time he was recalled from his Young Officers course at Ahmednagar as the war had just broken out. He and another unit officer, Second Lieutenant Brijendra Singh, were so excited at the thought of going to war that they both took the first train to Delhi, having managed seats in the pantry car, though they travelled without reservation. Once in Delhi, Arun unloaded his motorcycle that he had also brought back and rode it home promising fellow Second Lieutenant Brijendra that he would be back in time to catch the Punjab Mail. He returned as promised, happily lugging his Blue Patrol and golf clubs.

When Brijendra asked him why he had brought those along from his house, he cheerfully replied, ‘I will wear the Blue Patrol at the ceremonial dinner we will have after winning the war and I plan to play golf in Lahore’. One is well aware that he refused to evacuate Famagusta, his burning Centurion tank, in the Battle of Basantar, and switched off his radio set after famously saying,



‘No, Sir, I will not abandon my tank. My gun is still working, and I will get these bastards’.

### ***Zinda ya Murda, Dograi Mein Milna Hai* — We meet at Dograi, Dead or Alive**

The last story that I want to share is about the late legendary Brigadier Desmond Eugene Hayde, MVC who upon retirement settled in Kotdwar, the same hill town in Pauri Garhwal where my paratrooper father Brigadier BS Bisht, SM, VSM, also chose as his post retirement retreat. Every Garhwali knew the celebrated war hero Hayde was. Locals were initially surprised but soon got used to seeing him do odd jobs around the place. He could be spotted shirtless in the summer heat of Kotdwar, perched on the roof of his house, hammering a nail into a loose wooden board, or fixing a leak. He would often be found washing the rugs of his dogs in the small canal that wound past his house or walking around his estate with squirrels climbing in and out of his pockets (where he kept crumbs) or followed by some of the 45 stray dogs he had come to adopt. He was a dog lover. People would throw unwanted puppies across the boundary wall of his estate and he would unquestioningly adopt them too.

The delightfully grounded Brigadier was a fearless Commanding Officer as a young Lieutenant Colonel. He was an Anglo-Indian fluent in Jat bhasha and was highly respected by his troops with whom he spoke in their language. Just before the attack on Dograi in 1965, he warned his men to not act like cowards when they went for the attack. He told them that even if every single one of them ran away from the battlefield, he would continue to stand there facing the enemy alone. *‘Jab tum apne gaon wapis jaoge to log tum pe thukenge. Wo bolenge tum apne CO ko ladai ke maidan mein marne ke liye akela chor kar bhag gaye’* (If you run away from the battlefield, you won’t be able to face your neighbours once you are back in the safety your homes. They will say you abandoned your CO and left him to die at the hands of the enemy).

On the night of 21 September 1965 when the attack on Dograi was planned, he made only two demands of his men. The first *‘ek bhi aadmi piche nahi hatega’*—not one of you will retreat — and the second, *‘zinda ya murda Dograi mein milna hai’* — dead or alive, we will meet at Dograi. This was drilled into the soldiers’



heads so clearly that when Colonel Hayde asked a young soldier in a bunker on the eve of the attack: '*Susre, agar CO saheb zakhmi ho gaya toh kya karoge?*' — What would you do if your CO is injured during the fight? — without a second thought the young soldier replied, '*CO saheb ko utha kar Dograi le jaayenge kyunki CO saheb ka hukm hai ki zinda ya murda Dograi mein milna hai*' — I will carry the CO to Dograi because he has ordered everyone to get there, dead or alive! A pleased Colonel Hayde gave him a pat on the shoulder moved on to the next bunker.

## **Conclusion**

These were some of the amazing men who fought for us. Each time I hear or tell their stories, it fills my heart with pride. They were ready to give up their lives for us (as many of them did). And none of them wanted anything in return. All we can offer them is our gratitude and remembrance.

# Post-Independence India: Evolution of Jointmanship in the Military and Lessons Learnt

Group Captain PA Purohit®

## Abstract

The issue of jointmanship in the Indian Armed Forces assumed greater salience with Revolution in Military Affairs (RMA) and enhanced threats including collusive ones. Although unanimously agreed as a necessity, the perceptions about jointmanship vary across the Services. Analysis of jointmanship exhibited during wars, conflicts and major operations reveals a mixed bag — mainly divergent at the military strategic level yet reasonably good coherence, coordination and execution at the tactical level. To jointly outfight the enemy, the article infers the need of establishing sound Civil-Military Relations (CMR), realistic threat assessment, enhancing joint training, jointly developing capabilities, and rejuvenating existing mechanisms, especially at the strategic level. Importantly, it highlights the difference good leadership and a robust Professional Military Education (PME) makes in enhancing jointness, both in peace and war.

## Introduction

On 25 October 1947, a Royal Indian Air Force (RIAF) Dakota took off from Delhi for an aerial reconnaissance of Srinagar. On board was Colonel (later Field Marshall) SHFJ Manekshaw. This sortie, launched to gauge the extent and nature of the armed infiltration from Pakistan, was perhaps the first joint mission undertaken by the armed forces of independent India. It was precursor to a historic fight back by the army and RIAF in the

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®Group Captain PA Purohit was commissioned into the flying branch of IAF in December 1990. He is alumni of National Defence Academy, Defence Services Staff College Wellington and Army War College. He is presently posted as Chief Instructor, Faculty of Leadership & Air Power, Air Force Administrative College, Coimbatore. This is the edited version of the paper which won the first prize for Lt Gen SL Menezes Memorial Essay Competition 2020.

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defence of Jammu and Kashmir (J&K). Thus, a foundation of joint operations was laid early in our post-independence history. Yet, the primary medium (land, sea, air) and peculiarities of each, through which the Services exercise their combat power, have given rise to differing notions of jointmanship.

The problem got complex with the advent of RMA. Hence, although no one in the military opposes jointmanship, the means, method, structures, and achievement of this concept is where differences arise. Although the Indian Armed Forces have evolved considerably since independence, yet, questions that arise include:

- (a) Has the level of jointness been sub-optimal?
- (b) Have factors such as CMR, our strategic culture and budgetary allocations stymied jointmanship?
- (c) Is there a trust deficit within the Services?

A look at jointmanship requires study and analysis of the Higher Defence Organisation (HDO) including changes, conduct of wars/conflicts/operations, force structure development and the evolving character of warfare. The efforts and experiments of the military establishment in enhancing jointmanship throw useful lessons. The article posits that these should serve to create a road map of achievable objectives rather than ideal objectives. The role of leadership in ensuring enhanced jointmanship is also highlighted.

## **HDO During Independence**

Upon achieving independence, Major General Ismay, Chief of Staff to Lord Mountbatten, proposed a Chiefs of Staff Committee (COSC) comprising the three Service Chiefs (C-in-C as it was then designated) at the apex level to provide professional military advice to the Defence Committee of Cabinet (DCC). The COSC was part of the military wing of Cabinet Secretariat. The post of Chairman was proposed to be on a rotational basis with the longest serving C-in-C (Chief) being the Chairman. A number of committees were to be formed under the COSC with an aim to facilitate joint planning and functional cohesion amongst the Services. Crucial amongst these were the Joint Planning Committee (JPC) and Joint Intelligence Committee (JIC). The mandate of the JPC was to jointly prepare operational plans for consideration and approval of

COSC and DCC.<sup>1</sup> The JIC reported to the COSC and was to provide intelligence assessments to COSC and laterally to JPC. The system was designed with good intentions. Tragically, joint staff was never set up and the JIC was detached from the COSC after 1962.<sup>2</sup>

Faced with a mammoth refugee crisis, an armed invasion from Pakistan, a trust deficit in British officers, and economic woes, the attention of the government faced multiple crises. It is, therefore, a matter of conjecture, if a well-intended structure of HDO that had built-in mechanisms of jointmanship was unsuccessful because of these reasons.

### **The 1947–48 Indo-Pak War: The First Test**

The first real test of jointmanship for the military of independent India came in October 1947. The response by the army and RIAF was swift and sure. Both the services suffered from a major scarcity of resources, logistics, ammunition, communication equipment, and maps to name a few. Everything was in short supply except courage and determination. It is rather unfortunate that understanding of aspects of jointmanship in this war is limited. One well known writer has opined that this conflict was essentially an army action with air power used to only transport troops and equipment and to provide limited air support to ground troops.<sup>3</sup> This is untrue based on published accounts of the war.<sup>4</sup> Jointmanship was responsible for victories in the battles of Budgam, Poonch, Shalateng, Uri, Chhamb, Naushera, and Zoji-La. The unparalleled airlift to Leh helped regain Kargil and averted the fall of Leh to the enemy. The mammoth and incessant airlift by Dakota aircraft ensured sustenance of the fighting troops, and populace, and their morale. The fledgling fleet of fighters caused havoc and broke the cohesion of the enemy. The army accomplished the onerous task of regaining territory till proclamation of the cease fire. High quality of leadership by Indian officers, making common cause and displaying the right attitude towards joint warfighting helped us emerge victorious. The first trial by fire was successfully accomplished. Ideally, the armed forces should have then moved towards a high level of jointness, inter-operability and operational efficiency.

## **The 1962 Conflict**

This conflict with China, preceded by years of neglect of the military, involved only the army and Indian Air Force (IAF). A failure at the strategic level forced an unprepared army into combat. Lack of infrastructure, roads and stretched lines of communication necessitated the use of air power for build-up and supply. Regrettably, a myth has been propagated that air power was not used. One article mentions that in 1962, air force and navy did not come into play at all and watched from the side lines.<sup>5</sup> Air power was used, albeit, in combat enabling roles such as reconnaissance, air maintenance and casualty evacuation. The decision of not to use air power in offensive operations was a political one. Under the circumstances, IAF aircrew exhibited great bravery and dare devilry in flying into the danger zone in aid of their fellow warriors on ground. Their saga and contribution has been eloquently brought out in a book.<sup>6</sup> There was a failure at the apex level of the military too. There was no planning done jointly between the two Services prior to or during the conflict for contingencies and targeting. Neither Service thought it worthwhile to war-game or brainstorm even when war clouds were looming. Both, ground and air operations lacked a structured and synergistic application. The primary reason for lack of jointmanship in the conflict is hence attributable to a leadership failure at the strategic level (both political and military). The abysmal state of CMR prior to the conflict only aggravated the situation.

## **The 1965 Indo-Pak War**

The developments from April 1965, when Pakistan launched Operation Desert Hawk, to August 1965, when they launched Operation Gibraltar, were an indicator of things to come. Yet, in this period concerted effort to jointly discuss the emerging scenario, engage in contingency planning, building the intelligence base for targeting, and jointly appreciating the situation were lacking. Resultantly, the jointmanship was sub-optimal.

Air operations in support of ground operations were largely 'reactive'. However, tactical employment of air power was undertaken as per requirement. Even the fledgling helicopter fleet was used extensively towards air-land operations. In the Kashmir Valley, small teams of troops were airlifted from one place to another at short notice. Mi-4s were modified in the gunship role.

Demands for air support took too long to materialise. Communication systems required for close coordination between forward troops and the IAF did not exist.

The navy was assigned a defensive role to limit the scope of conflict.<sup>7</sup> Yet, it is notable that Seahawk aircraft of navy were placed under the operational control of the IAF on 02 September 1965 for offensive action against the enemy.<sup>8</sup>

The template to judge the level of jointmanship was planning at the apex level and execution at the tactical level. The former failed while the latter was fair. Air Chief Marshal PC Lal accused the Chief of Army Staff (COAS) in 1965 of treating the war as his, “personal affair, or at any rate that of the Army alone, with the Air Force as a passive spectator and the Navy out of it all together”<sup>9</sup>. These words tell a lot about the state of affairs. Within the military, some lessons that emerged were:

- (a) Developing a strategic understanding of war by the higher leadership.
- (b) Institutionalising planning jointly at the apex level.
- (c) Developing better understanding of sister Services, especially their core competencies, at all levels.

## **The 1971 Indo-Pak War**

For the first time in independent India, a war was fought in the backdrop of a clear politico-military aim. Taking full advantage of the time available for planning and good leadership within COSC, the armed forces were able to display good jointmanship. Several measures were put in place to ensure this. They included establishing Tactical Air Centres (TAC) at Corps HQs and Maritime Air Operations (MAO) and two other elements along with each Naval command. Jointmanship was achieved in a ‘top down’ and ‘lateral’ manner. Air support was aplenty and effective. The airborne assault at Tangail, the heli-lift of an entire Brigade across Meghna River, carpet bombing by An-12 and Caribou, and the incessant strikes from air were decisive in the capitulation of the enemy. A dispassionate study reveals that good strategic leadership, understanding capabilities of sister Services, good planning, quantification of effects required in targeting, and establishing sound processes for interface were crucial in attaining victory.

## **Operation Meghdoot**

On 13 April 1984, the army and IAF jointly launched an operation to pre-empt Pakistani occupation of Siachen glacier. This tactical action later assumed a strategic dimension. At 36 years and counting, this is the longest joint operation India has undertaken. The army and IAF have been fighting shoulder to shoulder at the world's highest battlefield, making it unique and unparalleled. The fine-tuning of operations has drawn awe and admiration from foreign militaries. The bonding, camaraderie and understanding between the helicopter pilots of IAF, Army Aviation Corps and the units deployed is a classic example of excellent jointmanship.<sup>10</sup> The lesson that emerges is that given the right direction and attitude, it is possible for two or more Services to synergise their efforts and create history.

## **Operation Pawan**

The Indian Peace Keeping Force (IPKF) was inducted in the backdrop of political infirmities, strategic blunders, and lack of cohesion amongst various government organs. On the brighter side, the COSC appointed GOC-in-C Southern Command as the Overall Force Commander (OFC) with component commanders of the three Services under him. However, in less than a month, navy, and IAF Cs-in-C responsible for providing forces, declined to delegate command. The component commanders were recalled and replaced by liaison officers.<sup>11</sup> Lieutenant General AS Kalkat, in an interview to Anit Mukherjee, has revealed that assets of navy and IAF were taking orders from their respective HQ.<sup>12</sup> In his opinion, this led to delays affecting planning and operations. Jointness was also hampered due to lack of interoperability and inability to communicate with each other.<sup>13</sup> In addition, intelligence sharing was minimal.<sup>14</sup>

The first major joint operation was a heli-drop at Jaffna University. Unfortunately, it was a failure. Soon enough, the blame game started. Different versions of the operation have been written.<sup>15</sup> Some criticised the navy's role during Operation Pawan.<sup>16</sup> After the initial setback and chaos, a semblance of proper planning and co-ordination was restored. Procedures for joint operations were streamlined. The synergy between IAF helicopters and ground forces soon had the LTTE on the run. Meanwhile, the navy engaged in aggressive patrolling of the waters and providing valuable sealift



to IPKF elements. Jointmanship at the tactical level continued improving. IPKF elements of all three Services realised the benefits of jointness in minimising own casualties, massing firepower and enhancing tempo of operations. Naval operations afloat and IAF transport operations had a direct bearing on ground operations. In Operation Pawan, a reasonably well conceived joint structure at the strategic level was stymied at the operational level. To their credit, the war fighters of the three Services, engaged in actual combat and combat support, buried their differences to a large extent. For them, survival and victory were at stake.

### **Operation Cactus**

Operation Cactus was a daring tri-Services operation. The IAF airlifted paratroopers who rescued the President and secured the airstrip; the Indian Navy then coerced the fleeing terrorists to surrender. There were hardly any disagreements. Issues, if any, were ironed out professionally. Mutual confidence in each other was high. The affiliation and traditionally close interaction of transport squadrons with the Para brigade at Agra was a major factor. Operation Cactus showcased effective jointness of our Armed Forces. However, no Joint Directive with an Overall Force Commander (OFC) was issued prior to the operation, possibly due to paucity of time.<sup>17</sup>

### **Kargil Conflict**

The Kargil conflict was initially marred by lacunae in intelligence, joint staff work, procedural differences between demanding impact on targets vis-à-vis the assets themselves, inability of the army to integrate IAF into its planning process and perceived hesitation of IAF.<sup>18</sup> Anit Mukherjee is particularly critical of the IAF.<sup>19</sup> However, a more realistic, balanced and insightful account has been written by Benjamin Lambeth.<sup>20</sup> It reinforces that only close planning, co-ordination and transparent communication from the very beginning can enable optimum utilisation of air power in joint warfare. Once the early disagreements were resolved, the effective application of air power indisputably saved further casualties as well as compressed considerably the timeframe in which the army made progress on the ground. The IAF flew 7631 sorties devoted towards ensuring success of ground operations. The navy flew its electronic warfare aircraft along the LoC in support of ground operations.<sup>21</sup> Ultimately, as often proven, elements of army and IAF engaged in



operational 'hotspots' had neither the time nor the inclination to fight amongst themselves. They rose above parochialism, fought together against a common enemy and achieved victory.

## Looking Ahead

The article so far has analysed the wars/operations to decipher jointmanship exhibited. Actions in war are a manifestation of peacetime activities of planning, capability development, training, finances, and CMR. Each of these is interlinked. Barring 1971, each of the wars fought have been preceded by neglect of some or all these. Most of these factors are top driven, reinforcing the lessons from war that divergence in issues of jointmanship are most prevalent in the higher echelons. CMR in India have seen its ups and downs. Financial outlay in the defence budget is limited, and coupled with lengthy procurement process has adversely affected force structure development. A perceptible shift towards sub-conventional warfare has raised questions on the relevance of large forces and demand of the Services. A clarity on short-, medium- and long-term threats is required. A realistic threat assessment could lead to lesser wrangling for resources and a more focused approach towards capability development. Joint planning can then identify technologies/weapons in the 'must', 'should' and 'could' category and balance them with available finances. Sadly, this has rarely happened and even the Long-Term Integrated Perspective Plan (LTIPP) is basically a sum of the Services wish list.

Anit Mukherjee argues that in India, jointness can only be imposed by civilian leaders and sustained civilian intervention is crucial in improving jointness.<sup>22</sup> However, given the general lack of a strategic culture, inadequate awareness of military power, ethos, and a peripheral role of the armed forces, it is a tall order. Former Defence Secretary, Mr Shekhar Dutt, remarked that without consensus, civilians are unwilling to accept the risks of imposing their vision of jointness as it would make them responsible for military setbacks, if any.<sup>23</sup>

There is another offshoot of CMR that has impinged jointness. It is in defining roles and missions of each Service. Historically, the debate was non-existent till advent of air power. As air power became potent and decisive, issues of ownership arose. In USA, the 'Key West Agreement' settled this contentious issue.<sup>24</sup> In India,

since roles and missions have not been defined, it has led to avoidable turf wars<sup>25</sup>, primarily for air power resources. Notable amongst these have been ownership issues of attack helicopters, the transfer of maritime reconnaissance role from IAF to navy as also the perceived (or real?) attempts by navy of taking over the maritime strike role. Technological developments have led to the Services demanding a 'bit of everything'. Creation of Special Forces of navy and IAF was turbulent. Attitudes of the Services toward the necessity of designating 'roles and missions' are varied. While the IAF insisted upon it with the Arun Singh Task Force, the other Services were not enthused. However, with the knowledge of history, it is necessary to resolve the issue. A seminal study deduced that a clearer division of roles and missions of ground and air power would go a long way in enhancing joint war fighting.<sup>26</sup> A legislative framework has been proposed to achieve it.<sup>27</sup>

India was in the forefront in establishing joint training institutions. Thus, a sound foundation exists. Each Service has a functional command entrusted with training. A mechanism for facilitating joint training exists in the form of a Joint Training Council and Tri-Services Training Commands Conference (TSTCC). The TSTCC has made considerable headway. However, the variation in mandates of the three training commands requires to be bridged. Joint training, be it Army-IAF or Navy-IAF, has been enhanced in air mobility, heli-borne operations, maritime air operations, and Special Forces. A 2012 tri-Services study on joint content in war colleges observed that joint content was maximum in College of Air Warfare.<sup>28</sup> The Joint Services Nuclear, Biological and Chemical (NBC) course and common training for cooks are some good examples of success. There exists potential for further enhancing joint training.

It is the field of education that requires greater attention. Our PME should be tailored to produce strategic/thought leaders who can subdue parochial Service interests to national interests. They should understand application of military power of every Service. This will reduce the historic disagreements at the top. A robust PME should be able to clear past dogmas, avoid template responses and enhance conceptual acumen. The system of each Service planning in isolation and then stitching it with the other Services is passé. The boundary issue with two neighbours should not limit our thinking to a predominantly land centric war doctrine.

We can create asymmetry in effects with a considered application of air and maritime power in a limited war, having its origin in the border dispute. Air power can influence the time, space, and force domains effectively. A thorough study and understanding of its unique capability is essential to optimise its potential. Our PME should be well rounded and commence early. It should be open to learning the right lessons by accepting past mistakes. Mere apportioning of resources of one Service to another is not the right lesson. The PME should also be able to inculcate trust, respect and sound understanding of the other Services without a feeling of relative superiority.

The human resource development process in the Services can make a difference with change in attitude and mindsets. Officers with cross Service experience/postings require to be groomed for higher leadership positions. Although officers with a lifetime spent within their own Services are more preferred for the highest leadership position, it is now time to formulate a policy wherein, to become a three-star officer, a prior tenure of at least two years in a joint service establishment/with other Service becomes mandatory. Meritorious officers of Brigadier/Colonel and equivalent rank in joint establishments need nurturing to ensure their growth. A focused approach on these lines will create the critical mass in higher ranks that is truly 'purple'. This will enable future leaders to strike the right balance between Service loyalties and the overall war aim.

Jointmanship can be improved by rejuvenating existing mechanisms. The Joint Operations Committee that functions under the COSC can meet more frequently and jointly evolve war-plans for different contingencies across the spectrum of conflict. At Command HQs, bright officers from the other Services should be posted. Presently, institutionalised structure exists only in case of IAF in the form of Advanced HQ and HQ Maritime Air Organisation with Army and Naval Commands, respectively.

## **Conclusion**

It is vital that the changes brought in the aftermath of creation of Chief of Defence Staff (CDS) are measured and calibrated to find acceptance. The changing character of warfare means that future conflicts are multi-domain and multi-dimensional. They will require a multi-dimensional and often innovative approach. Hence,

jointmanship should represent the wisdom about fighting together.<sup>29</sup> It must also include the wisdom to overcome mindsets, train together and jointly formulate Qualitative Requirements for design and development of weapon systems that are inter-operable.

Jointness in thoughts and actions is more important than rhetoric. Each Service brings to battle its unique capabilities. Time and again, it has been proven that whenever two or more Services have been involved in planning jointly from the preliminary stage, success has never eluded us. Even as each Service retains its uniqueness and independence, the ability to match their strengths to mission objectives will be the essence of jointmanship. A swift and sure victory is then, all ours.

*‘Jointness is like golf; you only have to use the right club.’*

## Endnotes

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# IAF Transition towards a Network-Centric-Knowledge Based Force

Wing Commander Mukesh Kumar Singh<sup>@</sup> & Dr Vikas Gupta<sup>#</sup>

## Abstract

*The article is based upon a study done by the authors regarding Knowledge Management in the Indian Air Force (IAF). The study brings out valuable lessons regarding institutionalising the way to retain the knowledge base of the organisation keeping in mind that personnel moving out of the organisation is inevitable. Though the study is based upon the IAF the findings are of equal relevance to the complete military.*

## Introduction

**K**nowledge Management (KM) is getting the right knowledge to the right person at the right time. In a military environment, KM includes a strategic approach to achieve strategic aims by using the power of collective knowledge penetration into the processes of generating, gathering, organising, sharing and transferring knowledge to meet the military objective.<sup>1</sup>

Knowledge is power, therefore an asset for people and organisations. It has superseded traditional corporate assets and has become a strategic resource that drives the economy and provides a lasting competitive advantage<sup>2,3</sup>. Leveraging individual and organisational knowledge to boost efficiency and effectiveness has now become a popular management technique that has been successful across the globe. A survey conducted in more than 200 successful US firms revealed that 80% of corporations had knowledge initiatives. There is adequate evidence in numerous studies conducted worldwide that effective KM is beneficial to the

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<sup>@</sup>Wing Commander Mukesh Kumar Singh is an Aeronautical Engineer in the IAF. He is B.E in E&E, MBA in Information Technology and M.Tech from IIT, Roorkee. He is also pursuing Ph.D from Delhi School of Management.

<sup>#</sup>Dr Vikas Gupta is an Assistant Professor, Delhi School of Management, Delhi Technological University (Former Delhi College of Engineering). He has many research papers and articles in his credit which are published in International and Indian journals. His research interests are in knowledge management, innovation, and corporate social responsibility.

organisation in saving cost and time, increasing innovations, efficiency, customer satisfaction, competitive edge, and organisational performance<sup>4,5,6,7,8</sup>.

Like any other organisation, the requirement of an effective KM in a contemporary military cannot be ruled out. Studies indicate that with the expansion of operational areas and sub-conventional warfare taking the center-stage, a large number of military organisations like NATO, US, UK, Israel, Canada, Turkey etc. have adopted KM in a big way. The cutting-edge technologies have resulted in dynamic, unpredictable and complex operations. This makes problem-solving and decision making more complex and essential than ever. These significant changes in the characteristics of warfare dynamics have forced the militaries in the world to reorganise their doctrines to include KM at the core<sup>9</sup>.

Aggressive KM initiatives also assumes a vital role for the IAF as timely, accurate, decision-ready and actionable knowledge is imperative for planning and conducting aerospace operations<sup>10</sup>. However, despite the best efforts, IAF continues to squander what may be its greatest assets in today's knowledge economy i.e. the wealth of experience, ideas, and insight of its air-warriors that are scattered across and deeply embedded within the organisation<sup>11</sup>. The IAF is required to move beyond the simplistic incorporation of the latest information technology (IT) hardware and software to a more deliberate KM strategy. There is a need to progress beyond the simple network-centric force to a network-centric-knowledge-enabled force to achieve knowledge superiority.

### **KM in the World's Military Organisations**

The available literature establishes KM as a force multiplier for the military establishments. Hence, in the 21<sup>st</sup>-century, military organisations of the world have no option other than to take cognisance of the fact and embrace KM in a big way to remain current and relevant. Some of the contemporary military establishments have already initiated necessary steps to incorporate KM in their doctrines and policies<sup>12,13</sup>.

The NATO Knowledge vision declares that "the NATO military structure will transform into Knowledge Centric Organisation. It will promote information and knowledge sharing and treat expertise,



experience and best practices as valuable assets to achieve decision superiority”<sup>14</sup>. The United Nations (UN) peacekeeping operations have developed a “Knowledge-Based System” to assist the UN Military Observers in the deployment country<sup>15</sup>.

The US Department of Defence directs the Joint Forces to be knowledge empowered and initiate actions to acquire, refine and share knowledge. KM was included in the US Army Regulations to emphasise KM as the means of supporting its strategy for the 21<sup>st</sup> century, which is of transforming itself into a net-centric, knowledge-based force. Similarly, the US Air Force Strategic Plan enforces Knowledge-Based Operations, which envisages effective use and management of information and knowledge across the Air Force<sup>16</sup>. The Israeli Defence Forces foresee knowledge as critical resources for current and future battlefield<sup>17</sup>. The Defence Research and Development Canada has also targeted KM as an area to support the futuristic military requirements in 21<sup>st</sup> century<sup>18</sup>. The Armed Forces of the Slovak Republic also believes in active KM for retention of necessary knowledge<sup>19</sup>. Thus, KM is being given importance by several militaries.

### **KM Status Check of the IAF**

Two of the major impediments faced by the military organisations in managing the organisational knowledge is the consistent knowledge loss because of soldiers’ exit and lack of formalised KM strategy<sup>20</sup>. Studies show that half or more of the best officers leave the military early, rather than serving for a full career<sup>21</sup>. Also, to keep their forces young and fighting fit, the military organisations by the policy itself have an option for voluntary retirement after 15 to 20 years of service. As per the statistics, 89% of the soldiers of all the armed forces retire young between 30–50 years of age<sup>22</sup>. To examine the status of IAF on these two aspects, a survey study was done to address the following questions:

Q1. The effects on the organisation’s knowledge due to the early retirement of its air-warriors?

Q2. Status of existing KM strategies and plans in IAF?

### **Study Methodology**

An inferential, descriptive study was employed to examine the status of KM in IAF. This was a quantitative study in nature,

utilising descriptive statistics to analyse the data derived from the KM survey. A survey instrument was designed to gather data from 250 retired air-veterans, comprising of 100 officers and 150 airmen. Since the complete population of air-veterans could not be ascertained, snowball sampling was used to select the participants for this study wherein each sample was requested to refer a friend or acquaintance air-veteran for participation. The survey questionnaire was divided into two sections, comprising of four questions in each. Respondents were asked to record the answers on a 5-point Likert scale ranging from (1) strongly agree, with (3) neutral as the midpoint, and (5) strongly disagree. Pilot testing was conducted to establish content validity and improve questions. Cronbach's Alpha reliability coefficient<sup>23</sup> was used to measure the internal consistency of the questions. The questions were found to be reliable with a 0.773 Cronbach Alpha coefficient for all the eight items. This study used SPSS 23.0<sup>24</sup> as major tools to analyse data.

## Results and Analysis

To better understand the characteristics of each variable, descriptive statistics analysis was used. The questions and responses are as under:

*Q 1: What are the effects of knowledge loss in IAF due to the early retirement of air-warriors?*

Response of sample population on various questions asked to understand the effects on the organisation's knowledge due to the early retirement of the air-warriors indicates:

- (a) 93.2% of the respondents feel that the retiring air-warriors possess critical professional knowledge, the loss of which adversely affects the organisation's performance.
- (b) 51.6 % feel that that the existing system and process in IAF caters to redundancies with adequate induction and training, so that early retirement does not have any significant effect on the organisations knowledge, while 34.4% don't agree to this fact.
- (c) 84% of the respondents believe that early retirement by 20 yr of service, creates a vacuum at the senior supervisory level in a technology-intensive organisation.

(d) 50.4% of the respondents feel that early retirement is good for the organisation as it helps to maintain a young and fit workforce with greater adaptability and current knowledge, whereas 28% disagree with the facts and the remaining 21.6% remained neutral on this question.

*Q2: What is the status of the existing KM strategies in the IAF?*

Response of sample population on various questions asked to understand existing KM strategies and plans in IAF indicates:

(a) 51.6% of respondents believe that the organisation has comprehensive and documented KM strategies, while 30.4% disagree with the fact and the rest remained neutral.

(b) 45.6% of the respondents feel that the KM roles and responsibilities are clearly defined in the organisation while 34.8% expressed disagreement.

(c) Mixed opinion was received on whether the HR policies in the organisation support the proper management of individual and organisational knowledge. 42% agreed to the fact whereas 40.4% expressed disagreement.

(d) 71.6% of the respondents strongly believe that KM is an integrated part of routine work processes, but it is practiced without realising it.

Average Mean from Officers and Airmen indicated that Officers are more in disagreement on the existence of a formalised KM strategy in IAF as compared to Airmen.

## **Key Findings**

- Retiring air-warriors possess critical professional knowledge, the loss of which adversely affects the organisation's performance. It also creates a vacuum at the senior supervisory level. However, early retirement cannot be completely avoided as it helps to maintain a young and fit workforce. Therefore, the only viable option available is to capture and transfer the knowledge and expertise of these air-warriors.

- KM is an integrated part of routine work processes in IAF, however the same is neither formalised nor documented and practiced sparingly without realising it.
- Officers strongly feel a lack of KM strategy and plans in IAF as compared to Airmen.

## **Recommendations**

- Organisational and individual knowledge be treated as assets and it needs to be managed to attain knowledge superiority.
- The relevance of active KM needs to be acknowledged at the highest levels and driven down to all ranks through Policies, Doctrines and defined Roles and Responsibilities.
- Develop a KM strategy for the IAF that is closely aligned with the IAF's overall strategy and goals.
- Capturing and Transferring of knowledge needs to be emphasised and methods may be instituted to incorporate the same in the routine process.
- Knowledge audit may be conducted to understand the organisational knowledge needs, holdings and deficiencies.
- Efficacy of various KM Tools like Community of Practices, Lesson Learned, Knowledge Portal etc. for the IAF and need to be implemented in a planned manner.

## **Conclusion**

The departing soldiers at the peak of their ability and experiences take with them the most valuable knowledge they have gained over the years of their professional and personal lives. Their in-depth knowledge experience, aptitude to understand and integrate knowledge reduces the organisation's capability of innovating and problem-solving which invariably decreases the organisation's performance and profitability. It is in the strong interest of IAF to identify optimal strategies to leverage the intellectual capital of the organisation's workforce. The IAF, therefore is required to develop a KM strategy, to transform from

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# China's Expanding Role in United Nations (UN) Peacekeeping

Colonel Shailender Arya®

## Abstract

*For much of the Cold War period, China was highly sceptical of the concept of United Nations (UN) peacekeeping, viewing it as a thinly veiled disguise for imperialist interventions by the great powers. Further, Deng Xiaoping's 24 character strategy which stressed on keeping a low profile had guided China's foreign policy for over two decades. All this has changed under Xi Jinping, wherein UN peacekeeping was identified as a relatively low-risk vehicle to gain global prominence. Consequently, from total opposition to the role of UN itself, China has now transformed as a champion of UN peacekeeping. Today, China provides the 10<sup>th</sup> largest troop contribution and Beijing is the UN peacekeeping programme's second largest funder, providing 15 percent of the program's overall budget. In fact, China provides more personnel to peacekeeping operations than any other permanent member of the Security Council, and has almost twice as many as the other four permanent members combined. This has provided China with global acceptability, significant clout in Africa, and helps to foster China's image as the leader of the developing world. However, the Chinese intensions are anything but benign. A 'Wolf Warrior' diplomacy is on the increase, the Chinese peacekeeping efforts are intertwined with Chinese economic interests, and the overall aim seems to expand Chinese influence across the world.*

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®Col Shailender Arya is posted as a Directing Staff at the Defence Services Staff College Wellington, Nilgiri Hills, India. He is a graduate of the College of Defence Management. He has won the USI Gold Medal Essay Competition twice (2006 & 2008), and has twice remained runner up (2007 & 2011). He is a prolific writer and has written articles on China, the Naga Insurgency, North East India, Myanmar and Tibet for the USI Journal.



## Introduction

For long, the story of peacekeeping operations across the world was quite predictable. The flag was blue and multilateral – of the UN; the majority of the peacekeepers were from Africa and the Indian sub-continent, albeit with a smattering of European observers on short-rotations; the cost was shared by the US and European nations; and the conflict zones for deployment were mostly in Africa. Sometimes the deployment shifted to Haiti in the Caribbean or East Timor in Southeast Asia, but the dynamics remained the same. The US scarcely contributed any troops (even today, they have only 31 persons deployed) and nobody ever heard of the Chinese in the UN Peacekeeping Operations. In fact, for much of the Cold War period, China was highly sceptical of the concept of UN peacekeeping. In the 1960s, China opposed the UN itself as *“the docile special detachments of the international gendarmerie of US imperialism.”*<sup>1</sup> Later, when China became a member of the UN in 1971, it strictly opposed international peacekeeping because it saw it as a thinly veiled disguise for imperialist interventions by the great powers.<sup>2</sup>

Like on the LAC, on the status of Hong Kong or its position on UNCLOS, China has changed its stance, albeit slowly, and almost imperceptibly. In November 1989, it sent the first contingent of 20 civilian observers to assist in Namibia’s transition to independence. In April 1992, China sent 47 military observers and a unit of 400 military engineers to the UN Transitional Authority in Cambodia (UNTAC). In 1999, China deployed a contingent to East Timor in UN Transitional Administration in East Timor (UNTAET), a mission under Chapter VII of the UN Charter. From total opposition to the role of UN, China has now transformed as a champion of UN peacekeeping. By 2008, China had participated in 23 UN peacekeeping missions, involving 2,157 persons at any one time, for a cumulative total of 12,433 troops and civilian police.<sup>3</sup> In 2012, China deployed an infantry platoon to Sudan to protect its engineering troops, the first time that China had deployed combat troops overseas.<sup>4</sup>

Fast forward to mid-2020, wherein China provides the 10<sup>th</sup> largest troop contribution, and Beijing is the UN peacekeeping programme’s second largest funder, providing 15 percent of the program’s overall budget. In fact, China provides more personnel



to peacekeeping operations than any other permanent member of the Security Council, and has almost twice as many as the other four permanent members combined. This includes Chinese troops in the 'big five' – Mali, Sudan, Congo, Central African Republic, and Darfur. These personnel and monetary contributions enable China to exert significant diplomatic and political influence globally. Peacekeeping also helps China to portray itself as a peer of other great powers.

## The Larger Picture

Under President Xi Jinping, China finally abandoned Deng Xiaoping's 24 character strategy; *observe calmly; secure our position; cope with affairs calmly; hide our capacities and bide our time; be good at maintaining a low profile; and never claim leadership*. This had guided the Chinese thoughts and actions for over two decades. In 1999, former Premier Zhu Rongji had coined the phrase "responsible power" to denote that China had not only become an economic superpower, but also intended to use its growing power to contribute to peace, security, and good global governance. The "responsible power" narrative was accompanied by the concept of "peaceful rise," introduced in the early 2000s. However, Xi decided that it was time for China to abandon the thought process of his predecessors and occupy the global centre stage. Chinese behaviour in South China Sea turned aggressive, attempts were (and are being) made to unilaterally change the status quo on the LAC with India, and Hong Kong lost its autonomy. While all these came under international spotlight, UN peacekeeping was identified as a relatively low-risk vehicle to gain global prominence. President Xi therefore expanded China's role in peacekeeping operations as part of a larger effort to strengthen China's global presence. In their perception, Chinese peacekeepers provide Beijing with opportunities to reassure the international community of China's commitment to global peace and stability.<sup>5</sup> However, the picture is granular. China's motivations for becoming a peacekeeper are multi-layered, changing over time, and consist of "soft" reputational interests and "hard" national interests. As in everything else with China, the 'soft' shall turn 'hard', and benign shall turn malignant, as the time progresses.

The Chinese and pro-China views first. According to the Chinese media, Beijing's deepening engagement with UN

peacekeeping is a building block for the development of China as an “internationally socialized country” that can operate effectively in a multilateral environment, as well as a “responsible great power.”<sup>6</sup> According to China scholar Courtney Fung, China’s involvement is based on a desire to be perceived both as a great power and as an ally to developing countries. Furthermore, attaching Chinese military and police forces to peacekeeping operations provides a low-risk, non-confrontational means for China to strengthen its command-and-control structure, test its crisis-management capabilities, explore the logistical challenges of supporting an overseas presence, and offer valuable training to its troops.<sup>7</sup> A foray into UN peacekeeping provides many other benefits. According to Logan Pauley, deploying peacekeeping troops affords the PLA an opportunity to improve its ‘Military operations other than war’ (MOOTW) and modernize its security forces.<sup>8</sup> Troops that participate in peacekeeping efforts receive valuable on-the-ground experience.<sup>9</sup> Japan’s National Institute for Defense Studies explains change in China’s approach as a sign that China felt concerned about the “global interventionism” based on the values of democracy, human rights, and humanitarianism, espoused mainly by Europe and US. Thus, it looked to strengthen its engagement in UN peacekeeping activities as a means of “constructive development.”<sup>10</sup>

However, for an aspirational China, UN peacekeeping is just the tip of the iceberg. Finally what China aspires is global leadership, with BRI is at the vanguard, representing more than USD one trillion in funding and partnerships with more than sixty countries inside and outside the Asia-Pacific region. Other Beijing-led institutions, including the Asian Infrastructure Investment Bank, the New Development Bank, and the Silk Road Fund, have been established alongside existing Western economic organisations. For these initiatives to succeed Beijing requires security and stability. Participation in UN peacekeeping, including missions that involve war-to-peace transitions, may help Beijing achieve those desired outcomes.<sup>11</sup>

### **Assertiveness and Image Building**

China’s assertiveness in global affairs is increasing. In UNSC, China, as a permanent member has only employed its veto privilege 14 times. However, it may be noted that China has cast 13 of its

14 vetoes after 1997. Chinese interest in peacekeeping is linked to its image building, which often takes a hit due to incidents like Tiananmen Square massacre, propping dictators in Africa, or robbing Hong Kong of its precious autonomy. In Darfur, Sudan an estimated 300,000 people were killed in incidents of ethnic cleansing from 2003 to 2009. The Chinese government however continued its aid to the Sudanese government, even as other countries imposed sanctions and Khartoum became increasingly isolated. China was criticized for its involvement in the exploitation of oil in Sudan and for the fact that the majority of the weapons used in the massacres had a 'Made in China' stamp. There were even calls for a boycott of the Beijing Olympics. To counteract this, China appointed a Special Representative on African Affairs in May 2007 and took a decision to send 275 engineers to the African Union/United Nations Hybrid Operation in Darfur (UNAMID).<sup>12</sup>

Increasing its profile as a peacekeeper had also served the purpose of breaking out of the international isolation in which China found itself in the aftermath of the Tiananmen Square events of 1989.<sup>13</sup> UN peacekeeping provided a platform for China to gradually rehabilitate its international image and maintain a working relationship with Western countries, especially the US.<sup>14</sup> It is still working on the same premise, even after the current US-led pushback against China that was accentuated by China not disclosing facts about the origins of Coronavirus

### **Chinese Peacekeeping**

Ever since China began to reform the PLA in 2015, UN peacekeeping has been an integral part of the restructuring processes. In September 2015, Xi pledged to create a standby force of 8,000 peacekeepers and a permanent peacekeeping police squad. China followed through two years later with the registration of the peacekeeping force with the UN. Among this force are six infantry battalions, and enabling units such as three companies of engineers, two transport companies, four second-grade hospitals, four security companies, three fast-reaction companies, two medium-sized multipurpose helicopter units, two transport aircraft units, one drone unit, and one surface naval ship. The readiness and the level of equipment of these units are highly assessed by UN. In addition, the UN welcomes the fact that China places few caveats on the troops it pledges.<sup>15</sup>

Beijing complemented this push by committing to a 10-year, USD 1 billion China-UN Peace and Development Fund for peacekeeping operations. Xi's pledge was targeted at specific areas of interest, with USD 100 million being earmarked for military assistance to the African Union. This was earmarked for building of an African Standby Force, with Chinese assistance. In March 2019, China announced that the fund would support nearly double the number of peacekeeping training and capacity-building programs.<sup>16</sup>

China is augmenting all facets of its peacekeeping capabilities. PLA has commenced special-operations training for Chinese UN forces at a base in Hainan Province. By late 2017, the PLA had organized nineteen separate units for engineering, helicopter crewing, infantry, transport, security, and rapid-reaction forces that could be deployed for peacekeeping missions.<sup>17</sup> China has built up training centres for police and military peacekeepers, where it trains both Chinese and international peacekeepers. Around 500 foreign military peacekeepers from 69 countries have already been trained. China plans to increase that number to 2000 by end-2020. International observers report that the standards and content of the training are in line with UN expectations.<sup>18</sup> Since the early 1990s, China has deployed approximately 38,000 personnel for UN missions, with the current deployment around 2,600 troops in 14 missions. In 2000, China contributed a total of USD 12 million to the UN regular budget—accounting for just one percent of total contributions. By 2019, this number had surged to USD 367.9 million, making China the second-largest contributor after the US.

Scholars in China are already calling for China to shift from being a “participant” in UN peacekeeping to a “leader”.<sup>19</sup> Accordingly, China is seeking greater role in various UN peacekeeping field and policy positions. In August 2007, Major General Zhao Jingmin became the first Chinese national to be appointed as the Force Commander for the UN Mission for the Referendum in Western Sahara (MINURSO).<sup>20</sup> In 2016, Beijing sought the leadership of the UN Department of Peacekeeping Operations, a position that has been dominated by France. If China is able to assume a top UNPKO post like Under-Secretary General for Peacekeeping Operations, and Chinese peacekeepers continue to be the most prolific forces in peacekeeping missions, China stands to have much greater influence.<sup>21</sup> The increasing footprint

of China is already being recognised – both internationally and within China. In February 2018, the fifth cadre of the Chinese Peacekeeping Force to Mali was recognized with the Peace Medal of Honour, a preeminent award given by the UN for contributions to peace. In South Sudan, the completion of the Chinese-engineered Kuacjok-Wau-Tonj main-supply route, which will improve supply and aid transport to the country, was widely celebrated.

## Worldview and Foreign Policy

In China, everything is linked, and possibly planned. It views itself as a Middle Kingdom, and aims at restoration of an international order where the Middle Kingdom gains supremacy in the region and beyond. Chinese commentators refer in quite concrete terms to the benefits of participation in peacekeeping, including the contribution this makes to modernizing the PLA, to containing the US and Taiwan, securing economic interests abroad, particularly resources and markets in Africa, and expanding Chinese influence in the UN and in the region.<sup>22</sup>

China's commitments to peacekeeping have made its security policies more versatile - a better match for Beijing's growing global diplomacy toward states and regions beyond China's periphery, as well as making it better prepared to respond to non-traditional security concerns such as terrorism, insurgencies, and weak or collapsed states.<sup>23</sup> As one analyst concludes, *"China's decision to participate more vigorously in UN peacekeeping operations stems from its interest in building an identity as a 'peacebuilder' that understands the connections between underdevelopment and insecurity, which are inherent in many current civil conflicts."*<sup>24</sup>

Another motivation lies in China's interest in strengthening multilateralism and the UN system. Multilateralism has been a regular part of China's foreign policy lexicon since the mid-1990s. The UN is the only major international security institution in which China holds significant power, including veto power. In China's view, a marginalized UN would mean more unilateralism by the US and its allies. By increasing its contributions to UN peacekeeping, China hopes to help strengthen the UN as the only legitimate source of authority for international peace and security.<sup>25</sup> The NATO air campaign in Yugoslavia in 1999 was hard for China to accept, with the Western allies seeming to slight the UN and taking the decision to use military force based on humanitarian

justifications. A desire to curb the Western-led global interventionist movement was part of the background to China's policy shift.<sup>26</sup>

China is also the only permanent UN Security Council member that sees itself as both a great power and a member of the global South. A deepened engagement in peacekeeping - an activity that takes place predominantly in developing countries - helps to foster China's image as the leader of the developing world. Being perceived as a responsible, altruistic peacekeeper without an imperialist legacy garners support for China among developing countries, which in turn strengthens its influence within the UN.<sup>27</sup> This explains the Chinese volte-face on UN peacekeeping.

### **Dragon in Dark Continent**

Of late, the aggressive behaviour of Chinese diplomats, from Canberra to London, has also been termed as 'Wolf Warrior Diplomacy'. The origins are in the 2017 Chinese blockbuster movie *Wolf Warrior 2*, which also offers an insight on how China sees its engagements in Africa. The movie tells the story of Leng Feng, a former special force soldier who has to protect Chinese medical aid workers, Chinese expatriates, and African employees in a Chinese-run factory from ruthless African militias. In his exploits, apart from some hand-to-hand combat, and saving a little African boy, he teams up with a female Western aid worker, of whom he asks, "*Where are the US Marines when you need them?*" hinting that the Chinese do not abandon their people, but the Americans do.<sup>28</sup> In short, China views itself as the dominant power-to-be in Africa.

Beijing's pivot to Africa is underway. Chinese peacekeepers are currently deployed in ten different operations in North and sub-Saharan Africa and the Middle East, with the largest number of personnel currently deployed for missions in South Sudan, Mali, the Darfur region of Sudan, and the Democratic Republic of the Congo (DRC). English speaking officers from China are not a rarity anymore, and in Mali, Chinese troops are learning French. In its relations with Africa, China capitalizes on the fact that China has no history of colonialism in Africa and is carefully curating its image as a leader of the Third World, whose experiences with economic development can be valuable for other developing countries.<sup>29</sup>



The first Chinese overseas military base has been set up in Africa in Djibouti in mid-2017. It was initially termed as a logistics support base to act as a hub for peacekeeping and other strategic policies in Africa and the Indian Ocean region.<sup>30</sup> Though the Chinese government has asserted that its peacekeeping efforts stem from a desire to contribute to global stability, it is evident that the Chinese peacekeeping efforts are intertwined with Chinese economic interests, particularly in Africa wherein China has been expanding its economic footprint.

Notable cases of countries with both Chinese peacekeeping presence and substantial Chinese investment include the DRC and South Sudan. China has significant investments in the DRC, including an 80 percent stake in one of the world's largest copper and cobalt mines. In early 2018, China had signed a USD 248 million loan agreement for South Sudan. In May and July 2018, China abstained on two UNSC resolutions that extended sanctions on South Sudan. China has provided a full infantry battalion of 1,031 peacekeeping troops South Sudan while it has a stake in South Sudan's oil resources, and in April 2019 increased its imports of Sudanese oil from 10,000 barrels per day to 30,000 barrels per day. Data from the China Global Investments Tracker and the International Peace Institute indicates that between 2012 and 2018, China contributed peacekeeping personnel in thirteen countries. Of these thirteen countries, nine had significant Chinese investment either in the year or three years before Chinese peacekeepers arrived. This proportion notes a high correlation between peacekeeper presence and investment.<sup>31</sup>

## **The Future**

The US foreign policy fluctuates between isolationism and activism. The US commitments in terms of funding to the UN bodies had become uncertain under the then Trump administration. In April 2020, in middle of the Coronavirus pandemic, US announced stoppage of its USD 400 million funding to WHO. Predictably, the next week witnessed China announcing a USD 30 million increase in funding for WHO. The story of UN Peacekeeping is similar. Although the US remains the peacekeeping program's top funder at 28 percent of the program's budget, the Trump Administration had proposed a 27 percent decrease in US contributions for the 2020 fiscal year.<sup>32</sup> It remains to be seen whether this trend will

be continued by the Biden administration. Beijing sees Washington's waning presence in UN peacekeeping as a wide-open door to take a bigger role on the multilateral stage. China's role in peacekeeping shall continue to grow as the US scales back its contributions. Money speaks. The UN Secretary-General António Guterres has stated that China now stands to become an "honest broker" and "bridge-builder" in international conflict.<sup>33</sup>

Given China's significant investments in its peacebuilding capabilities, it is clear that China will increase its contribution to UN peacekeeping. China is also expected to play a prominent role in providing equipment and weapons systems. Every year the UN spends between USD 1 to 2 billion on renting and buying equipment and weapons systems for peacekeeping operations. China has offered the UN a wide range of equipment and technology, including UAVs, ground surveillance radar, infra-red cameras, anti-UAV systems, access control technologies for increased camp security, small-size weapon locating radar, communications networks, and light-armoured, transport, and medical vehicles. With an increased role for China, it is probable that UN peacekeeping will increasingly buy Chinese technology and equipment.<sup>34</sup>

## **Conclusion**

The US's unipolar honeymoon is over. Strategic competition between the major powers is back, and rising powers like China shall use all means and forums to increase their influence, from BRI to peacekeeping. Keen to change the status quo, China has an interest in engaging with the UN, as long as engagement turns out to be a net positive for Beijing. However, there are challenges as modern peacekeeping does not always fit into Chinese perceptions of impartiality, respect for sovereignty, the requirement for consent, and "win-win" situations.<sup>35</sup> As in the ancient Greek story, the Trojan horse contained soldiers; the Chinese peacekeepers are the seemingly benign pioneers, who shall be followed by Chinese investments, BRI projects, false maps, vague dashes called lines and finally an overwhelming Chinese influence.

Expect more of Chinese presence in peacekeeping in 2021 as a means to improve its battered image post the Coronavirus pandemic. The tensions between India and China are rising. Even otherwise, India, with its close ties with Africa, long traditions of UN peacekeeping, justifiable claims to an expanded UNSC, and



ongoing competition for global markets, should be wary of an increased Chinese footprint in form of peacekeeping. Increased Chinese military presence in Africa, particularly on the Eastern shores along the IOR, may become the next pearl in the Chinese strategy of 'String of Pearls'. To counter the same, India should create a standby force to match the Chinese force as well as an UN Peace and Development Trust Fund for joint India-UN peace initiatives. As the Latin phrase goes, *Timeo Danaos et dona ferentes*, we should be beware of those bearing gifts.

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# Political Developments in Nepal and the Chinese Involvement

Prof Sangeeta Thapliyal®

## Abstract

*The dissolution of parliament in Nepal has brought the focus back on its fragile democracy. After years of political instability, a new constitution and one party with absolute majority in the general elections gave the impression and hope that the future looked promising for political stability. But that did not take place. Nepalese politics have remained volatile. The article makes an assessment and suggests the path for India keeping in view Chinese machinations.*

## Introduction

The political infighting within the ruling Nepal Communist Party has engulfed the political landscape and vitiated the atmosphere. Prime Minister KP Sharma Oli dissolved the lower house of parliament on 20 December 2020. Even though the events were due to infighting within the ruling party but the active involvement of China in the party politics cannot be ignored more so because it was responsible for the newly formed left party. The present Chinese Ambassador Ms Hou Yangi was seen meeting the political leaders to stall friction and split in the ruling party. China had sent a four-member delegation led by the vice minister in the International Department of the Communist party of China, Guo Yezhou, to assess the political situation and stabilise unity within the NCP. It is in China's interest that a stable but pro-China Communist party government remains in power in Nepal.

## Nepal's Tryst with Communist Parties

Nepal Communist Party (NCP) was established with the merger of the Communist Party of Nepal (United Marxist Leninist) [CPN (UML)] and Communist Party of Nepal (Maoist Centre) [CPN (MC)]

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®Prof Sangeeta Thapliyal is faculty in the Centre for Inner Asian Studies, Jawaharlal Nehru University. She works on strategic issues concerning South Asia with a special reference to Nepal. She has been Director, Department of Strategic and Regional Studies, University of Jammu. She has worked with the Observer Research Foundation, Delhi Policy Group and the Institute of Defence and Strategic Studies.

in May 2018. Before the merger there was electoral alliance for the first general election held under the new constitution in May 2017. The UML led by KP Sharma Oli and CPN led by Pushpa Kamal Dahal alias Prachanda agreed for the electoral alliance and field candidates on 60:40 ratios. But the results were unexpected as UML won nearly 70 per cent of the votes and looked for a larger share in the seats allocation. Following series of negotiations between the alliance partners a 7-point agreement was signed on 19 February 2018.<sup>1</sup> As per the agreement the two parties agreed to merge as the Nepal Communist Party and adopted the party symbol of UML, that is the rising sun; both the leaders Oli and Prachanda would be Prime Minister (PM) on rotation; UML would get the posts of President of the country and Deputy Speaker of the lower house and CPN (MC) would get Vice President and Speaker. Central Committees of both the parties were dissolved and merged to form NCP on 17 May 2018.

One of the reasons for the left unity was to counter Nepali Congress in the election. The combined party did consolidate the left vote and gave an edge over the Congress. In this attempt China had played a key role in bringing the two left parties together. China wanted to consolidate Oli's position as a good working relationship had developed during his government from 2015-16. It had coincided with Nepal's strained relations with India due to border blockade by the Madhesi protestors. During that period Oli as the caretaker prime minister of Nepal had looked towards China for support that gladly accepted to fill the vacuum. Nepal's relations with China had grown substantially. Many agreements related to infrastructure development, connectivity and energy were signed between the two. There was a consensus in Nepal that the country should come out of its overdependence on India and look for alternative routes for trade and transit. With these developments in the background, China sided with the left unity to ensure Oli's win in the election.

### **The Friction in the Left Alliance**

However, the very foundation of the left unity was faulty. They had different history, approach, and orientation. The CPN (UML) was an alliance of seven left parties formed during the people's movement against the Panchayat rule in 1990. It believes in socialism, constitutionalism, and multiparty democracy. On the other

hand, the Maoists had come to mainstream politics with a background of leading people's war for 10 years from 1996 to 2006. They indulged in loot, arson, killing people and believed in one party rule. It was the comprehensive peace agreement of 2006 that stopped the people's war and brought Maoists to the mainstream politics.<sup>2</sup> With these differing backgrounds the two parties had come together. CPN (MC) had agreed to leave the Maoist ideology as was decided in the seven-point agreement and settled for Marxism-Leninism for the time being. The ideology of the new party had to be further discussed and decided in the general convention.

Ideology wasn't a strong glue to keep the two factions together and cracks were visible in no time. Power sharing and distribution of constitutional positions to their favorites was the major bone of contention. Prachanda was looking for the post of Prime Minister as Oli had completed half of his tenure but was not willing to share the post with him. Prachanda started asking for 'one person, one post' that meant Oli had to be either PM or Chairman of the party. Both Oli and Prachanda were chairmen of the party. Blaming Oli of running the government without consulting the party, Prachanda submitted a protest note to the party secretariat on 18 November 2020 and Oli responded with a 38-page note.<sup>3</sup> Even leaders from the erstwhile UML faction blamed Oli for bypassing standing committee while appointing officials. Madhav Nepal had submitted a protest note to the party secretariat against Oli's style of functioning.<sup>4</sup> Oli was also criticised for misgovernance and mishandling of the Covid-19 crisis. Every time the infighting became intense the Chinese ambassador was actively involved in trying to unite the factions. Nepali media reported that the Ambassador was seen meeting party leaders without taking prior appointments.<sup>5</sup>

### **China's Policy of Sinification of Nepalese Communists**

China had established ideological linkages with the Nepal Communist party and tried to push Xi Jinping's ideology. A workshop was organised by the Communist Party of China (CCP) in collaboration with the Nepal Communist Party to discuss Xi Jinping's Thought in September 2019. The meeting took place before the visit of President Jinping to Nepal in October 2019. Song Tao, head of the CCP's International Department, led the fifty members Chinese delegation. PM Oli and other senior leaders such as

Prachanda, Madhav Kumar Nepal, Jhalanath Khanal and nearly 200 party cadres attended the two days' workshop. The workshop shared Jinping's ideas on Chinese model of economic development and socialism. A six-point Memorandum of Understanding was signed between the two parties emphasising on regular visits and exchange of cooperation and programmes at the leaders and cadre level.<sup>6</sup> Jinping's thought on socialism with Chinese characteristics was a blueprint to consolidate position of the party at every level.

The Nepali Congress, the main opposition party, expressed concern over indoctrination of the NCP cadres by China. Congress leader N Bal Krishna Khand was reported saying in People's Review that, "the workshop showed that NCP was a sister organisation of the Chinese Communist Party".<sup>7</sup> Due to Covid pandemic the next meeting between the two parties was held virtually in June 2020. The meeting was held around the time when the forces of India and China had clashed in Galwan. Interestingly, the foreign affairs department of the NCP showed ignorance on the conduct of the meeting though the Deputy PM Ishwar Pokhrel chaired it and Prachanda was the Chief Guest. Nepali Congress leaders such as Udaya Shumsher Rana again issued statements criticizing the meeting. He said that, "the two ruling communist parties seem to be dictating the governments, on similar lines as China's relations with Cuba and North Korea."<sup>8</sup> It was not just the ideological and fraternal linkages between the two parties but "clubbing the party and the government's policies together"<sup>9</sup> that was disturbing to many in Nepal and considered as a political tilt in favour of China.

### **External Political Linkages and Internal Party Politics**

Through the ideological linkages China tried to establish close political linkages. This was a transition from the past where China had recognized monarchy as the political force. After the abolition of monarchy as a political institution in 2008, China had tried to develop relations with many political parties. To some extent they have been successful to identify leaders in every party sympathetic towards them. Some politicians have business interests in China and personal interests guide their decisions. However, of all the political parties China was able to identify UML friendlier towards them and easy to deal with. Nepali Congress and the Madhesi parties are generally identified as closer to India. Even though



China had not extended support to the Maoists during the people's war, but they found them a willing party to go along with the UML. However, as said earlier that unlike China, ideology is not a strong variable to keep the two factions together in Nepal. The socio-political systems in the two countries are different, China has one party rule with strong control over institutions whereas Nepal has too many parties and too many prominent leaders within each party. It is difficult to have one party rule in Nepal.

As of now it is certain that the left unity in the NCP is broken but it is not clearly established which is the legitimate faction of NCP; the one led by Oli or the other by Prachanda-Madhav Nepal. The election commission in Nepal has ruled out giving recognition to both the factions as legitimate NCP as they failed to follow party statute and Political Parties Act 2017.<sup>10</sup> Unless that is cleared, elections cannot be held on the stipulated dates on April 30 and May 10, as was declared by the President's office. China is still making efforts to keep the ruling party intact. It is said that PM Oli felt that the Chinese emphasis is more on party unity than in supporting him and this led him to dissolve the house.<sup>11</sup> To have a strategic hold in Nepal, a favourable government would be ideal but like elsewhere China would try to control Nepal economically.

### **Chinese Economic Inroads and Big Power Politics**

China has gained entry in trade and infrastructure development. Efforts were made to establish closer ties during President Xi Jinping's visit to Nepal in October 2019, the first in 23 years by a Chinese President. Bilateral relations were elevated to the level of strategic partnership. Nearly 20 agreements, treaties and MoUs were signed on various sectors like transport, agriculture, and industry.<sup>12</sup> Xi Jinping had agreed to provide Nepalese Rupees 56 billion assistance to Nepal for development projects over the next two years. Nepal had become a member of the Chinese supported Belt and Road Initiative in 2017 and many agreements on infrastructure development have been signed within its ambit such as Kathmandu-Kerung railway, Galchi-Rasuwarahi-Kerung 400 KV transmission line, Dipayal-Tokla-Chahre road etc.<sup>13</sup> China is the highest FDI contributor in Nepal. Its Overseas Development Assistance has also increased to \$ 38 million.<sup>14</sup>

There are concerted efforts to enter education, culture and tourism sectors. Both the countries have had joint military exercises

named 'Sagarmath Friendship'.<sup>15</sup> The China International Development Cooperation Agency is reported to have provided assistance in 15 northern districts of Nepal bordering Tibet.<sup>16</sup> China is particularly wary of any support to Tibetans from Nepal. There are nearly 2000 Tibetans living in Nepal. Due to the Chinese pressure, Nepal had stopped giving refuge to them or to allow its territory to be used as a transit to reach India. The latter was relaxed with the intervention of UNHCR. There have been reports that many Tibetans have been arrested or deported to Tibet. The Chinese were particularly disturbed when there were pro-Tibetan demonstrations in Nepal during the Beijing Olympics in 2008. After this incident, the Chinese presence increased in Nepal and it made concerted efforts to look for political allies in the absence of monarchy. Some of their efforts have paid dividends as is seen in opposition from certain quarters within political parties to the US development assistance through Millennium Challenge Corporation Nepal Compact (MCC). Political leaders are divided on it. Nepali Congress, PM Oli and Foreign Minister Pradeep Gyawali are supportive of it but the Maoist faction considers it as within the Indo-Pacific strategy and a military alliance with the US. Global times has reported that it received a joint letter signed by the Nepalese organisation, party members and individuals from Nepal against the MCC alleging it to be an American strategy to counter the Chinese connectivity strategy of Belt and Road initiative.<sup>17</sup>

China has tried to use domestic politics and the vulnerabilities of the Nepalese political elite to its advantage. Oli, cornered by the growing opposition from within the party, had taken refuge in programmes and policies that were nationalistic. He not only laid claims on Kalapani, Lipulekh, and Limpiyadhura pass in India but also issued a new map incorporating the territory. Both the houses of parliament had unanimously approved the new map.<sup>18</sup> General MM Naravane, the Indian Army Chief, was quoted in the media saying that, "there is a reason to believe that they might have raised the matter at the behest of someone else".<sup>19</sup> That "someone" is considered as China — more so because Nepal's new map was issued close to the border skirmishes in Ladakh. Also, the territory of Kalapani is at the trijunction of India-Nepal and China. China is challenging India not only in the Indian Himalayas but also through the Himalayan countries. There are allegations that China has encroached in Rui village in Gorkha and other areas in

the northern districts of Nepal bordering Tibet.<sup>20</sup> It is challenging India's traditional ties and presence with the Himalayan country, as is done with other South Asian countries, further raising strategic concerns. China is getting involved into projects in Terai. It wants to make a manufacturing hub in Nepal while eyeing the big Indian market. It wants to create a \$ 450 million trade hub in Nepal. Rudra Singh Tamang, the administrative Chief of Kathmandu Metropolitan Corporation said that, "China's Shenzhen province has sister-city relationship with Kathmandu Metropolitan Corporation. With the establishment of the Chinatown, India's vast market will be open for Chinese goods via Nepal. This will also help promote trade and business for Nepal."<sup>21</sup> China has established an industrial park in Jhapa and is planning to establish another in Chitwan, the hometowns of PM Oli and Prachanda respectively<sup>22</sup>.

There are many in Nepal cautious towards Chinese presence. The awe towards China is weaning in Nepal. Till recently it was an unknown, untested territory. However, there have been reports of clashes between the locals and the Chinese nationals working in projects<sup>23</sup>. Chinese embassy had taken objection<sup>24</sup> to a news item on Covid 19 virus by Anup Kafle of Kathmandu Post, Nepali daily, and issued a statement which was considered as threat and condemned by the media fraternity. It was seen as clash between the fundamental core values of liberal democracy and communists.<sup>25</sup> Nepali media, commentators, policy experts have been critiquing China's interference in the country's domestic affairs.<sup>26</sup> The allegations that were earlier heard against India are now hurled at China especially on interference in the domestic politics. India's stance of not getting involved in the present political situation has been well appreciated in the country.<sup>27</sup> This in no way means that people have turned towards China or there is a change of heart towards India. In a personal interview Bishwa Bandhu Thapa made an interesting assessment of Nepal's neighbours that "India is like cow. It eats grass and when hungry or annoyed can kick at the most. China is like lion. It eats meat and when hungry can eat the person feeding it." This surmises the perceptions of many. Close familiarity with India brings in complexities along with it but in no way is considered a major threat to Nepal.

## **Conclusion**

PM Oli has been smart to use India and China to his advantage.

He was considered close to India but turned towards China after he perceived that his interests were hurt by India such as he had blamed India for the fall of his government in 2016.<sup>28</sup> Today he has projected himself as an independent leader who can stand up to both India and China. At this juncture over-emphasising the China factor in Nepal would create larger than life image giving it more strength and credibility. In this hour of political instability India should not try to play favorites in the country. It would be prudent to continue developing relations with Nepal in every sector be it social, economic, or political and try to gain ground without seen as interfering or supporting any actor.

## Endnotes

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<sup>9</sup> Ibid.

<sup>10</sup> “Nepal Election Commission refuses to give legitimacy to either faction of ruling NCP Hindustan Times, 25 January 2021.

<sup>11</sup> Ranjit Rae, “Oli has played a chess move to save his position; impact on Nepal to be seen”, Economic Times, 21 December 2021.

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# Standing Up for Few Good Men

Lieutenant General KJ Singh (Retd)<sup>®</sup>

## Editor's Note

*This personal narrative recounts an incident where the author had to ensure that justice was done in case of men who were unwittingly drawn into a misdemeanour in counter insurgency operations and brings out many lessons for dealing with such situations if they ever occur.*

The recent trial of an army Major (Maj), in an incident of staged abduction and elimination of innocent civilians in Shopian district,<sup>1</sup> brought back painful memories of a similar ghastly incident, in Punjab in 1993. Unfortunately, in rare cases a young officer with overzealous or malevolent tendencies may fall prey to greed and diabolical conduct. It is sad that despite being exposed, such despicable acts happen, tarnishing the otherwise excellent track record of armed forces in challenging environments. This happens in all armed forces under stressful conditions, My Lai being a very prominent example.<sup>2</sup> There is a general tendency to avoid debate on such incidents but it is important to analyse them and learn appropriate lessons.

The incident under discussion occurred in Mar 1993 in the dying phase of Punjab militancy. It was covered extensively by the print media.<sup>3</sup> Hype was fuelled by the fact that unlike the Punjab Police which was often accused of ham handed and ruthless approach, the army had maintained an impeccable record till this isolated incident. The story's principal character was Maj PS Gill, who was tried in his substantive rank of Captain. In 1983, as a newly commissioned officer, he walked into my office when I was Adjutant of my regiment. He introduced himself as 'Pinky'. In my perception he was a tough, stout and eager Sikh, with awards in the Rashtriya Indian Military College (RIMC), the Officers Training Academy (OTA) and national level shooting, and needed a more appropriate pet name. I decided to call him 'PS', which became his

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<sup>®</sup>Lieutenant General KJ Singh, PVSM, AVSM & Bar (Retd) is State Information Commissioner, Haryana. He is a former Western Army Commander & Advisor to CM, Haryana. He has held the Maharaja Ranjit Singh Chair in Punjab University. He is member of UT Advisory Council and is a regular columnist in many leading newspapers.

Fauji name. He showed great promise and was picked up as ADC by our Colonel of Regiment. In the aftermath of Mrs Indira Gandhi's death, his life was saved by another regimental officer, when a mob attacked his train compartment.

My regiment was deployed for countering militancy in Punjab and he was leading a column in Malerkotla area. The incident being narrated unfolded with the detention of a 26-year-old jaggery trader, Valjinder Kumar Singla, from a check post established by the army on the highway on 01 March 1993. The explanation given by PS to his men was that the person was a terrorist. He was confined in the isolated Moharana canal rest house and sum of Rs 32,000 which was with him, was taken away. Later, a demand for a ransom of Rs 35 lakhs was made from local number to his relatives. It is important to remember that there were no mobiles then. It was later learnt that on 03 March 1993, he was dumped (with stones in his clothes), resulting in his drowning in the Bhakra canal. Despite a concerted search, his dead body could never be recovered.

The check post party, commanded by PS and included one Junior Commissioned Officer (JCO) (Risaldar Amar Singh), two non-commissioned officers (NCOs) (Dafedars Vijay and Surender), and a driver (Surinder Pratap or SP). Sepoy Virender who was the officers orderly was also dubbed as collaborator in this incident. Soon after disposal of the detainee the officer proceeded on leave. He also sent all members of his party on leave. His plan was to proceed on the Junior Command Course, for which he stood detailed, after leave. Concurrently, the army was also scheduled to pull out from anti-militancy operations in April 1993.

The officer had applied his amateur planning skills by choosing an isolated stretch of road on inter district border. Yet, unknown to him the spike in crime had spurred the Punjab Police to deploy special pickets in this area, under a highly motivated ex-Olympian officer. Since the army had discontinued deploying check posts, deploying the one in question was logged by Police and the Central Reserve Police Force (CRPF), as aberrations, adding to evidence. PS chose the supposedly deserted canal rest house. However, but as per rotational roster, Mohrana rest house was the venue for pay distribution in that month. This lead to congregation of troops there some of whom heard the wailing of the detained trader.



The officer's over confidence was also fuelled by having a relative in the police, local friends and proximity to his native place. Yet, these only contributed to his nailing, as a maid at one friend's house testified that the officer had made calls from there. As providence would have it, the local manual exchange had been upgraded to electronic in that very week, enabling call tracing. The lesson is very clear; every crime leaves a very long trail and tell-tale signs. Despite planning to cover up, the law in all probability will catch up, especially in the current age of electronic surveillance.

All hell broke loose on 08 March, as the Punjab Police and Military Intelligence homed in on the culprits. PS was recalled and arraigned for enquiry on charges of murder, abduction and extortion. During custody, PS ran away in an army jonga (light vehicle) on 10 March, leading to a Hollywood style chase across two states, till he surrendered at Suratgarh, the next day. After, a summary of evidence, a General Court Martial (GCM) was convened. The JCO readily became an approver and became the common thread to string together the plot for prosecution. Notwithstanding absence of a dead body, there was a trail of considerable circumstantial evidence. Armed with confessional statements of men, the prosecution was in an over drive to wrap up the case. The charge was led by experienced, retired Judge Advocate General (JAG) officer, hired as the prosecution counsel.

In such trials, the accused, specially *jawans* (soldiers) are entitled services of legal counsel at government expenses. On defence side, PS privately engaged another equally renowned ex-legal branch officer. Daffedar<sup>4</sup> Surender hired a retired JCO, masquerading as a lawyer, on government expenses. Daffedar Vijay, Sepoy Virender and SP (the driver) asked me to defend them. It was literally the biggest challenge of my career, as I had no legal background. Institutional advice of my reporting officers — Brigade Commander, new Commanding Officer (CO) and others was to avoid this task as it amounted to defending the indefensible. They also felt that I would be absent from the unit when we had an acute shortage of officers; my friends also called it avoidable 'panga'<sup>5</sup>. I tried to objectively advice the *jawans* about my limitations and attendant risks. They surprised me by sticking to their decision and enhanced my dilemma by getting their families to write and appeal to me.

It was gratifying at one level to enjoy their confidence, yet at another level, the responsibility appeared too heavy to shoulder. Above all, I was risking a critical appraisal report in case I fared poorly in a task for which I was not trained. However, a sense of loyalty to my men who had requested my assistance made me accept the task. There are times in life, when one has to make a choice, between playing safe and taking a '*panga*'. I was facing this dilemma during this critical year of my career when I was to earn a report which was essential for upward progression. It was a double whammy of sorts, as I had refused an extension in a UN mission to return for this report.

Conventional legal wisdom and all available advice recommended joint defence by all accused. My reading of the case led me to a unique but untried line of argument. The simple basic premise was that jawans were merely victim of circumstances. Study of sections 34 and 35 of Indian Penal Code (IPC) covering nuances of joint/collective responsibility and explanations of common/similar intention, fortified my belief. My research resulted in the conclusion that I needed to adopt an independent line of defence. This decision resulted in some ill-informed people questioning my sense of camaraderie and jettisoning of a regimental officer (PS). I decided to follow the Chetwode code and hold the officer accountable for betraying the trusting jawans, that too in operational area where freedom of action for men is minimal. It really meant that I had to open another front against PS. Accordingly, I asked for a separate designation, seating area and cross-examination of the main accused. My unpleasant task was to build and prove the narrative of coercion and intimidation by the officer for defending the jawans. This was initially scoffed by seasoned lawyers on both sides as an amateurish foray. After the trial, the seasoned lawyers accepted that it was indeed a good legal approach.

My regiment was short of officers and was located in Ambala, while GCM had been convened in Patiala. Road connectivity between two places in 90s was impacted by construction of a new highway and the Shambhu barrier was the main choke point. Every challenge throws up solutions, consequently we discovered service roads and canal tracks to bypass the traffic jams. My basic routine was to leave for Patiala, very early in morning, returning in evening to catch up with regimental work. It is to credit of my squadron that

they went the extra mile with me. The interesting part is that I used to give a lift to PS's father, who attended the proceedings, on the return trip uptill Rajpura.

I had to burn considerable midnight oil and prepare for the case every night. Reading up on law was tough but I had no choice. In pre-internet age, it was difficult to get hold of All India Law Recorders and read commentaries, on similar cases. It was equally tough to keep up motivation. Movies like 'A Few Good Men' and 'The Scent of a Woman', seen many times on videocassette recorder (VCR), helped to sustain my resolve. As the assignment was causing me obvious stress, my wife Anita kept visiting Gurdwaras to seek divine blessings for my guidance. The prayers must have helped because it did make me feel that I was pursuing a just cause in the case of the three men I was defending, who had unwittingly and unwillingly been drawn into act which was otherwise reprehensible to them.

Defending Virender was relatively easy as he had not been at either the check post or the canal site where the person was thrown. In case of Dafedar Vijay, while he was member of the check post, detailed on orders, but his sixth sense, literally, saved him. After initial detention of the trader, he had contrived to get detailed elsewhere as he did not want to be associated with an act where he was smelling a rat. This became clincher for me on the issue of his not sharing common intention. Analogies to buttress my arguments were drawn from similar cases adjudicated in High courts, by way of extrapolation.

The most difficult element of defence, related to SP, who though largely passive, had been present all along. He along with PS and others had helped to throw the deceased into the canal. As the case had progressed, pressures on me from various quarters increased but I persisted with my approach. The court was kind to acquit Vijay and Virender of all charges. Unfortunately, it convicted SP of partial complicity in murder, while acquitting him of other charges. Despite my appeals for mitigation to court and various authorities, SP was awarded dismissal and prison term. PS and Surrender were awarded dismissal and life imprisonment.

After nearly ten months, I got back to normal soldiering and got many requests related to court martials as I had earned the reputation of being a good defence counsel, but I could not accept

them. The simple reason is that Vijay, Virender and SP were my charge, they were my men and were not clients. Later, I learnt that SP jumped parole and he wrote to me that he is fine. His parting words, “on every Navratra, I will pray for you to be my squadron commander again”. I also pray that jawans like him are never caught up in such maelstrom. I also hope that after many years, PS can understand my obligations and loyalty to our men.

The objectives of this personal recollection are to highlight and reiterate four positive lessons. Firstly, caution to such offenders to steer clear of such acts as the law invariably catches up. So operate within the bounds of law, especially in disturbed areas as the army follows ‘zero tolerance’ policy. Secondly, need for loyalty to hapless men, who often get caught in such a maelstrom because of the military psyche of unquestioning obedience. Thirdly, to emphasize objectivity of our legal and trial process, this is both swift and fair. Finally, law which is seemingly complicated is not beyond comprehension. Regimental officers can not only harness it, but apply innovative approaches. It is hoped that such narrations will dissuade malevolent tendencies as also inspire officers to protect their men, to uphold traditions enshrined in the Chetwode code.

## Endnotes

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<sup>2</sup> The My Lai massacre was one of the most horrific incidents of violence committed against unarmed civilians during the Vietnam War. A company of American soldiers brutally killed most of the people—women, children and old men—in the village of My Lai on March 16, 1968.

<sup>3</sup> Kanwar Sandhu, “Whiff of Scandal- Army Officer Faces Extortion and Murder Charges”, *India Today*, May 31, 1993. Accessed Jan 20, 2021 from <https://www.indiatoday.in/magazine/defence/story/19930531-army-officer-faces-extortion-and-murder-charges-811102-1993-05-31>

<sup>4</sup> A Sargent is called a Havildar in the Army except in the Armoured Corps where he is called a Daffedar.

<sup>5</sup> A colloquial Punjabi word meaning “Don’t mess with me without a cause” which is commonly used all over India.

## The End of an Era: India Exits Tibet, India-Tibet Relations [1947-1962]@

Claude Arpi

This is the fourth and final volume in Claude Arpi's tetralogy on India-Tibet relations from 1947 to 1962. Its dolorous title, "The End of an Era – India Exits Tibet" sums up the author's sorrow and anger at the way things ended up. It is, at the same time, one for the ages; the extensive coverage of first-hand sources makes it not just an intellectual tour de force, but also a valuable reference work.

The final volume covers the period 1958 to 1962, and tells the story of how the situation in Tibet reached a stage where open rebellion broke out against Chinese rule, the growing differences and distance between the Indian and Chinese leaders, and the war of October-November 1962. Arpi also explores the internal balance of power in China, and clearly links the hardening of Chinese positions on the border, and on India, to the return of Mao to active power after having been side-lined as a result of the failure of the Great Leap Forward. In the course of his researches, Arpi unravels very important facts. For one thing, he shows that the construction of the Lhasa-Urumqi Highway was known as early as 1953, and confirmed by an Army reconnaissance team in 1957. The report was submitted to the political leadership, but was rubbished by Krishna Menon as American propaganda.

Another insight provided is that Indian Air Force reconnaissance flights had established, as late as 1961, that the Chinese had no air assets worth the name in Tibet. This being known to the political and military leaders, it remains a puzzle why Nehru did not use the IAF in 1962. It might have made the difference between humiliation and honours even. Enough has been written about the intelligence failures, but this was not one. This was more a loss of nerve. Because Nehru did ask the US for twelve squadrons – no less! – of fighter aircraft and pilots in the perfervid weeks of the war.

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Arpi also narrates the account of the meeting between Krishna Menon and Chinese Foreign Minister Marshal Chen Yi in the summer of 1962, as war clouds were gathering. But Chen assured the Indian leader that there would be no war. At the same time, the author notes that there is no record of the discussion that took place. That begs the question whether this is indeed an accurate and full account of the talks. It also highlights, as Arpi does, the importance of watching internal developments in the adversary: the increasing role of Mao and his Defence Minister Lin Biao, who was moved into that position shortly after the Tibetan Uprising of March 1959. Even if Chen did indeed give such an assurance, and even if he was sincere – both big ifs – there was the problem that he was not in a position to deliver on that assurance.

The chapters on the Tibetan Uprising provide a wealth of detail, both as seen by the Indian Consul-General and, in a separate chapter, as seen from China. That trouble was brewing was apparent because the Chinese advised Nehru not to visit Tibet, though he had been invited by both the Dalai Lama and the Panchen Lama. The precipitating factor was, beyond doubt, the oppressive Chinese rule, in violation of the 1951 Agreement. The idea was for the formation of an independent Tibet under an all-of-society Commission. The crackdown that followed reverberated around the world, especially after the Dalai Lama escaped to India at the end of the month.

Arpi also adds the view from China: this is the booklet called *The 1959 Tibet Uprising Documents – Chinese Army Documents*. Released a “few years ago” according to the author, they show that the PLA took a realistic view of the situation inside Tibet on the Chinese side as well. The documents acknowledge that “the Chinese were not popular in Tibet” and complained about “the influence of foreign secret service agents” inside Tibet. The documents also admit that by the spring of 1959, the Army had lost control of the situation on southern Tibet. Weapons were coming in from Nepal, which also, along with India, had a Consulate-General in Lhasa.

Particularly noteworthy, it seems Mao was initially inclined to let the Dalai Lama escape to India, and gave relevant instructions on 12 March 1959. He subsequently changed his mind, around 17 March, and ordered that he should be stopped. There is some



evidence for this in Jianglin Li's book, *Tibet in Agony, Lhasa 1959*, but it does not square with Arpi's own assessment that Mao was weakened after the failure of the Great Leap Forward. And yet, it is worth bearing in mind, for what it tells us about the nature of Chinese decision-making. It is not all-seeing and all-wise, as much of the hagiography on China would suggest.

The parts of the book dealing with the border talks reflect Arpi's pain and confusion at the same time. He is clear from the outset that this volume does not cover the India-China boundary negotiations. And yet, they do logically figure in the narrative. Arpi is convinced that the Chinese were serious about the offer of a swap – India accepting their alignment in Aksai Chin, and they accepting India's alignment in the east, the McMahon Line. There is palpable anger and disappointment in him over the lost chances.

An intriguing part of the book is the fate of the 1961 UN General Assembly Resolution on Tibet. This is because this was the first and most important international document on Tibet since the Chinese occupation. However, Arpi leaves the chronology hanging, which is so unlike him. The Resolution is the first UN document that calls for self-determination for Tibetans; India did not support the Resolution, and indeed, India spoke to the issue only in 1965, after Nehru was gone. However, this is an important document and remains on the record of the UN. Those who argue that General Assembly Resolutions are not binding need to remember that Israel was created by a vote of the General Assembly. Arpi does not see this chronicle to its conclusion. This is a minor fault, in a magisterial study spanning four volumes.

Arpi deserves to be complimented for the commitment and hard work that have gone into this production. The frustrations of seeking reliable documentation from the catacombs of the Indian bureaucracy did not deter him from going after the best information available, and the result is one that he can take much satisfaction in. Thanks also to the United Services Institution of India for supporting Arpi's work.

It would be a pity if the books were only to be read and put aside as one more contribution to the literature on the subject. For there are topical issues here, as we pass "peak China", in the sense that it is growing increasingly isolated diplomatically, and several of these questions become live again. Most striking for me



is the obvious regret that Arpi has for the missed opportunities offered by the Chinese for a swap. If they were serious – there would be difficulties in the details – we should be clear that a settlement implies equally a closure of the Tibet question. It is instructive to read the Simla Convention documents and the near-parallel agreement between the Russians and the Mongolians. Starting from almost exactly equal positions vis-à-vis the Chinese, today, Mongolia is a sovereign country, Tibet is under the jackboot. The Russians, and the Soviets after them, were unrelenting in their demand for recognition of Mongolian independence, from Republican, Nationalist and Communist China.

India clearly was not. And there is an oddity here: in April 1947, when Nehru organised the Asian Relations Conference, he treated Tibet as an independent country. Its flag was displayed among all other nations' flags, its representatives travelled on Tibetan documents. Despite protests from the Nationalist China delegation, Nehru maintained this position and in his welcome address, he counted Tibet among the countries represented. But, inexplicably, he recognised Communist China's sovereignty over Tibet. No satisfactory explanation has been found for this volte-face. The answer may possibly be in the archives "lost" or in the British archives which are unavailable, for they were in close consultation with Nehru on these issues.

This was the original sin in our northern policy. Some Indian leaders saw all this clearly, notably Sardar Patel and Sir GS Bajpai, and advised Nehru to exercise caution. But that was not to be. Even among outsiders, the dangers were well understood. An article in *Foreign Affairs* [*India and the Tibetan Tragedy* By C. H. Alexandrowicz, April 1953], shows unusual prescience and points out that, through its hold over Tibet, China would extend her claims over territories that were once under Tibetan control – Sikkim, Darjeeling, Bhutan, and Nepal, the last of which used to pay quinquennial tribute to the Chinese Emperor until 1908. And, of course, the Government of Tibet had raised these claims against India in October 1947. The Chinese appear to be following the very pattern of behaviour described by Alexandrowicz. His warnings, too, were written before the *Panchsheel* Agreement of 1954.

It is frequently argued that India did not have a military option in 1950, when the Chinese invaded Tibet. In the light of the information provided by Arpi and others, this is open to serious doubt. It is worth emphasising that the Chinese were obliged to move their goods to Tibet through India at that time. Direct communications were so poor that even the commanding officer of the Chinese forces in Tibet, Gen Chang Ching-Wu travelled through Calcutta to Kalimpong and thence on to Yatung where he met the Dalai Lama. In fact, after the 1954 Agreement between India and China on border trade, China signed another agreement with India the same year for trade through Calcutta with India and for transit to Tibet!

It is also worth remembering that China was embroiled in the Korean War at the same time, and its resources, limited as they were, were also fully stretched. And it has already been established in the book that China had no worthwhile air assets at the time. So, India was in a good position to exercise military pressure, if Nehru had chosen to do so. More important, even if Nehru decided to give up the military option, that was no reason to abandon diplomatic efforts to address the situation. Even that was given up. Just as the UN Security Council was sitting to discuss the question of Tibet, India informed the body that bilateral talks between Tibet and China were due to start, and a solution would be found within that framework. So the man who took Jammu and Kashmir to the UN Security Council prevented Tibet from being placed before that body. No wonder Galbraith, in his memoirs as Ambassador in India observes, "Indians are the world's safest objects of animosity".

*Shri Prabhat P Shukla, IFS (Retd)*

# Watershed 1967 - India's Forgotten Victory Over China<sup>@</sup>

Probal DasGupta

The book titled “Watershed 1967 — India’s Forgotten Victory over China” published in 2020 is authored by Probal DasGupta, a former Army officer from the 11<sup>th</sup> Gorkha Rifles. The book starts with a section titled “Praise for the Book”. This has words of praise from some well-known people. After reading these words of praise, the reader looks forward to an engrossing book on military history. The lay reader is not disappointed. Even a military historian finds the book interesting, unless he is aware of the actual occurrences. Unfortunately, the truth is not correctly portrayed in the book.

## The Book

In the Introduction (Page 9-12) to the book, the author states that “The twin victories at Cho La and Nathu La have only been covered in fragments through articles and papers. This book, based on extensive interviews with the army men who were present at the scene, captures the events truthfully and aims to fix this blind spot in history. This was personally important to me, being a former army officer myself.” The author’s claim that the twin victories at Cho La and Nathu La have only been covered in fragments through articles and papers is not correct. This subject has been covered in detail in Chapter 8 of Volume III of the History of the Corps of Signals.<sup>1</sup> It was also uploaded on the blog <http://veekay-militaryhistory.blogspot.com/2013/> in 2013. This includes extracts from the diary of 2/Lt (later Brig) NC Gupta, who was then the signal officer in HQ 112 Brigade. This is the most authentic account of the Nathula skirmish, as it was written as and when the events occurred. An account of the skirmish at Nathu La is also covered in the biography of General Sagat Singh that forms part of the book *Leadership in the Indian Army – Biographies of Twelve Soldiers*, written in 2005. This is the earliest published account of the action.<sup>2</sup>

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<sup>@</sup>**Watershed 1967 - India's Forgotten Victory Over China.** By Probal DasGupta; Publisher: Juggernaut Books, New Delhi (April 2020), Pages 208; Price Rs 390/-, ISBN: 978-93-53450-93-9 (Paperback)

The 181-page book has eight chapters, followed by an epilogue. The first chapter titled *Secret Games: Spies, Soldiers and the Opening Gambit* has 18 pages, covering diverse subjects such as CIA plot to encourage China and Pakistan to attack India; meetings between Sheikh Abdullah and CIA operatives; Pakistani attacks in the Rann of Kutch in July 1965; Operation Gibraltar in Kashmir in August 1965; the war on the Western Front in September 1965; details of major battles such as Haji Pir, Asal Uttar, Dograi etc. There are 48 notes, mostly referring to newspaper articles in Indian and foreign journals.

The second chapter titled *In the Shadow of the Dragon: The War Moves East* has nine pages covering the Goa operation in December 1961; Pakistan's failed attempts to obtain help from USA and China; and the cease fire between India and Pakistan on 22 September. Both these chapters are irrelevant to the Nathula Operations of 1967 and have been added just as fillers.

The third chapter titled *Protests, Disagreements and a Temporary Truce: Advantage China* has 19 pages. It covers the diplomatic exchanges between India and China after some sheep crossed over into India; the agitation outside the Chinese embassy led by Atal Behari Vajpeyee, the ultimatum by China to India to vacate Nathu La and Jelep La; Sagat's refusal to vacate Nathula; minor skirmishes in 1965; the installation of loudspeakers by the Chinese at Nathula; the marriage of Hope Cooke with Palden Thondup, the Chogyal of Sikkim; her friendship with Gen Sagat; the Tashkent agreement; and the death of Lal Bahadur Shastri. The only relevant part is the one concerning the ultimatum by China to India to vacate Nathula and Jelep La; Sagat's refusal to vacate Nathula and the installation of loudspeakers by the Chinese at Nathula; minor skirmishes in 1965. The author has acknowledged the source as the article *The Skirmish at Nathula (1967)*.<sup>3</sup>

Chapter 4 titled *China's Psychological Tactics: Softening Up the Enemy Before the Storm* covers the insurgency in Mizo Hills, the bombing of Aizwal by IAF, the beginning of the Naxalite movement; machinations of Hope Cooke in an effort to gain independence from India; and the stand-off at Doklam. It again has limited relevance to the operations at Nathula and Chola.

Chapter 5 titled *1966-67: Warriors Arrive at the Watershed* covers the organisation of the Indian Army into commands, corps,

divisions, brigades and battalions; brief biographical sketches of some officers (KB Joshi, Parulekar, Ram Singh Rathore) and men (Tinjong Lama, Debi Prasad) of 7/11 GR and some officers of 2 Grenadiers (Rai Singh, Bishan Singh and PS Dagar). There is no mention of the names of officers or men from 18 Rajput or 10 JAK Rifles, the two other units that played a major role in the battles at Nathula and Chola.

Chapter 6 is titled *The Tipping Point: A Tale of Spies and a Breach at the Watershed*. This is the longest chapter (20 pages) covering the arrest and deportation of two Indian diplomats in Peking in June 1967; India's retaliation by expelling a Chinese diplomat followed by mob attacks on the Chinese embassy in New Delhi; similar attacks on the Indian embassy in Peking; arrival of 2 Grenadiers at Nathula in August 1967; commencement of laying the wire at Nathula by 2 Grenadiers on 20 August; objection by the Chinese; visit by the Corps Commander and Gen Sagat Singh to the border on 1 Sep 1967; patrol led by Maj Bishan Singh being surrounded by Chinese leading to scuffle; commencement of fencing using concertina coils on 5 Sep; brawl between Indian and Chinese soldiers at the fence on 7 Sep resulting in injury to the political commissar; meeting held at HQ 112 Brigade by Gen Sagat Singh during which Maj Bishan Singh was given the task of completion of fence; allotment of additional troops from Engineers to assist him.

Chapter 7 titled *Hellfire at Nathu La* is the most important chapter that covers the battle at Nathula. However, it has been assigned only nine pages. Some extracts from the chapter are given here along with comments in italics. The opening paragraph gives details of signal communications, including the new line laid overnight from the brigade headquarters in Changgu to Sherathang where the mortars were located. All posts were connected on telephone and radio. This network was patched to the Divisional HQ. This information has obviously been obtained from the diary of NC Gupta that is quoted mentioned in my articles as well as Chapter 8 of the History of the Corps of Signals, Volume III that is on my blog. The author has mentioned that the article includes extracts from NC Gupta's diary. The author has made no mention of a bunch of 30 soldiers who instinctively make a run for their lives: some even escaping from the scene. This unpleasant chapter of the battle is often dropped from narrations, but to exclude this

would undermine the heroism of the soldiers who stood and fought gallantly. Months later, court martials would be held to prosecute deserters, on charges of cowardice.

The author only mentions that Major Bishan Singh was injured. He has totally ignored the role of 2/Lt NC Gupta in saving his life. One can only conclude that this was done deliberately, to conceal the fact of 2/Lt Attar Singh quitting his post at South Shoulder and being taken back to the post by NC Gupta, under orders of the brigade commander.

The author also writes that “Signal Officer Naveen Gupta and Second Lieutenant Attar Singh, who was among the younger officers in the unit, joined in and ran from trench to trench as he yelled at the men to keep the flock together and respond with fire. The morale had to be kept up.” This is not true. Naveen did not join Attar Singh and run with him from trench to trench. In fact, Attar Singh was at South Shoulder while Naveen was with the brigade commander until he was sent up to South Shoulder. On the brigade commander’s instructions, Naveen and a line repair party proceeded towards South Shoulder with a radio set for the platoon there. On arriving at the post, Naveen found the bodies of a few dead soldiers ahead of the defences. The post wore a desolate look as most men had either been killed or had left the post, barring an abandoned light machine gun (LMG). The author has twisted the facts mentioned by NC Gupta in his diary. The diary runs into almost 30 pages of handwritten notes. It is not intended to reproduce the complete diary in this article. It has been included in the History of the Corps of Signals, Volume III.<sup>4</sup>

A short resume, describing the events relating to South Shoulder on 11 September as described in Gupta’s diary has recently been published in the Indian Military Review. It is reproduced below<sup>5</sup>

About an hour later Brigadier Bakshi spotted six soldiers sitting behind a huge rock, around 100 metres down South Shoulder and asked Gupta to investigate. On reaching the spot, Gupta found that they were from 2 Grenadiers, including 2/Lt Attar Singh who was in command of the post at South Shoulder.

The author writes “To the few that had had enough of the tough battle and who decided to retreat to a safer shelter, a rude

surprise awaited. Sagat had decided to move closer to the scene of the battle. Like a no-nonsense army drill sergeant out to catch cadets who had loitered outside the precincts without permission, the general had started to marshal the troops that had abandoned the battle, shouting at them, herding them back into action. Sagat stood on the road coming down from Nathu La trying to stem the rout. He even threatened to shoot anyone he found moving to the rear. Sagat hated to see his troops run away from the Chinese. When he saw a few men struggling to keep up, he screamed at them, scolding, lambasting those who had gone astray, finally collecting them like a schoolteacher at picnic and steering them back into class – up towards the forward posts, into their harnesses and back into the battle. Most of the soldiers stayed and fought valiantly, some attaining martyrdom. There were still a few who had deserted the battle that day. Over thirty soldiers faced court martial later for cowardice.” The citation for this given by the author is from an article in The Print by Vandana Menon and Nayanika Chatterjee, published on 01 October 2018. However, this article makes no mention of Gen Sagat “collecting the deserters like a schoolteacher at a picnic and steering them back”. This seems to be more of the authors creative writing. But the information about Sagat threatening to shoot deserters is true. This had been narrated to the reviewer by Lt Gen Sagat Singh himself when he met him at his home in Jaipur in 1997-98. In fact, 2 Grenadiers was not the only battalion that showed traces of cowardice under fire. Similar instances occurred in other units, including 2/Lt NC Gupta’s own company as entries in his diary reveal.

Chapter 8, titled The Battle of Cho La, describes the actions of 7/11 GR in the battle of Chola.<sup>6</sup> It is entirely based on the regimental history of the regiment. “The Path of Glory: Exploits of the 11 Gorkha Rifles” written by Gautam Sharma and the author’s conversation with Lt Col KB Joshi. The Author has totally ignored the role of 10 JAK Rifles, which was awarded one MVC and three VrCs. The name of the brigade commander, Brig Kundan Singh has also not been mentioned. The regimental history mentions the name of the brigade commander and his conversation with Lt Col KB Joshi. It is not understood why the author has chosen to ignore his name. It now appears that the whole aim of writing the book is to eulogize the action of 7/11 GR. This would not be objectionable in case the book had been about the 7/11 GR and



not given the title it has, because that portrays it as a history of the full conflict.

The Epilogue covers subjects such as the war in 1971, the creation of Bangladesh and the merger of Sikkim with India with the assistance of RAW. All these are irrelevant to the subject of the book, which is professed to cover the battles of Nathula and Chola. Interestingly, the author has written 24 pages in the Epilogue, with 78 Notes. In comparison only 9 pages have been devoted to the battle at Nathula (97-105) and 15 pages (106-120) to Chola.

### **General Comments**

The author seems to have done hardly any research, apart from snippets from books and articles and some interviews. Except for the regimental history of his own Regiment, the 11<sup>th</sup> Gorkha Rifles, he has not consulted the regimental histories of The Grenadiers, The Rajput Regiment and The Jammu & Kashmir Rifles. He has made no attempt to go through the war diaries of the units or the formation HQ. This being his first book he can perhaps be excused for gaffes such as using incorrect ranks, names, and decorations. In the book, Ranjit Singh Dayal, the captor of Haji Pir is called Rajinder Singh Dayal; Gen Shiv Charan Singh, GOC 27 Division is called Ramcharan Singh. Brig MMS Bakshi's is said to have been awarded a VrC in 1965, whereas he got an MVC. He also has a disconcerting habit of giving names without mentioning the rank. For instance, he mentions Kul Bhushan, Parulekar, Tinjong Lama, Debi Prasad etc. without their ranks. Kulbhushan is sometimes referred to as KB. His full name with rank Lt Col KB Joshi or Kul Bhushan Joshi is rarely mentioned. Since the battalion has another KB (Krishna Bahadur), this sometimes leaves the reader confused. Using names without ranks may be the norm in articles and stories; it is almost never done in a book on military history.

As already mentioned in Chapter 8 - The Battle of Cho La, the Author has totally ignored the role of 10 JAK RIF and its CO, Lt Col Mahatam Singh, MVC. In addition to the MVC for the CO, the battalion was awarded three VrCs. This is an unacceptable lapse and amounts to an insult to the unit.

The most conspicuous feature of the book is the distortion of facts relating to 2 Grenadiers. The only authentic version of the

battle is the diary of 2/Lt (later Brigadier) NC Gupta, which gives a day-by-day account of the occurrences from 11-14 September 1967. Its authenticity cannot be questioned because it was written daily as the events occurred, and not in hindsight. The diary clearly brings out the instances of cowardice, especially the vacation of South Shoulder at a critical juncture.

In the military—and the reviewer has noticed this most in historians from the Infantry—events are glossed over when they come across critical comments about their own or even other Regiments. In most cases War diaries are written after an event, and not as events occur. This leads to a disturbing trend – the falsification of military records by units; often in the name of the unit's izzat (honour). This is indeed a serious matter and needs urgent attention from those concerned with our military heritage and history. It also makes it imperative that military historians research their subject without bias, rancour or a desire to write pulp fiction which can become the basis for a war film.

*Maj Gen VK Singh (Retd)*

## Endnotes

<sup>1</sup> Major General VK Singh. *History of the Corps of Signals, Volume III: Covering the First 25 Years of the Post –Independence History of the Corps from 1947 to 1972*, (KW Publishers, New Delhi 2014), pp 330-337.

<sup>2</sup> Major General VK Singh. *Leadership in the Indian Army –Biographies of Twelve Soldiers*, (Sage, New Delhi, 2005), pp 308-312

<sup>3</sup> Major General VK Singh. *The Skirmish at Nathula (1967)*, (Scholar Warrior, Autumn 2014).

<sup>4</sup> Major General VK Singh. *History of the Corps of Signals, Volume III. Op cit.*

<sup>5</sup> Maj Gen VK Singh. *The Skirmish at Nathula (1967)*, (IMR August 2018).

<sup>6</sup> Lt. Col. Gautam Sharma, *Path of Glory – Exploits of the 11<sup>th</sup> Gorkha Rifles*, (Allied Publishers, Delhi, 1988).

## Short Reviews of Recent Books

**Jinnah: His Successes, Failures and Role in History.** *By Ishtiaq Ahmed, (Penguin, Random House Gurgaon, India), Pages 808, Price – Rs. 999/-, ISBN: 9780670090525*

At 808 pages of which approximately 67 are the bibliography and index, the book by the Swedish Pakistani academic Isthiaq Ahmed is heavy to hold and appears daunting to read. However, when one starts reading it, it is not as heavy to read as its sheer thickness and weight suggests. The reason for this is the enigma of its subject, the meticulous research of the author and the flowing prose. Ahmed has researched Jinnah's actions very thoroughly to ascertain his successes and failures and the depth and significance of his legacy.

Muhammad Ali Jinnah was undoubtedly one of the most fascinating political leaders of the 20th century Indian subcontinent. His successes, failures, and personal life as well as his role in history have continued to generate controversy. Having won Pakistan by invoking Islam and describing Muslims as a distinct and separate nation, those very ideas constrained the freedom of the new country to manoeuvre freely and extricate the idea and demand for Pakistan from Islam. Jinnah is celebrated in Pakistan as the father of the nation and reviled in India for his role in the partition of India. However, even in India he is given a grudging respect because he is seen as a 'son of the (Indian) soil' who was a nationalist and who achieved a lot in his (short by today's standards of longevity) life. The respect however merges into a feeling of betrayal when questions concerning him come up. The prime being as to how did someone who advocated Hindu-Muslim unity become the inflexible proponent of the two-nation theory? The controversies surrounding his actions have only increased in the period after his death. It is for this reason that books about Jinnah still get the Indian reader's attention.

In the context of Pakistani readers, the book seeks to solve a puzzle in their minds; Muhammad Ali Jinnah succeeded, apparently against all odds, in mobilising Indian Muslims to support his demand for the partition of India to create Pakistan — but once Pakistan came into being why have Pakistani Muslims disputed Jinnah's vision of the state and nation. They debate whether Jinnah envisioned Pakistan as a theocratic state. His views on federalism too are ambiguous. Attempting to answer these questions against

the backdrop of the turbulent struggle against colonialism, this book is an enlightening examination of one of the most controversial figures of pre partition India.

The author identifies four main stages in the political career of Jinnah, first as an Indian nationalist; then as a Muslim communitarian; next as a Muslim nationalist; and finally, as the founder of Pakistan. The first three stages unfold against the backdrop of British rule, and the fourth after Pakistan had come into being. Generally, the third stage is celebrated as the hallmark of his charisma and ability to bring about a landmark change in Muslim thinking. For the fourth stage when Jinnah succeeded in bringing about the partition of India, he had no clear or consistent vision, or policies to offer. One of the main contentions of this book is that during the fourth and final phase of the extraordinary political life he had, there was no single core argument around which he conducted his politics. Instead, the fear of perceived Indian conspiracy against him and Pakistan remains a constant reference for his behaviour. This led him to take extraordinary powers and take controversial decisions that became an example for military authoritarianism in Pakistan and weakened parliamentary democracy. The landed elites, a Punjabi-dominated army and a Mohajir-led civil service came to power not despite Jinnah, but because of him. By September 1948, when he died, little had been done to set out a clear constitutional blueprint for the new state. Its undemocratic roots with the Governor General, and not the Prime Minister, being in charge did not portend well; subsequent events proved that.

The book is laid out in 21 chapters starting off with his generous role in history, his two nation theory and how his vision achieve momentum in the period from March 1940 onwards, for the creation of Pakistan, for which he used the Quit India movement to his advantage. Even those who read through the book will be awed by the depth and quality of the author's command over secondary literature and virtually all of Jinnah's works and speeches. His success derived as much from contingency and the exigencies of changing imperial policy as much as his own abilities. Using a wealth of contemporary records and archival material, Ahmed recounts many hither to unknown facets of Jinnah's transition from Indian nationalist to Pakistan's all-powerful head of state. Chapter 15 of the book titled, "Jinnah as the All-Powerful Head of

a Muslim State” explains in a concise and precise manner, the history of Islam’s temporal power holders. Quoting from the Holy Quran this chapter will appeal to even those who do not want to read about Jinnah but would want to understand more about the coming together of temporal and spiritual authority in Islam. Chapter 17, titled ‘Governor-General Jinnah’s Other Speeches, Statements and Messages, is composed of 50 pages of somewhat archival material. The reader may find these a bit taxing to read as they tend to be repetitive being directed towards domestic politics. They also show how Jinnah in trying to manage a precarious post birth situation vacillated from trying to show that he cared for minorities while vilifying them in an address to military officers on 11 Oct 1947; he was opposing the Muslim League to become the organisation for all Pakistanis because he did not want it to be secular (p 533) at the same time he was insisting that the Muslim League should survive in India as the party to ensure the protection of the interest of Indian Muslims.

Chapter 19 is not about Jinnah at all. Its title says as much as it is ‘The Liaquat Interlude’ since Liaquat could affect Pakistani politics only after the death of Jinnah on 11 Sep 1948. However, with his assassination on 16 Oct 1951 apparently by ultranationalists who considered him soft on India there was no provincial leader who could claim either his or Jinnah’s mantle leading to the rise of the bureaucratic-military oligarchy which made and unmade six governments in the period 1951 to 1958 when the first military coup took place.

This is a book that clears several perceptions, answers a lot of questions and provides fresh insight into an enigmatic personality. Therein will be its enduring value.

*Lt Gen Ghanshyam Singh Katoch, PVSM, AVSM, VSM (Retd)*

**Internal Security: A Psychological Approach.** *By Major General Sanjay Bhide, YSM, VSM (Retd), (New Delhi, Manas Publications, 2020), Pages 149, Price - Rs 595/-, ISBN: 9788170495666*

There are many dimensions of looking at internal security as it pertains to our country and there are numerous books and articles on the same, however, one of the dimensions which is not widely written about or discussed is the ‘Psychological Approach’ and this is what Major General Sanjay Bhide has dealt with admirably

in his recent book. General Bhide has the necessary credentials backed by his vast experience and critical appointments held including those in various operational assignments in Mizoram, Sri Lanka, Punjab, and Jammu & Kashmir where he held crucial command assignments which included command of a Rashtriya Rifles (RR) battalion and later a RR Force. The book is aimed at the serious reader having a role in policy formulation and in influencing decisions as well as those involved in these operations who will undoubtedly benefit from his practical perspective and deep insight.

The book is laid out in six chapters which include an Environment Scan, Emergence of a Threat Vector, Existing Security Architecture for Internal Security, Psychological Intervention Operations, Winning the Fight against India's Threat Vectors and a Study of the Kashmir Threat Vector.

Internal security demands a comprehensive approach as it involves a multitude of aspects which impact both the individual and society. There is no doubt that an individual's sense of security and belonging stems from an effective political, economic, social, religious and cultural environment and this is an important component of security of a group and society. Psychological factors remain a key to the well-being of different categories of people. The reality is that there is only an extent to which such feelings should be allowed to fester because if they go on too long; bitter feelings remain and corrective measures become difficult.

The book clearly brings out that the perceptions and assessments of an individual and groups are different though the levels of intensity vary. The author states that we have failed to find a cogent strategy to deal with this kind of situation. He has identified various threat vectors that have an effect on internal security and threatens the national fabric. General Bhide has stressed on the importance of a process and suggested an interdisciplinary operational framework for handling such threats.

He writes that there is a gap between value expectations and value capabilities, which leads to inflated perceptions of 'capabilities and values'. This psychologically leads to a sense of deprivation of an individual that makes him vulnerable to anti state activity. Yet, not all individuals rebel, and paradoxically while an individual remains at the core of this threat vector, he doesn't rebel alone

and is part of a larger group or network which, at times, plays out on religious or ethnic sentiments and drives irrationality. It is, therefore, imperative that the Psychological Approach needs to focus on the individual with regard to his perceptions and aspirations and his position as a responsible citizen in a socio-economic and political environment. This is the foundation on which a threat vector develops and grows.

The chapter on Kashmir covers the historical details, the realities that shaped the region, and the culprit for the sense of deprivation and exploitation being the 'outsider' – earlier the 'Maharaja' and now 'Delhi'; a perception that is undesirable. By ignoring the genesis, the arguments made in earlier chapters seem justified and as per the author, in the war of perception the vector remains a step ahead. Unfortunately, as pointed out in the book, multidisciplinary theories remain confined to the academics. It is, therefore, imperative that policy makers, practitioners and executors of these policies are aware of the various human dimensions that make people behave in the manner they do and this book will help bridge the gap. The author while not recommending any changes in the Cabinet Committee on Security (CCS), which is the most important body responsible for internal security having the power, vision and capability, feels that it only looks at a threat once it manifests effectively. There is, thus, a need for the structures that support it to balance long term and pressing emerging issues, external and internal dimensions and deal with the vectors through their myriad manifestations. As kinetic force has its limitations, the psychological drivers need to be understood and identification and mitigation needs more focus. He has accordingly recommended some restructuring and reorientation in the existing security structures both at the Central and State level including a Ministry for Internal Security; these recommendations will need deliberation in greater detail.

Combating internal security is a complex, multi-dimensional task; one of the key challenges, as correctly identified by the author, is the 'Psychological Approach', and this is what we need to understand and address as a nation and, particularly, by those formulating and implementing its security policies. It is for this reason that this book needs to be read, for only then will we be in a position to attempt to answer the questions he has asked. Which is as to "why after decades of political, military and diplomatic



efforts and analyses of the issues involved, we are still not able to reach at a resolution of most conflict situations — or at least commence the process of conflict resolution — and why newer and newer threats emerge? The author's examination of the various threat vectors to internal security, his extensive research duly supported by references and deep understanding will undoubtedly help in navigating the difficult path of conflict resolution which is the desirable end state and remains the overriding aim of the nation.

*Maj Gen Jagatbir Singh, VSM (Retd)*

**Non-Contact Warfare: An Appraisal of China's Military Capabilities.** *By Brigadier Vivek Verma, (New Delhi: USI of India in association with Pentagon Press LLP, 2020), Pages 352, Price - Rs. 1295/-, ISBN: 9789390095162 (Hardback)*

The geopolitical and geo economic manifestation of world politics has been completely destabilised by COVID-19 contagion. It has thrown the globe in turmoil with endless conflicts shaping the world order. Competitions leading to confrontations and conflicts are shaping strategies. Ever-evolving technologies have pushed the boundaries of doctrinal debates which devolve more on deterrence, disruption, deception, disempowerment, disinformation rather than destruction. Non-contact warfare has emerged as the new method of warfighting and war avoidance.

This book by Brigadier Vivek Verma is the first book which has been published on a contemporary subject about which people have been talking piecemeal. He provides a fresh perspective on how the game at a sub-threshold level of war is likely to be played. The centre of gravity of non-contact warfare has changed from 'Information' to 'People' who are ordinary citizens of the state.

The focus of every nation is to influence the outcomes of each contest along the escalation matrix. Hence, perception of winning is more important than victory, and thus, the violence-force correlation is testing security discourse. The future of warfare had never been so dynamic and overwhelming. The changing focus of conflict is to target people and economy. Non-contact warfare intends to influence people and governance while marginalising the role of armed forces.

The book is divided into six chapters. In the first chapter, the author has tried to contextualise the term non-contact warfare in the absence of any cogent definition. He has tried to develop the understanding of non-contact warfare by providing an insight into the changing character of warfare affected by technological developments during the Cold War and Post-Cold War conflicts and the emergence of non-state actors besides the states as the new stakeholders. Instead of the military, the new targets are the population, sovereignty, governance structures and the economy. With war-avoidance as the new norm, the non-military measures or use of non-lethal and lethal stand-off military means have gained currency as the way of war fighting. The end state being winning without fighting or fight with minimum use of physical contact of own forces. Hence, according to the author, the future of warfare is likely to be non-contact.

Chapter Two of the book examines possible use of non-contact warfare means by China's People Liberation Army (PLA) through the prism of strategic behaviour and adoption of the concept of defeating the superior through the adoption of superior strategy, structures and operational simulations. PLA's role and security doctrines like 'Active Defence' and 'Three Warfares' have also been analysed. The book also throws light on discreet methods adopted by China of countering America's global alliance system by favourably managing the 'Shi' – a Chinese way of gauging strategic situations.

Chapter Three and Four look at the kinetic and non-kinetic domains of China's military capabilities. An absorbing insight into Chinese long-term planning to achieve its stated military goal of significantly enhancing informationisation and strategic capabilities has been provided. The push for PLA reforms and priority of force and doctrine development for lethal and non-lethal systems helps in grasping the strategic direction of the Chinese Communist Party (CCP).

Chapter Five explores how China intends to play the game of non-contact warfare to create favourable 'Shi'. It gives an account of how the PLA has been focussing on enhancing influence dominance and situational awareness to counter Pentagon dominance strategy. The chapter also illustrates the 'war control' strategy adopted by the PLA through the development of disruptive

and deterrence capabilities in the non-nuclear field. The role of the PLA in the sub-conventional domain and related civil-military fusion in the Chinese security apparatus highlighted in the book provide perspective about its asymmetric capabilities development.

The final Chapter Six is India-centric, where the author has tried to build scenarios that may lead to strategic instability and provides policy recommendations for the security planners. The author pitches for the whole-of-a-nation approach to counter the threat from China. India needs to firewall its security by taking a holistic review of its security apparatus and look at areas where it needs to create strategic leverages and build asymmetric capabilities.

‘Non-Contact Warfare: An Appraisal of China’s Military Capabilities’ is a timely book that posits that the warfare has moved beyond jointmanship between the services and predicts that the effective civil-military synergy will decide the outcome of the next war. The book rationally and lucidly analyses the events and builds scenarios which binds the reader. It is rich source material for security planners across all walks of life - whether they wear the uniform or not. A must read book for those who are concerned with national security, governance, intelligence or working in economic arena.

*Maj Gen Sanjeev Chauhan, YSM*

**Aatma Nirbhar Bharat (Self-Reliant India): Challenges and Opportunities.** By Brigadier (Dr.) Rajeev Bhutani, (New Delhi, Pentagon Press, 2020), Pages 214, Price – Rs. 895/-, ISBN: 9789390095131

Among the contemporary issues that have been extensively debated and written about in recent times are a wide range of issues encompassing regional security, human security, maritime issues, energy security etc. A prominent one among them is the *Aatmanirbhar Bharat Abhiyan* (Self-reliant India) which directly impacts a nation’s security. The topic is at the forefront of the non-academic discourse since the outbreak of coronavirus in early 2020. It is extremely difficult to research and write about a vision, propounded by the Indian Prime Minister Narendra Modi, which is yet to be formulated in terms of policy and is still in its nascent stage with its share of shortcomings and uncertainty.

With this as a background, one can say that the book being reviewed is very relevant as the author has done a commendable job to bring out this book on the topic and discuss various elements of it with granular details. The book has been written with care to make it readable for the lay reader. Written in very lucid language, the author has beautifully narrated the flow of the events which make self-reliance imperative. He, thereafter, links the narrative to the current challenges and opportunities. The extraordinary number of citation and notes clearly highlight the amount of research done on the book.

The vision for *Aatmanirbhar Bharat* is based on the crucial component of national security — to fill the gap in the industrial and manufacturing sector, technology, and supply chain, and adopt efficiency and prepare India for 21<sup>st</sup> century. The pandemic has also highlighted the vulnerability of the current global supply chain dominated by an aggressive and belligerent China. This argument is excellently captured in the initial chapters of the book.

The book rightly begins with the onslaught of the Covid-19 pandemic which has put tremendous pressure on the global economy, including the economy of India. The book talks about the change in global order, new world order, geopolitical uncertainty, and the perfidy of China. In the first chapter, the author has given details of the past events linking it to the emerging geopolitical environment. The author successfully brings past events into clearer perspective. Cause of Sino-Soviet split and Sino-US Rapprochement could have been avoided. A drawback in the book is that the book's initial three chapters gives far too much emphasis on China and China related issues, at times giving a view that book is more about the China and less about *Aatmanirbhar Bharat*.

Otherwise, the chapter on India's response to Chinese adventurism and belligerence is nuanced and has portrayed the right picture to the reader. The most interesting reads come from this chapter where the author has theoretically and empirically tried to answer many enduring questions on China's status as a friend or an adversary, or on the question of India's strategic culture. Part-2 of the book with five chapters is the crux of the book where the author has tried to relate the impact of pandemic on Indian and global economy. The role of opportunistic China has been vividly described throughout the book and in this part too.

The challenges and opportunities rightly reflect the expanding umbrella of national security that includes rural development, public health and the supply chain.

The author has done a good work to bring out this timely book. The exhaustive details and supporting arguments and data situates the matter in the context of globalisation, and, hence, need for self-reliance. However, the book could have done more justice to the topic had it been able to incorporate critical analysis of the *Aatmanirbhar Bharat Abhiyaan* — the other side of the perspective. It could have covered other related issues, including their economic and political impact, such as ‘Vocal for Local’ and ‘Aatmanirbhar Bharat’, which are synonyms to the ‘Make in India’ push that has been under discussion for long.

*Shri Gaurav Kumar*

## USI LATEST PUBLICATION DURING 2018

Pub Code	Title of Book & Name of Author	Price(Rs)	Year
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\* Available at USI of India \*\* Available at M/s Vij Books of India Pvt Ltd

# USI

(Estd. 1870)

## OUR ACTIVITIES

### Library and Reading Room

The library holds over 68,000 books, and journals, including some books of 17th, 18th and 19th centuries, on an astonishing variety of subjects. While the principal emphasis is on strategy and defence, there are a large number of works on different vistas of Indian life. There are memoirs, biographies, recollections, diaries, journals, manuscripts for scholars and researchers. The reading room is air-conditioned, spacious and well stocked in terms of current reading material. Library was automated in 2002.

### Correspondence Courses

The Institution runs regular correspondence courses for officers of the Armed Forces to assist them in preparing for promotion examinations, and for the entrance examinations to the Defence Services Staff College and Technical Staff College. Over the years, this has been a significant and well-received activity.

### USI Journal

The *USI Journal* is the oldest surviving defence journal in the country and in Asia, having first appeared in 1871. In an era when there is a feeling that free expression of views by Defence personnel is not looked upon kindly by the establishment, the Journal in fact provides just such a forum, without regard to seniority and length of service in the Armed Forces, subject of course, to propriety and quality of the written work.

### Centre for Strategic Studies and Simulation

The Erstwhile Centre for Research and its resources have been merged into the new Centre named as USI Centre for Strategic Studies and Simulation (USI-CS3) wef 01 January 2005. The Centre aims at conducting detailed and comprehensive enquiry, research and analyses of national and international security related issues, and gaming and simulation of strategic scenarios, to evolve options for wider discussion and consideration.

### USI Centre for UN Peacekeeping (CUNPK)

The Centre was established in 2000 and functioned with USI till Aug 2014, when it moved out of USI premises and was delinked from USI. Its aims were organising workshops, seminars and training capsules for peacekeepers, observers and staff officers – both Indian and foreign. It also oversaw the practical training of Indian contingents. It functioned under a Board of Management headed by the Vice Chief of the Army Staff and worked in close coordination with the Service Headquarters and the Ministries of External Affairs and Defence. In August 2014, CUNPK moved out to the accommodation allotted by the Army HQ.

### Centre for Military History and Conflict Studies (CMHCS)

The Centre was established on 01 Dec 2000 and encourages study and research into the history of the Indian Armed Forces with objectivity, covering different facets such as strategy, tactics, logistics, organisation and socio-economic aspects and their implementation.

### Gold Medal Essay Competitions

Every year the Institution organises two gold medal essay competitions: one for officers below 14 years of service and the other open to all officers. These essays, the first one of which was introduced in 1871, constitute a barometer of opinion on matters that affect national security in general and the defence forces in particular.

### Lt Gen SL Menezes Memorial Essay Competition

This has been instituted from 2015 on a subject related to Armed Forces Historical Research. The Essay Competition is open to all across the globe.

### Lectures, Discussions and Seminars

A series of lectures, discussions and seminars on service matters, international affairs, and topics of general interest to the Services, are organised for the benefit of local members in Delhi.

### MacGregor Medal

This medal is awarded to Armed Forces personnel for valuable reconnaissance and adventure activity they may have undertaken.

## MEMBERSHIP

The following are eligible to become members of the Institution :

- Officers of the Armed Forces
- Class I Gazetted Officers of Group 'A' Central Services.
- Any category mentioned above will be eligible even though retired or released from the Service.
- Cadets from the NDA and Cadets from the Service Academies and Midshipmen.

For further particulars, please write to Director, USI of India, Rao Tula Ram Marg, (Opposite Signals Enclave) Post Bag No. 8, Vasant Vihar PO, New Delhi – 110 057