

U.S.I. JOURNAL

INDIA'S OLDEST JOURNAL ON DEFENCE AFFAIRS

(Established : 1870)



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No 625

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R-111**	"STRATEGIC YEAR BOOK 2021" Concept and Structure by Maj Gen BK Sharma, AVSM, SM & Bar (Retd), Edited by Lt Gen GS Katoch, PVSM,AVSM,VSM (Retd), Gp Capt Sharad Tewari, VM (Retd) and Dr Roshan Khanijo	1850	2021
R-112	"Maritime Corridors in the Indo-Pacific : Geopolitical Implications for India" By Cdr Subhasish Sarangi M/s Pentagon Press	1295	2021
M-1/21**	"The Determinants of India's National Military Strategy" By Lt Gen (Dr) Rakesh Sharma, PVSM,UYSM,AVSM,VSM (Retd)	295	2021
OP-1/21**	"Russia-China Relations and Future Dynamics" By Brig LS Lidder, SM, VSM (Retd)	250	2021
Adm-1 (UNPO)/ 2021**	"India and UN Peace Operations Part - 1 : Principles of UN Peacekeeping and Mandate" Edited by Maj Gen AK Bardalai and Maj Gen PK Goswami, VSM (Retd)	295	2021
Adm-2 (UNPO)/2021**	"UN Peace Operations Part - II : Hostage Taking of Peacekeepers" Edited by Maj Gen AK Bardalai and Maj Gen PK Goswami, VSM (Retd)	295	2021
CMHCS-3	"WITH HONOR AND GLORY - Five Great Artillery Battles" By Maj Gen AJS Sandhu, VSM (Retd) Published by USI (CMHCS)	-	2020
R-105**	"Tao of Soldiering the Chinese Paradigm – The Shift in Human Resources Development in PLA and Lessons for India" By Col Nihar Kuanr	1995	2020
OP-1/2020**	"The Dynamics of the India – Nepal Relationship" By Lt Gen Shokin Chauhan,PVSM,AVSM,YSM,SM & VSM (Retd)	295	2020
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
CMHCS-1	"Traditions and Customs of the Indian Armed Forces" By Brig SP Sinha,VSM (Retd) M/s Manohar Publication, New Delhi	4500	2020
CMHCS-2**	"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) Lt Gen GS Katoch, PVSM,AVSM,VSM (Retd) and Dr Roshan Khanijo	1850	2020
R-108**	"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**	"A Brief History of the United Service Institution of India (USI)" By Col VK Singh, VSM (Retd)	750	2020
Adm-1/ 2020	"When Sparrows Flew Like Eagles – 1971 Indo-Pak War of Liberation of Bangladesh" (Memories of a Signal Officer) By Brig M.R. Narayanan, VSM (Retd) (M/s Pentagon Press)		
JC/2020	"Military Musings 150 Years of Indian Military Thought" from the Journal of the United Service Institution of India Edited By Sqn Ldr Rana TS Chhina,MBE M/s Speaking Tiger	1899	2020
GPMST-7/ 2020	"Bajirao I – An Outstanding Cavalry General" By Col RD Palsokar, MC M/s Mervin Technologies, Manoj R, Kelkar, Indranagari, Dahanukar Colony, Kothrud, Pune-411038	525	2020
M/1/2020**	"CDS and Other Reforms – A Midway Milestone" Edited by Col (Dr) Rajneesh Singh	295	2020
M-1/2019**	"An Appraisal of The PLA's Training for Integrated Joint Operations – India's Actions, Response and Counter-Strategy" By Col Nihar Kuanr	295	2019
Op-1/2019**	"Kashmir Valley Politics : Alignments and Re-alignments" By Prof Kashi Nath Pandita	150	2019
R-101	"CHINA-PAKISTAN MILITARY NEXUS : Implications for India" By Lt Gen PC Katoch,PVSM,UYSM,AVSM, SC(Retd) & Gp Capt Sharad Tewari,VM (Retd) (M/s Pentagon Press)	1295	2019

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(i)

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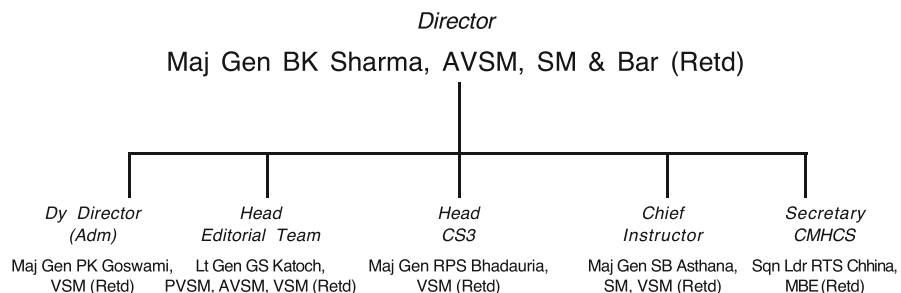
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Editor

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5. **Contact Programmes.** Three contact programmes for DSSC/Army-2021 have been planned. Dates are : **20-25 Jun 2022, 04-09 Jul 2022** and **18-23 Jul 2022**. Separate test papers will be set for each programme. Fees – Rs 6000/- per contact programme.
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1. USI welcomes original researched articles pertaining to national security, defence matters and military history for publication in the USI Journal. Articles should preferably not exceed 2,500 words. Along with the article, the author should forward abstract of the article not exceeding ten per cent of the total words. These should be forwarded as a word document on e mail to the Editor, United Service Institution of India, on dde@usiofindia.org. In the email the author should state that “ the article titled (Title of Article) has neither been previously published in print or online, nor has it been offered to any other agency for publication. The Editor reserves the right to make alterations.
2. It is mandatory that the author furnishes complete details of the book/journal referred to in the article as end notes. A guide to writing endnotes is given on the next page. Besides endnotes, if the author so desires, a bibliography may also be included, though it is not mandatory.
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.
4. The full name and address of the author along with a brief Curriculum Vitae should be given. Serving officers are advised to follow the prevailing Services instructions for publications of their articles.
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.

GUIDE TO WRITING ENDNOTES

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:

https://www.chicagomanualofstyle.org/tools_citationguide/citation-guide-1.html.

Some examples are given below:-

¹ 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.

² Lina Bolzoni and Pietri Coral. *The Culture Memory*, (Bologna: Societa editrice Il Mulino, 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:

⁴ R Polrer, *Learning Physics*, (Academic, New York, 1993), p 4

⁵ *Ibid*, p.9.

⁶ T Elliot, *Astrophysics*, (Springer, Berlin, 1989), p.141.

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

⁸ Elliot, *op cit.*, p148.

⁹ Elliot, *loc, cit.*

3. Where websites have been used to access information, the complete web address of the website should be cited, followed by the date the website was accessed by the author, e.g. Accessed Jun 24, 2020 from <http://www.fordham.edu/halsall/mod/1947degana.html>.

Additions to the USI Library for the Quarter Ending September 2021

During this period a total of 25 new books have been added. Details of the new books are available on USI Website.

Research Projects

Members interested in undertaking research projects may submit research proposals to USI (CS3 / CMHCS). At present, seven chairs have been instituted in CS3; namely, Field Marshal KM Cariappa Chair, Admiral RD Katari Chair, Air Marshal Subroto Mukherjee Chair, Prof DS Kothari Chair, Ministry of External Affairs Chair, Flying Officer Amandeep Singh Gill Chair, Assam Rifles Chair and two Chairs in CMHCS namely; Maharana Pratap Chair and Chhatrapati Shivaji Chair. Copies of the Rules for Award of Fellowship Grants and Conduct of Research are available on the USI Website.

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New USI Members

During the period Jul – Sep 2021, 11 registered as New Life Members; 01 Ordinary Member renewed membership and 04 registered as new Ordinary Members.

Course Members

During Jul-Sep 2021, 62 Officers registered for Course Membership.

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NOTE

The views expressed in the Journal are the opinions of the contributors and the Editor, and are not necessarily official views or those of the USI Council.

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Editorial

Dear Readers,

It is with great pleasure that we present to all our readers the USI Journal for the 3rd Quarter of the year 2021. This issue puts together a number of articles on national security, military history, and international affairs.

The issue starts off with the 2nd prize winning essay for the year 2020 of the USI Gold Medal Essay Competition Group 'B', on 'Space the Next Frontier: Opportunities and Challenges for India'. This was written by Commander Pankaj Grover of the Indian Navy.

The following article is 'The Purple Path Ahead is full of Expectations and Opportunities' by Lieutenant General PS Rajeshwar, PVSM, AVSM, VSM (Retd). Having held the joint Services office of CISC, his views are insightful and need reflection. For some time now, the doctrinal aspects of India's involvement in UN Peacekeeping missions have been somewhat neglected in the public discourse. To bring the spotlight back, the USI of India, along with the ICWA, has started a series of webinars with international partners to learn from the Indian experiences and imbibe experiences from others. Major General (Dr) AK Bardalai (Retd) who is involved in this initiative writes on 'Challenges to UN Peacebuilding'.

Military history is one field in which the USI has an untrammelled lead on account of its 151-year heritage and a library with a priceless collection of rare books. We have two articles in this journal dealing with military history. In one, we have a rare comparison of two opposing commanders of the 1857 War of Independence, titled 'Rani Lakshmi Bai and Major General Hugh Rose: A Comparative Analysis' by Major General (Dr) RS Thakur (Retd) and Colonel Nikhil Kapoor. The British called it the Great Mutiny. It may have started off as a mutiny by soldiers whose cultural aversions were not understood by the British, but as the mutiny spread, it fanned the embers of the desire to throw off the British yoke. The other military history article is of post-independence times by Major General VK Singh (Retd), an

acknowledged historian, who writes on 'Corrupting India's Military History – A Dangerous Trend' with the example of the 1967 Sino-Indian clash at Nathu La and Cho La in Sikkim. Military history is written with two diverse aims; one is to chronicle facts and learn lessons, the other is to record deeds to motivate. In the fog of war, fast paced events, and regimental loyalties, truth is often distorted. It is for the historians to put incomplete facts together and join the dots. Major General VK Singh conveys this very ably. On this note, it is worthwhile to mention that in recent years a valuable resource to join the dots for historians is access to the casualty lists on the National War Memorial website which gives a fair picture of how thickly in action a unit was.

The next two articles deal with the use of technology in war. These are 'Cyber Defence — India's Critical Infrastructure' by Commander K Ashok Menon (Retd) and 'Emergence of Drone Warfare and Implications for India' by Brigadier Kulbhushan Bhardwaj. Both articles carry important information, lessons, and recommendations in preparing for future wars.

This journal carries the last 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'. It is good to learn from the experience of others and his recommendations can give direction to reduce some of the shortcomings of the ECHS and further refine 'veteran medical care' in India. General Sherman of the American civil war fame had rightly said that "War is hell". Those whose loved ones die or are incapacitated know the real cost of war. There are many who pick up their threads and try to bring succour and relief to the next of kin of war casualties. The next article, 'Research & Advocacy to Address Issues Faced by Families of Armed Forces Soldiers Killed in Action (KIA)' by three such stalwarts Mrs Meghna Girish, Mrs Subhashini Vasanth & Mr Vikas Manhas is an eye opener. They bring out lot of very pertinent points which we hope, through the medium of this journal, will see some fruition.

The promotion policies and the promotion system often cause angst not only in the army, or the armed forces, but in any organisation. In the article 'Promotion Policy in the Armed Forces:

Time for Full Transparency’, the author Colonel PK Chaudhary writes with no recrimination about what in his view ails the system and how it can be made more transparent. Constructive criticism is always good, and this article should be read in that spirit by policy makers. It may even bring out some more constructive ideas from our readers. In the penultimate article titled ‘Stay “absolutely loyal, absolutely pure”: Xi’s Memoires to the PLA’, Ms Mrityika Guha Sarkar argues that Xi Jinping has aimed to utilise the military as a tool to further his agendas and, in that backdrop, analyses what has the CCP’s 100th anniversary meant for the CCP-PLA as well as Xi-PLA relations.

The final article of this issue is ‘India-US Partnership in Afghanistan: Challenges Ahead for India, by Shri Gaurav Kumar. This has been a much-debated subject after the astounding victory of the Taliban. While their victory was a foregone conclusion after the Doha agreement of Feb 2022, its speed was not foreseen and hence, the subject will remain relevant for some time till a clearer picture of the power play in Afghanistan emerges.

In the Review Article, Dr MR Anand, IES (Retd) writes about the book ‘India’s China Challenge: A Journey through China’s Rise and What It Means for India’ by Ananth Krishnan. He highlights that the objective of the book is to examine the transformation that has taken place in China and if India has to have a better grasp of her neighbour, there is a need to invest more efforts and attention in understanding the developments in China.

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

- The Saga of a Braveheart: Lt Col Ajit V Bhandarkar Shaurya Chakra. By Mrs Shakunthala A Bhandarkar
Reviewed by Maj Gen Jagatbir Singh, VSM (Retd)
- Irrawaddy Imperatives: Reviewing India’s Myanmar Strategy
By Jaideep Chanda
Reviewed by Shri Gaurav Kumar
- Manthan: Multifaceted Reflections on the Indian Armed Forces
By Major General VK Shrivastava, VSM
Reviewed by Ms Samriddhi Roy

- Law of Armed Conflict: Application and Practice
By Major General (Prof) Nilendra Kumar
Reviewed by Wg Cdr UC Jha (Retd)

We 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 our readers. As always, the USI Journal will attempt to maintain our standards of inquisitive and fruitful research and original writing by established as well as budding writers.

Happy Reading!

The Editorial Team

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Space the Next Frontier: Opportunities and Challenges for India[@]

Commander Pankaj Grover[#]

Abstract

Space as the next frontier influences technological and military development, gives a stimulus to the economy and strengthens national will contributing to the coercive and persuasive ability of a nation. It is a medium to gain strategic superiority and has the capability to influence the international balance of power. At the same time it is also an evolving war theatre. The pursuit of security, supremacy, and balance of power in space began with the US and the USSR during the cold war era leading to the present scenario where space is becoming congested, contested, and competitive. India since 1969 has primarily been focused on making use of peaceful applications of space technologies and only recently has started investing to ensure that its assets are protected against advertent and inadvertent disruptions. There is a need for India to focus on having well defined strategic objectives to face the evolving trends on the turfs of outer space. The article analyses the global space economy and the latest trends in the space industry affecting the national security objectives. The compounded annual growth rate required by India's space industry to keep up with the global pace has been analysed. Militarisation trend being followed in the global space domain has been compared with India's counter space capabilities and, finally, a road map has been proposed for the Indian Space Programme to counter

[@]This is the runners up entry of the USI Gold Medal Essay Competition Group 'B' for the year 2020.

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the challenges and exploit the opportunities leading to comprehensive national development.

Introduction

The quest for technological advancements and the desire to explore have changed the way humans look at the night sky. From the time when Sputnik 1 was launched in 1957 to the climax of cold war in 1990, the USA and the USSR were the dominant space powers. 70 per cent of the satellites launched by these two countries were with military intent.¹ In the 1990s, space capabilities began proliferating to other countries and even private entities, resulting in comprehensive development of nations. In today's world, space technology plays a multi-faceted role in all activities ranging from domestic to military. Increased use of space by many nations and development of technology with innovative applications have led to disruptive changes in how space is being utilised. 82 countries with over 200 private investors have contributed to the total satellites in orbit as of 2018.² Advancements in space affects "technological, demographic, economic, industrial, military and other factors that contribute to the coercive and persuasive ability of a country to politically influence the actions of other states".³ In the on-going pursuit of security, supremacy, and balance of power, space is becoming congested, contested, and competitive.

India's foray into outer space started in 1969 with the formation of Indian Space Research Organisation (ISRO).⁴ Ever since the launch of India's first satellite Aryabhata in 1975 to RISAT-2BR1 in 2019, Indian space programme has excelled. On 27 May 2019, post the successful demonstration of Anti-Satellite (ASAT) capability by ISRO, Indian Prime Minister Narendra Modi, while addressing the nation, brought out that "The main objective of India's space programme is to ensure country's security, economic development, and technological progress. India's strategic objective is to preserve peace, not prepare for war".⁵ India is presently a well-recognised space-faring country in the global space domain due to its ASAT capabilities and cost-effective launch programmes. With China making huge strides in outer space, the questions that need to be addressed by India are: firstly, whether the growth in space sector is commensurate with the ever-growing global competition? Secondly are the present space capabilities good enough to counter any threat from adversary nations and ensure India's national security?

Global Socio-Economic Trends

The global space industry has grown into a multi-billion-dollar industry, with its assessed value being \$366 billion in 2019.⁶ The satellite industry contributes 74 per cent to the global space economy (Figure 1 refers). Amongst the various constituents of this share, Remote Sensing Satellites (RSS) have seen an upward global trend in last five years.⁷ This may be attributed to the dual usage of RSS for military and domestic applications.

While there is an upward trend in India's space expenditure in last five years (Figure 2), it amounts to only four per cent of the global space economy and 0.06 per cent of Indian economy.⁹ A former senior economist, Brian Higginbotham, predicted that global space sector will grow to at least \$1.5 trillion by 2040, which would amount to approximately five per cent of US GDP at that time.¹⁰ For India to contribute even up to one per cent of the Indian envisaged GDP of \$5 trillion by 2024¹¹, it needs to have Compounded Annual Growth Rate (CAGR)¹² of at least 24 per cent. The target may sound ambitious but is not impossible. The increasing share of private players in the space domain merits re-evaluation of the traditional measures and policies of Indian space programme. The challenge for India would be to increase the investors in the Indian space economy.

While countries continue their efforts to utilise space, the magnitude of investment and the number of private-sector investors, also called 'Start-ups', have grown significantly over the last decade globally (Figure 3). Start-ups are booming in nations where the government's proclivity is towards forging a sense of security in private firms by implementing various economic reform policies. The Luxembourg Space Agency, formed in 2018, is likely to be the upcoming future hub among European nations in space ventures, such as asteroid mining.¹⁴ Luxembourg has formulated a regulatory and legal framework and an ecosystem for global industries to invest in its space programme through European Space Agency.

In 2019, Start-ups across the globe contributed \$5.7 billion in various space sectors. US private firms such as Elon Musk's SpaceX, Jeff Bezos's Blue Origin, and Richard Branson's Virgin Galactic were forerunners in contributing the maximum to global space sector till 2019 when the mantle was seized by firms like Qianxun Spatial intelligence from China and few from Japan.¹⁶

The Satellite industry in Context

(2019 revenues worldwide, in billions of U.S. dollars)

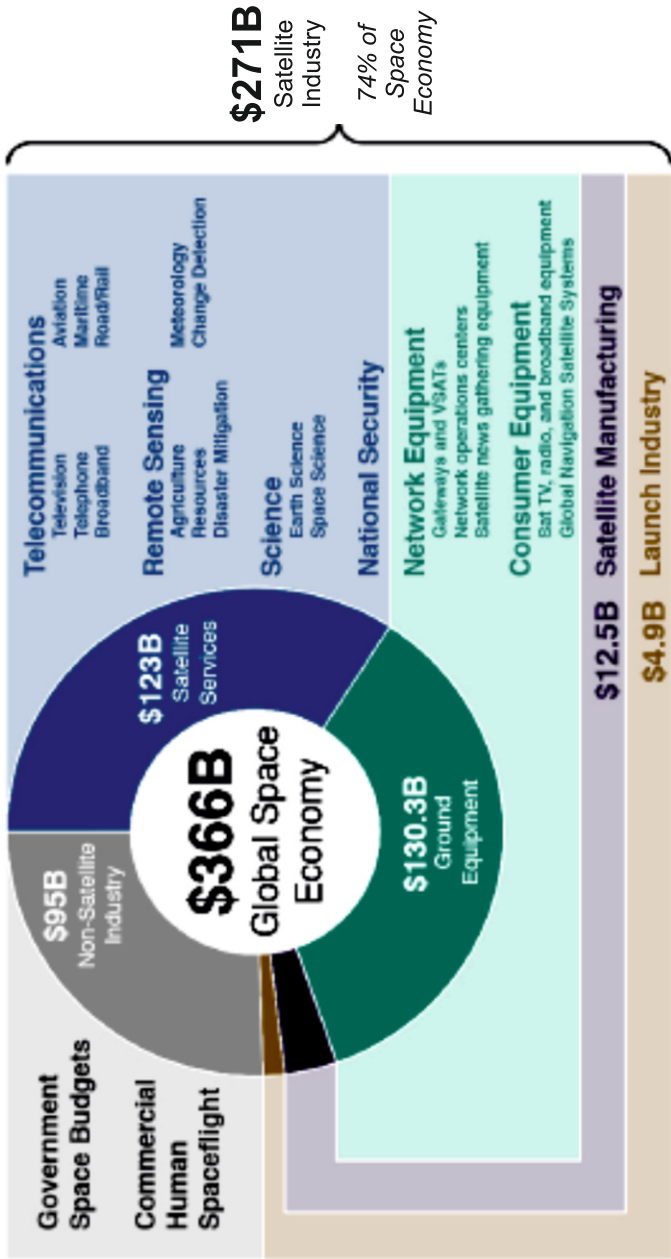


Figure 1: Global Space Economy, 2019, by Bryce Space and Technology

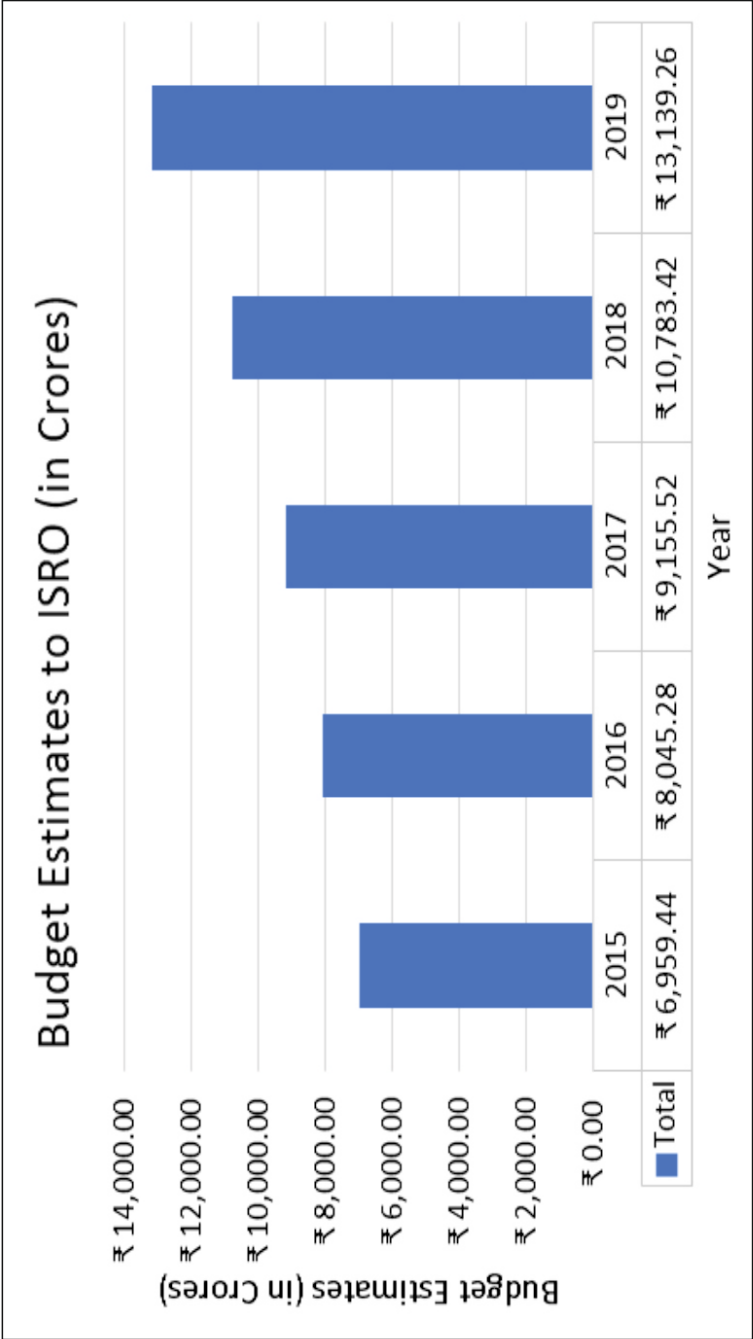


Figure 2 : Budget Estimates to ISRO for last five years¹³

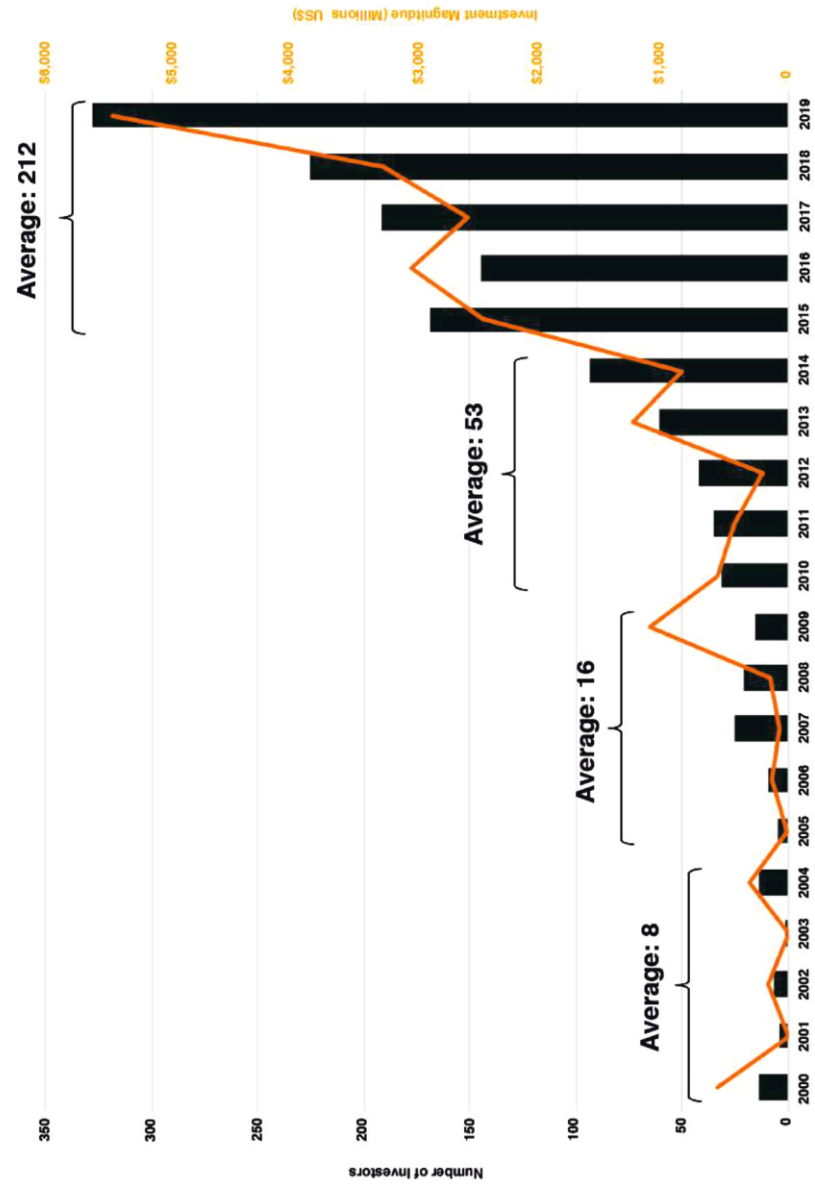


Figure 3 : Private Investors Growth Rate in last five years¹⁵

India's standing in global space market can be improved by commercialisation of the space industry in India. Over the last decade, an upward trend can be seen in the number of foreign satellites launched by India (Figure 4). Even though India has the capability, it is yet to witness an Indian version of Space X or Blue Origin. Over the last decade, India has launched 319 foreign satellites for 33 countries, US being one of the prominent customers, resulting in a revenue generation of over ₹ 5600 crores.¹⁷

ISRO, through its nodal agency such as NewSpace India Limited (NSIL) and Public-Private Partnership (PPP) model, has been dependent on various private Small and Medium-sized Enterprises (SMEs) for manufacturing space-subsidaries such as motor cases, tanks, control equipment, chemicals, electronic packages, etc. An entire ecosystem exists in the Indian market, although at a relatively small scale, for private sectors working for ISRO. To tap the global market, Antrix Corporation Limited (ACL), headed by Department of Space (DoS), is responsible for engaging with international customers on behalf of ISRO. All Indian space activities are controlled and driven by the DoS along with ISRO. Space sector in India seems to lack the competitive and financial drive required for excellence. Impetus on privatisation of space sector with end to end manufacturing capabilities has not yet been legally given by the Indian Government. There is no regulatory framework in India to boost confidence among the existing SMEs to invest more, and expand into larger firms.

The private sector is also shaping the counter-space capabilities of space-faring nations. Private firms are offering low-cost, technologically advanced solutions in the field of Space Situational Awareness (SSA), satellite launching, manufacturing and tracking. In the context of SSA, LeoLabs, a California-based start-up, is operating its own phased array radar and developing the largest constellation of Low Earth Orbit (LEO) satellites without US government support.¹⁹ A less politically controlled, 'bottom-up', innovative approach is trending in the space sector which is working in favour of the US Space programme. However, in Russia and China, a 'top-down' approach is being followed where the programme is governed by political dictate and nationalist agendas. The State Space Corporation of Russia, Roscosmos, appears to be isolated from the growing western global space community. A recent study indicates that Russia imports 75 per cent of its space industry components from US.²⁰

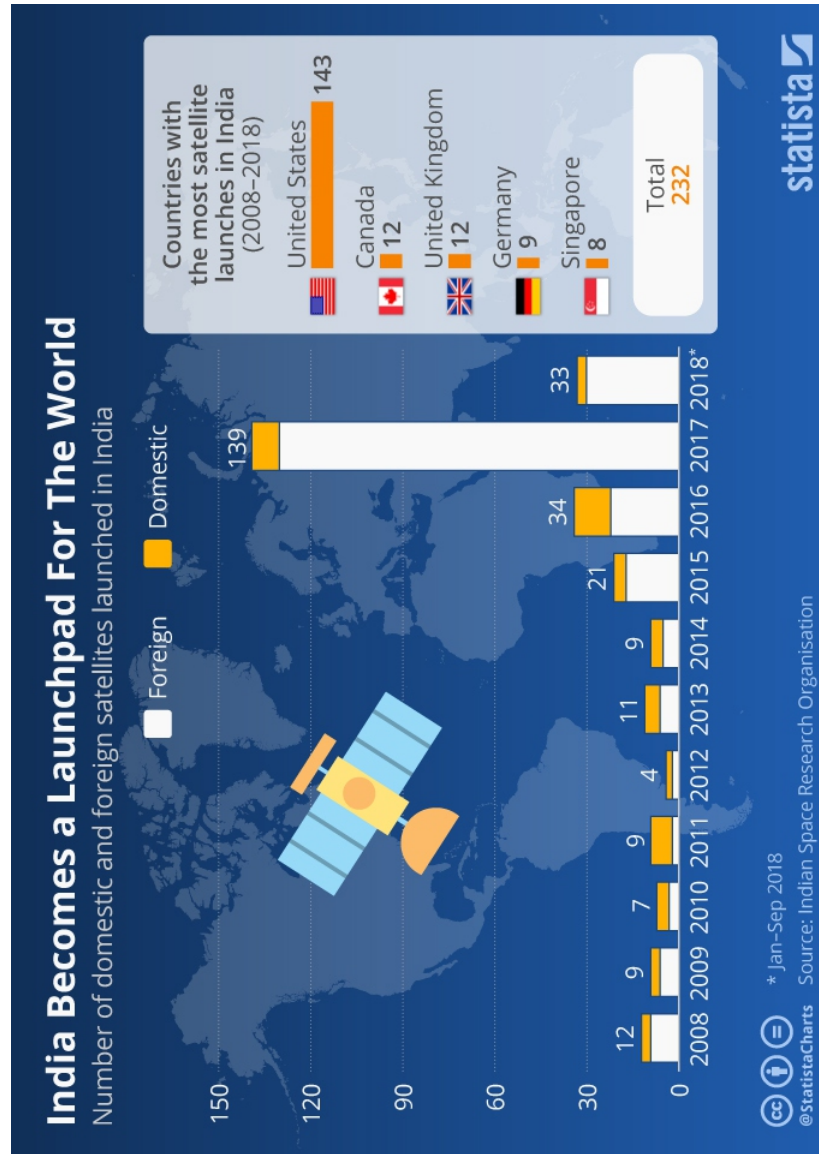


Figure 4: Satellite Launches by India: 2008-2018¹⁸

Although Chinese space programme follows a top-down approach, it promulgated laws in 2014 for fostering private business and allowed start-ups to emerge in 2015.²¹ As on 2018, 60 start-ups have been registered under Chinese space programme.²² Presently, Chinese private firm SpaceOk is working on putting a constellation of 40 satellites into orbit as part of China's 'One-Belt, One-Road' initiative and China is likely to continue to use its private sector for military purposes.²³

The correct approach for a nation to adopt, 'top-down' (Russia & China) or 'bottom-up' (US), to promote the growth of its space programme is the challenge that India must resolve. India needs force restructuring in its space sector to meet the challenges that the future is yet to unfold. Private players are playing an evolving role in strengthening military resilience and sustainability across the globe. Thus, to strengthen national security objectives, military must work in confluence with the commercial sector.

Global Militarisation Trends

Militarisation of space is not a recent phenomenon, as since the era of Cold-war USA and Russia has been experimenting and exercising coercion and deterrence through several Space programmes (Table 1).²⁴

Table 1 : ASAT weapons tested by the USA and Russia during the Cold War²⁵

Country	ASAT Weapon	Treaty Imposed	Timeline
USA	Nuclear Tipped Interceptors	Outer Space Treaty	1950-1960
	Air-Launched ASAT System	US Air Force discontinued Air-Launched miniature Vehicle Programme	1980-1990
Russia	Co-Orbital ASAT weapons	<ul style="list-style-type: none"> • The Anti-Ballistic Missile Treaty • Accident Measures Agreement 	1970-1980

As on date, four nations have demonstrated the possession of Direct-Ascent Anti-Satellite (DA-ASAT) technology for engaging Low Earth Orbit (LEO) satellites²⁶ (Table 2). With the expanding global space economy and panorama of socio-economic impacts, it is in the national interest of all states to safeguard their space

assets from any attack. Militarisation is perceived as an act of belligerence by a state. Therefore, any overt act in outer space has been disdained by other space-faring nations. Notwithstanding, nations have gone ahead with the development and validation of their anti-satellite capabilities towards space deterrence by denial. With the increased number of global players, the security issues have become more enmeshed and stakes have gone high. With the resultant implications of a direct attack on a satellite, countries are showing preference for covert counter-space capabilities for plausible deniability.

Table 2 : Latest demonstrations by nations having DA_ASAT capabilities²⁸

Country	Test Year	Interceptor Missile	Intercept Altitude	Orbital Debris	Life Span of Orbital Debris
China	2007	SC-19	800 kms	3000	Several Decades
United States	2008	SM-3	240 kms	174	18 months
India	2019	PDV-Mk II	280 kms	400	Likely weeks to months
Russia	2020	A-235	Max reported altitude of 1500 kms	Nil	Missile carried a dummy vehicle

In today's scenario, direct satellite attack methods include DA-ASAT missiles and co-orbital systems. The non-direct methods include lasers, microwave, radio-frequency weapons, satellite jamming, and spoofing. Cyber-attacks and SSA are also considered part of counter-space capabilities. The present status of anti-satellite capabilities of few space-faring nations, shown in Table 3, indicates India's standing as a middle-ranking nation in the league. India must keep up the pace of technological advancements with regards to non-direct methods to keep a check on adversaries and ensure Indian national security.

Table 3 : Status-Militarisation of Space, the leading Space-faring nations²⁹

Country	Direct Ascent	Co-orbital	Direct Energy	EW	SSA	Cyber Capability
USA	Ops	R&D	Test	Ops	Ops	Ops
Russia	Ops	R&D	Test	Ops	Ops	Ops
China	Ops	R&D	Test	Ops	Ops	Ops
India	Ops	-	-	-	Ops	Ops
Iran	Capable	-	-	Ops	-	Ops
North Korea	Capable	-	-	Ops	-	Ops
Japan	Capable	-	-	Ops	R&D	-
France	-	-	R&D	-	R&D	-

Dual-use satellites are also an emerging trend in the militarisation of space. Satellites with robotic arms meant for repairs, inspection, or debris removal can also grapple an adversary's space asset when required. RSS, communication, and navigation satellites also assist in military domain awareness and network centric operations. After US, China and Russia have the largest RSS fleet. As of 2018, China had a fleet of more than 120 RSS through which China maintains situational awareness in its areas of interest.³⁰ India presently has 15 RSS to augment the armed force's communication and military operations.³¹ With an increasing demand of RSS in the global space industry, India should develop a strategy to upscale RSS production and launch capability, which can be used for both military and economic gains.

Global Strategic Developments

The strategic importance of outer space got emphasised in the global arena when US used it effectively during the First Gulf War. To showcase a resilient posture in the face of growing US space and military capabilities, China successfully demonstrated its kinetic ASAT technology in 2007. While this brought the issue of militarisation of space to fore, it also highlighted the issue of the resultant satellite debris management.

Indian space programme objectives have always been focused on societal co-existence. There is a need for India to focus on having well defined strategic objectives to face the evolving

trends on the turfs of outer space. Some of the global strategic developments in the employment of outer space are as follows:

- **Evolving Nature of Space Assets.** Nations are exploring higher orbits than LEO for Intelligence, Surveillance, and Reconnaissance (ISR), and communication satellites, as DA-ASAT is limited to LEO as on date. Also, smaller satellites are being preferred for Command, Control, Communication, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) functions currently being performed by larger, more specialised custom-built satellites. Further, options of reusable launch vehicles are being explored for cost and time efficiency during peace and war times. This will also boost the space industry.³²
- **Deterrence through Disintegration.** To ensure survivability in case of an attack and quick replacement, when required, without the entire system's breakdown, countries are aiming to spread their satellites in different orbital planes. The disaggregated space assets in multiple orbits would provide redundancy.³³
- **Deterrence through Threat of Retaliation.** This strategy supports development of dual-use satellites and soft-kill counter-space capabilities. DA-ASAT will always have a 'No First Use' policy in case of conflict, as a lot is at stake in the arena of space due to congestion. Therefore, all space-faring nations are concentrating on soft-kill technology development. The awareness quotient of hard-kill weapons is exceptionally high. However, it is difficult to assess the arsenal of weapons available with other nations with soft-kill technology. The element of surprise during an emerging conflict scenario will always be maintained. Threat characteristics of various counter-space capabilities are shown in Table 4.

Table 4 : Threat characteristics of various counter-space capabilities³⁴

Types of	Kinetic Physical		Non-Kinetic Physical		Electronic		Cyber	
	DA-ASAT	Co-Orbital	High Powered Microwave/Laser	Laser Blinding	Jamming	Spoofing	Data Monitoring/Corruption	Seizure of Control
Reversibility	Irreversible	Irreversible/Reversible depending on capabilities	Irreversible	Irreversible/Reversible; attacker may not be able to control	Reversible	Reversible	Reversible	Reversible
Awareness	Known to all	May or may not be known	Satellite Operator will be aware	Satellite Operator will be aware	Satellite Operator will be aware	May or may not be known	May or may not be known	Satellite Operator will be aware
Collateral Damage	Orbital debris could affect other satellites	May or May not produce debris	Could leave target disabled/uncontrollable	None	Only disrupts signals and frequencies	Only corrupts specific RF signals	None	Could leave target disabled/uncontrollable

- Multinational Efforts. The US has 50 SSA agreements with nations, international organisations, and commercial entities. This has come to be known as the Combined Space Operations (CSpO) concept, essentially a “multinational effort focused on co-operation, collaboration, and the integration of military space activities across the participating countries”.³⁵

India’s stand in Global Space Domain

Out of 5806³⁶ active satellites in outer space as on 2019, the Indian share was only 105³⁷, out of which 68 per cent amounted to communication and earth observation and meteorological satellites (Figure 5).

While other countries are making huge progress in space technology, India is yet to exploit its potential fully. India established its Defence Space Agency (DSA), to coordinate the armed forces space requirements, in Nov 2019. The Defence Space Research Organisation (DSRO) has also been created to provide technical support to DSA. In Sep 2019, India launched Network for Space Objects, Tracking, and Analysis System (NETRA) to improve its SSA capability. India has primarily been focused on making use of peaceful applications of space technologies and only recently started investing to ensure that its assets are protected against advertent and inadvertent disruptions.

In terms of manufacturing capabilities, due impetus is needed on 100 per cent indigenisation of spacecraft components. Presently, India imports 10 per cent of critical materials and electronic components for launch vehicles and 55 per cent for satellites manufacturing.³⁹ One of the latest reports vetted by ACL brings out a lack of awareness in the general masses about the international space industry’s demands.⁴⁰ India needs to develop its end to end space system capabilities to cater for global needs. A new kind of partnership between ISRO, the established private sector, and the new space entrepreneurs promoting due participation of all stakeholders in development of indigenous space sector is the need of the hour.

To ensure safe, secure, and sustainable use of space, India will have to follow a multi-pronged approach. Opportunities available

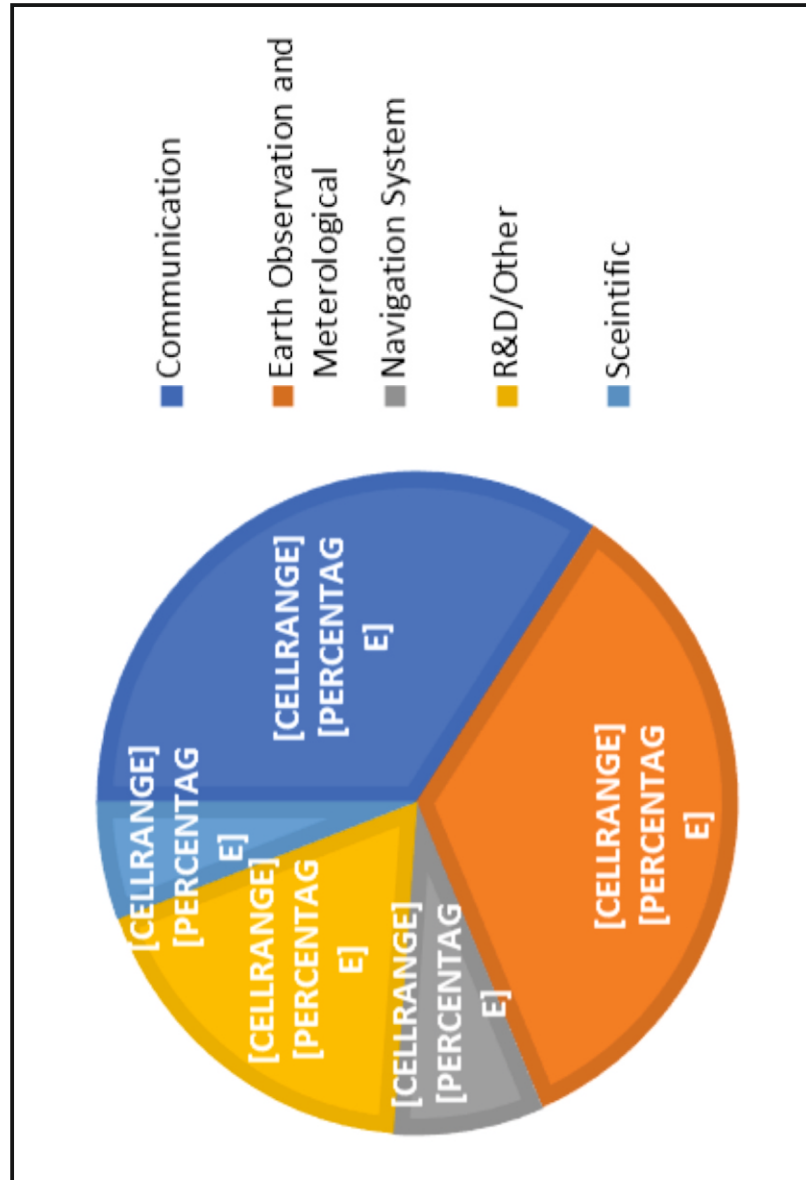


Figure 5 : Percentage share of active Indian Satellites in Outer Space, 2019³⁸

with India to overcome various challenges highlighted above are as follows:

- Supportive Governance. With the present majority government having supported various ventures of ISRO such as the ASAT programme, Mangalyaan and Chandrayaan, changes in space organisational structure and a conducive regulatory framework can be promulgated to develop a business-friendly ecosystem for ancillaries – encouraging smaller component manufacturers to participate and existing firms (such as Exceed Space, Dhruva Space, and Bellatrix) to expand in the space sector. The scaffolding is already in place; there is a need to push start the process.
- Globalisation. NSIL was commissioned in 2019, as a commercial arm of ISRO, to globally market space technologies emanating from the Indian space sector. With many start-ups ready to align with the government's aim of comprehensive national development and 'Make-in-India' drive, it is time to annex a sizable amount of \$366 billion global economy. The global market for small satellites is predicted to increase from \$12.6 billion in 2009-18 to \$ 42.8 billion in 2019-28.⁴¹ According to a recent market study by Euroconsult, only 700 small satellites were launched by 2015. This number could grow up to 10,000 small satellites by 2026.⁴² There is a massive potential in India to tap this global market.
- Demographic Dividend. Since 2018, India has entered a phase in which she will have a working population for the next 37 years, i.e. people between age group 15 and 60 years will be higher than the dependant population. This phase should be utilised to increase the production capacity and capability of space sector to achieve the CAGR of 24 per cent in the space economy.
- Diplomatic Partnerships. India should utilise its diplomatic relations with Japan, France, and Europe for collaborative ventures in space technology and exploration to raise collective deterrence. This can also leverage indigenous expertise in niche areas.
- Enhanced SSA and Impetus on Network Centric Operations. As the country advances on the path of socio-economic growth, India cannot afford to be complacent about the

emerging security environment, particularly in the Indian Ocean Region (IOR) and in its extended neighbourhood. DSA in 2019 conducted the first series of space war game simulation exercises like IndSpace Ex to measure the Indian space security's strengths and weaknesses. The gaps emerging from these exercises in the upkeep of domain awareness and C4ISR should be documented and addressed on priority.

Way Ahead

In an arena that is evolving rapidly, the only strategy that is guaranteed not to fail is to make the most out of the available opportunities. With a view to enhanced utilisation of the outer space, India could consider realisation of the following options:

- Privatisation. The Government of India should formulate a dedicated 'Space Policy' as the first step to commence the privatisation process. Various legal and administrative aspects like intellectual property rights, insurance, transfer of technology, if warranted, liability clause etc. are to be considered and should be laid out in the open for the motivation of private players to commence their relay run.
- Restructuring. Presently, ISRO is a single vertical hierarchy under DoS with various subunits to assist in its functioning. DoS has a divided focus on the multiple roles it is currently playing with subsequent budgetary constraints. Three parallel verticals should be created under DoS. ISRO should purely concentrate on R&D and advancements of space technology. An Integrated Defence Space cell with DSA should be commissioned as a second vertical, headed by the CDS, and responsible for the military security of space assets. A fourth war dimension, called 'Space Force', can eventually be created in addition to Army, Navy, and Air Force. The third vertical should be the private sector, which will be possible only after achieving the short-term goals regarding the regulatory framework and privatisation. All three verticals should work in synergy through a regulatory framework to achieve national security objectives.
- Human Resource Employment. To reap the benefits of demographic dividends, more jobs in space sectors to be

created for improved productivity. Data received from communication, earth observation, and meteorological satellites have a vast scope for data application tools like artificial-intelligence and machine-learning. Thus, there is a scope for commercialisation and increasing human resources employed in the nation.

- Global Support Services. NSIL should show presence in various international forums related to space industry and promote an Indian comprehensive satellite strategy with respect to communication and earth observation satellites. India should offer a cost-effective end to end service for building, launching, operations, ground support maintenance, and mission support services.
- Space Co-operation. It is essential to have diplomatic engagements to address space security concerns and be part of Combined Space Operations (CSpO) like US and other ally nations, like France, Europe, and Japan, as this would deny an aggressor the opportunity to take up a fight on a one to one basis, given the networking of systems of many countries.
- Counter-space Capabilities. India is required to increase its counter-space capabilities. To start with, the government and ISRO should focus on the following:
 - ✦ 100 per cent indigenisation in satellite manufacturing sector.
 - ✦ Production of cost-effective smaller RSS.
 - ✦ Technological advancement to put remote sensing satellites into higher orbits than LEO.
 - ✦ Feasibility study for disaggregation of the space architecture as a response mechanism to deal with the perceived threats.
 - ✦ Invest in Direct Energy Weapons, Electronic Warfare, and Cyber Technologies.
- C4ISR. To strengthen national security, technology for introducing more robust and redundant space systems would have to be developed emphasising on space-based ISR and

communications. A potential solution could be a fleet of small satellites described as an 'Operationally Responsive Space' launch capability that can be looked into to provide a distributed but integrated multi-sensor, multi-domain approach to ISR data collection and analysis. India also needs to deploy a large number of Electronic Intelligence (ELINT) and Imagery Intelligence (IMINT) satellites to match the advanced space fairing adversaries and increased SSA.

Conclusion

The known unknowns⁴³ of space is a 'Gray Rhino' event. National security is the ultimate end for which space is an emerging means. India has excelled in its journey of space programme but has a long way to go compared with the US, China, and Russia. The space sector plays a dual role in the national security strategy. Space as the final frontier is vital from the strategic autonomy perspective and is also an enabler for the country's socio-economic development. India needs to develop its regulatory framework, space policy, and a law defining state and private players' role. Sharing of burden with the private industry is a critical enabler in achieving the Indian space programme's vision. It is also essential to focus on space applications of strategic significance and use diplomatic means to ensure space remains a medium to foster technological developments to achieve national security objectives.

Endnotes

¹ T Harrison, Z Cooper, K Johnson, TG Roberts, Escalation & Deterrence in the second space age, A project report by the Center for Strategic & International studies Aerospace security project, 2017, pp. 8. Available at <https://aerospace.csis.org>. Accessed on 17 August 2020.

² "OECD(2019), The Space Economy in Figures: How Space Contributes to the Global Economy", OECD Publishing, Paris. Available at <https://www.oecd.org/innovation/the-space-economy-in-figures-c5996201-en.htm>. Accessed on 12 August 2020.

³ Ober JE, Space power theory, Colorado Springs: US Air Force Academy/ Government Printing Office, 1999, p.1

⁴ Ajey Lele, Asian Space Race: Rhetoric or Reality?, Institute for Defence Studies & Analysis, Springer publication, 2013, pp. 59.

⁵ "Speech by Prime Minister on Mission Shakti, India's Anti-Satellite Missile test conducted on 27 March 2019". Available at <https://>

www.mea.gov.in/Speeches-Statements.htm?dtl/31180/Speech+by+Prime+Minister+on+Mission+Shakti+Indias+AntiSatellite+Missile+test+conducted+on+27+March+2019. Accessed on 16 July 2020.

⁶ “State of Satellite Industry Report”, A report by Bryce space and technology. Available at <https://brycetek.com/reports>. Accessed on 02 August 2020.

⁷ Ibid

⁸ Ibid

⁹ OECD(2019) report, op. cit 2.

¹⁰ “The Space Economy: An Industry Takes off”, An article by Brian Higginbotham for US Chamber of Commerce, 11 October 2018. Available at <https://www.uschamber.com/series/above-the-fold/the-space-economy-industry-takes>. Accessed on 02 July 2020.

¹¹ “Modi govt’s USD 5-trillion GDP target by 2024 looks unimaginably ambitious”, article in economic times, 12 January 2020. Available at <https://economictimes.indiatimes.com/news/economy/policy/modi-govts-usd-5-trillion-gdp-target-by-2024-looks-unimaginably-ambitious/articleshow/73212751.cms>. Accessed on 15 July 2020.

¹² “CAGR – Compounded Annual Growth Rate”, calculation formula available at <https://groww.in/p/cagr-compounded-annual-growth-rate>.

¹³ Data taken from Annual reports published by ISRO from 2015-2019. Available at <https://www.isro.gov.in/>. Accessed on 16 July 2020.

¹⁴ “How Luxembourg is positioning itself to be the centre of space business”, An article in The Conversation, 17 July 2019. Available at <https://theconversation.com/how-luxembourg-is-positioning-itself-to-be-the-centre-of-space-business-120436>. Accessed on 29 August 2020.

¹⁵ “Update on Investment in Commercial Space Ventures”, A report by Bryce space and technology, available at <https://brycetek.com/reports>. Accessed on 16 July 2020.

¹⁶ Ibid

¹⁷ “ISRO earns Rs 5,600 crore in three years”, An article by Chethan Kumar in Times of India, 13 August 2018. Available at <https://timesofindia.indiatimes.com/india/isro-earns-rs-5600-crore-in-three-years/articleshow/65390644.cms>. Accessed on 16 July 2020.

¹⁸ “India becomes a launchpad for the world”, An article by Statista, 21 September 2018. Available at <https://www.designworldonline.com/india-becomes-a-launchpad-for-the-world>. Accessed on 25 August 2020.

¹⁹ JC Moltz, 'The Changing Dynamics of Twenty-First-Century Space Power', *Journal of Strategic Security*, Vol. 12, No. 1, 2019.

²⁰ "75 Percent of Russian Satellite Program Dependent on US-Manufactured Components", An article by P Goble in *The Interpreter*, 12 June 2015. Available at <https://www.interpretermag.com/75-percent-of-russian-satellite-program-dependent-on-us-manufactured-components>. Accessed on 20 July 2020.

²¹ "China's Start Up incubators", An article by PK Gregely for PAGEO Geopolitical Institute, 22 November 2017. Available at <http://www.geopolitika.hu/en/2017/11/22/chinas-start-up-incubators>. Accessed on 01 September 2020.

²² "China Focus: Sunrise for China's Commercial Space Industry?", An article by Xinhua for Xinhuanet, 13 May 2018. Available at http://www.xinhuanet.com/english/2018-05/13/c_137175948.htm. Accessed on 16 August 2020.

²³ JC Moltz, op. cit 19.

²⁴ Refer to Table 1

²⁵ "A History of Anti-Satellite Programs", Article by Laura Grego, senior scientist, USC Global Security Program, January 2012. Available at <https://www.ucsusa.org/resources/history-anti-satellite-programs#ucs-report>. Accessed on 16 July 2020.

²⁶. This refers to an orbit with an altitude of up to 2,000 km above Earth.

²⁷ "Russia Tests PL-19 Nudol Direct Ascent ASAT System", Article available at <https://spacewatch.global/2020/04/russia-tests-pl-19-nudol-direct-ascent-asat-system/>. Accessed on 17 August 2020.

²⁸ Laura Grego, op. cit 25.

²⁹ "Global Counterspace Capabilities: An Open source assessment", A report by Brian Weeden and Victoria Samson for Secure World foundation. Available at <https://swfound.org/counterspace>. Accessed on 01 July 2020.

³⁰ "Competing in Space: assessment", A report by Master Sgt. Zachary Wilson for National Air and Space Intelligence Centre Public Affairs, 16 January 2019. Available at <https://www.nasic.af.mil/News/Article-Display/Article/1733201/usaf-nasic-releases-unclassified-competing-in-space-assessment>. Accessed on 16 July 2020.

³¹ Air Marshal Anil Chopra, 'Space the Next Frontier : Opportunities and Challenges for India', *The journal of the United Services Institution of India*, Vol. CXLIX, No. 618, October-December 2019.

³² Kai-Uwe Schrogl, 'Traffic Management for Responsive Space: The Mega-Trend for Space Activities in the Decades to Come', European Space Policy Institute Perspectives, no. 44, February 2011.

³³ USAF Space Command, Resiliency and Disaggregated Space Architectures, White Paper 2014.

³⁴ T Harrison et al. op. cit 1.

³⁵ Statement of Deputy Assistant Secretary of Defence for Space Policy, Douglas Loverro, before the Senate Committee on Armed Services, 24 April, 2013. Available at https://www.armed-services.senate.gov/imo/media/doc/strategic_militaryspaceprograms_042413.pdf. Accessed on 16 July 2020.

³⁶ "Satellites by Countries and Organisations", list of operational satellites available at <https://www.n2yo.com/satellites/>. Accessed on 20 June 2020.

³⁷ Data available at <https://www.isro.gov.in>. Accessed on 16 July 2020.

³⁸ Ibid

³⁹ ISRO Annual report 2019-20. Available at <https://www.isro.gov.in>. Accessed on 16 July 2020.

⁴⁰ "Preparing to Scale new heights: Enhancing Private Participation in India's Commercial Space Sector", A position paper by PwC on India's Space sector. Available at <https://www.pwc.in/research-insights/2020/preparing-to-scale-new-heights.html>. Accessed on 04 August 2020.

⁴¹ "Euroconsult research projects smallsat market to nearly quadruple over next decade" article by Euroconsult, 05 August 2019. Available at http://www.euroconsult-ec.com/5_August_2019. Accessed on 28 July 2020.

⁴² Bhavya Lal, R Blanco et al. 'Global Trends in Small Satellites', (IDA Science & Technology Policy Institute, 2017, pp. 2-5)

⁴³ Donal Rumsfeld, Known and Unknown A Memoir (Penguin Group, USA, 2011)

The Purple Path Ahead is full of Expectations and Opportunities

Lieutenant General PS Rajeshwar (Retd)[®]

“Things cannot move smoothly if anyone from the Navy, Army and Air Force is a step ahead of the other two forces, while the other two are lagging behind. All the three should move simultaneously at the same pace. There should be good coordination and it should be relevant with the hope and aspirations of our people.”¹

Shri Narendra Modi, Hon'ble Prime Minister

Abstract

India's geo-strategic location has placed it among two adversarial neighbours who have disputed borders with it. The past experience is that the security situation with Pakistan and China has the ability to deteriorate from a state of peace to crisis to conflict unexpectedly. In such a context, Pakistan and China can collude and threaten us with a 'two' or a 'two and a half' front war. To deal with such a situation, it is imperative that there should be synergised application of the three Services. The article brings out that the purple path chosen by the Govt, after years of debate, will enable the three Services to move forward in unison to meet the threat. Creating a CDS, theatre Commands, and joint acquisition procedures will provide benefits and continue to evolve thereafter.

Introduction

India finds itself in the midst of a complex geopolitical environment today. There is great power competition between the US and China, at a time when the former has exited Afghanistan and is renewing its focus on the Indo-Pacific. Simultaneously, China's

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economic and military power is posing new challenges to many nations, regionally and globally. India too has been particularly affected by the pandemic and from clashes with China on the LAC since early 2020. On the other hand, Pakistan continues with its hostility towards us and is progressing a proxy war in J&K. The Galwan clash and Chinese deployment in 2020 have distinctly indicated Chinese belligerence to alter the Line of Actual Control (LAC), violating existing Confidence-building Measures (CBMs) and agreements, and rendering the security situation very volatile. On our western borders too, peace remains fragile with Pakistan. At present, it is busy helping the Taliban consolidate power in Afghanistan. Further, China has been vigorously assisting Pakistan and built the China Pakistan Economic Corridor (CPEC) through Pakistan Occupied Kashmir (POK) to get land access to the Arabian Sea.

A State of Uneasy Peace

India's geo-strategic location has placed us uniquely in the midst of two adversarial neighbours who have disputed borders with us. In the last two decades we have learned that the security situation with Pakistan and China has the ability to deteriorate from a state of peace to crisis and then to conflict rather rapidly. While the chance of an all-out war remains remote due to the nuclear backdrop, crisis and conflict situations have been arising more frequently and, often, abruptly. In addition, the armed forces have had to be deployed in Counter Terrorism operations in Jammu & Kashmir for the last three decades and in the Northeast for longer than that. In such a context, could Pakistan and China collude and threaten us with a 'two' or a 'two and a half' front war? This remains a moot point but its possibility cannot be ruled out.

Nature and Character of War

The nature of war continues to be the imposition of one nation's will on another nation. However, it's the character of war that is changing rapidly. War has progressed from the traditional domains to multiple domains already. We see a confluence of land, air, maritime, cyber, space, and information domains in action now. The Nagorno-Karabakh war brought to fore the increasing role of unmanned aerial vehicles (UAVs) for intelligence and surveillance, precision fires through loitering munitions and long-range artillery, neutralisation of enemy Air Defence (AD) systems by electronic

warfare means and sapping the adversary's morale by intense real time information warfare; albeit at a lower scale compared to what is envisaged in our case. The Israel-Hamas conflict highlighted the fusion of intelligence, precision munitions, strong AD systems, and reliable networking mechanisms. Both conflicts had different scope, yet demonstrated novel methods of warfare. Technological advances in 5G network applications, artificial intelligence, machine learning, robotics, quantum computing, nanotechnology, hypersonic vehicles, laser weapon systems, and chemical/ biological warfare in the future are only going to make domain intersections complex and the battlefield much more intense.

India's Critical Defence Reform

Consequent to the 1999 Kargil war, the Kargil Review Committee highlighted the need for greater defence reforms. The Group of Ministers (GoM) then followed this up by taking a firm view on defence management and attempted to bring in the required jointness in the armed forces. "The capabilities of the Armed Forces can be enhanced significantly if rather than operating as three individual units, they operate with a high degree of jointness and in close tandem with one another in the conduct of various tasks, including training".²

In order to further strengthen our defence forces and usher in jointness, the Govt of India notified the appointment of Chief of Defence Staff (CDS) on 24 Dec 2019. It assigned him a specific mandate while placing the Department of Military Affairs (DMA), the fifth vertical of the MoD, under the CDS, thereby integrating the services fully. The duties and functions of the CDS, amongst others, included heading the DMA as its Secretary, acting as the Principal Military Advisor to the Defence Minister on all tri-service matters and functioning as the permanent chairman of the Chiefs of Staff Committee (COSC).³

With the advent of CDS, the last twenty months have seen a lot of deliberations within our Services to carve out the desired purple-path. Steeped in single service ethos, doctrines, and seeking individual domain outcomes, it was but natural to be challenged initially while working towards greater jointness and integration. Even the US realised three decades after the Goldwater-Nichols Act that more reforms were necessary. As the then US Defence Secretary, Ashford Carter, said in 2016, "We need someone in

uniform who can look across the services and combatant commands and make objective recommendations to the department's civilian leadership about where to allocate forces throughout the world and where to apportion risk to achieve maximum benefit to our nation. And the best person to do that is the Chairman of the Joint Chiefs (COJC)".⁴ While the COJC had been willy-nilly doing it, this had not been put in writing in his charter.

The Slew of Expectations

How then does one traverse the purple-path smoothly? At the outset, a broad strategic direction is expected from the national security apparatus in the form of a National Security Strategy. This will help us crystallise immediate and future challenges. We can then derive the National Defence Strategy that primarily encompasses external and internal defence, work out required domain capabilities and capacities. Within the Ministry of Defence, it will enable the refining of the *Raksha Mantri's* (RM's) Operational Directive based on how we now identify our primary and secondary adversary. Following up, we will have to put together a suitable Joint Services Doctrine that guides integrated and modern war fighting methods in the strategic and operational planes. These, in turn, will facilitate planning, capability development, and inter-se prioritisation between individual services and the joint components. Certain missions will remain in the single service domain and can continue being progressed based on service specific doctrine. Also, 'lead service missions' may be undertaken when required. During crisis/conflict situations, based on the role assigned, the lead service could change from time to time.

One of the foundational requirements for joint combat in the battlefield transparency and decision-making sphere is seamless electronic and digital networking. While service specific networks currently linked to existing single service structures proliferate, joint service networks may need to be constructed exclusively to cater for to-and fro joint intelligence, surveillance, command and control, training, and logistics functions. The gaps in real time lateral flow of information and decision making at identified Division/ Integrated Battle Group – Fleet/Base – Airbase level will need to be bridged so as to enable swift joint operational manoeuvres. Simultaneously, cyber and space domains, which intersect all domains, also need to be secured and expanded.

Theatre Commands

Theatre Commands (TC) are a structural imperative in our journey to integrate the military capabilities of the three Services and attendant joint entities. What needs to be decided upfront is whether the next lower echelon will be the existing single Service command(s) or otherwise. This is contingent on the desirable span of control of a TC, when weighed against the additional layer of command and control (C2) that it could now become. If the subordinate level is the single service command then HQ TC should be lean and agile precluding duplication. Since the staff will come from existing resources, the current Command HQ too can be pared down.

Certain media reports identify TCs that are likely to be created shortly. “According to the current proposal that was discussed during last month’s meeting, there will be five theatres — Northern Land Theatre (J&K, Ladakh and Central Sector), Western Land Theatre (Pakistan centric), Eastern Land Theatre, Maritime Theatre Command and Air Defence Command”.⁵ The logic of creating a TC would be to improve overall combat effectiveness and, based on the role, have minimum essential assets from the Army, Air Force and Navy. Axiomatically, such resource allocation to the TC would become central to its planning, training, operations, and sustenance. As resources would always be finite, the COSC should be able to ab initio allot them and, when required, review and readjust depending on mission assignment to each theatre. One of the issues for consideration is whether all the TCs need to come into existence simultaneously or would it be wiser to initially designate one as a ‘pilot’ TC and move forward on the rest based on our experience, say, after a couple of years?

The aspect of human resource (HR) management that merits attention would be whether to confine the leadership at TC to a particular Service or to open it up for officers from any Service, as is the case with Andaman & Nicobar Command (ANC), since this brings in a fresh perspective and deeper integration with each rotation. While training and creating more staff billets for cross staffing is possible, the challenge would be to create adequate purple command assignments below TCs, especially, as the current levels of command vary from Service to Service. Routing Commander in Chief (C-in-C) TC through Service command would

truncate their command tenures to the detriment of the TC. Should we then think about separate streams for purple and single service career progression after promotion to three-star rank? How do we select C-in-C TCs? If Cyber, Space and Special Forces agencies are later converted to Commands, should they be considered equivalent to TCs? All these issues need considerable deliberation.

Joint forces military training is a key facet of successful integration. A review of the curriculum for officers at the Staff College and War Colleges, followed by standardisation, is a must, with an increased emphasis on understanding of the principles of employment of each service and capabilities of land, air, and sea power. At the command/formation level, scenarios involving application of joint forces need to be simulated and war gamed periodically. Evaluation exercises could then be conducted for a TC once every three to four years by an inspection unit of the Joint Training Command, which itself could be raised from one of the present training commands.

A key driver of the current set of reforms has been the need to develop integrated capabilities, optimise acquisition between the Services, and make plans in harmony with the available capital budget. This would demand prioritising requirements between the services and joint entities. In addition, it could mean an audit of available assets, assessing feasibility of up gradation, and making a realistic estimate of new assets, costs, and acquisition timeframes.

Logistics and sustenance commonalities, arising from the requirements of Services for storing and delivery of ammunition, fuel, oil and lubricants, rations, weapon and equipment spares, transportation, and real estate, need optimisation. Should we continue with progressing joint logistics on a nodal basis or based on inventories, look at a combination of joint service and single service logistics or instead rework de novo on a joint logistics model? This needs contemplation.

The Window of Opportunities

There are a number of opportunities within the Services that have arisen and can be attempted or further progressed if already initiated. Joint operations by a TC, foremost, demand the early revision of the Joint Operations and Training Doctrines.

Simultaneously, it would be pertinent to set up an exclusive joint communication and data network at the strategic and operational levels. For tactical operations, 'single Service' networks could remain the spine and be augmented, where necessary. For a Joint Task Force (JTF), communication and data flow could be built modularly around the lead Service network. The current model at HQ ANC could be the basis of creating a HQ TC. The staff and components could be customised as befits each theatre, allowing the TC enough flexibility to create a JTF when required. The 'chain of command' and responsibility, authority, and accountability of the C-in-C TCs must be laid out deliberately.

By about 2024, we should have achieved greater jointmanship and integration, and with functioning of DMA having stabilised, the CDS may consider handing it over to Chief of Integrated Defence Staff (CISC) to reduce his administrative load. He could retain his other functions and begin to look after operations of the TCs progressively. The Service chiefs will then have to shed their operational role and contribute on operations through the COSC, to whom the C-in-C TC would report.

The CDS may seek to appoint a VCDS to assist in Operations, Training, Intelligence, and Operational Logistics. The transition of operational C2 of all the TCs from Service HQ to HQ IDS could take place over two to three years. The CISC could then focus on DMA, the acquisition processes for overall capability development, HR management, infrastructure building, medical support, and administrative aspects for joint entities.

One of the critical aspects is the shape that our Services will acquire by the end of this decade. A 'Force 2032' plan can be worked out for each Service and vetted by the COSC. This will also help work out asset management for the TCs. With common inventories such as helicopters, transport aircraft, UAVs and AD systems, communication and digital equipment, an 'Integrated Capital Development Plan (ICDP)' needs to be finalised at the earliest, with the COSC harmonising acquisitions between Services. The Service HQ could continue to bring up acquisition cases to HQ IDS and follow them through after approval by the MoD or higher authorities.

The Defence Cyber Agency, Defence Space Agency, and the Armed Forces Special Operations Division were set up in

2018. This is the opportunity to decide as to what will be their 'direct element' of support to the TCs and as to when they need to be expanded further. The ANC could continue to be a joint formation with a rotational leadership. We could also refine a number of operational issues such as close air support and strategic airlift to the Army, dynamic air support to the Navy, especially, since air vectors will be with AD Command as well as the geographical TCs. The AD Command can now expand their air space management model to accommodate the smooth utilisation of rockets, missiles and long-range artillery, helicopters, and UAVs that otherwise pose spatial challenge.

Defence diplomacy has now assumed greater importance. When interacting and exercising with foreign forces or at UN missions, we could have integrated representation to reflect our transformation. Training of foreign officers in our institutions has always paid us good dividends, for which more vacancies can be created at our joint training establishments such as National Defence College, College of Defence Management, and the Staff College.

The crying need of the hour is to bring up the Indian National Defence University (INDU) to support the thought process of such an exhaustive overhaul. Deep strategic and doctrinal concepts can then be worked upon by academics, practitioners, think tanks, and defence training institutions in a cogent fashion. Studies such as neighbourhood dynamics, revolution in military affairs, refinement of defence acquisitions, war gaming models, strategic communication, net assessments, and many others can be researched through designated 'Centres of Excellence on National Security' at the INDU. It will enable us to educate, train, and develop future leaders on jointmanship and integration.

The Joint Logistics Command, when raised, could focus on peace time logistics and common operational logistics. Since bulk inventories are different for operational logistics of the Services, these could be retained as single Service logistics systems in an exclusive vertical. A modular approach to logistics accompanied with real time asset visibility across Services could be attempted.

Conclusion

The purple path chosen by the government, after years of debate, will enable the three Services to move forward in unison. Modern

armed forces have clearly benefited from a joint approach, continued to evolve thereafter, and became more potent. The appointment of the CDS has stimulated India's armed forces to transform. With belligerent neighbours and intense battlefields of the future, the range of situations that our nation faces have become very complex, making application of national power quite nuanced. War prevention, war fighting, and sustaining peace have assumed huge significance and demand a sophisticated range of tools. If India has to become a regional power, military effectiveness will be a key factor in exercising that power. Jointmanship and integration by our armed forces is then a *sine qua non*, more so, when warfare demands a 'Whole of Govt' approach now than ever before.

Endnotes

¹ Shri Narendra Modi, Hon'ble Prime Minister, Independence Day Speech, New Delhi, 15 Aug 2019, (<https://www.firstpost.com> accessed on 11 Aug 2021)

² Group of Ministers Report on National Security, New Delhi, 19 Feb 2001, Pp 101 (<https://www.vifindia.org> accessed on 15 Aug 2021).

³ Press Information Bureau, Govt of India, Ministry of Defence, "Functions of the Chief of Defence Staff (CDS), 03 Feb 2020, (<https://pib.gov.in> accessed on 19 Aug 2021).

⁴ Aaron Mehta and Joe Gould, Defense News, "Carter unveils Goldwater Nichols Reform" 05 April 2016, (<https://www.defensenews.com/breaking-news/2016/04/05/carter-unveils-goldwater-nichols-reform/> accessed on 15 Aug 2021)

⁵ Snehash Alex Philip, The Print, "What are military theatre commands and why does India want to switch to them" 06 July 2021, (accessed at <https://theprint.in> on 16 Aug 2021).

Challenges to UN Peacebuilding¹

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Abstract

Peacebuilding and Peacekeeping are two distinct but complementary operations. The article examines four cases where in the first three, the causes of the conflict result from reasons which may be classified as due to 'Sacred Geography', and in the fourth due to other reasons. The article brings out the challenges faced in Peacebuilding and Peacekeeping and ends by stating that the practical way forward will be the regular evaluation of the peace process, reappraise the policy, and review the organisational structure without hurrying up for a quick exit after the restoration of the security situation.

Introduction

The end of the Cold War did not usher in a peace dividend as was expected earlier. The myth regarding the shared feelings of the sufferings of the colonial past preventing the outbreak of wars amongst the newly independent nations, mostly in Africa, was broken. There were not only conflicts between the states but also intra-state conflicts. In Africa, after a short decline in the conflicts in the early 2000s, there was a steady rise in the armed conflicts in the region.² While the United Nations (UN) is struggling to institute more robust structures to rebuild the states, it is confronted with secessionist struggles amongst the belligerent groups. Peacekeeping missions are now expected to get involved in the internal affairs of the states but are finding it difficult to keep the peace. Within the states, there are contestations for power at the central level with political objectives.

At the local level, the motivations for the belligerents for the continuation of the conflict are triggered by a desire for physical control of the space due to either ideological reasons or financial

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gain. Since most current conflicts are in the African Region and given the ambiguity of the violence, the process of peacebuilding has become messy, complex, and challenging in the shrinking space. As I wrote earlier in one of my previous articles, the failure of peacekeeping in establishing peace could vary from strategic to tactical reasons.³ The French-American author, and researcher, Severine Autesserre noted that fight over the primacy of land causes and produces violence.⁴ To the belligerents, the continuation of the conflicts could be inspired by their obsession with the sacred nature of space or geography. How does the sacred geography then impact the process of peacebuilding?

This article will cite examples from one relatively older conflict in the Balkan Region in 1999 and two of the contemporary conflicts in Africa, as it relates to peacebuilding and as the author understands the meaning of *sacred geography*. To refer to the geography or space as sacred and linking it to peacebuilding is slightly puzzling. We will try to deconstruct the puzzle first by establishing the relationship between 'sacred geography' and the conflict, and then delve into its linkage with peacebuilding.

Sacred Geography and Peacebuilding

While to some, the territory for which the fight is on is sacred because of religion, to others it may be sacred because of historical reasons. Geography also denotes the complex contours of these conflicts. Hence, one could interpret the meaning of '*sacred geography*' as the unique curves of the complex intra-state conflicts where most of the current UN peace operations are deployed. Regardless of its changing explanation, control of territory remains very sacred to the disputants, who may benefit from either continuation or termination of both inter-state and intra-state conflicts. I will begin with the story of the sacredness of Kosovo.

Kosovo. The legend goes that in the battle between the Serbian Christian forces and the Ottoman Turk forces in Kosovo on 28 June 1389, Serbian prince Lazar sacrificed his earthly empire for the heavenly empire. This as expounded by the American University professor, Julie Mertus, is also known as '*Kosovo Myth*'.⁵ Kosovo, therefore, is sacred to Serbia and hence untouchable. For the Serbs, the memory of Kosovo has become a *Sacred Grief*. Mertus, however, concluded, after her interview with Serbians and Albanians, that the myths are more persuasive than the facts to

trigger hatred and endanger the truth. Stripping the autonomy of Kosovo and making it part of Yugoslavia simply helped President Milosevic to use Kosovo in pursuit of his power. Therefore, even after the declaration of independence by Kosovo in 2008 and despite its recognition by 103 out of 193 UN members, Serbia has refused to recognise Kosovo with consequential effect on the post-war peacebuilding activities. Further, because of Russian opposition, United Nations Mission in Kosovo (UNMIK), which was established by Security Council Resolution (SCR) 1244 to govern Kosovo, never left.⁶

Kosovo has a population of less than 2 million with 92% Kosovo Albanians and 8% other communities. Serbians comprise only 1.5% of the population.⁷ This population, which now lives in a divided society in isolated enclaves and being guided by Belgrade's political life, refuses to move out of Kosovo. The Declaration of Independence of Kosovo was based on the plan proposed by Ahtisaari, the former UN special envoy to Kosovo.⁸ Ahtisaari plan seemed to have been the only alternative to give shape to the status of Kosovo, which included a new constitution for Kosovo, the creation of enclaves, and the segregation of minorities. It essentially meant the partition of Kosovo. Presently, the international community is trapped in a situation of not knowing which side to go. The unresolved status of Kosovo is being perceived as a security threat by the communities. Kosovo Albanians are afraid of losing their freedom, Serbia fears losing Kosovo, and Kosovo Serbians worry of revenge — being the minority. The current situation has also not helped to address massive Human Rights (HR) violations, delay in justice to war crimes, the allegations of corruption, and the population's losing faith in the government. The current situation in Kosovo is such that though the Kosovo Albanians expected UNMIK to bring autonomy, a large part of the blame now goes to UNMIK for Kosovo's unresolved status. Soon after the riot of 2004, UNMIK hurriedly handed over a lot of responsibilities to the Kosovo authorities for which they were not prepared. Some were transferred to the European Union (EU) also. But when several EU members have not recognised the independent status of Kosovo, state-building activities have taken a hit. As for the Kosovo Serbs, mostly those from the north, they refuse to recognise the legitimacy of the newly declared state and do not engage with the government

of Kosovo. They continue to believe that they belong to Serbia. The cumulative effect is that while the unresolved status of Kosovo has become a hostage to international and European politics, its contested legitimacy is the challenge to the peacebuilding efforts because of Serbia's obstinate stand on the so-called sacredness of Kosovo.

Mali. Mali, intertwined with security and governance challenges, is the latest challenge to the international community. It is slightly different in the sense that one of the disputants — Tuaregs consider the northern part of the country as sacred because of their belief that their right over that territory, which was taken away from them by the French in the 19th century, is sacrosanct to them. The first uprising by the Tuaregs took place in 1911 and again later in 1963, which was brutally suppressed by the Malian Army. The latest rebellion took place in 2012.⁹ The key provisions of the peace accord of 2015 remain unimplemented. Humanitarian relief has been constrained because of droughts, security threats, poor infrastructure, and limited donors. In addition, lack of political will, spoilers, jihadi threats, and implication of Malian soldiers in grave HR abuses have undermined the peace process. While the Tuaregs are now sitting on the side of the government, the armed groups, who have signed the peace accord, are changing their alliance and are yet to be demobilised. While United Nations Multidimensional Integrated Mission in Mali (MINUSMA), which is mandated to provide logistical support to G 5 forces, is facing stark challenges, the US is constantly trying to block the effort of France to reinforce the UN effort in Mali.¹⁰ Even though defeated in 2012, internally divided and their movement hijacked by the jihadists, Tuaregs, however, still cling to their national dream of complete independence from Mali. As if it was not enough, in August 2020, Col Assimi Goïta has seized power in Mali, detaining transitional President Bah Ndaw and Prime Minister Moctar Ouane after accusing them of failing in their duties and trying to sabotage the West African state's transition to democracy.¹¹ Such circumstances, with the jihadi movement spreading to central Mali and the violence creating an 'unprecedented humanitarian emergency', have become a challenge to the state-building activities in Mali.

Democratic Republic of Congo (DRC). DRC is another example where despite so many peace agreements, the current situation is

still in a mess. According to Autesserre, what began as the grass-root conflict over access to land and power politics between the so-called indigenous Congolese in Kivu (eastern Congo) and the Congolese of Rwanda descent who migrated to Congo, first escalated into a national political issue and then into a regional conflict. Even after the end of the war in 2003, the micro-level antagonism continued to fuel the insurgencies. But the strategy to build peace has been based on the dominant narrative that the current situation is a fallout of the large-scale violence of the two Congo wars. Autesserre gave two conventional explanations for the failure of international peacebuilders in Congo. First, despite sincere interest to establish peace, there are contextual constraints that hamper the peace process. Second, because of institutional vested interests, some peacebuilders deliberately encourage or ignore peace agreement violations. She reported that the popular belief that some Westerners actively exploit rich mineral resources of Congo and hence encourage the continuation of violence is flawed because of the lack of adequate statistics.¹² She, however, later noted that “The illegal exploitation of Congolese mineral resources thus holds a central place as one of the primary motivations for violence waged by regional and national actors”.¹³ The ‘illegal exploitation’ being looked at as a desecration of the motherland.

Other Challenges

In South Sudan, severe droughts and floods, because of climate change, force large population migrations within South Sudan and some even crossing the border to Sudan looking for shelter and food. According to the author’s interview with one Indian Army officer who recently returned from his tenure with United Nations Mission in South Sudan (UNMISS), the migrating population gets harassed by the corrupt security forces and, at times, get caught in the crossfire between the warring armed groups. There are also occasions when the hungry population even plan to rob the storage of the World Food Program (WFP). During the dry seasons, it is not that the Nile River fully dries up but the water level recedes and the wealthier ones who reside next to the riverbank are still able to use the water. Even during heavy flooding, the rich ones manage to survive. It is only the poorer ones from the hinterland who lack the resources to survive the drought and excessive flooding are forced to migrate to other places.¹⁴

Protection of civilians being the core objective of the mandate, a sizeable number of peacekeepers get diverted to the protection duties of the food granary, the workers, and other UN and non-UN agencies associated with humanitarian work. When the armed rival gangs fight for their survival, even a strong, well-armed, and well-equipped UN patrol does not seem to be strong enough and the deterrence by the UN patrols rarely work. On the contrary, if an armed group decides to train its guns on the UN patrols, using force even in self-defence may not work. Addressing these challenges will always be at the cost of the mandated tasks, and peacebuilding activities take a beating.

Despite the challenges, United Nations Interim Security Force for Abyei (UNISFA) brings in some rays of hope.¹⁵ While peacemaking has slowed down in Abyei, one of the eight disputed areas between Sudan and South Sudan, mostly because of lack of cooperation on part of Sudan and South Sudan, peacebuilding is still progressing, albeit slowly. In Abyei, threat to security comes mainly from local crimes and fight between Nogk Dinkar and Misseria communities. The situation, however, is kept under control by the UNISFA and the local community, providing some breathing space to the peacebuilding activities regardless of how much progress has been made in other critical areas.

Peacebuilding and Substantive Skill

Military and civilian peacekeepers work side-by-side in a peace operation and, at times, in overlapping issues. However, among others, some of the activities where civilians have better expertise and hence can make a significant contribution are humanitarian assistance; rehabilitation and economic reconstruction; resettlement of refugees; monitoring and improving human rights situations; establishment of interim administration; mediation and confidence-building measures; and, finally, transition of authority. Such expertise can be classified broadly under two categories — UN and non-UN.

UN Agencies. Barring a very few in the department of political and civil affairs, the UN mostly comprises staff with administration as their core competency. But they lack the skill required for numerous peacebuilding activities. Whatever little capability they have is limited to support the operations of the peacekeeping mission. Therefore, the required skill, perforce, will have to come

from UN agencies like United Nations Development Program (UNDP), United Nations Children Education Fund (UNICEF), United Nations High Commissioner for Refugees (UNHCR) etc. which comprise some trained hands and can execute selected and limited substantive mandated programs. Unfortunately, governed by different board of directors and having different sources of funding, these agencies are independent in their functioning. In addition, since the budgetary process for both peace operations and UN agencies are completely different, it is difficult to align and execute the UN agencies' tasks along with the UN peace operation activities.¹⁶

The Deputy Special Representative of the Secretary-General is double hatted and is responsible to coordinate the activities of these agencies. However, being considered only as one among the equals, he is also constrained by the limited say of the UN Secretariat in the policy and employment of the UN agencies. It is important to conceive, develop, and cater for the required resources for all developmental programs, which fall in the core competency of the civilian experts, as early as possible, preferably even before the signing of the peace accord. In the case of a peacekeeping operation, once the mandate and operational parameters and exact requirements of men and material are spelt out, planning and providing administrative support becomes relatively easier. But it is difficult to determine and establish such parameters for peacebuilding activities during the initial stages of the peace process.

Non-UN Agencies. To execute important peacebuilding projects, the know-how is available partly with the national governments but mainly with non-government agencies. Even the ability of the governments to make available such services are limited to only a few areas and, that too, when not in use in their own countries. On the other hand, the Non-Governmental Organisations (NGOs), who have the expertise and capability, contribute under bilateral arrangement with the host government/nation. Influenced by explicit agendas and with independent sources of funding, the NGOs take pride in their freedom and dislike oversight and accountability. The net result is duplication of work and wastage of resources. That aside, at the local level, in places like South Sudan where displacement of the population is because of climate change, the peacebuilding activities should aim at helping the local population

to stay put in the same place and go through the difficult days with assistance.

Conclusion

With multiple stakeholders in the conflict zone who are genuinely interested in rebuilding the broken society but with varying interests, peacebuilding will be fraught with challenges. The best option, therefore, will be to try to avoid duplication and achieve prioritisation of their activities by making them partners at work from the very beginning. The leadership to implement such an ambitious plan must have the ability to coordinate and synergise the activities of all agencies in the field. The present type of heads of missions or special representatives of the Secretary-General of the UN is to a great extent remain focused on the peace agreement, cessation of hostility, democratisation, the conduct of election, and exit. A person who has been a successful former head of a government, or has good potentials to head a government, is likely to meet the qualitative requirements of such leadership demand.

Progress on the security situation, or decrease in violence, and peacebuilding need not be sequential. These two activities can run concurrently. Taking a cue from Abyei, when the security situation remains under reasonable control, at some stage peacebuilding may kick in the peacemaking. It is, however, difficult to predict how long does it take for both peacemaking and peacebuilding to march forward at a good speed and in tandem. The major challenge to the peacekeepers, therefore, is time. The practical way forward will be the regular evaluation of the peace process, reappraise the policy, and review the organisational structure without hurrying up for a quick exit after the restoration of the security situation.

Endnotes

¹ This article is an updated and modified version of the author's talk delivered on UN Day Seminar in New Delhi on 29 May 2019.

² Sandy Africa, "Challenges of Peacebuilding in Africa", <https://www.accord.org.za/conflict-trends/challenges-of-peacebuilding-in-africa/>, accessed August 17, 2021

³ A K Bardalai, "United Nations Peacekeeping Operations: Causes for Failure and Continuing Relevance", *Journal of Defence Studies* 12, no. 4 (October-December 2018): 5-34.

⁴ Severine Autesserre, “The Peacebuilding World”, *The Trouble with the Congo* (New York: Cambridge University Press, 2010), 2.

⁵ Julie Mertus, *Kosovo: How Myths and Truths Started a War* (Berkeley: University of California Press, 1999).

⁶ UN Security Council Resolution 1244 (June 10, 1989)

⁷ Kosovo Profile, *BBC Monitoring*, <https://www.bbc.com/news/world-europe-18328859>, accessed August 17, 2021; Statistical Yearbook of Republic of Kosovo, 2021, <https://ask.rks-gov.net/media/6111/vjetari-statistikor-2021f.pdf>, accessed August 17, 2021

⁸ Jr. H. Perritt, *The Road to Independence for Kosovo: A Chronicle of the Ahtisaari Plan* (Cambridge: Cambridge University Press, 2009), doi:10.1017/CBO9780511635410.

⁹ The UN, <https://minusma.unmissions.org/en/history>, accessed August 17, 2021

¹⁰ UN Security Council Resolution, 2100 (April 25, 2100); MINUSMA was established to support political processes in that country and carry out several security-related tasks; UN Security Council 2164 (June 25, 2014)

¹¹ Paul Melly, Mali coup: How to solve the conundrum, BBC News, May 27, 2021, <https://www.bbc.com/news/world-africa-57255601>, accessed August 17, 2021

¹² Severine Autesserre, “A Top-Down Problem”, *The Trouble with Congo: Local Violence and the Failure of International Peacekeeping* (New York: Cambridge University Press, 2010), 17.

¹³ Severine Autesserre, “A Top-Down Problem”, *The Trouble with Congo: Local Violence and the Failure of International Peacekeeping* (New York: Cambridge University Press, 2010), 62.

¹⁴ Author’s interview with an Indian Army Officer who has served with UNMISS.

¹⁵ UNISFA was established through United Nations Security Council Resolution 1990 of June 27, 2011 to provide security and protect civilians under imminent threat of violence in the disputed border region.

¹⁶ Author’s experience from his service with the UN.

Rani Lakshmi Bai and Major General Hugh Rose: A Comparative Analysis

Major General (Dr) RS Thakur (Retd)[@] and Colonel Nikhil Kapoor[#]

Abstract

The Indian Revolt of 1857 was led by many capable leaders from the revolters' side, namely, Rani Lakshmi Bai, Nana Saheb, Kunwar Singh, and Begum Hazrat Mahal, whereas the fight by the British East India Company forces was steered by senior officers such as Major General J Outram, Major General Hugh Massey Wheeler, Major General Hugh Rose, Brigadier Henry Lawrence and Brigadier John Nicholson.¹ The battles of 1857 have been described by numerous authors in great detail in the last century and a half; however, the comparative analysis of the leadership qualities and military skills of the two most prominent leaders of the revolt, Rani Lakshmi Bai and her principal opponent, Major General Hugh Rose, does not find a mention in history. This article, which is a product of the research of rare/vintage books available in the libraries of Army War College and the Infantry School Mhow, besides other sources available on the subject, endeavors to bridge this historical gap. It is hoped that the article will provide a new perspective on the leadership aspect during an important event of Indian military history.

Introduction

The 'Indian Revolt of 1857' was a landmark event of the 19th century, which shook the British Empire to its foundation and almost brought the British rule in the Indian subcontinent to an

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abrupt end. The desperation with which the British fought to retain their Empire can be gauged by the fact that as many as 182 Victoria Crosses were awarded to the British personnel during the Indian Revolt of 1857, which is precisely the same number of awards given during the Second World War.² The Revolt witnessed key battles that were fought at Delhi, Kanpur, Lucknow, Arrah, Jhansi, and Gwalior. The main leaders, who led the British East India Company forces, were Major General J Outram, Major General Hugh Massey Wheeler, Major General Hugh Rose, Brigadier Henry Lawrence, and Brigadier John Nicholson. On the other hand, the prominent leaders of the revolt were Nana Saheb (1824-1859), Rani Lakshmi Bai (1828-1858), Begam Hazrat Mahal (1820-1879), and Kunwar Singh (1777-1858).

The bulk of the writings on this historical event, dominated by the British authors, do not give a correct perspective as these were written with the intent to further the British imperial interests, as also to project their racial superiority. The British were haunted by the ultimate fear of the possibility of 'Indian Revolt of 1857' leading to more such rebellions globally, which their military may not be able to handle. Such literature on the Revolt, in the form of personal accounts by the British authors, gave a biased account of the battles, glorifying the pursuits of the British generals on one hand and maligning the activities of the rebel leaders on the other. For example, the successes of Major General Hugh Rose were narrated as epitome of heroism rather than historical accounts.³ As such, a comparative analysis of the leadership and tactical skills between the opposing commanders, Rani Lakshmi Bai and Major General Hugh Rose, find but a passing mention in history and is the theme of this article.

Childhood, Education and Military Career

Both the leaders grew up in a rather contrasting environment. Rani Lakshmi Bai, born on 19 November 1828 in Varanasi⁴, came from a humble origin. Her father, Moropant Tambe, worked with Chimnaji Appa at Varanasi and later shifted to Bithur⁵, a small town near Kanpur. She was named Manikarnika at birth and spent her childhood in the Court of Baji Rao at Bithur where her father worked. Her parents had been exiled from Maharashtra and they had moved to Bithur along with the last Maratha ruler, Baji Rao II. She learnt to read and write at home including Persian; the language that was

used in the Court during the period. She also learnt riding, shooting, and swordsmanship during this period.

Hugh Henry Rose, 27 years older than Rani Lakshmi Bai, was born in Berlin on 06 April 1801. His father, Sir George Henry Rose, GCB was a minister at the Prussian Court. Hugh Rose received his education in Berlin. He joined the army on 08 June 1820, as an Ensign in 93 Highlanders, and became a Lieutenant on 24 October 1821. He, however, left the army in 1839 and joined the diplomatic corps. Bulk of his career was spent in diplomatic rather than military tenures.⁶ He was praised more for his tact and diplomatic skills and less as a military commander. He held several diplomatic assignments from 1840 onwards. He was posted in Syria during the Turco-Egyptian War, where he was subsequently appointed as Consul General. Later, he was posted to the British Consulate in Constantinople in 1851. During the Crimean War (1853-1856), he excelled himself while working as the British liaison officer to the Supreme French Command.

Personality Traits of Rani Lakshmi Bai and Major General Hugh Rose

Rani Lakshmi Bai. Rani Lakshmi Bai was civil, polite, intelligent, and a woman of high character. These virtues were demonstrated in sufficient measure during her dealings with the people of Jhansi, who respected her very much. However, in the eyes of the British, she was the second most hated figure after Nana Saheb due to her defiance against the Empire. She has, therefore, been maligned by a few British authors in a baseless manner. For example, GB Malleson has written about Rani Lakshmi Bai — without any historical basis — that she deceitfully led the British officers and their families to mass massacre, in which 60 Britishers, including women and children, had died on 09 June 1857.⁷ But historians such as Kaye were convinced that there was no proof to establish the involvement of Rani Lakshmi Bai in the said massacre. There also exist numerous sources offering massive evidence contrary to what Malleson and some British authors have written.

Rani Lakshmi Bai had an eye for detail. Instead of monitoring things from her palace, she went to every rampart and every gun to oversee the deployment. She selected the best gunners for the job. With her astute leadership, she also ensured that her troops gave a well determined resistance at Jhansi, which included

continuous bombardment from the Fort on to the advancing British forces and quick repair of the walls damaged due to shelling after the siege began on 22 March 1858. Subsequently, when the British forces launched an attack, the battle was fought most furiously by the rebels in every street, room and chamber including a bitter hand to hand fight in the final stages of the British attack on the Jhansi Fort.⁸

Rani Lakshmi Bai had the compassion of a great human being which helped her to become a powerful leader.⁹ She provided clothes to the beggars, attended to her wounded soldiers while they were being treated. She also distributed Scindia's pearl necklace, taken a fortnight before from the treasury in Gwalior, to her followers just before her death.¹⁰ She showed kind heartedness even to her political rival, Sadashiv Rao, who within hours of the departure of the revolted from Jhansi for Delhi, on 09 June 1857, had gathered some troops and occupied Fort Karahra, about 40 km from Jhansi, and declared himself to be the King of Jhansi. However, he was quickly captured by the soldiers of Rani Lakshmi Bai and put in prison, thus allowed to live. Incidentally, he was executed by the British in June 1858 soon after they recaptured Jhansi.

Rani Lakshmi Bai was a strong-willed woman who proactively handled numerous challenges, in the wake of breakdown of British rule in Jhansi in June 1857, from her rivals such as Nathe Khan of Orchha State, Chief of Datiya State, and Sadashiv Rao. Nathe Khan launched an attack on Jhansi on 10 August 1857 and his forces reached the walls of Jhansi Fort. At this crucial juncture, Rani Lakshmi Bai herself joined the battle amongst her troops, for the first time, and defeated his forces. Similarly, she effectively tackled the threat from the forces of Datiya State. It was during this period of extreme chaos in the second half of 1857 that Rani Lakshmi Bai metamorphosed from a modest and gentle person into a deadly warrior. She was a courageous woman and a resolute warrior who challenged the British rule with great determination and fought the British East India Company forces with unparalleled military prowess like no other rebel leader did.

Major General Hugh Rose. General Hugh Rose was known to be good-natured, magnanimous and, like his rival, possessed high character. He had the profound ability to take sound judgments

and was a tireless person.¹¹ In physical bearing, he was unimpressive and gave the impression of a person who was adept in negotiations in court rather than directing tactical situations in field.¹² In May 1858, during the operations in Kaunch and Kalpi, Major General Hugh Rose was indisposed on five occasions¹³ due to sun stroke but got back to work soon due to the sheer force of his will power¹⁴. He displayed ample tact, personal courage, and dedication to duty while performing his tasks as the British liaison officer at the French Headquarters during the Crimean War. As the liaison officer, he excelled himself during the British deliberations with its allies. His efficiency and good performance during the Crimean War led to his promotion to Major General.

Leadership Styles and Military Expertise of both Leaders

Rani Lakshmi Bai. Rani Lakshmi Bai possessed indomitable courage and clarity of purpose like no other leader had. During the first half of 1858, when the British had recaptured Delhi, Kanpur and Lucknow and the British forces seemed to be gaining an upper hand, she never lost sight of her aim and continued to prepare her army for the fight against the British. She made elaborate preparations for the defence of Jhansi Fort. The Fort was stocked with supplies, ammunition, artillery guns etc.¹⁵ She had the acumen to follow the 'scorched earth policy' wherein she cleared the trees around the Fort and walls of Jhansi with a view to deny cover and shade to the British forces who were, thus, adversely affected by the Indian summer.

Simultaneously, Rani Lakshmi Bai fought and defeated the forces of the kings of Datiya and Orchha to deny the opportunity of logistics support to the British forces during their approach towards Jhansi as both these kings were favourably inclined to them. She possessed military virtues of a warrior¹⁶ and was called by none other than her adversary, Major General Hugh Rose as "the best General the rebels ever had". Rani Lakshmi Bai was ably supported by many women. Jhalkari Bai played a significant role in the Revolt of 1857 and subsequently became an advisor to Rani Lakshmi Bai. Other women warriors, Motibai¹⁷, Kashibai, Munder and Sunder looked after important duties in the Jhansi State Forces.¹⁸ Many of these women came from the community of weavers called *Koshti* Community.¹⁹

On 24 May 1858, after the fall of Kalpi, the British thought that they had won the Campaign and Major General Hugh Rose was planning to proceed on sick leave back to England.²⁰ On 01 June 1858, he issued a farewell order to his command assuming that the operations by the Central India Field Force had been completed.²¹ However, they were taken by surprise when Rani Lakshmi Bai along with her forces attacked Gwalior Fort and captured it.²² True to her leadership persona, she fought the British till the end and died bravely on the battlefield as a warrior, dressed in a red jacket, trousers, and white turban, when she received a saber cut from a soldier of 8 Hussar Regiment. Incidentally, four British personnel of 8 Hussar Regiment were awarded with Victoria Cross for the operations of that day.²³

Major General Hugh Rose. General Hugh Rose, when he arrived in Bombay by ship on 12 September 1857, had never served in India before. Moreover, he also had no prior command experience, not even of commanding a platoon. The reason why he, despite this handicap, was given the command of Central India Field Force is not known. As such, his selection to the given appointment, overlooking many other claimants, came as a shock and was a subject of criticism in India amongst the British officers. He took over command of the Central India Field Force at Indore on 16 December 1857.²⁴ During the initial phase of the campaign, he was mocked at by his subordinates because of his lack of experience and poor health. Moreover, his concept of Battle of Rahatgarh, fought in January 1858, was questioned by many as the frontal attack by the British East India Company forces allowed the revolters to easily disengage from the battle and put up another fight to the East India Company forces at Barodiya.²⁵ Although as per Smyth, the Battle of Rahatgarh was a huge success, a claim which is not supported by historical evidence.²⁶

Sooner than later, Major General Hugh Rose gained a strong hold over his command and displayed enduring determination, because of which he conducted operations around Sagar and Madanpur with great efficiency. However, he also had another factor in his favour, luck. The fight over Madanpur pass was indeed intense as the rebels were dominating the pass having occupied the heights on both sides along with deployment of artillery. The British forces were bombarded with intense fire and even Major General Hugh Rose's horse was shot. The battle could have gone

either way. However, due to the attack by the infantry of the British forces, the situation was saved just in time. An aspect of war fighting that Major General Hugh Rose gave great importance was reconnaissance. He personally spent hours in observing the details of approaches and terrain before the attacks were planned on Rahatgarh, Sagar, and Jhansi Forts.

Overall Comparison of the Two Leaders

Having narrated the personal attributes, leadership styles, and military skills of Rani Lakshmi Bai and Major General Hugh Rose, it needs to be brought out as to who was the better of the two leaders from an overall perspective. As an individual, both the leaders were good-natured, capable, and had strong character; however, Rani Lakshmi Bai surpassed her opponent due to her additional qualities of compassion, personal valour, and the unique talent to inspire her subordinates. As a strategist, both the personalities were evenly matched. Major General Hugh Rose exhibited good generalship during the Campaign, especially during the battles of Jhansi and Gwalior. He quickly adapted to the prevailing situation and relentlessly pursued his critical objective — the capture of Jhansi Fort. Moreover, during April-June 1858, luck was on his side as by now the Revolt was in its last stage with Delhi, Kanpur, and Lucknow having already fallen to the British forces a few months before. In addition, the support provided to him by the kings of Bhopal, Gwalior, Orchha, Datia, and others in terms of logistics and firepower ensured that his forces were supplied at critical junctures. Rani Lakshmi Bai, on the other hand, skillfully handled the ambiguous and uncertain environment prevailing in the Bundelkhand Region in 1857-58.

At the tactical level, Rani Lakshmi Bai proved herself to be a much better leader by her qualities of optimum use of ground and human/material resources, superlative output from her command by employing the right man or woman for the job, and correct and timely response to emerging battle situations. Overall, Rani Lakshmi Bai was a better leader. Notwithstanding the above, during April-June 1858 she was fighting a lone battle. British East India Company forces had an upper hand and the other rebel leaders/kings, with the exception of kings of smaller states of Banpur, Banda, Shahgarh and Charkhari, had refused to collaborate with her in anticipation of an impending British victory in the region.

Conclusion

Rani Lakshmi Bai and Major General Hugh Rose, two leaders of varying skills, fought against each other in the last phase of the Indian Revolt of 1857, in the battles of Jhansi, Kalpi, and Gwalior. In September 1857, before he set foot on the Indian shore for the first time in his life, Major General Hugh Rose, born and brought up in Berlin, had already accumulated more than 35 years of mostly diplomatic acumen with no military command experience whatsoever. On the other hand, Rani Lakshmi Bai, though groomed in horse riding, sword fighting, and shooting, lacked any formal education. As an individual, both the leaders possessed exceptional human qualities although Rani Lakshmi Bai surpassed her rival in attributes of compassion, personal valour, and the ability to inspire subordinates. As strategist, both leaders excelled themselves in equal measure, however at the tactical level, Rani Lakshmi Bai demonstrated better expertise on many occasions. Overall, Rani Lakshmi Bai proved herself to be superior to her opponent but lost out in June 1858, in the final stage of the Campaign, due to many overriding factors against her and her forces. She, with her extraordinary leadership qualities and military prowess, gave the British East India Company forces their bloodiest fight in the Campaign and she died like a true warrior, fighting on the battlefield on 17 June 1858.

Endnotes

¹ FG Cardew, *A Sketch of the Services of the Bengal Native Army*, (Calcutta : Office of the Superintendent of Government Printing, India, 1903), 271.

² John Smyth, *The Story of the Victoria Cross: 1856-1963*, (London: Frederick Muller Ltd, 1963) 17.

³ Shashi Bhusan Chaudhuri, *English Historical Writings on the Indian Mutiny 1857-1859*, (Calcutta: The World Press Private Limited, 1979), 35-36.

⁴ Joyce Lebra-Chapman, *The Rani of Jhansi: A Study in Female Heroism in India*, (Honolulu: University of Hawai Press, 1986),168.

⁵ Surendra Nath Sen, *Eighteen Fifty-Seven*, (Calcutta: Sree Saraswat Press Ltd, 1957), 269.

⁶ GB Malleon, *The Indian Mutiny of 1857*, (Delhi: Rupa Publications India Pvt Ltd, 1998), 258-60.

⁷ Ibid, 258-59.

⁸ Michael Edwardes, *Battles of the Indian Mutiny*, (London: William Clowes and Sons Ltd), 1963, 169-171.

⁹ Pratibha Ranade, *Rani Laxmibai: Warrior Queen of Jhansi*, (NOIDA: Harper Collins Publishers India, 2016),32-35.

¹⁰ MH Anderson and ESJ Anderson, *The Poona Horse, Volume I*, (London: The Royal United Service Institution, 1933), 79.

¹¹ John Smyth, *The Rebellious Rani*, (London: Frederick Muller Ltd, 1966) 24-25.

¹² EW Sheppard, *Deeds That Held the Empire*, (London: Butler and Tanner Ltd, 1939), p 123.

¹³ DH Cole and EC Priestley, *An Outline of British Military History, 1600-1937*, Sifton Praed & Co. Ltd, London, 1937, p 212.

¹⁴ JW Fortescue, *A History of The British Army, Vol XIII*, Macmillan and Co. Ltd, London, 1930, p 363.

¹⁵ Edwardes, pp 169-172.

¹⁶ Pandit Sunderlal, *British Rule in India*, SAGE Publications India Pvt Ltd, 2018, pp 457-58.

¹⁷ Ranade, p. 114.

¹⁸ Om Shankar Asar, *Jhansi Kranti Ki Kashi*, Prachi Printers and Packagers, Lucknow, 2008, pp.795-796.

¹⁹ Ranade, p. 165.

²⁰ Edwardes, pp 178.

²¹ Anderson and Anderson,pp 76-77.

²² Surendra Nath Sen, *Eighteen Fifty-Seven*, Sree Saraswaty Press Ltd, Calcutta,1957,pp 293-294.

²³ Smyth, *The Story of the Victoria Cross*, pp 88.

²⁴ Edwardes, p 159.

²⁵ F R Sedgwick, *The Indian Mutiny of 1857*, Forster Groom & Co Ltd, London, 1909, pp 127-128.

²⁶ Rainer Jerosch, *The Rani of Jhansi: Rebel Against Will*, Aakar Books, Delhi,2008, p 129.

Corrupting India's Military History – A Dangerous Trend

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Abstract

The article brings out that the trend of writing incorrect accounts of military actions, to glorify, portray military history incorrectly. Operations at Nathu La/Cho La in 1967 have been narrated to make the point. It states that it is important to portray failures, or less than perfect conduct of operations, so that lessons can be learnt and mistakes made in conduct of an operation are avoided in the future. Unfortunately, the military and military historians today have different views and failure in battle seems to carry with it a stigma and guilt, which is totally unwarranted. The article concludes that if handled correctly, even failures and lost battles can be used to glorify and motivate and yet we can learn constructive lessons from them.

Introduction

This article aims to highlight the trend of omission, distortion, and obfuscation of facts in records such as unit war diaries and regimental histories which are the basic documents referred to by military historians. This phenomenon is rarely encountered in the documents pertaining to World War I and II, and even earlier. However, it is increasingly being noticed in the post-Independence period in the Indian Army¹. Examples of such distortion of records are found in many tactical and operational level operations that the Indian Army was involved in after 1947. These may have been done in good faith to safeguard the honour of a person, unit, or country or because in the fog of war events get distorted. However, this distortion obfuscates the correct picture in official history and

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does not enable lessons to be learnt to take better decisions or do operations in a better manner the next time. To highlight the problem, the Nathu La – Cho La operations of 1967 have been chosen as a case study. This operation has once again come into the limelight in recent years. This trend is not limited to the Indian Army alone, or even to only the military; there is even a formal term for this — “historical negationism”².

The Accounts of the 1967 Skirmishes

The Nathu La Skirmish. The skirmish at Nathu La took place in September 1967. This was the first time that the Indian Army gave the Chinese a ‘bloody nose’. The story has been narrated in several books including regimental histories and biographies of Lt Gen Sagat Singh³, who was commanding the division in Sikkim when the operation was conducted. In addition, several articles have been published in numerous journals written mostly by officers who were present or took part in the operation. Two recent events have brought the Nathu La skirmish in the limelight again. One is the publication of a book titled “Watershed 1967 - India's Forgotten Victory over China” in 2020, written by Probal DasGupta⁴. The second is the episode concerning the Nathula and Chola battles of 1967 which was broadcast on TV in *Tales of Valour* on 09 and 10 Jan 2021 on the Times Now. There was also a Bollywood movie called ‘*Paltan*’ (battalion) which came out in 2018 and covered the operations at Nathu La. Sadly, these narrations have been less than truthful in recounting the events of the conflict.

At first glance, ‘Watershed 1967 - India's Forgotten Victory over China’ appears to be dealing with an important event in India's military history. Unfortunately, the book has several errors in the correlation of events and facts. A review of the book by this author has been published in the Journal of the United Service Institution of India, January – March 2021 and could be seen for further details.⁵

The most glaring lacuna in the book is the distortion of facts relating to 2 Grenadiers. In this author's knowledge, the only authentic unclassified version of the battle is the diary of Second Lieutenant (2/Lt) (later Colonel) NC Gupta, which gives a day-by-day account of the occurrences from 11-14 Sep 1967.⁶ Its authenticity is sound because it was written daily as the events occurred and not in hindsight after 40-50 years, like this book and

some articles written by a few others. The diary brings out many lesser-known facts including instances of apparent cowardice, especially the vacation of South Shoulder at a critical juncture by a few soldiers of 2nd Grenadiers led by 2/Lt. Attar Singh. An account of this episode has been covered in detail in the articles 'The Skirmish at Nathula (1967)' published in the Indian Military Review in Aug 2018 and 'Remembering the War We Forgot 51 years ago – How India Gave China a Bloody Nose' by Vandana Menon and Nayanika Chatterjee in The Print on 01 Oct 2018.

The regimental history of The Grenadiers, titled 'The Grenadiers – A Tradition of Valour', was written by Colonel RD Palsokar in 1980. The book gives a different narrative. On page 365, the author writes:

"At one stage it appeared that the force fighting from the South Shoulder was wiped out as it was the main target of the Chinese. The troops could not hold it and had to fall back. When the Chinese fire died down, they once again occupied the feature. The South Shoulder would have remained unoccupied had 2nd Lieutenant Attar Singh not been there. His personal example inspired the men to stay fast."

Colonel RD Palsokar (Guards) is a well-known military historian who has penned many regimental histories and biographies. It is probable that the primary source for his use were the inputs given to him by The Grenadier Regiment from the accounts submitted by the unit.

Another example of this historical negationism syndrome is the article titled 'The Nathu La skirmish: When Chinese Were Given a Bloody Nose', by Major General Sheru Thapliyal, in the 'Force' magazine in 2004 and reprinted in the CLAWS website in 2011⁷. He writes:

"2 Grenadiers were initially shaken up due to the loss of Captain Dagar and injury to their CO but found their man of the moment in Lieutenant Attar Singh who went round from trench to trench to rally the troops and was later promoted as Captain on the spot."

A short resume describing the events relating to South Shoulder on 11 Sep, as described in Gupta's diary, has been published in the Indian Military Review. It is reproduced below:

"During the first day's action, there was a loss of morale in 2 Grenadiers when troops occupying the South Shoulder vacated their positions. This became evident after breakdown of communications. Finding no response from the post on radio and observing about a dozen troops running down the slopes of South Shoulder minus their helmets, packs and rifles, the Brigade Commander asked his Signals officer, 2/Lt NC Gupta to go up to South Shoulder with a spare radio set. On reaching South Shoulder at around 10 am, Gupta found the post abandoned and informed Brigadier Bakshi, who asked him to hold the post until reinforcements reached. About an hour later, Brigadier Bakshi spotted six soldiers sitting behind a huge rock around 100 metre 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. Their radio set had been switched off. Gupta made him speak to the Brigade Commander who gave him a mouthful and ordered them to return to the post, accompanied by Gupta. At about 12 pm, Gupta discerned some movement in one of the bodies lying next to the fence barely 10 metre from the Chinese bunker. Taking advantage of the fog, he went ahead to investigate. He discovered that it was a badly wounded Major Bishan Singh, 'Tiger Nathula', who had been injured in the initial firing. Bishan was a 6 foot tall jat while Gupta was a diminutive five foot three, almost half his weight. With great difficulty Gupta managed to drag Bishan into our defences and made him speak to the Brigade Commander. Bakshi ordered Gupta to evacuate him using four men from 2 Grenadiers while he stayed on with the post commander and one Havildar."

From the words in the diary, Attar Singh was not trying to rally the troops but had abandoned the post along with his men. More than 30 soldiers were later court martialled for cowardice. Surprisingly, Attar Singh was not among them.

The story of 2 Grenadiers would not be complete without relating the episode of the missing pages of Gupta's diary. It is given below in his own words:

"After the end of the event, a couple of officers of the brigade were asked to submit their versions of the battle to the brigade commander. Since I was in the habit of maintaining a daily diary since my NDA days, I had been maintaining the account of the activities leading to it and of the events of 11 Sept and beyond. I, therefore, submitted my account in a normal fauji file cover. The file had:

- Seven pages of important events leading to 11 Sept.
- Nine pages of events of 11 Sept.
- Ten pages of events from 11 Sept evening to cease fire.

After about a month, the file was returned to me but I did not bother to check if all pages had been returned. Like a good soldier, I carried it with me on all my postings and even after retirement in 1992. Around the early twenties, Major General VK Singh (he was Adjutant of 17 MDSR in 1967) was writing part three of the history of the Corps of Signals. He approached me for some gen on the operations. I decided to hand him over this file. Out of sheer curiosity to re-live the events, I started reading it and to my horror found ten pages missing. These were the most critical pages dealing with the events of 11 Sept.

I informed this to Gen VK who told me to try and remember the events and write them. I did this and gave him the file that contained the events leading to 11 Sept and events after 11 Sept in original. The events of 11 Sept were written on white paper and filed accordingly. I also made an endorsement on the first page of the events post 11 Sept that "Nine pages containing details of 11 Sept are missing".

In July 2016, Mr Vijay Dagar, nephew of Captain PS Dagar met me at Delhi where I had come from Australia for my knee operation. After the operation on 10 Aug

2016, I went to Captain Dagar Museum in Najafgarh and presented this file to Mr Vijay Dagar and told him about the missing pages. To my utter shock, he produced those nine pages in original and the file become one as it was when handed to the Brigade HQ. This is a combine of destiny and a miracle waiting to happen. Mr Vijay Dagar found these pages with 2nd Grenadiers and was able to take them. Page 1 of these nine pages has an endorsement in red ink in commander's own hand "2/Lt Gupta's Battle Account". In June 2019, all the pages were laminated and then presented in original to its rightful owners – The Nathu La Brigade."

The Cho La Skirmish. The missing pages from Gupta's diary point to the disturbing trend already mentioned — the distortion of military records by units. Similar discrepancies were noticed in the records of the two battalions that were involved in the skirmish at Cho La that occurred about two weeks after the skirmish at Nathu La. These were 10 JAK Rifles and 7/11 Gorkha Rifles. The regimental histories available are 'The Path of Glory: Exploits of the 11 Gorkha Rifles' written by Gautam Sharma and the 'Soldiers of the Sun and Snow' published by the Jammu and Kashmir Rifles Regimental Centre at Jabalpur.

Cho La, located to the northwest of Nathu La, was held by 10 JAK Rifles which was under the command of Lieutenant Colonel Mahatam Singh. During the last week of Sep 1967, the battalion was being relieved by 7/11 Gorkha Rifles. The area was under 63 Mountain Brigade under the command of Brigadier Kundan Singh. According to the relief plan, the changeover was to take effect from 01 Oct 1967. The raising day of 10 JAK Rifles was on the same date and after briefing Lieutenant Colonel KB Joshi, CO 7/11 Gorkha Rifles, Lieutenant. Colonel Mahatam Singh had left on 30 Sep to conduct the *Havan* at the Battalion HQ at Changgu Lake next morning.

On the morning of 01 Oct, there was a scuffle at Point 15450 which had been handed over to the Gorkhas on the previous day. According to 10 JAK Rifles, the new post commander was Second Lieutenant Rana of 7/11 Gorkha Rifles. (According to the regimental history of 11 Gorkha Rifles, Point 15450 was held by Lieutenant Rathore.) There was a boulder at the post and Chinese and Indian

sentries usually stood on opposite sides. Since the Gorkhas were new to the post, the Chinese staked claim to the boulder, leading to heated argument between the two post commanders. During the argument, the Gorkha JCO rested his right foot on the boulder. The Chinese kicked his foot away. The JCO then put his foot back on the boulder and challenged his Chinese counterpart. The Chinese soldier bayoneted the Gorkha JCO injuring him in the arm. The Gorkhas retaliated by cutting off the arm of the Chinese with a kukri. The Chinese opened up with all they had, with the Indians responding in like fashion. The Chinese finally captured the post forcing the Gorkhas to withdraw.

Brigadier Kundan Singh, who was also officiating as the divisional commander, could not contact Lieutenant Colonel Joshi, CO 7/11 Gorkha Rifles, who had gone for a morning walk. Brigadier Kundan Singh then tried to contact Major Nair, the officiating CO of 10 JAK Rifles, but there was no answer from his telephone. Major SRR Aiyengar, the Brigade signal officer, told his B-1 operator, L/Nk Moga Singh, to take the radio set to Major Nair's bunker. When Moga Singh reached there, he found the telephone ringing repeatedly and the officer in a state of shock. Finally, Brigadier Kundan Singh was able to speak to Major Nair. After giving him a piece of his mind, he ordered Nair to proceed to Cho La Post.

Brigadier Kundan Singh also ordered the rest of 7/11 Gorkha Rifles to move up from Tamze. He himself moved up to Twin Huts, to see things for himself. Joshi was missing and everyone thought that he has been killed. At 1700 hours, Joshi reached Twin Huts where he met Brigadier Kundan Singh and requested permission to recapture Point 15450, which was granted. According to the Gorkhas, the attack was launched next morning and the position was re-occupied by them, the Chinese having vacated it during the night. The battalion was awarded two Vir Chakras during the incident.

Meanwhile, Lieutenant Colonel Mahatam Singh, CO 10 JAK Rifles, who had been informed about the firing, immediately left the Battalion HQ for the road head at Tamze, from where he started walking up reaching Saddle at 1230 hours. He assumed command and told Brigadier Kundan Singh that he would recapture Point 15450. He ordered Major Subhas Dogra, who had just handed

over the post to the Gorkhas, to recapture it. Dogra immediately proceeded with his men towards Point 15450. They found that the Chinese had withdrawn. The post was re-occupied at 1600 hours without firing a shot or a single casualty. In addition to the CO who was awarded the Maha Vir Chakra (MVC), the battalion won three Vir Chakras.

As can be seen, there are several discrepancies in the records of the two units. According to the Gorkhas, point 15450 was held by Lieutenant Rathore while 10 JAK Rifles claim to have handed over the post to Second Lieutenant Rana of 7/11 Gorkha Rifles. Both units, viz. 7/11 Gorkha Rifles and 10 JAK Rifles, claim to have recaptured Point 15450 which, in fact, had already been vacated by the Chinese. Compared to the skirmish at Nathu La which lasted 5 days and resulted in many casualties, the one at Cho La was relatively minor lasting just a day. Though this is not mentioned in their regimental history, Major KG Nair of 10 JAK Rifles was later court martialled.

Conclusion

Most regimental histories of the post-Independence period tend to glorify the actions of battalions as well as individuals. Hence, successes are highlighted but failures rarely mentioned. In battle, cases of units fighting to the last man are matched by instances of units breaking up and examples of audacious commanders by specimens of indecisive leaders. Not surprisingly, some earn medals and promotions while others are sacked. Like in any two-sided match, the odds of winning and losing in battle are equal and one would expect that the performance of units and commanders would conform to this pattern. The military profession has always placed a greater premium on valour, rather than victory. This is especially true in India, where the most famous military leaders — Porus, Prithvi Raj Chauhan, Rana Pratap, and Rani Laxmi Bai — lost their battles. Yet, their stories are part of legend and have acted as an inspiration to generations of Indians. Unfortunately, military historians today have different views and failure in battle seems to carry with it a stigma and guilt, which is totally unwarranted. Today, a misplaced sense of honour and '*izzat*' impels units to hide mistakes and failures and magnify achievements. If not corrected, this may seriously impinge on the integrity of post-Independence military history of India.

Endnotes

¹ The term 'Army' can be read by the reader to encompass all armed forces of the Union.

² Historical negationism, also called denialism, is falsification or distortion of the historical record. It should not be conflated with historical revisionism, a broader term that extends to newly evidenced, fairly reasoned academic reinterpretations of history. <https://www.bing.com/search?q=historical+negationism+&qsn&form=QBR&sp=-1&pq=historical+negationism+&sc=4-23&sk=&cvid=991856EE2F9640EEBA8279F81986AC3F>

³ *A Talent for War: The Military Biography of Lt Gen Sagat Singh* by Randhir Singh is one such book. This author's book *Leadership in the Indian Army: Biographies of Twelve Soldiers* also covers Lt Gen Sagat Singh.

⁴ 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)

⁵ https://usiofindia.org/publication/usi-journal/reviews-of-recent-books-12/?sf_paged=2

⁶ For excerpts of the diary, see Veekay's History Book, *Nathu La the True Story* at <http://veekay-militaryhistory.blogspot.com/2013/04/nathula-1967-real-story.html>

⁷ "The Nathu La skirmish: When Chinese Were Given a Bloody Nose" by Major General Sheru Thapliyal. Accessed Aug 24, 2021 from <https://archive.claws.in/595/the-nathu-la-skirmish-when-chinese-were-given-a-bloody-nose-sheru-thapliyal.html>

Cyber Defence — India's Critical Infrastructure

Commander K Ashok Menon (Retd)[®]

Abstract

Cyber war is becoming a greater concern for all nations, including India, than at any time earlier. In the on-going war between cyber attackers and cyber defenders, the defenders are still at the receiving end. Based on available information in the public domain, it is difficult to gauge India's overall cyber defence preparedness, though it has been reported that those engaged in this have taken initiative to improve security. At the same time, the government has mandated that organisations 'implement certain security protocols'. The Indian cyber security establishment, in the meanwhile, must think of counter measures factoring the cyber defence-offence balance, especially when the nature of the attack gets more sophisticated, and it is a determined 'State' that is at the other end.

Introduction

In the on-going cat and mouse game between cyber attackers and cyber defenders — who have an unenviable task of defending their technology systems despite substantial advancements in the field of tech-security — the defenders are still at the receiving end. Letting the guard down would be at its own peril even if the claims from the attacker ilk sometimes borders on hyperbole and tends to blur facts.

The earliest recorded duel between these two sides — though the term cyber in that context may not be appropriate — dates back to 1903, when Marconi attempted to demonstrate secure wireless communication capability between Prof Flemings positioned at the lecture theatre in the Royal Institute in London while he himself was stationed at Cornwall, about 300 miles away.

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This communication experiment was successfully sabotaged by Nevil Maskelyne, 'an inventor, magician and a general troublemaker'. The 'weapon' that was used by him to block the signal and transmit his own content was a transmitter capable of outputting '8 or 9 Amps', which he had 'lowered to 2.5 Amps' and placed it close to the stage from where Prof Flemings spoke. One version of the reported event states that just before Marconi's demonstration commenced, the projection lantern used for the slide show began to click and what it conveyed in Morse was "Rats, rats, rats, rats; there was a young fellow of Italy, who diddled the public quite prettily"¹ targeting Marconi. While some of the facts that Marconi had claimed earlier did come to question as a result of this successful 'interference', it was eventually overlooked. However, seen in today's raging cyber-attack context, Maskelyne did seem to have the last word when he concluded in Latin "Qui vult decipi, decipatur" or "Let him be deceived who wishes to be deceived". Governments at that point in time too were impressed by Maskelyne as they had seen the ease with which signals were monitored by him; subsequently leading to the development of wireless encrypted systems that were used during the World Wars and later.²

As the cyber space has grown, the cross-section of the attacker community and the nomenclature for referring to them too have evolved. Terms like Identity thieves, Internet stalkers, Cyber terrorists, Advanced Persistent Threat groups (APT groups) etc. have come into existence. The general classification of White, Grey and Black Hat are used to convey intent, ethics, and legality of the hacking community — with the White Hat hackers being the only safe ones.

Again, to get a glimpse of 'state' involvement in this duel, it would be worthwhile to look at the early stages of the computer era. Cliff Stoll's "The Cuckoo's Egg", a 1989 book, provides a first-hand account of a computer break-in, where he documents the cyber investigation and audit findings of a "75 cents" error in the computer usage account at the lab he was working in California, which after a "dangerous game of deception, broken codes, satellites and, missile bases..."³ is finally traced to a hacker — Markus Hess in Germany who was incidentally involved in selling his findings to the Soviet Union's intelligence agency, KGB.

In essence, the 'state' has been a key actor in this duel — always.

Information Technology (IT) vs Operational Technology (OT)

While IT infrastructure, and software solutions that ride on them, got early attention from a security standpoint thereby giving rise to a sizeable collection of professionals with the necessary credentials, apart from a fit for purpose collection of products and services that addressed the security need at each 'layer', the Industrial Control Systems or ICS [which in turn includes Supervisory Control and Data Acquisition (SCADA) and Distributed Control Systems (DCS)] and connected devices fell behind.⁴ ICS leveraged OT, essentially meaning "a category of computing and communication systems to manage, monitor and control industrial operations with a focus on the physical devices and processes they use".⁵ In the past, these systems were, by and large, managed and monitored manually. The software and protocols that were used were proprietary in nature and most of them operated in 'islands'. So the risk of being targeted by hackers was limited as there was no 'network-interface' and hardly any integration between OT and IT system; neither did they have the same type of vulnerabilities. But over the last few years, this has changed. Efficiency enhancement initiatives and single window control of "industrial systems together with process management solutions" that deliver accurate information have made OT-IT convergence a necessary imperative.⁶

But there are challenges in handling technology security in this hybrid environment as the basic prism through which security implementations in the IT and OT spaces are seen, differ. Whereas a conventional Information Security professional in the IT vertical sees it through the lens of the 'Confidentiality, Integrity, Availability (CIA) triad' — for OT security implementation, 'Availability' comes first. Consider for instance, the case of a typical 'software patch update' where an asset is to be made available for application of a patch. In an IT system, an asset is handed over to the security team first for application of a patch (albeit in several cases for a short duration) as confidentiality and integrity are critical and cannot be compromised once the system is in a production environment. Operations teams need to factor this into the plan and currently for most mature enterprise systems there is a standard template that is followed. But the OT professional's dilemma is different. For him/her, 'Availability' is non-negotiable. A downtime of an asset is likely to affect other linked assets and thereby can impact safety

of people and the entire system as a whole.⁷ However, these challenges would have to be managed as with the rise in OT-IT integration, attacks on these systems — especially the ones that operate critical infrastructure (Energy, Transportation, Water etc.) and have embedded cyber devices — have increased.

Technology Security Incidents

The ransomware attack on Colonial Pipeline, a US Company that handles the largest pipeline system in the US that moves gasoline, diesel, and jet fuel from the Gulf coast to the East Coast market⁸, in early May this year was one such incident. The attacker was apparently “Dark Side”, an East European based criminal gang. Despite the fact that the company stated that its systems had been restored within a week, the impact continued to be felt, be it shortages across states, drivers being stuck in long queues and encountering empty gas stations, oil prices shooting up etc.⁹ A cyber audit carried out three years ago had found “glaring deficiencies” and a “patch work of poorly connected and secure systems”, while the company itself has claimed that it has taken several measures since 2017 to address the security concerns.¹⁰ US leadership, in the meanwhile, has pointed out that it is a ‘wake-up call’ for the US energy infrastructure.

Based on available information in the public domain, it is difficult to gauge India’s overall cyber defence preparedness in the oil and gas infrastructure though it has been reported that Public Sector Undertakings (PSUs) engaged in these verticals have taken initiative and “were making efforts to beef up security” while at the same time government has mandated that these organisations “implement certain security measures”.¹¹

India’s power establishment had a status check on where it stood on cyber protection measures of its assets, when on 28 February 2021, David Sanger and Emilie Schmall of The New York Times (NYT) reported a study carried out by Recorded Future (RF), ‘a company that studies the use of the internet by state actors’, on a cyber-break-in, raising a key concern as to “whether an outage that struck on Oct 13 in Mumbai” (last year) compromised our critical infrastructure and was a veiled threat “from Beijing about what might happen if India pushed its border claims too vigorously”.¹² Surely, the news of a Chinese malware implant in a nation’s power grid infra cannot be music to anyone’s ears, least

of all the key stakeholders within the power eco-system responsible for delivering uninterrupted service or the larger cyber security establishment committed to protecting these assets. The report delved into the approach adopted and also revealed that 10 Organisations in the “power generation and transmission sector were targeted”.¹³

Preparedness: Power Ecosystem

In December 2019, the Minister of State (MoS) for Power told the *Rajya Sabha* that in order to address cyber threats ‘over the national power grid’, protection of Transmission Assets, for instance, was achieved by handling ‘communication from equipment of substations to control centres’ using ‘dedicated optical fibre network owned by Powergrid’ and in turn ‘without any connectivity to external networks’. He further emphasised that ‘these assets’ were “protected through multiple firewalls and systems” and were “kept isolated from office networks to prevent any malicious online attack because of internet activity”. Conveying how closely the “Computer Emergency Response Team (CERT) housed in Powergrid” were working with Indian Computer Emergency Response Team (CERT-In), National Critical Information Infrastructure Protection Centre (NCIIP), Ministry of Home Affairs (MHA) and Ministry of Electronics and Information Technology (MeitY), he highlighted that “regular cyber audit, crisis management plan, mock drills and exercises... were being undertaken”.¹⁴

Deeper insights can be obtained from a presentation of 2018, titled ‘Cyber Security in Power System’, by a Chief Engineer (IT) from the Ministry of Power, which delves in detail on the steps that have been taken and are underway in securing the infrastructure. A few key aspects from ‘Action to be Taken’ & ‘Action Points’ reflects a forward-looking approach in handling these threat scenarios and at the same time, the section on ‘Cyber Security Preparedness’ does confirm that the magnitude of the problem at hand is not underestimated either. Since it is stated that entities like National Thermal Power Corporation (NTPC), National Hydroelectric Power Corporation (NHPC) etc. have already implemented ISO 27001 (a standard that provides requirements for an Information Security Management System) controls, there are good reasons to believe that the security-culture would have percolated to other related entities too in the Power ecosystem

during the last couple of years.¹⁵ This is of course with the caveat that the nuances of ICS (that are applicable) were factored as a part of the implementation considering other standards like IEC 62443 that provides a framework to address and mitigate security vulnerabilities in industrial automation and control systems or similar standards like US's NIST 800-82.

Inconsistencies

Yet, what was disconcerting was the conflicting and inconsistent responses from the centre and the state of Maharashtra that were captured by several Indian news outlets in the days that followed the NYT reporting 'the likely power grid sabotage'. Extracts below from these reports¹⁶ are highlighted to substantiate the point:

Centre's position:

- There is no impact on any of the functionalities carried out by the Power Sector Operations Corporation (POSOCO) due to the referred threat.
- No data breach / data loss has been detected.
- The massive grid failure, which hit Mumbai and surrounding areas on 12 October last year, was caused by human error and not due to cyber-attack.

State's reactions:

- The massive power outage in Mumbai last October was an attempt at 'cyber-sabotage' according to a preliminary report.
- 8 GB foreign server data may have transferred into the Maharashtra State Electricity Board system to sabotage the financial capital's power supply.
- Based on the preliminary information, there definitely was a cyber-attack and it was a sabotage.

If indeed most of the information security controls were in place, it is logical to assume that the incident management process, which included responsibilities spanning across multiple stakeholders, the incident escalation matrix, Responsible, Accountable, Consulted, Informed (RACI) matrix etc. would all be in place. In which case, a single root cause analysis artefact for the incident would have emerged that provided details of the incident impact

assessment, issue resolution, prevention of recurrence etc. However, multiple investigating agencies within, what can be perceived as, a single organisation coming out with different findings should be a matter of concern. More so because, an attacker's intent is to not only disrupt a service — but also observe and assess the victim's approach to recover. Further, if the assessment that at the state level there was a "lack of expertise" and an "inability to detect the malware" and therefore it "exposed the country's vulnerability"¹⁷ is read in conjunction with the various responses from the centre and state, the larger question that emerges is that whether there are other weak links that need to be identified and remedial action taken without delay.

Kaspersky in the technical document, which provides details on ShadowPad malware (referred to in the original report and the Ministry's responses), has written that it is what attackers deploy in their target's networks "to gain flexible remote-control capabilities".¹⁸ In an investigation carried out by them in July 2017 in a financial institution's network, "suspicious Domain Name System (DNS) requests were identified" where they explain how "The attackers hid their malicious intent in several layers of encrypted code". Not sure of who exactly was behind the attack, they have stated, "Currently, we can confirm activated payload in a company in Hong Kong", adding that attribution would be difficult as attackers are careful not to leave a trace though "certain techniques were known to be used in another malware like PlugX and Winnti, which were allegedly developed by Chinese-speaking actors".¹⁹

So, even if we assume the best-case scenario and accept the words of the Power Minister that the cause of outage was human error, at least for the cyber security professionals, handling the domain, it would better to analyse and draw their inferences based on flipped Occam's razor; remain circumspect and prudent and *think zebras and not horses*, even well after the 'hoof beats' created by this report dies down. In other words, not to presume that the inference is as simple as other indicators may lead us to believe.

As CyberWire has stated, while it is possible that the conclusions reached in the report by RF "are more tentative and circumspect" than what NYT or media outlets in India reached, it

is better that we see it “in the spirit in which the researchers have apparently offered it”.²⁰ Also, while we may not accept the rankings given to India (21 out of 30 countries in Cyber space capabilities) – based on the National Cyber Power Index drawn up by the Belfer Centre at Harvard University last year – we still do need to be concerned of China being ranked number 1; as the seven parameters that were measured to assess “intent and capacity” were: “Defence, Offence, Surveillance, Control, Intelligence, Commercial, and Norms”.²¹ A closer examination of technology security incidents outside India further amplifies this point.

Texas Power Crisis

CyberWire points out that the impact of “cyber sabotage of a power grid” can be gauged when a comparison is made with the Texas power crisis that struck in February – though in that case it was due to severe winter storms across the US – that resulted in major electricity downtime. Fallout of this led to shortages in basic needs – water, food, and heat – and approximately “4.5 million homes and businesses without power at its peak” and an “estimated \$295 billion in damage”.²²

But what is significant is the argument made by Control Global (CG) in the context of cyber security that while the US critical infrastructure are “vulnerable to disruption from natural disasters”, a bigger concern is that similar disruptions can be “triggered by adversaries” and “cascading effects” ensured by “exploiting control systems”. Elaborating on the Texas incident, CG observes that there were “significant grid frequency drops that caused system-wide impacts” which “could potentially be unintentionally or maliciously exploited to cause long-term damage to grid and other critical infrastructure equipment”. They fear that adversarial nation states – Russia and China – with considerable cyber offense capability “not only monitor but also affect the magnitude and recovery of events”. The concern expressed is not out of place as the power crisis occurred in the ‘same time frame as the Chinese-made transformer hardware backdoor issue and the Russian SolarWinds hack’. The impact would have been far graver ‘if there were hardware backdoors in Chinese-made transformers that were manipulated’. That assessment that it was a Chinese threat gets a further boost when the statement from the Chinese foreign ministry released during the havoc created by the storm is read in

perspective; viz. “it reinforced a belief among Chinese citizens that their country is ‘on the right path’”. Clearly, therefore, the threat assessment by CG was not paranoid or made in an isolated vacuum. Hence, the concluding remarks that there is not “only a responsibility but also an opportunity” to leverage what happened in Texas to effect necessary “changes to regulations and guidance on cyber security of critical infrastructures” across organisations including the ones “that have a financial stake in critical infrastructure protection” is as applicable to the US context as it is to India’s.²³

Conclusion

In the context of Texas incident, Mike Rogers has written as to ‘Why America would not survive real first strike cyber-attacks’, adding “[...] hackers in Beijing or Moscow could turn off our electricity, millions would lose heat, groceries would spoil, banking machines would not work [...]”. But what would be even more disturbing is when he claims the reasons for any of their systems not going down on a larger scale; that they have so far “escaped a digital catastrophe” is not because of effective defence mechanism in place but “due to blind luck and restraint from our adversaries”.²⁴ That, coming from one of the most powerful cyber capable nations, should surely worry the less capable ones.

As need for Internet of Things (IoT), Machine Learning and Big Data implementations start gaining ground, in the critical infrastructure space the OT-IT integration is set to further increase. In the meanwhile, hackers of all hues continue sharpening their skill sets on OT, while inadequate knowledge of OT on the one hand and the spiralling vulnerabilities on the other are adding to organisational woes — not to mention the large attack surface that they may have an onus to defend. While it is not any one’s case that we would be able to establish a 100 per cent hacker proof environment, there is every need for all ‘Critical Infrastructure’ organisations to get the basics right — recognise that the threats are real, have a defined budget to address this realm, invest in the right set of technologies, and have enough skill sets within to get essential controls in place so that the attacks are not easy to execute. The clarion call to the larger Indian cyber security establishment, in the meanwhile, is to think of counter measures factoring the cyber defence-offence balance when the nature of

the attack gets more sophisticated and it is a determined ‘state’ that is at the other end.

Endnotes

¹ Kevin E. Hemsley, Dr. Ronald E. Fisher ‘History of Industrial Control System Cyber Incidents’, Available at: <https://www.osti.gov/servlets/purl/1505628.71Nicole> ; Accessed on 20 May 2021

² Richard Baguley ‘Origin Of Wireless Security: The Marconi Radio Hack Of 1903’, Available at: <https://hackaday.com/2017/03/02/great-hacks-of-history-the-marconi-radio-hack-1903/>; Accessed on 20 May 2021

³ Cliff Stoll, ‘The Cuckoo’s Egg’, (2005), Back Cover

⁴ ‘Cyber attacks on critical infrastructure’, Available at: <https://www.agcs.allianz.com/news-and-insights/expert-risk-articles/cyber-attacks-on-critical-infrastructure.html> ; Accessed on 21 May 2021

⁵ i-Scoop, ‘Operational technology (OT) – definitions and differences with IT’, Available at: <https://www.i-scoop.eu/industry-4-0/operational-technology-ot/#:~:text=Operational%20technology%20or%20OT%20is,assets%20and%20manufacturing%20Findustrial%20equipment> ; Accessed on 21 May 2021

⁶ ‘OT Security Defined, Explained and Explored’, Available at: <https://www.forcepoint.com/cyber-edu/ot-operational-technology-security>; Accessed on 21 May 2021

⁷ David Bisson, ‘ICS Security What it is and Why It’s a Challenge for Organizations’, Available at: <https://www.tripwire.com/state-of-security/ics-security/ics-security-challenge-organizations/>; Accessed on 22 May 2021

⁸ ‘Colonial Pipeline’, Available at: <https://www.mckinseyenergyinsights.com/resources/refinery-reference-desk/colonial-pipeline/>; Accessed on 18 May 2021

⁹ The Washington Post, ‘As Colonial Pipeline recovers from cyberattack, leaders point to a ‘wake-up call’ for U.S. energy infrastructure’, Available at: <https://www.washingtonpost.com/business/2021/05/13/colonial-pipeline-ransomware-gas-shortages/>; Accessed on: 18 May 2021

¹⁰ ‘Tech Audit of Colonial Pipeline Found ‘Glaring’ Problems’, Available at: <https://www.securityweek.com/tech-audit-colonial-pipeline-found-%E2%80%98glaring%E2%80%99-problems>; Accessed on 18 May 2021

¹¹ Indian Express; ‘Explained: How a US pipeline came under cyberattack, which group was behind it, and how it impacts oil prices’: Available at: <https://indianexpress.com/article/explained/explained-the-darkside->

cyberattack-on-a-us-oil-pipeline-and-how-it-impacts-prices-7310822/; Accessed on 15 May 2021

¹² David E. Sanger and Emily Schmall, The New York Times, 'China Appears to Warn India: Push Too Hard and the Lights Could Go Out': Available at: <https://www.nytimes.com/2021/02/28/us/politics/china-india-hacking-electricity.html>

¹³ Recorded Future, 'China-Linked Group RedEcho Targets the Indian Power Sector Amid Heightened Border Tensions'; Available at: https://go.recordedfuture.com/hubfs/reports/cta-2021-0228.pdf?utm_medium=email&_hsmt=110851062&_hsenc=p2ANqtz-83oaU-RLMlrmA7XBj2H5BzTM0HW9oR-5totH7NfJumY1CITOGQ8uRSfJdXTLI2fTov2oeqXLIcPzTBK9Rb_BgYGR5bTg&utm_content=110851062&utm_source=hs_automation; Accessed on 07 Mar 2021

¹⁴ The Economic Times, 'Multiple steps taken to check cyber threats faced by national power grid' (Response by RK Singh MoS for Power, New And Renewable Energy); Available at: <https://energy.economictimes.indiatimes.com/news/power/multiple-steps-taken-to-check-cyber-threats-faced-by-national-power-grid-r-k-singh/72358377>; Accessed on 07 Mar 2021

¹⁵ Vijay Menghani, 'CYBER SECURITY IN POWER SYSTEM' (a 2018 presentation by Chief Engineer(IT), Central Electricity Authority, CISO Ministry of Power); Available at: http://erpc.gov.in/wp-content/uploads/2018/03/ERPC_Cyber-Security-in-Power-system_presentation.pdf; Downloaded on 14 Mar 2021

¹⁶ THE HINDU, 'Chinese cyber attack foiled: Power Ministry', Available at: <https://www.thehindu.com/news/national/attacks-by-chinese-groups-thwarted-power-ministry/article33965683.ece>; Accessed on 15 Mar 2021

¹⁷ The Indian EXPRESS, 'After the blackout', Available at: <https://indianexpress.com/article/opinion/editorials/mumbai-power-blackout-cyberattack-china-7213054/>; Accessed on 16 Mar 2021

¹⁸ Kaspersky Lab, 'ShadowPad: popular server management software hit in supply chain attack, Part 2: Technical Details' https://media.kasperskycontenthub.com/wp-content/uploads/sites/43/2017/08/07172148/ShadowPad_technical_description_PDF.pdf; Accessed on 16 Mar 2021

¹⁹ Kaspersky, SECURELIST, 'ShadowPad in corporate networks', Available at: <https://securelist.com/shadowpad-in-corporate-networks/81432/>; Accessed on 18 Mar 2021

²⁰ <https://thecyberwire.com/newsletters/daily-briefing/10/39>; Accessed in Mar 2021

²¹ The Indian Express, 'After the blackout', Available at: <https://indianexpress.com/article/opinion/editorials/mumbai-power-blackout-cyberattack-china-7213054/>; Accessed on 18 Mar 2021

²² Chris Stipes, UNIVERSITY OF HOUSTON, 'New Report Details Impact of Winter Storm Uri on Texans'; Available at: <https://uh.edu/news-events/stories/2021/march-2021/03292021-hobby-winter-storm.php>; Accessed on 25 May 2021

²³ Joe Weiss, Control Global, 'Texas power outages demonstrate grid cyber vulnerability and inadequacy of existing regulations'; Available at: <https://www.controlglobal.com/blogs/unfettered/texas-power-outages-demonstrate-grid-cyber-vulnerability-and-inadequacy-of-existing-regulations/>; Accessed on 18 Mar 2021

²⁴ Mike Rogers, THE HILL, 'Why America would not survive a real first strike cyberattack today'; Available at: <https://thehill.com/opinion/cybersecurity/539826-we-would-not-survive-true-first-strike-cyberattack?rl=1>; Accessed on 18 Mar 2021

Emergence of Drone Warfare and Implications for India

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Frontal engagements of large formations of forces at the strategic and the operational level are becoming obsolete. Long distance contactless actions against the enemy are becoming the main means of achieving combat and operational goals.

- Valery Gerasimov, Russian Chief of General Staff.¹

Abstract

In recent times Drones have emerged as the cutting edge tools of warfare. Therefore it is imperative that their usage and impact be analysed. This article traces the emergence of drone warfare from the mid nineteenth century to the present day. It highlights the advantages and uses of drones along with the moral and ethical dilemmas. It brings out that the use of drones for military strikes today is akin to use of tanks and aircrafts during WW1 with an equally transformative impact. It is therefore imperative for the Indian armed forces to be prepared for this genre of war in a faster time frame and to suitably enmesh these into the current and new doctrinal and organisational structures thereby enabling synergised application in operations.

General

On 4 February 2002, an MQ-1 Predator fired a Hellfire missile at three men, standing near a known mujahedeen base at Zhawar Kili, Afghanistan, killing them. This killing occurred without any face-to-face contact between the adversaries.² More than a decade later, in January 2018, Russian operators manning the extensive Air Defence (AD) network at Russia's Khmeimim airbase

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in western Syria spotted 13 incoming drones at low level. It was clear to the Russians that they were witnessing a new genre of a collaborative drone attack.³ This failed attack on Khmeimim was disturbing to close observers of drone warfare as the first recorded instance of a mass-drone attack by “non-state actors” in a combat operation.⁴ Later, in the Azerbaijan-Armenia conflict in the Nagorno-Karabakh war in 2020, the coordinated usage of armed drones and loitering munitions against tanks and air defence systems via electronic networks was very effective.⁵

In the early hours of 27 June 2021, two explosive-laden Unmanned Aerial Vehicles (UAVs) crashed into the Indian Air Force (IAF) station at Jammu in the Indian union territory of Jammu and Kashmir (J&K). This is the first time that UAVs have been used to strike a vital military installation in India.⁶ The drones had finally arrived at India’s doorstep.

Drones have now emerged as the tool of warfare and it is imperative that their usage and impact be analysed. This article, therefore, dwells upon the emergence of drone warfare by tracing its origins from the mid nineteenth century to the present day. It then highlights the advantages and uses of drones along with the moral and ethical dilemmas and concludes with implications and recommendations for India.

What is a ‘Drone’?

The term ‘drone’ came into prominent use in the 1930s when it specifically referred to radio-controlled aerial targets. The De Havilland DH 82B Queen Bee aircraft was a low-cost radio-controlled drone developed for aerial target practice and is considered to have introduced the term “drone” into general use and was the first modern drone.⁷ Once World War II broke out, “drone” started to represent any remotely-controlled pilotless aerial vehicle.⁸

Although popularly known as drones, however, the military refers to them as Remotely Piloted Aircrafts (RPAs) or UAVs.⁹ Today the word “drone” is being interchangeably used with UAV and RPA. In this article, the word drone shall be used.

Drones: The Genesis

Considering that 20th century saw the parallel development of drones and cruise missiles, it is almost impossible to separate

their origins.¹⁰ Nevertheless, a brief history of the use of drones is covered in the succeeding paragraphs.

The Inception. On 22 August 1849, the Austrians, who controlled much of Italy at this time, launched some 200 pilotless balloons against the city of Venice. The balloons were armed with bombs controlled by timed fuses. Some of the bombs exploded as planned but the wind changed direction and blew several balloons back over the Austrian lines. This is, by most accounts, the first recorded action of its type and the first use of aerial bombing, and its effect, though minor, contributed to the collapse of the Venetian revolt.¹¹

Initial Years. During World War I (WW I) many eccentric weapons were developed on all sides of the conflict. One was the pilotless aircraft – Ruston Proctor Aerial Target – which represented the cutting edge of drone technology in 1916.¹² Unmanned technology advanced in the interwar period producing remote controlled targets for anti-aircraft gunners to use for target practice. Others, including the Nazi V1 & V2 (WW 2) were still essentially guided bombs – primitive versions of today's cruise missiles.¹³

Cold War Era. By the late 1950s, the USA and others found they could use unmanned RPAs as spy planes. Radio-controlled and fitted with film cameras, small drones flew over China and North Vietnam gathering imagery intelligence. On 15 November 1964 a Firebee Spy Drone was shot down over China which is said to be the first known use of reconnaissance drones.¹⁴

Technological Leaps. During the cold war, drones were unreliable, small yet expensive, and pilots had to be within range of their analogue radio signals. The genesis of the drones orbiting today's battlefields came in three key technological leaps:

- **Increasing Endurance.** In the 1970s, former chief designer of the Israeli Air Force Abraham Karem developed an aircraft with glider-like properties.¹⁵ To hold the plane aloft, the gliders were designed to be incredibly long and thin, and could remain at altitude for hours on end. Incredibly long, thin wings could hold the plane aloft for hours on end, more than 24 hours flight.¹⁶ This long flight time is the fundamental reason that today's armed

unmanned systems, such as the MQ-9 Reaper, have gained such traction.¹⁷

- Relay of Signals. The second crucial advance was the use of transmitters to send the footage straight back to battlefield commanders. The signal to control them, and the returning video footage, are now transmitted through satellite networks, not radio waves.¹⁸
- Arming the Drones. In 2001 USA took the final leap forward when the US Air Force and Central Investigating Agency (CIA) became the first to successfully fit drones with missiles – Predator drones with Hellfire missiles – as part of a failed CIA attempt to kill Osama bin Laden.¹⁹

Use of Drones: A World View

Over three-dozen countries in the world have armed drones, but not all of them produced their drones at home. Many countries seeking armed drone capability without the capacity to develop drones domestically have turned to other countries. USA's drones have been hoovering up information, feeding the military's insatiable demand for battlefield intelligence, and finding and killing terrorists and insurgents.²⁰ USA has conducted thousands of drone strikes, ranging from attacks on non-state actors such as al Qaeda to the operation that killed Iranian Major General Qasem Soleimani.²¹ Today, the US armed services own nearly 8,000 drones.²²

Chinese-made drones have been used extensively to combat extremism outside of China, but the Chinese military has avoided conducting lethal strikes themselves.²³ Turkey has employed armed drones domestically against the Kurdistan Workers' Party, Nigeria against Boko Haram, and Iraq against the Islamic State. Saudi Arabia and the UAE have carried out deadly attacks in Libya and Yemen using drones. Azerbaijan has used armed drones, arguably to great effect, in the war with Armenia, especially against tanks and artillery.²⁴

On the other edge of the spectrum, during India's Army Day parade in New Delhi in January 2021, the Indian Army (IA) showed off a mature offensive capability with a swarm of 75 autonomous drones with distributed intelligence and edge computing, destroying a variety of simulated targets with kamikaze attacks.²⁵

Use of Drones: Strategic, Operational and Tactical Domains

There are numerous ways in which the drones can be used at various levels – strategic, operational and tactical. Some of the uses are outlined below:

- Intelligence, Surveillance and Reconnaissance (ISR) Missions. Drones are able to digitally and instantly provide the most desired and precious operational information about the battlefield with their ability to loiter, often at a high altitude over a target, watching it ceaselessly for many hours.²⁶ They possess the advantage of enormous intelligence collection and data analysis capabilities as warfare turns to disrupting command and control, computer centres, and communication networks.²⁷
- Strategic Bombing. Drones can be used for striking the enemy or its infrastructure in the deep rear and interrupting some operations that have strategic importance. The Turkish and Russian experiences have demonstrated that drones are optimal in cooperation with heavy artillery and air forces that provide high accuracy of bombardment.²⁸
- Sniper in the Sky: Precision Targeting. The sniper role is a unique element offered by drones, allowing operators to detect, track, and liquidate a particular person or a group of people whose deaths have a political or military significance.²⁹ The extremely accurate lethal use of force is a great indicator of the capabilities of drones in warfare.³⁰ Drone strikes can be divided into two targeting categories:³¹
 - ✦ Targeted Strikes. In these strikes, the targeted individual is known to be at a particular location at a specific time.
 - ✦ Signature Strikes. In these strikes, a pattern of activity is observed over a long period of time at a particular location before deciding to strike.
- Exert Power Enmeshed with Diplomacy. Large drones like the Predator and Reaper help USA exert power

across the globe.³² Equipped with high-tech surveillance gear, these drones can provide support for soldiers on the ground as well as launch their own strikes.

- Replacing Manned Fighter Aircrafts. Drones are the most effective instrument in fulfilling military and political goals without the use of fighter aircraft or upping the ante. In Idlib in March 2020, Turkish drones were able to reach targets that F-16s could not, obtaining the same effects as warplanes without incurring the same military or political consequences that the more traditional penetration into hostile areas might accrue.³³
- Enhancing Network Centric Warfare (NCW) Capabilities. Drones serve as an integral part of NCW as such systems genuinely enabled an enhanced situational awareness, rapid target assessment, and distributed weapon assignment.³⁴
- Psychological Effect. The psychological effect when the enemy is unaware of the direction of the next attack is pivotal. The Idlib episode showed perfectly that soldiers' mind-sets are ruined because from now on, they cannot feel secure in their supposed safe zone with drones sneaking into the rear, striking soldiers, weapons systems, and infrastructure.³⁵
- Impetus to Covert War. Drones can be deployed quickly, for long periods of time, and to lethal effect at lower financial cost and risk to life for those using them. Compared to piloted aircraft or ground forces they can be projected over great distances. Since the CIA lacks fighters and bombers, the drone is their primary weapon of choice for a counter-terror target.³⁶ Since 2004, CIA drones conducted approximately 400 strikes between Pakistan and Yemen.³⁷ This makes it more likely that we will see more (covert) drone warfare, but less (declared) war.³⁸
- Future of Drones: Enmeshed with Artificial Intelligence (AI). In the future, we will not need as many analysts, as AI and machine learning will allow the operatives to be

presented with the intelligence rather than sifting through terabytes of data to find the key data point they need.³⁹

- Fuelling Violence and Abetting Future Wars. Thousands of civilians have been killed in American drone strikes alone. And there is evidence to suggest drone strikes alienate and radicalise locals, sowing the seeds for further violence.⁴⁰

Use of Drones: Moral and Ethical Dilemmas

While the military personnel have been using drones within the military framework, there have been various moral and ethical dilemmas which are being debated throughout the world. Some of these are enunciated below:

- Making the World Safer or More Dangerous? As drone technology advances, and proliferates, ever further, national and international security interests will increasingly come to be seen being served better by drones than by expeditionary campaigns. That said, the temptation for more state (and non-state) actors to use drones and to do so more often, will not necessarily make the world a safer or a less violent place.⁴¹
- Civilian Casualties and Collateral Damage. The killing of civilians remains through collateral damage is a moral dilemma. As also is the infrastructural destruction for homes and means of subsistence even when (claiming to) directly target only individual bodies.⁴²
- Signature Strikes: No Jus ad Bellum. Drones are now used to monitor for days on end the movement of individuals in regions and villages in countries known for the presence of extremist groups. By identifying any atypical behaviour on the part of a resident, this person becomes immediately eligible to be targeted without even having his or her identity established.⁴³ Thus, there is limited or no jus ad bellum in such signature strikes.

Implications and Recommendations for India

As drone warfare becomes ever menacing and omnipresent, it is imperative for India to focus on critical facets to enable a robust

and morally and militarily correct usage of drones. Some of these facets are accentuated below:

- Acceptance of Political Risk. The Indian polity has to accept the political fallout while authorising use of drones for politico-military purposes in pursuance of the overall national strategy, especially so in case of an adverse ground situation.
- Refining Military Strategy in Consonance with Political Aims. Once the use of drones is authorised by the political authorities, then the execution of the same has to be dovetailed into the overall framework of military strategy. This needs careful consideration as the use of drones is likely to spill into the grey zone wherein there are no clear cut demarcated lines between war and peace or military targets or non-state actors, et al. Therefore, precision strikes based on confirmed identities of the target are recommended instead of the morally ambiguous signature strikes.
- Evolving Joint Doctrine, Organisational Setup, Training and Tactics. Once the overarching strategic framework is erected, a joint doctrinal framework must be developed to cover the employment of drones in operations for all the three services. Once the joint doctrine is enshrined, thereafter tactics can be evolved and appropriate training can be imparted.
- Synergy of Land, Air and Sea Operations. The use of drones will become integral to any future military operation, by all three Services – IA, Indian Navy (IN) and the IAF. Hence, synergised application of the drones within the overall joint doctrinal framework and military strategy is required.
- Command and Control (C2). C2 is the basic ingredient of any operational plan and hence there is a requirement to establish C2 hub(s) for the drone operations. These should be suitably sited, duly protected and with redundant communications network to ensure flow of information from the decision makers to the operators, thereby enabling a short(er) Observe-Orient-Decide-Act (OODA) loop.

- New Joint Organisational Structures. Instead of equipping and raising “more of the same” organisations that exist today – like infantry/artillery/armoured brigades or divisions, etc. – it is recommended that new joint organisational structures like drone flights or batteries, drone units, etc. at various hierarchical levels be raised and suitably equipped, in sync with the new joint doctrinal precepts.
- Legal Protection for Armed Forces. As drones are likely to be employed during peace time also in covert missions as well, there is a requirement to back these actions by a legal framework to preclude unwarranted legal heckling and prosecution of armed forces personnel by Human Rights (HR) organisations. This will insulate armed forces personnel from adverse psychological setbacks while performing bone fide military duties.
- Regulatory Laws for Civilian Use. There is a need to erect a legal framework for use of drones by the civilians. The same is under process and the Government of India (GoI) has released guidelines under the Unmanned Aircraft System Rules, 2021, issued by the Ministry of Civil Aviation in March 2021. After the drone attack at Jammu Air Force Station on 27 June 2021, the Ministry of Civil Aviation has repealed the Unmanned Aircraft Systems (UAS) Rules, 2021 and replaced the same with the liberalised Drone Rules, 2021. The new drone laws and regulations apply to anyone looking to operate an unmanned aircraft system (UAS) in India.⁴⁴
- Research and Development (R&D): Anti Drone Technology. India should focus on indigenous R&D in this field and fast track the complete cycle. The Home Minister Mr Amit Shah stated: “Drones have become a serious issue of security concern. Defence Research and Development Organisation (DRDO) is working on developing anti-drone ‘Swadeshi’ technology to get over this danger. All R&D projects have been sanctioned by the government to develop anti-drone technology”.⁴⁵

- 'Sovereignty' and 'War'. Courtesy the likely use of drones during peace time and against non-state actors, the definitions of 'war' and 'act of war' need to be re-defined. Also, if the adversary undertakes a mirror action by drones, then again the concept of violation of 'sovereignty' needs to be refined to avoid any blowback and/or a forced military hand.
- Public Opinion. As many drone operations may be covert, any leakage of such actions may lead to adverse public opinion which the political authority must eschew in favour of preservation of national interest at large. Alternatively, a set of self-regulating guidelines for the press and media can be formulated to ensure coverage of news as well as preclusion of media hype.

Conclusion

Drones are no longer the weapons of tomorrow – they are now the weapons of today. The use of drones for military strikes today is akin to use of tanks and aircrafts during WW1. The development of aircraft and tank strategies during the inter war years by select nations led to emergence of *Blitzkrieg* and *Deep Operations* theories of manoeuvre warfare, leading to victory on the battlefields. It is therefore imperative for Indian armed forces to transit from old to new platforms in a faster time frame and to suitably enmesh these into the current and new doctrinal and organisational structures thereby enabling synergised application in operations. Only then can India secure victory on the present and future battlefields of 21st century.

Endnotes

¹ General Valery Gerasimov, Russian Army, The Value of Science In Prediction, Military Industrial Kurier, 27 February 2013, quoted by Dr Mark Galeotti, *The Gerasimov Doctrine And The Russian Non-Linear War*, blog titled *In Moscow's Shadows*, 06 July 2014, available at <https://inmoscowsshadows.wordpress.com/2014/07/06/the-gerasimov-doctrine-and-russian-non-linear-war/> accessed 1 December 2016.

² Ray Alderman, *Defining Fifth Generation Warfare*, available at <http://mil-embedded.com/guest-blogs/defining-fifth-generation-warfare/> accessed 11 October 2016.

³ Sameer Joshi, '*Drone swarms' are coming, and they are the future of wars in the air*, available at <https://theprint.in/defence/drone-swarms-are-coming-and-they-are-the-future-of-wars-in-the-air/596842/> accessed on 1 May 2021.

⁴ Ibid.

⁵ Ibid.

⁶ S Ramachandran, *Drone Attacks on Military Installation Rattle India's Security Establishment*, The Diplomat, 30 June 2021, available at <https://thediplomat.com/2021/06/drone-attacks-on-military-installation-rattle-indias-security-establishment/> accessed 19 July 2021.

⁷ David Daly, *A Not-So-Short History of Unmanned Aerial Vehicles (UAV)*, available at <https://consortiq.com/short-history-unmanned-aerial-vehicles-uavs/> accessed on 5 May 2021.

⁸ Nikola Budanovic, *The Early Days of Drones – Unmanned Aircraft From World War One And World War Two*, War History Online, 23 July 2017, available at <https://www.warhistoryonline.com/military-vehicle-news/short-history-drones-part-1.html> accessed on 3 May 2021.

⁹ Mike Fowler, *The Strategy of Drone Warfare*, Journal of Strategic Security, Volume 7, No. 4, Winter 2014 Issue, pp. 108-119, available at <https://scholarcommons.usf.edu/jss/vol7/iss4/9>, accessed on 1 May 2021.

¹⁰ Nikola Budanovic, op cit.

¹¹ From *Remote Piloted Aerial Vehicles: An Anthology*, available at https://www.ctie.monash.edu/hargrave/rpav_home.html#Beginnings accessed on 1 May 2021.

¹² Nikola Budanovic, op cit.

¹³ From *History of drone warfare*, The Bureau of Investigative Journalism, available at <https://www.thebureauinvestigates.com/explainers/history-of-drone-warfare> accessed on 1 May 2021.

¹⁴ David Hambling, *The Weird And Worrying Drone War In The Caucasus*, Forbes 22 June 2020, available at <https://www.forbes.com/sites/davidhambling/2020/06/22/the-weird-and-worrying-drone-war-in-the-caucasus/?sh=79be8e6f45da>, accessed on 3 May 2021.

¹⁵ Richard Whittle, *The Man Who Invented the Predator*, Air & Space Magazine, April 2013, available at <https://www.airspacemag.com/flight-today/the-man-who-invented-the-predator-3970502/>, accessed on 6 May 2021. Abraham Kareem is the designer of the Predator, the UAV that turned drones from unreliable oddities into military necessities, starting a technological revolution that is now spreading to civil aviation. See

¹⁶ From *History of drone warfare*, op cit.

¹⁷ Siobhan Doyle, *Drone warfare: the autonomous debate*, Engineering and Technology (E&T), 6 November 2018, available at <https://eandt.theiet.org/content/articles/2018/11/drone-warfare-the-autonomous-debate/> accessed 1 May 2021.

¹⁸ Ibid.

¹⁹ Ibid.

²⁰ Ibid.

²¹ Michael C. Horowitz, Joshua A. Schwartz, and Matthew Fuhrmann, *China Has Made Drone Warfare Global: The United States Must Join the Market or Be Left Behind*, Foreign Affairs, 20 November 2020, available at <https://www.foreignaffairs.com/articles/china/2020-11-20/china-has-made-drone-warfare-global> accessed 1 May 2021.

²² Richard Whittle, op cit.

²³ From the article *Who Has What: Countries with Armed Drones*, available at <https://www.newamerica.org/international-security/reports/world-drones/who-has-what-countries-with-armed-drones/> accessed on 7 May 2021.

²⁴ Michael C. Horowitz, Joshua A. Schwartz, and Matthew Fuhrmann, op cit.

²⁵ Sameer Joshi, op cit.

²⁶ Alex Gatopoulos, *"Battle for Idlib: Turkey's Drones and a New Way of War,"* Aljazeera, 3 March 2020, <https://www.aljazeera.com/>, accessed 1 May 2021.

²⁷ Michael Ignatieff, *Virtual War: Kosovo and Beyond*, New York, N.Y, Henry Holt, 2000, p. 169.

²⁸ Ridvan Bari Urcosta, *The Revolution in Drone Warfare: The Lessons from the Idlib De-Escalation Zone*, JEMENA (Journal of European, Middle Eastern, & African Affairs), 31 August 2020, available at <https://www.airuniversity.af.edu/JEMEAA/Display/Article/2329510/the-revolution-in-drone-warfare-the-lessons-from-the-idlib-de-escalation-zone/> accessed 1 May 2021.

²⁹ Ibid.

³⁰ Allen Brown, *How Drones Will Impact The Future of Military Warfare*, The Apoka Voice, 4 April 2021, available at <https://theapokavoice.com/how-drones-will-impact-the-future-of-military-warfare/>, accessed on 5 May 2021.

³¹ Scott Englund, *The Long Game of Drone Warfare*, Trends Research and Advisory, 11 Jan 2016, available at <https://trendsresearch.org/insight/the-long-game-of-drone-warfare/>, accessed on 5 May 2021.

³² Dr Michael Richardson, *Military drones are changing, as are the wars they're fighting*. Here's what's happening now, Australian Broadcasting Corporation (ABC News), 26 February 2021, available at <https://www.abc.net.au/news/2021-02-26/military-drones-and-wars-are-changing-heres-whats-happening/13186132> accessed on 3 May 2021.

³³ Ridvan Bari Urcosta, op cit.

³⁴ Ibid.

³⁵ Ibid.

³⁶ Mike Fowler, *The Strategy of Drone Warfare*, op cit.

³⁷ Ibid.

³⁸ Professor Stefan Wolff, *The ethics of warfare part 3: How does drone warfare change the debate?*, Perspectives, University of Birmingham, available at <https://www.birmingham.ac.uk/research/perspective/drones-wolff.aspx>, accessed on 1 May 2021.

³⁹ Siobhan Doyle, op cit. The idea is attributed to Andrew Jeffrey, a former Tornado navigator and the first Royal Air Force (RAF) pilot to be in command of the RPAS 39 Squadron for the MQ-9 Reaper, played an active role in the move from manned to unmanned piloting.

⁴⁰ Dr Michael Richardson, op cit.

⁴¹ Professor Stefan Wolff, op cit.

⁴² Nico Edwards, *The Meaning of US Drone Warfare in the War on Terror*, E-International Relations, 28 November 2020, available at <https://www.e-ir.info/2020/11/28/governing-global-security-through-the-logic-of-disposability-the-meaning-of-us-drone-warfare-in-the-war-on-terror/> accessed on 1 May 2021.

⁴³ Cristiano Mendes and Karina Junqueira, *Drones, Warfare and the Deconstruction of the Enemy*, Contexto International [online], 23 October 2020, Vol.42, No 2, pp. 237-256, available at http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0102-85292020000200237, accessed on 6 May 2021.

⁴⁴ Poulomi Saha, *After Jammu attack, Centre prepares new rules for drone use*, India Today, 2 July 2021, available at <https://www.indiatoday.in/india/story/jammu-attack-centre-prepares-new-rules-drone-use-1823058-2021-07-02> accessed 19 Jul 2021.

⁴⁵ Kamaljit Kaur Sandhu and Munish Chandra Pandey, *Make-in-India technology to counter drone attack threat, says Amit Shah*, India Today, 17 July 2021, available at <https://www.indiatoday.in/india/story/make-in-india-technology-drone-home-minister-amit-shah-1829324-2021-07-17> accessed 19 July 2021. The quote has been ascribed to the Home Minister while speaking at the 18th Investiture Ceremony of Border Security Force (BSF) at Vigyan Bhawan.

Veteran Medical Care Support System in the USA Part – II

Major General Ashok Kumar®

Abstract

This article is the third and final part of the trilogy on the Veteran Care Support System. The earlier parts having been published in the Apr – Jun 2020 and Jan – Mar 2021 issues of the USI Journal. It focuses on delivery of health care benefits and attendant facilities to defence veterans of the USA. Part I, published in Jan–Mar 2021 Journal, has already highlighted the historical perspective, organisational details, eligibility conditions, and enrollment priority groups. This part will be specifically focusing on medical benefits in multiple domains, including Preventive Care Services and Mental Health Services, having distinct and deliberate support, Dental Services, Blind and Low Vision Rehabilitation Services and other special features of support for care givers. It also covers medical related travel, lodging and daily allowances, issue of medical equipment and medicines besides coverage for family members. The article also throws light on care outside the Veteran Affairs System and emergency medical care services.

Introduction

USA has the oldest (1865 vintage) and largest health care system for defence veterans in the world.¹ It has evolved into an efficient healthcare system and recognises importance of preventive healthcare as well as mental health care services which are needed for our healthcare system as well. Its coverage is exhaustive including the need of support to be given to those

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members, including family members, who provide regular support to defence veterans. A chain of Veteran Hospitals provides substantial support besides utilisation of national health management resources optimally in an integrated manner.

Medical Benefits

Comprehensive health benefits include all the necessary inpatient hospital care and outpatient services to promote, preserve or restore health. These services include preventive care, inpatient care, ancillary services, specialty care, and mental health services. Preventive care services include, but are not limited to, periodic medical examination, health and nutrition education, immunisation, and genetic counselling. Inpatient care includes a full spectrum of treatment services such as medical, surgical, mental health, dialysis, and acute care. Veterans also have access to the Veterans Health Administration (VHA)² specialised care units. VHA's goal is to support recovery and enable veterans who experience mental health problems to live meaningful lives in their communities and to achieve their full potential. Mental health services are available in specialty clinics, primary care clinics, Veteran Affairs (VA) Community living centres, and residential care facilities. Specialised programmes such as mental health intensive care management, day centres, work programs, and psychosocial rehabilitation are provided for those with serious mental health problems. In addition, readjustment counselling services may be available for veterans and their families at Vet Centres across the nation. VA provides cost-free military sexual trauma counselling and referral, including appropriate care and services, to overcome psychological trauma resulting from a physical assault or battery of a sexual nature or from sexual harassment that occurred while the veteran was on active duty, or was on Active Duty for Training (ADUTRA). Veteran Affairs Health Care System (VAHCS)³ covers the following health services:

- **Preventive Care Services.** These include health examinations, health education (including nutrition education), immunisation against infectious diseases and counselling on genetic diseases that run in families.
- **Inpatient Hospital Services.** These include surgeries, medical treatments, kidney dialysis, acute care (short-term treatment for a severe illness or injury or after surgery),

and specialised care (including organ transplants, intensive care for mental and physical conditions and care for traumatic injuries).

- **Medical and Surgical Specialty Care Services.**

These include Anaesthesiology, Bariatric Surgery (weight loss surgery), Cardiology – Vascular (heart and blood circulation), Chaplain (spiritual support), Critical Care Specialty, Dermatology, Diabetes and Endocrinology, Geriatric Care, Gynaecology Care, Infectious Disease, Nephrology (kidney), Neurology (nerves), Mental Health, Oncology (cancer), Optometry & Ophthalmology (eye care), Orthopaedic Surgery, Orthotic and Prosthetic (amputee care and custom orthotics), Pacemaker (heart), Pain Management, Podiatry (feet), Pulmonary (lungs), Robotic-Assisted Surgery, Spinal Cord Injury, Transplant Surgery (heart, lung, liver, etc.), Urology, Vascular Surgery and Women's Care.

- **Mental Health Services.** The VHA provides eligible veterans with a comprehensive array of mental health care services in outpatient, inpatient, and residential settings. Eligible veterans can access these services in several ways. They may walk into a VHA facility and request mental health services. If they are already being seen in primary care, they may receive their mental health services within the primary care setting or be referred to specialty care. Vet Centres provide a third pathway into mental health care. Veterans can walk into a Vet Centre on their own, with or without a referral. Again, should more specialised or acute services be required, Vet Centres can make the appropriate referral to mental health specialty care or primary care. Finally, veterans may enter the VHA health care system via emergency service departments either at VHA facilities or at civilian hospitals; those seen in civilian emergency service departments may be later referred to VHA health care. The following mental health services can be availed through VAHCS:

- o Mental health services to treat certain issues like post-traumatic stress disorder (PTSD), military sexual trauma (MST), depression, and substance use problems.
- o Assisted living and home health care (depending on needs and income as well as space in the programs).
- o Prescriptions written or approved by a VA doctor.

- **Dental Services.** Eligibility for dental benefits is based on specific guidelines and differs significantly from eligibility requirements⁴ for medical care. Veteran is eligible for outpatient dental treatment if one meets any one of the following criteria:

- **Eligible for any needed Dental Care.** Service-connected disability or condition for which compensation is received; former prisoner of wars (PoWs); unemployable and getting disability compensation at 100% disabling rate due to service-connected conditions; one or more service-connected disability rated 100% (temporary disability doesn't qualify for this benefit); having service-connected non-compensable dental condition (not getting disability payments) or disability that is the result of combat wounds or service trauma .
- Dental condition linked to a service connected health condition and is making that condition worse. Eligible dental care to treat the oral conditions that a dental care provider concludes is directly making service-connected health condition worse.
- Served in active duty for 90 days or more during Persian Gulf War – Eligible for one time Care.
- Inpatient treatment for a health condition for which dental care is a prior requirement.

- **Diagnostics and Ancillary Services.** These include following:

- Tests/imaging services used to diagnose health conditions, including lab tests, X-rays, ultrasounds, scans, and MRI.
- Therapy and rehabilitation services, including physical therapy, vision rehab, and therapy for traumatic brain injury.
- Additional services including prosthetic items, audiology (care for hearing loss), and radiation oncology (cancer care).

- o If the need arises, a veteran is eligible for transplant services. The request will be coordinated by Primary Care Team.

- **Blind and Low Vision Rehabilitation Services.** VHA provides veterans with eye care including periodic exams, preventive tests and treatments including surgery. VHA also provides services for blind or low-vision rehabilitation. A veteran member who is blind, or has low vision, may be able to get advanced vision care and rehabilitation services through VHA to help the veteran live an independent life. Services offered are:

- o Vision-enhancing devices and technologies and training in how to use them.
- o Training in new visual skills to help with everyday tasks.
- o Sensory training (training that helps veteran to better use other senses-like hearing or touch).
- o Mobility and orientation training (training that helps one create mental maps that makes one feel more confident).
- o Strategies for restoring ability to communicate through writing or using the computer.
- o Counselling and group therapy to help adjust to blindness.
- o Family-centred care that helps family learn how to support while the veteran adjusts to blindness.

- **Support for Caregivers.** VHA has two programs for caregivers:

- o **The Program of General Caregiver Support Services.** This provides caregivers of enrolled Veterans with the following:

- § Information/Referral to in-home or support services, support groups and other resources.
- § Education and training on how best to care for oneself.

§ Peer support to learn from and gain support from other caregivers.

§ Mental health counselling.

§ Programmes that focus on caregiver self-care.

o **The Program of Comprehensive Assistance for Family Caregivers.** This is only available to eligible seriously injured post 9/11 veterans. In addition to all other services, eligible caregivers may receive financial monthly stipend, health insurance (if eligible), beneficiary travel benefits (if eligible), mental health services and Respite Care to get a break for no less than 30 days.

● **Geriatrics and Extended Care Services.** Geriatrics and Extended Care provides services for veterans who are elderly and have complex needs, and veterans of any age who need daily support and assistance. Veterans can receive care at home, at VA medical centres or in the community.

o **Home Health Care.** Home Health Care includes Skilled Home Health Care Services (SHHC) and Family Caregivers Program. SHHC is short-term health care services that can be provided to veterans if they are homebound or live far away from VHA health centre. The care is delivered by a community-based home health agency that has a contract with VHA. VHA's Family Caregivers Program provides support and assistance to caregivers of post 9/11 veterans and service members being medically discharged. Eligible primary Family Caregivers can receive training, mental health services, travel and lodging reimbursement, and access to health insurance if they are not already under a health care plan. The stipend is based on the medical conditions of the veteran and care requirements. The care giver is eligible for a stipend which is paid monthly.

o **Hospice Services.** Hospice is a comfort-based form of care for veterans who have a terminal condition with six months or less to live. Hospice Care provides treatment that relieves suffering and helps to control symptoms in a way that respects personal, cultural, and religious beliefs and practices.

- o **Respite Care Program.** Respite Care is a service that pays for a person to come to a veteran's home or for a veteran to go to a program while their family caregiver takes a break. Respite Care services may be available up to 30 days each calendar year.
- o **Domiciliary Care.** VA offers two distinct types of Domiciliary Care: short-term rehabilitation and long-term health maintenance care. This program also provides a clinically appropriate level of care for homeless veterans whose health care needs are not severe enough to require more intensive levels of treatment.
- o **Medical Foster Home.** Medical Foster Home is an adult foster care family home combined with VA home based primary care or spinal cord injury home care to provide a safe, home-like environment. VA does not pay for medical foster homes but helps match eligible veterans with approved homes and experienced caregivers.
- o **Adult Day Health Care.** Adult Day Health Care is a program veterans can go to during the day for social activities, peer support, companionship, and recreation. Adult day health care is for veterans who need skilled services, case management, and assistance with activities of daily living (e.g. bathing and getting dressed) or instrumental activities of daily living (e.g. fixing meals and taking medicines).
- o **VA Community Living Centre Placement.** If clinically indicated, veteran may be provided needed nursing home placement based on space and availability. Placement is provided either through VA's Community Living Centres (CLC) or contract nursing homes.
- o **State Veterans Homes.** State Veterans Homes are facilities that provide nursing home, domiciliary or adult day care. Eligibility for State Veterans Homes is based on clinical need and setting availability. Each state establishes eligibility and admission criteria for its homes.

Medical Related Travel, Lodging and Daily Allowances

Mileage Reimbursement. Depending on income, individual may be reimbursed as per laid down rates for obtaining VHA health

care services. Veterans are also eligible for travel reimbursement when they travel to a VA facility or VA-authorized health care facility for a scheduled Compensation and Pension (C&P) examination. Details are:

- VHA may arrange or reimburse the veteran for specialized transportation (Ambulances, Wheelchair, Vans) related to obtaining VA health care services.
- Depending on veteran's income, he/she may be paid the actual cost for meals, lodging, or both — not to exceed 50 per cent of the amount allowed for government employees — if it is determined that an overnight stay is required for travel related to obtaining VA health care services.
- Automobile Access Equipment. VA may provide automobile access equipment (for example, items such as power lifts, power door openers, turning seats) if veteran needs assistance to enter or exit a motor vehicle. Eligibility will be determined by his/her VA Primary Care Provider.
- Temporary lodging may be provided if veteran is receiving health care services or a Compensation and Pension examination at a VA health care facility. If undergoing extensive treatment or procedures (organ transplant, chemotherapy, surgical intervention, diagnostic work-up, etc.), veteran and a caregiver or family member may be furnished temporary lodging, at the discretion of the facility Director, for the duration of the treatment.

Veterans Transportation Service (VTS). Veteran Transport Services has established a network of transportation options for veterans through joint efforts with VA's office of Rural Health and other non-governmental organizations to provide mobility to veterans who face challenges travelling to their VHA health care appointments.

Medical Equipment/Prosthetic Items and Aids

VA Prosthetic & Sensory Aids Service (PSAS) furnish prescribed prosthetic equipment, sensory aids, and other devices to eligible veterans. Prosthetics serve as the case manager for the equipment needs of disabled veterans.

- **Eyeglasses.** VA provides eyeglasses only in special circumstances. However, veteran may be eligible because of medically compelling reasons as determined by a VA eye care practitioner. These circumstances may include vision impairment that results from:

- o Diseases or medical conditions for which veteran is receiving VA care, or which results from treatment of such conditions;
- o A significant functional or cognitive impairment that causes problems with activities of daily living, not including normally occurring vision loss; or
- o Vision impairment severe enough to interfere with ability to actively participate in health care.
- o VA eyeglasses will be provided only if otherwise receiving VA care or services.

- **Hearing Aids.** VA provides hearing aids only in special circumstances. However, veteran may be eligible, because of medically compelling reasons, as determined by a VA audiologist. These circumstances may include hearing impairment that results from:

- o Diseases or medical conditions for which veteran is receiving VA care, or which results from treatment of such conditions;
- o A significant functional or cognitive impairment that causes problems with activities of daily living, not including normally occurring hearing loss;
- o Hearing impairment severe enough to interfere with veterans' ability to actively participate in one's health care; or
- o 0% service-connected hearing impairment disabilities that meet certain medical criteria.
- o VA hearing aids will be provided only if otherwise receiving VA care or services.

- **Home Improvement and Structural Alteration (HISA) Grants.** Veteran may be eligible to receive a Home

Improvement and Structural Alteration grant for improvements needed to access one's home or essential bathroom facilities. Home improvement benefits may be provided for Service-connected condition and non-Service-connected condition of a veteran rated 50 per cent or more disabled. Benefits up to specified limit may be provided to all other veterans registered in the VA health care system.

Issue of Medicines

VA maintains a list of preferred medications called a drug formulary. VA's National Drug Formulary ensures that veterans across the country have access to the same medications at all VA facilities. There is a process that permits health care provider to prescribe a 'non-formulary' drug if special health needs require it (e.g., safety reasons, side effects, poor response, and no alternatives). VA is generally not authorised to fill prescriptions unless they are written by a VA provider. If non-VA physician has prescribed a medication that is not on the VA National Formulary (that is, a 'non-formulary' medication), VA physician may elect to re-write that prescription for a VA National Formulary medication. If this switch is made, it is because VA health care provider believes the VA National Formulary drug offers the best safety, effectiveness, and overall value.

Coverage for Family Members

Options for Family Members are limited. Few veteran families receive health care services at the VA. Two health coverage programmes for veterans and/or their families allow enrollees to receive care at the VA if space is available:

- TRICARE is a Department of Defence health care program offered to active duty, retired, and Guard/Reserve members and their families. All VHA health care facilities serve as TRICARE network providers, allowing TRICARE covered individuals to receive care on a space available basis.
- The Civilian Health and Medical Program of Veterans Affairs (CHAMPVA), a comprehensive health care program with deductibles and cost-sharing, provides coverage to the dependents and survivors of veterans who died or became permanently and totally disabled due to service-connected

injuries. Full-time students are covered until they are 23 but otherwise dependents lose coverage at 18 years. CHAMPVA recipients can receive care with no cost sharing from their local VA medical centre, subject to availability and only if it participates in the CHAMPVA In-house Treatment Initiative (CITI). CITI provides non-medicare eligible CHAMPVA beneficiaries' access to care in VA facilities after the facility has met the needs of its veteran population.

VHA Co-payments

While many veterans qualify for enrollment and cost-free health care services based on a compensable service-connected condition or other qualifying factors, certain veterans will be asked to complete a financial assessment at the time of enrollment to determine their eligibility for cost-free medications and travel benefits. This financial information is also used to determine the applicant's enrollment priority and whether he/she is eligible for cost-free VA health care. Higher-income veterans (veterans whose income exceeds established national income limits) who are treated for non-Service-connected conditions may be required to share in the expense of their care by paying co-payments. Quantum of outpatient & inpatient hospital payments has been specified separately.

Care outside the VA System

VA may refer to a non-VA provider in the community for a portion of medical care under certain limited circumstances. Non-emergency health care provided in non-VA facilities at VA expense must always be pre-authorised. If one seeks emergency treatment at a non-VA facility, it's important to contact the closest VA medical centre within 72 hours of admission to the emergency room even if one has been discharged home. VA is not authorised to pay for all emergency care for veterans; veteran's individual eligibility will determine what VA is able to pay for. Non-VA medical care may be pre-authorised when treatment is needed for:

- A disability for which veteran was released from active duty.
- A condition requiring emergency care that develops while one is receiving inpatient hospital or outpatient care in a VA

facility, federal facility with which VA contracts, Contract Nursing Home, or during VA-authorized travel.

Emergency Medical Care Services

Veterans are eligible for emergency medical treatment in VHA facilities or any other medical facility in case VHA facility is not available nearby. Veterans do not need to check with VHA before calling for an ambulance or going to an emergency department. During a medical emergency, VHA encourages all veterans to seek immediate medical attention without delay. A claim for emergency care will never be denied based solely on VHA not receiving notification prior to seeking care. It is, however, important to promptly notify VHA after receiving emergency care at a medical facility other than VHA facility. Notification should be made within 72 hours of admission to a community medical facility. This allows VHA to assist the veteran in coordinating necessary care or transfer and helps to ensure that the administrative and clinical requirements for VHA to pay for the care are met.

- **Service-Connected Emergency Care.** In general, VHA can pay for emergency medical care at a local Emergency Department for a veteran's service-connected condition. Specifically, emergency medical care for a veteran's service-connected or related condition is eligible for VHA payment as long as the VHA wasn't reasonably available to provide the care. In accordance with the following situations and requirements, VHA can pay emergency care costs for:
 - o A veteran who receives emergency treatment of a service-connected condition in a community emergency department; or
 - o A veteran who is permanently and totally disabled as the result of a service-connected condition is eligible for emergency treatment of any condition; or
 - o A veteran who is participating in a VA Vocational Rehabilitation Programme, and who requires emergency treatment to expedite their return to the programme, is eligible for emergency treatment for any condition;
 - o The emergency was of such a nature that the veteran would reasonably believe that any delay in

seeking immediate medical attention would cause their life or health to be placed in jeopardy.

- **Non-Service-Connected Emergency Care.** VHA can also pay for emergency medical care at a community Emergency Department for a veteran's non-Service-connected condition. However, there are several requirements and factors that affect the extent to which VHA can cover those services. Specifically, emergency medical care for a veteran's non-Service-connected condition(s) is eligible for VHA payment when all of the following five elements are true:

- o Care was provided in a hospital Emergency Department (or similar public facility held to provide emergency treatment to the public); and
 - o The emergency was of such a nature that the veteran (or other prudent layperson without medical training) would reasonably believe that any delay in seeking immediate medical attention would cause their life or health to be placed in jeopardy; and
 - o A VA medical facility or another federal facility was not reasonably available to provide the care; and
 - o The veteran is enrolled and has received care within a VA facility during the 24 months before the emergency care; and
 - o The veteran is financially liable to the provider of emergency treatment.
- o **Claim.** The claim should be made within 72 hours of receiving medical aid by any person helping the veteran to the VHA. Thereafter, VHA staff will assist the veteran and/or his/her representatives in understanding eligibility and how eligibility relates to services rendered in the community medical centre.
 - o VHA staff will also ensure that, if desired, the veteran is transferred to a VHA medical centre upon stabilisation.
 - o Claims for emergency medical care should be submitted to VHA within 30 days after care has been

provided. If a veteran is charged for emergency care received in the Community Medical Centre and believes the charges should be covered by VHA, the veteran needs to contact the nearest VAHCS medical facility as soon as possible.

Summary

The USA has one of the oldest as well as comprehensive health care programme for its veterans. As will be evident from the above details, the coverage of health care is wide ranging and covers a very wide canvas. It looks at comprehensive management of healthcare of veterans as against limited medical treatment.

At the same time, its primary focus remains on the veterans and only minor resources/effort is set-aside towards family members and other dependents. This approach makes the scheme affordable for the govt. While it is liberal to grant health care benefits but primary focus remains the soldier. One need not be only a pensioner to avail the benefits.

It is also important to observe that co-payment is taken from those who are from higher income group, a practice which could be emulated if a health care facility has to meet financial survivability. While some of the good practices have already been incorporated in Ex-servicemen Contributory Healthcare Scheme (ECHS) but many more can be adopted including establishment of Veteran Wings & Veteran Hospitals.

Endnotes

¹ US Department of Veteran Affairs (VA). VA's Veterans Health Administration is the largest integrated health care network in the United States, with 1,255 health care facilities serving 9 million enrolled Veterans each year. Accessed Aug 19, 2021, from https://www.va.gov/ABOUT_VA/index.asp

² Equivalent to the Indian military's Ex Servicemen Contributory Health Scheme (ECHS) with a difference that the scheme is primarily for Servicemen and not their family members or dependents.

³ US Department of Veteran Affairs. Retrieved 30 Dec 2019, www.va.gov.com.

Research & Advocacy to Address Issues Faced by Families of Armed Forces Soldiers Killed in Action (KIA)

Mrs Meghna Girish, Mrs Subhashini Vasanth &
Mr Vikas Manhas®

Abstract

This article is based upon a study to investigate existing ground realities in accessing entitlements and benefits for families of soldiers who made the supreme sacrifice defending the nation. Results indicate that widows and parents of armed forces soldiers killed-in-action (KIA) often face tremendous problems and challenges because of apathy, denial, and insufficient support from the military and civilian bureaucracy, and bureaucratic rules. On the basis of findings of the study, the article advocates for a review of policies and implementation processes so as to ensure timely and equitable access for all affected families, to lead a life of dignity.

Introduction

Every young soldier who joins the armed forces does so with passion and courage to protect the nation and people. When families lose their pillar of strength and support for the greater cause of defending India, not only are their dreams and hopes for a happy future shattered, they face extremely tough challenges

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Mrs Subhashini Vasanth is the wife of Colonel Vasanth V, Infantry (Maratha LI), who was awarded the Ashok Chakra (Posthumous) in 2008 for his selfless, supreme sacrifice while fighting terrorists in Jammu & Kashmir. She has channelled her grief to empower the 'veer naris' of the Indian Army through the Vasanthratna Foundation for Arts started by her in the memory of her husband.

Mr Vikas Manhas is from Bhaderwah. In the past two decades, Vikas has met the families of over 200 Indian martyrs and has built a personal relationship with all of them. He is a BSc from the University of Jammu and MMS (Marketing) from University of Mumbai. He has worked at Crosstream Consulting Pvt Ltd in Bengaluru for four years and then started a travel agency, a pursuit which helps him carry on with his life's mission of commiserating with the families of martyrs.

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in continuing to live long lives with fortitude and dignity. It becomes the nation's responsibility to honour each courageous soldier's supreme sacrifice and also to support their families devastated by loss. India's commitment to ensure support to families of soldiers KIA has some good initiatives. However, on ground, many families are either unable to access the entitlements and benefits or the delays stretch into years, thereby adding to their pain and problems.

The Defence Minister, the Home Minister, and the armed forces Chiefs have voiced their gratitude to soldiers for their supreme sacrifices and spoken on the need to stand with martyr's families and systematically address their issues. Although the years 2019 and 2020 were dedicated as 'Year of Next of Kin', programmes which were initiated could not be completed and gaps in policy and implementation remain. This article aims to bring to notice of decision makers and authorities, the realities of families of soldiers who courageously gave their all to defend India and its people. The aim is also to advocate for addressing existing gaps in policies and implementation to facilitate access to entitlements and benefits.

'Research for Advocacy Initiative' by Primary Stakeholder Organisations

The Vasantharatna Foundation (VRF), Martyr Captain Tushar Mahajan Memorial Trust (MCTMMT) and Major Akshay Girish Memorial Trust (MAGMT), as primary stakeholder organisations, undertook a 'Joint Research for Advocacy Initiative' for families of soldiers designated 'fatal battle casualty' by armed forces. 'Fatal battle casualty' is used to refer to a soldier who is killed in action while defending the nation. The target group included widows (Veer Naris) and parents (Veer Mata/Pita) of armed forces personnel killed in action in last 20 years (1999-2019).

As per information in public domain, between January 2005 and December 2017, 1684 Indian Army soldiers lost their lives in ceasefire violations, anti-terrorist operations, counter-insurgency, offensive tactical missions and peacekeeping missions.¹ The table indicates number of soldiers killed in action over last 15 years as per data from multiple sources.

As per the government⁴, the number of defence personnel killed in different operations / encounters during the four calendar years between 2014 to 2017 are 183 from the Indian Army (including

15 officers), 11 from the Indian Navy (including 4 officers) and 43 from the Indian Air Force (including 17 officers). In the last war fought in Kargil in 1999, fatal battle casualties numbered 527. Data suggests that at a high average of 200-250 fatal battle casualties per year, between 4000 to 4500 soldiers and officers have been killed in the last 20 years (1999-2019), majority from the Indian Army.

Research Methodology

The research data was collected and compiled using the following tools and methods:

- **Quantitative Data.** Structured survey questionnaire tool for data collection from Veer Naris and Parents of soldiers KIA.
- **Qualitative Data.** One to one open ended interview, focus group discussions (FGDs), individual case studies.
- **Secondary Research.** Information in public domain including official websites (Indian Armed Forces, Department of Ex Servicemen Welfare and Veterans portal) and news media.
- **Sample Size Calculation.** Keeping confidence level at 95 per cent, sample size was calculated for 4500 soldiers KIA with 8.25 per cent margin of error. The sample size for the purpose of survey data is thus 131 families of soldiers KIA.⁵

Survey Respondents and Coverage

As elucidated below:

- **Adequate Representation.** Adequate representation of affected family members was ensured by taking a decision to survey at least 100 Veer Naris and 25 Parents (either mother/father) from different families.
- **Separate Survey Questionnaires.** Questionnaires were finalised as data collection tools for Veer Naris and Parents. The survey questionnaires were administered through volunteers to 131 respondents after informed consent.
- **Respondents.** The respondents included Veer Naris and Parents of 21 officers, 4 JCOs and 106 other ranks of soldiers KIA.

- **Geographical Coverage.** The survey data has been collected from 18 States and Union Territories of India namely Arunachal Pradesh, Bihar, Chandigarh, Delhi, Gujarat, Haryana, Himachal Pradesh, Jammu and Kashmir (J&K), Jharkhand, Karnataka, Maharashtra, Madhya Pradesh, Meghalaya, Punjab, Rajasthan, Tamil Nadu, Telangana, and Uttar Pradesh.

Findings: Ground Realities of Families of Soldiers KIA

These are as given below:

- **Message to Bereaved Family.** There is a great deal of anguish that a soldier's supreme sacrifice beyond call of duty is not acknowledged by our national leadership with condolence message from President as Supreme Commander of Armed Forces and also from the Defence Minister.
- **No Official Recognition.** A major gap is that no medal has been instituted to officially recognise the supreme sacrifice of a soldier killed in action defending the nation. Although every soldier wounded in battle is awarded 'Wound Medal', (Parakram Padak; listed at number 29 in the Order of Precedence of Awards and Decorations determined by the President⁶), even 73 years after independence, a soldier who succumbs to injuries sustained while fighting to defend his nation is not honoured with a medal.
- **Broken Promises.** Leaders from their home state who make promises to duly honour the soldier by installing a statue or bust of the brave heart in the native village or naming of a school/road/park/bridge/station etc. in urban areas do not deliver what they promise, causing great anguish to the families.

Policy and Implementation Gaps in Access to Entitlements and Benefits for Veer Naris and Children

The findings are based on data from survey questionnaire administered to 103 Veer Naris in 17 States/Union Territories (UT). Eight of the Veer Naris are in their 20s; seven in their 50s; and 88 are between the ages of 30 and 49 years. 95 Veer Naris have at least 1 child while eight have no children.

Major Gaps affecting Veer Naris and Children

The details are contained in the following table:

Awareness	<ul style="list-style-type: none"> ▶ Only 36 per cent Veer Naris reported awareness about the entitlements and benefits for families of soldiers KIA. ▶ 53 per cent said they were partially aware and 11 per cent reported being unaware.
Ex- gratia	<ul style="list-style-type: none"> ▶ Only 68 per cent Veer Naris received state government ex-gratia.
Housing	<ul style="list-style-type: none"> ▶ 19 per cent received a flat at subsidised rate, housing site or fixed amount of money in lieu.
Land	<ul style="list-style-type: none"> ▶ 31 per cent received varying areas of agricultural land.
Employment	<ul style="list-style-type: none"> ▶ 34 per cent of Veer Naris or family members were offered a job by respective state governments.
Agency Allotment	<ul style="list-style-type: none"> ▶ 4 per cent have been allotted a petrol pump or gas agency as a livelihood option.
Children's Education	<ul style="list-style-type: none"> ▶ 38 per cent are still unable to claim the fee reimbursement for their children's education. ▶ 3 per cent received only partial fee reimbursement.
Medical Treatment	<ul style="list-style-type: none"> ▶ 31 per cent are still unable to access free medical treatment through ECHS.
Travel Concessions	<ul style="list-style-type: none"> ▶ 39 per cent of Veer Naris have bus passes for travel within home state.
	<ul style="list-style-type: none"> ▶ 41 per cent have been able to access train concession.
	<ul style="list-style-type: none"> ▶ 15 per cent have been on a flight with concessional fare.
Support from Armed Forces Family	<ul style="list-style-type: none"> ▶ Majority (53 per cent) said that the Armed Forces family is no longer in touch for their welfare or to help with access to entitlements and benefits.

Some Examples of Problems of Apathy and Denial Voiced by Veer Naris

It must be mentioned that despite these glaring shortcomings, Veer Naris said that they are proud of their husband's supreme sacrifice and 76 per cent said that they would like their children to join the armed forces to take forward a courageous legacy of service to the nation. The examples are:

- **Veer Nari, Arunachal Pradesh. W/o Hav KIA in 2016.** Promised housing not allotted. No ECHS card given yet. Daughter is in class 8 and son in class 4 but unable to claim fee reimbursement. Working in her old job as no better job has been offered. She stated that she can't keep going to city for paperwork as it is far and the kids are small.
- **Veer Nari, Maharashtra. W/o Hav KIA in 2015.** Veer Parivaar can retain the SF for 2 years. Where will we go after that? I applied for MHADA flat and my name is in the list. But flats which have been allotted at a subsidised rate of Rs Nine Lakh to police is not being given to Veer Naris of armed forces. Why?
- **Veer Nari, Jharkhand. W/o L/Nk KIA in 2004.** Zilla Sainik Board does not work properly. Complained that she has to struggle to repeatedly submit proof and documents. Children's fees never given on time and the high cost for books and stationery make it very difficult.
- **Veer Nari, J&K. W/o Nb Sub KIA in 2015.** She stated that it had been five years since her husband's martyrdom, but she had not received state ex-gratia, nor a government job, and not even travel concession in bus or train, despite writing even to Railway Minister.
- **Veer Nari, Maharashtra. W/o Maj KIA in 2016.** State government rejected sanctioned land in her name on the grounds of property being owned by in-laws.
- **Veer Nari, Punjab. W/o L/Nk KIA in 2017.** On martyrdom of my husband, renaming of school, stadium and gates in his honour were announced. Nothing has been done since. Broken promises hurt us a lot.

Policy and Implementation Gaps in Access to Entitlements and Benefits for Parents

The findings are based on data from survey questionnaire administered to 28 parents of unmarried and married soldiers KIA.

Equal numbers of 14 parents were surveyed in each category. Among respondents, the youngest parent is just 41 years of age and oldest is 79 years. Two respondents are in their 40s, five are in their 50s, and 21 are between 60 and 79 years of age.

Major Gaps Affecting Parents of Unmarried and Married Soldiers

The details are in the following table:

Support/ Benefit	Parent of Unmarried Soldier	Parent of Married Soldier
Central/ State Ex-gratia	► All except one parent received full central and state ex-gratia.	► 64 per cent did not receive even partial share in ex-gratia from state.
Liberalised Pension	► Receiving full liberalised pension, irrespective of their financial status.	► Only 21 per cent designated as 'dependents' receive part share in pension.
Housing / Livelihood	► 50 per cent received housing site, land or money in lieu from state government. ► 14 per cent allotted an agency (petrol pump).	► Not a single parent received any benefit like site/land/money in lieu. ► None were allotted any agency.
Medical Treatment	► 64 per cent parents access free medical treatment in armed forces hospitals as they have ECHS cards. ► Remaining pay for treatment in private hospitals (because they still do not have ECHS card or prefer nearby private hospital).	► 36 per cent parents get free treatment in armed forces hospitals as many fathers are ex-servicemen with ECHS card. ► Remaining have no choice but to pay for medical treatment in private hospitals.
Armed Forces Family Outreach	► 33 per cent said their soldier son's unit/armed forces family was not in touch. ► 67 per cent said they felt supported and were invited for felicitations/ functions by son's unit/armed forces.	► 86 per cent said their soldier son/daughter's unit/armed forces family was not in touch. ► Only 14 per cent said the unit/Service had been in touch and they were invited for felicitations / functions.

Parents Voice Pain at Neglect and Discrimination

Some of the points are given below:

- **79 years, Father of Major KIA, Tamil Nadu.** As our family member served the nation, the nation should take care of the families too, at least that much we can expect. If he would have been the only son, where would we go? We have never been contacted by anyone in forces and my wife died feeling sad about the fact.
- **41 years, Father of Sepoy KIA, Rajasthan.** We are being told younger sister cannot get a job. Wife or brother of martyr is eligible in Rajasthan but not sister. In other states, sister is also considered for job. Uniform policy change is needed.
- **73 years, mother of Captain KIA, Delhi.** I am invited to Regimental celebrations. There I meet wives but not parents. When I asked why, was told only NOK are invited. Does a parent cease to be a parent because their son got married? The armed forces and government must look at their needs too. Sending Raising Day message, medical treatment, and monetary support are basic essentials.
- **54 years, father of Sepoy KIA, Bihar.** Soon after my son's martyrdom, his mother who was NOK also fell ill and died. I live alone on my own pension and got nothing for my son's supreme sacrifice. An LIC policy of 75000 is also stuck. Can someone help me get this amount?
- **57 years, Mother of Major KIA, Maharashtra** Parent should get free medical treatment. If our son was serving, we could stay with him in old age. Forces need to acknowledge parents. They should call parents also for honours.
- **60 years, Father of Lieutenant (IN) KIA, Delhi** Now even women are being inducted in all the three forces even in combat. Parents raise and get children married. On martyrdom, all the benefits are going to the husband who is entitled as NOK. The husband gets married again and continues to get all benefits. The parents also must

receive entitlements so that they can live with dignity in old age and also fulfil goals of doing good for the society.

Differential Response by Authorities and Governments

In the aftermath of the Kargil conflict in 1999, most state governments supported families of soldiers KIA by proactively reaching out with ex-gratia, agricultural land, housing site, petrol pump or gas agency allotments, and government jobs to Veer Naris or soldier's sibling. Statues/busts of the soldier were installed in prominent public places and schools, parks, roads/bridges were named in their honour. The Delhi Government allotted a flat each to Veer Naris at subsidised rate and land was allotted by many states. However, in the years after Kargil, soldiers KIA and their families have not been extended the same honour.

Since January 2016, the Government of India has revised Ex Gratia compensation to NOK and enhanced other entitlements and benefits to widows and children of fatal battle casualties. Retention of government accommodation for 2 years (extendable by another 18 months), free medical treatment, reimbursement of tuition fee for children's education till first degree, and travel concessions are positive steps. A small one-time grant is also available towards marriage expenses for daughters and for widows to continue further studies or undertake a vocational course.⁷

Although every soldier wears the same uniform and fights to defend our nation and uphold the honour of the Indian flag, there is no uniformity in entitlements and benefits extended to martyr families by different state governments.⁸ While some state governments like Punjab, Haryana, Madhya Pradesh, Uttar Pradesh, and Uttarakhand have been proactive in terms of upward revision of ex-gratia and share to parents of married soldier, job to family member, honour to soldier with a memorial/road etc. named after him, others are yet to announce a comprehensive policy in support of families of soldiers from their state.

Examples of Unfair Policies

Some glaring examples of unfair policies or meagre support are given herein:

- J&K has the most unjustified and insulting policy that denies Ex Gratia and all state benefits to NOK if soldier

was martyred outside the state! Worse, a surrendered militant gets state benefits including a job which a martyred soldier's family is deprived of. Even after abrogation of Article 370, the policy of denying benefits and entitlements to families of soldiers martyred outside the state of J&K remains unaltered.

- West Bengal Government's paltry Rs 2 Lakh Ex-Gratia was refused by a family as an insult to the soldier's supreme sacrifice in 2016.⁹ This led to an initiative of crowd funding support for the family. In 2018, same amount of Rs 2 Lakh was given as compensation to victims of boat capsized during Durga Puja idol immersion.¹⁰ Even in 2020, the Ex-Gratia to family of soldiers KIA is only Rs 5 Lakh in West Bengal.
- Punjab Government's policy of providing job to NOK has not been extended to children of soldiers KIA before 1999. This denial of job to the Veer Naris and also to a martyr's child just because of the date of martyrdom has caused great anguish to many NOK families.

Besides the above, ad-hoc announcements not in line with the state government's stated benefits cause confusion and also a feeling of discrimination amongst NOK families. While the Telangana Chief Minister took the lead in handing over high Ex-Gratia of Rs 5 Crore to Veer Nari and parents of Col Santhosh Babu MVC martyred in Galwan clash, as per the state policy Ex-Gratia is only Rs 5 Lakh for soldiers KIA.¹¹ Issues of access to entitlements and benefits are also linked to inadequate outreach on the part of government agencies. The Sainik Welfare Boards at state and district level are mandated to assist and ensure access to NOK of soldiers. However, many have been politicised or are being used for unrelated jobs by bureaucrat bosses. They need to be rejuvenated, sensitised, and made more accountable.

Prioritising Major Shortcomings with Recommendations for Way Forward

When a soldier makes the supreme sacrifice defending the nation, the lives of his wife and children are changed forever. The first shock is that they need to relocate to hometown or village but do not have a house they can call their own. Also, government job/

sustainable livelihood option for Veer Naris, particularly for widows of soldiers below officer rank, is a critical need.

A majority of the Veer Naris are mothers of very young children. Monetary benefits include pension but without a home, and a job, life becomes very tough. Further, if relationships with in-laws are strained, the Veer Naris must either return to their parents or live independently coping alone with multiple difficulties.

Every soldier in India joins the armed forces from his/her parent's home and being 'unmarried' is among important eligibility criteria for joining Army/Air Force/Navy. While the nation says it respects the martyrdom of soldiers and stands with their families, the most neglected category among family members are the parents of the married soldier KIA. No provision to support parents of the martyred soldier remains a big lacuna in the system. Parents who lose their child in service of the nation are not entitled to any monetary assistance or benefits in terms of ex-gratia and pension. They are also not covered for medical treatment. This glaring apathy has not been addressed by armed forces and successive governments.

Suggestions to Address Major Gaps and Challenges

The details are contained in the table below:

Target Group	Major Gaps/ Challenges	Suggested Solutions
Soldier KIA (Fatal Battle Casualty)	No official honour for supreme sacrifice. Wound Medal awarded to soldiers injured in battle but no medal for soldier's supreme sacrifice while fighting to defend the nation is a shocking apathy that needs to be corrected.	Institute 'Sarvoch Balidan' Medal for supreme sacrifice in battle akin to Parakram Padak as Wound Medal. (Similar to Purple Heart – USA, Desh Putra Sanmanaya – Sri Lanka, Sacrifice Medal – Canada, Dag Hammarskjöld medal – UN, the US Purple Heart is awarded to both injured and KIA)
	Broken promises – no recognition by home state.	Bestow local honour to soldier by naming road/school/public place.
Veer Naris and Children	Housing in SF accommodation is only for 2 years. Moving to expensive rental accommodation, changing schools etc. adds to trauma.	Extend SF accommodation. Also support independent living for Veer Naris with children through financial support and schemes to own home.

	Promised government job by state government not offered. Often, only class 4/class 3 jobs are offered irrespective of Veer Nari being qualified for better jobs.	Provide employment as per qualification within 2 years of soldier's supreme sacrifice. The AWWA/Sainik Welfare Board should assist.
	Children's education fee reimbursement does not cover Kindergarten nor Post graduation.	Fee reimbursement for children of soldier must extend from KG to PG (age 3 to 25).
	Getting ECHS Card, Canteen Card, Travel Pass, etc., involve tedious paperwork and multiple follow up efforts. Many do not have them even after years.	Should be given through single point of contact without delay. Veer Nari employed in Sainik Welfare Board can assist many to access entitlements/benefits.
Parents of Married Soldier	Not considered family – No communication even for official condolence message. Not invited to felicitations and functions by Unit/Regiment and by Government.	Must be considered family and receive official condolence messages, invitations to felicitations and functions from Armed Forces/ Government.
	No Ex-gratia share for parents by centre and in most states.	Must receive a share of Ex-gratia and insurance as moral obligation to parents for soldier's sacrifice.
	Also, not entitled to any other benefits extended to parents of unmarried soldier KIA.	Soldiers should also have option for nominating parents share in Pension (within limit).
	No free medical treatment in Armed Forces hospitals. Also not given any travel concessions.	All parents of soldiers KIA must be extended free medical treatment through ECHS and travel concessions in train/flight.

Conclusion

Families of soldiers KIA and concerned citizens expect the armed forces and their government, both at centre and in states, to bestow due honour to every soldier who gives his life defending India and to address the problems and challenges that their families are facing thereafter. In the light of research findings and suggested solutions that have emerged from the 'Research for Advocacy Initiative', efforts continue for decision makers to review the existing policies and implementation processes and take necessary steps

to enable widows, children, and parents of soldiers KIA to lead a life of dignity.

Endnotes

¹ Arvind Chauhan, Times News Network, 16 January 2018. Accessed on 5 August 2020 from <https://timesofindia.indiatimes.com/india/every-third-day-1-soldier-of-indian-army-killed-in-line-of-duty-for-last-13-years/articleshow/62511387.cms>

² 'Martyrs 2018 - List of Fatal Battle Casualties for the Year 2018' from Official Home Page of the Indian Army. Accessed on 5 August 2020 from <https://indianarmy.nic.in/Site/FormTemplate/frmTempSimple.aspx?MnId=36a6ou96NNQXJgpDrnPcJSOtIEJ9iMxgZ8OwLSNbbGk=&ParentID=Ho1ERBtBqWleOVZDOwH9k/aNsHWRdQdJeDAQgPU+3c=>

³ Editorial Team at SSB Crack, '77 Indian Army Martyrs Who Saved Us By Sacrificing Their Lives In 2019.' Accessed on 5 August 2020 from <https://www.ssbcrack.com/2020/01/77-indian-army-martyrs-who-saved-us-by-sacrificing-their-lives-in-2019.html>

⁴ Press Information Bureau, Ministry of Defence, Government of India, 'Casualties of Soldiers' 6 August 2018. Accessed on 5 August 2020 from <https://pib.gov.in/Pressreleaseshare.aspx?PRID=1541717>

⁵ Practical Tools for International Development, Resources- How to Choose Sample Size. Accessed last on 10 December 2020 from <http://www.tools4dev.org/resources/how-to-choose-a-sample-size/> Cross verified with <https://www.beaumontethics.ie/docs/application/samplesizecalculation.pdf> and <https://www.calculator.net/sample-size-calculator.html>

⁶ The Gazette of India, Weekly, February 8-14, 2020, Page 219-220. Accessed on 20 December 2020 from <https://www.staffnews.in/wp-content/uploads/2020/02/notification-order-of-precedence-of-wearing-of-various-medals-and-decorations.pdf>

⁷ 'Benefits Given to Widows of Fatal Battle Casualties', Department of Ex-Servicemen Welfare, Govt of India. Last accessed 11 February 2021 from <http://www.desw.gov.in/benefits-widows-battle-casualties>

⁸ 'State Entitlements Veterans/NOKs/Wards/Disabled Soldiers' from Website of Indian Army Veterans Portal, Sub link under Imp Info (Updated 10/5/2020). Last Accessed 11 February 2021 from <https://www.indianarmyveterans.gov.in>

⁹ Subhro Niyogi, Times News Network, 7 November 2016. Accessed on 10 December 2020 from <https://timesofindia.indiatimes.com/city/kolkata/Crowdfunding-raises-Rs-5-lakh-for-family-of-Uri-martyr/articleshow/55282286.cms>

¹⁰ Express News Service, Kolkata, 29 October 2020. Accessed on 10 December 2020 from <https://indianexpress.com/article/cities/kolkata/murshidabad-drowning-cm-announces-rs-2-lakh-relief-for-victims-families-6907894/>

¹¹ Department of Sainik Welfare, Government of Telangana, 'Concessions and Benefits Extended to Ex-Servicemen (ESM) and Their Families' Accessed on 10 December 2020 from <http://telanganasainik.nic.in/content.php?U=18>

Promotion Policy in the Armed Forces: Time for Full Transparency

Colonel PK Chaudhary®

The only thing harder than putting a new idea into the military mind is to take the old one out of it.

—BH Liddel Hart

Abstract

The article touches upon the aspects of Promotion Policy that generates a sense of injustice and affects morale, is detrimental to military discipline, and requires refinement. Increasing number of officers who have been overlooked for promotion at all ranks are approaching courts to seek redress. The system for promotion and the system for redress of grievance against non-empanelment have to be viewed as one continuum. Together, they either build or destroy the perception about the empathy and sense of justice within the organisation/hierarchy. The article examines this issue and makes recommendations for remedial measures.

Introduction

The armed forces have a special public personality because of two special attributes traditionally associated with them — fairness and transparency — thanks to the Chetwodian ethos assiduously pursued by many visionary and upright Indian successors of the British-Indian officer corps post-independence. These two attributes intimately affect the members of the armed forces in one very personal but equally official matter — promotion. The way the armed forces handle this matter, and its aftermath, affects the member's behaviour and deportment, both within and outside of the organisation and as such impacts the organisational image in the public eye. Impeccable and non-controversial conduct by the armed forces is the biggest factor to uphold the image of

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the armed forces and the trust of the public that this organisation will always rise to the occasion for their protection. The same image ipso facto motivates quality personnel to join the armed forces. Perceived injustice through denial of promotion is the most common cause for military personnel going into litigation.

Fundamentals of a Promotion Policy

Every policy by its very definition must be consistent and should give a firm assurance about its stability to the environment, enabling all those affected by it to fully commit themselves to the parameters expected. It must also be well thought of, fair and transparent both in principle and procedure. Any change must happen only when either of the following conditions is met:

- The existing policy is creating problems.
- A better policy that has been experimentally tried is ready for implementation.

Promotion is a Privilege and not a Right

There are various judgments of the Honourable Supreme Court on this. Conversely, promotions are the biggest professional aspiration which adds purpose and productivity to the most happening period of any professional's life. Further, the organisation, nation and society benefit out of the sum total of the productivity of all individuals. Yet, no system can promote everyone, nor is it desirable, if merit and hard work have to be incentivised. This is well known and no professional ever resents this. The resentment occurs when there is a real or perceived feeling of injustice. It obviously leads to multiple representations. As a corollary, the representation figures are accurate indicators of the judicial health and morale of any organisation.

As per the assessment of this author, 70 per cent of the officers in the armed forces (especially the army) get superseded in each Selection Board (SB). Almost 80 per cent of these officers represent their supersession through statutory and/or non-statutory complaints. (These are ballpark figures; mathematical accuracy is not very important to convey the picture). This is a huge number and conveys a very important message that because of high supersession, there will always be either a general sense of

institutional injustice or a big unawareness about the selection model and the selection process. This is malignant. Like all malignancies, metastasis is inevitable. Since this is an in-house matter aimed at an in-house introspection, this article deals with it with military frankness. *Is it possible to pre-empt/prevent this?* Yes, if there is a bold and honest acceptance and a sincere will. It's a simple task of '*Perestroika*' and '*Glasnost*' in the promotion system. The suggested methodologies are discussed in the subsequent paragraphs and can be further brainstormed at the official level.

Complaints

Every career is a lifetime professional investment and there are legitimate aspirations. Human resource is the most important resource, especially in the military where the demand from the workforce is in the form of the 'ultimate sacrifice' — dying for the country. The organisational system for redress over the decades has remained frozen in the form of Non-Statutory and Statutory complaints.¹ The system for promotion and the system for redress of grievance against non-empanelment have to be viewed as one continuum. Together they either build or destroy the perception about the empathy and sense of justice within the organisation/hierarchy. This has a lasting impact on the intake of and output from the human resource.

Why so many Representations?

In the civilian perception, the armed forces are fairer than other government bodies. However, there are far more representations in the armed forces than in the civil. Secondly, despite the dismal outcome of the representations, almost every officer in the army represents. What explains the dichotomy? *It's clearly explained by the vagueness that surrounds the promotion policy and procedure whereby officers are unable to self-assess correctly.* This is compounded by the fact that the officers calibrate themselves in isolation without any idea of their competitive peers' performance matrix. Everyone feels that he would have performed quite well without knowing what amounts to 'quite well'. As such, when the representations convert to no valuable relief and are returned with the same formatted reply time and again, there is resentment against

and a disbelief in the organisation as well. Broadly, the reasons can be enumerated as under:

- The policies for promotion are complicated and not clear. In addition, these are non-consistent and frequently changing. The officers know very little of the policies, and their execution, and are in any case not very sure what model will be relevant by the time they are considered for promotion.
- The implementation of the quantification model is very complex both mathematically and subjectively. Only the Military Secretary's (MS) branch officers or the officers conducting the SBs know how the various marks received in the Confidential Reports (CRs) ultimately convert to merit.
- Value judgment has arbitrary weightage. The 5 marks discretion with the Boards is enough to negate the remaining 95 marks quite comfortably. It can make or mar any officer. The problem is compounded by the opacity with which it is perceived to have been awarded.
- The complainant has no way to objectively compare his performance with that of the last successful officer.

In essence, the officers are expected to just accept their fate with faith. This is hardly encouraging.

The Cumbersome Redress Mechanism

Specific to army but principally to all the Services, every year approximately 2100 army officers face their SBs as 'Fresh Cases', out of which around 600 get selected (this is again a ballpark figure). Any variation can be proportionately estimated on the basis of this figure. Assuming that every year around 700 non-statutory complaints from the current batch and at least 300 statutory complaints from the rejected non-statutory complaints of last year are received, approximately 1000 complaints are received each year. Out of these complaints, the total number of officers getting redress is not more than 20 in a year. Now let's take a look at the logistics behind this satisfaction figure of 20/1000 (2 per cent):

- A full-fledged organisation of Complaints Advisory Board (CAB) comprising of an officer of the rank of Major General with six more officers of the rank of Colonel and a supporting office of clerical and ancillary staff.

- Another three Colonels in MS19 (The complaints section of the MS's branch and its supporting office). (Total 9 officers plus 2 full-fledged supporting offices).
- Stationery consumed per year to the tune of at least 50K pages as rough/final drafts by the petitioner officers.
- Man-hours wasted by each officer are conservatively around 48 hours i.e. 6 days of work corresponding to 6000 days of salary i.e. 20 officers for one full year.
- The time spent by the respective clerks and the superior officers is another big chunk of lost man-hours.
- The waiting period for disposal of statutory and non-statutory complaints is one year plus now. There is a dichotomy as the existing policy stipulates that disposal must be done within six months.

Essentially, the above logistics is to achieve 98% dissatisfaction. The word 'dissatisfaction' is used because of the routine and predictable broad brushing of the complaints, with the lines, "The assessments by all reporting officers in the reckonable period including the impugned CRs are fair, objective, well corroborated and consistent, technically valid, performance based and devoid of any bias/subjectivity. None of the CRs merit any interference".

It may be noted that the existing system largely caters for officers only. As we progress towards greater awareness and internal democracy, we will be dealing with many times more numbers coming from the Personnel Below Officers Rank (PBORs). It's very obvious that the organisations as in first two bullets above are not able to handle even their current load. No wonder routine replies as above are doled out on a standard format. Justice can never be on a standard format because no two cases are the same. A routine template for the plethora of different categories of complaints is itself a proof of 'No justice'. Expunction of an odd 7 award doesn't change any fortune.

The Non-Empanelment Assessment

Seventy per cent officers have a perceptible decline in their motivation level, not because they were *unfit* but because they

were *not empanelled*. These two nomenclatures are to obviate a functional difficulty. Almost all officers cross an Over-All-Profile (OAP) of 8 on a scale of 9. To be unfit as per the policies, one has to be 6 or less on that scale. This is no way possible because the assessing officers wouldn't like to risk awarding average CRs for a host of functional reasons. Now the classic dilemma is that 9 is defined as 'Outstanding', 8 as 'Very Good', 7 is 'Good' and 6 is 'Average'. How can any system say that an officer who has been consistently getting 'Very Good' is unfit for promotion? Yet, the 30 per cent vacancies do not permit the luxury of promoting the 'Very Good', since many 'Outstanding' are available. So, it's a competition based on available vacancies. If there are 30 seats for a batch of 100, 31st in merit is not empanelled but it doesn't mean he is unfit. If there had been 40 vacancies, 31st would have reasonably scaled the bar. Thus, the upshot is that 70 per cent officers get permanently superseded between 16-18 years of service and they still have a residual professional life of 16-18 years to carry themselves in the system. They have nothing to look forward to professionally. The CRs are no more effective like the bullwhip that they earlier used to be. There is an added feeling of sub-conscious resentment. There are exceptions of course.

The Confidential Report (CR) System

Many models from 'part open' to 'part closed' CRs have been experimented. Each has its own advantages or disadvantages and the authorities know best what model to adopt. The model adopted is not a public concern. What transparency exists with the adopted model is important. Let's get back to the data. Approximately 20 officers out of 1000 get relief in their complaints. Let's assume that another 80 would have been close to getting empanelled. It means that at least 900/1000 officers are totally clueless as to what was the minimum requirement in their batch to get approved. These 900 officers wouldn't complain or represent if they were to know their own profile and the profile of those who got empanelled. What's relevant to note is that the CRs do not need to remain confidential once the board result has been declassified. The opacity serves no purpose other than, mistrust, resentment, and a sense of injustice in the environment. This consequentially leads to the vast number of complaints as well as multiple litigations in the Armed Forces Tribunals (AFTs) and civil courts, thereby burdening the understaffed judiciary as well.

Recommendations

The following are the recommendations:

- The promotion policy must be transparent, well promulgated, and institutionally explained to all officers during their mandatory courses. The various Personal Qualities (PQs), Qualities to Assess Potential (QsAP) and the Demonstrated Performance Variables (DPVs) in the CR form, the weightage and relevance of each, the box grading and their weightages, the pen picture and what it must entail and how it's factored in the CRs/SBs etc. should be made known to all officers.
- The 5 marks under 'Value Judgment' are just humongous in impact even if they appear trivia in absolute terms against the total 100. The 89 marks allocated for the CRs convey the supremacy of the CRs but that's superficial. These 89 marks ultimately condense to a difference of merely 0.5 between the top and last in merit. As such, a mere award of 1 mark extra in Value Judgment can bring an officer many notches up and would still appear innocent. The value judgment marks need to be quantified like the 6 marks for courses, awards etc. to make them objective. Arbitrariness breeds suspicion and discordance. As a rule, officers with generally matching profile must be marked equally under Value Judgment and in proportion to what they have already earned under the 95 marks. Any disproportionate award/variation from this norm must be made public along with reasons. Any officer pulled down must be intimated in writing to allow him to take steps for 'redress'. Needless to say, such exceptional rewards or reductions to any candidate in the Value Judgment must be based on a well promulgated policy which is sound, non-arbitrary, and exceptional.
- The officers facing the SBs must get to see the cut off, the median and the topmost Member Data Sheet (MDS) in overall merit of the 'empanelled list'. These MDS can be made public post declassification of the SBs after obliterating personal details of the concerned officers. Along with that, each officer must get access to his own MDS and all CRs on army intranet in totality — all reckonable CRs and all inputs including the hidden ones. The opacity that was required at

the time of initiation for organisational functioning is no more a necessity. The Initiating Officers (IOs) and the Reviewing Officers (ROs) would be out of the assessment chain of these officers and mostly retired. This is the stage for 'transparency' since it's the stage of justice.

- The CRs must have greater spread. This can be achieved as is done in the other Services by introducing the decimal system. Therefore, 18 more numbers would get introduced just between 7 and 9 and that's huge. That would also ease the psychological burden on the IOs/ROs since they would have a bigger range of numbers to apply.
- The scope for redress must be made more objective, fair, and stringent. This can be best described by the 'Principle of Averages'. Every officer in his career encounters approximately the same number of assessing officers. Everyone gets his share of different grades based on his general performance and personality. While individual annual CRs can be inconsistent, their average over 10 years, from at least 25-30 officers, will always give a consistent picture. Therefore, no relief would need to be accorded for CRs under the 'Best of the Average' principle, subject to the special cases of moral turpitude, integrity etc. for which special provisions can be made. Any grossly unfair CR by the IO can be represented, within a limitation of 30 days, to the RO in writing. No complaint must be allowed for any award of 8 and above.
- Adequately Exercised (AE) reports must be equal in number for all. The MS branch is to be held accountable for any variation between officers by more than 10 per cent. There is a tendency amongst the well-connected officers to take the bare minimum AE exposure and remain sheltered in staff appointments thereafter. This not only is unfair to the others but also defeats the entire philosophy behind higher weightages to Command reports.
- The above measures shall totally cut down the representations. As stated earlier, specific CR related exceptions can be dealt by the reporting chain. Any further grievance, if at all, can be dealt by the AFTs. The CAB and the MS 19 tail can be used elsewhere as teeth.

Conclusion

Every action or inaction has consequences. What is good for one situation cannot continue to remain good for another. Therefore, while there must be consistency in policies dealing with specific situations, there must be dynamism to deal with different situations depending on what is sought to be done or attempted to be prevented. If the devil has to be inevitably dealt with, 'soonest' would be better from all points of view.

Endnotes

¹ For a definition of the difference in these two forms of complaints see extract of Para 364(k) Regulations for the Army at <https://www.lawyersclubindia.com/experts/Para-364-k-Of-regulation-for-the-army-252961.asp>

Stay “absolutely loyal, absolutely pure”: Xi’s Memoires to the PLA

Ms Mrityika Guha Sarkar®

Abstract

The People’s Liberation Army (PLA) has played a pivotal role in creating the People’s Republic of China and, fundamentally, acts as a central force in Chinese politics. Owing to the unique party-army relationship, the PLA has been an indispensable supporter of the Chinese Communist Party (CCP) ensuring the regime’s survival and leadership legitimacy since decades. However, the institution, especially under Xi Jinping, has come to act as an arm of the Party, particularly as a one-man army under the top leader. While the ‘party’s army’ arrangement had been put in place by Mao himself, the CCP-PLA relations in the Xi era have been increasingly characterised by the centralisation of power in the hands of a single individual. These include extensive reforms of the military command structure, large-scale personnel reshuffles, and wide-spread promotion of Xi’s image as the ‘commander-in-chief’. With this backdrop, the article argues that Xi, through its organisational reforms, administrative measures, extensive anti-corruption purges of the military personnel, and strengthened regulatory regimes to recuperate the PLA’s loyalty, discipline, and efficiency, has aimed to utilise the military as a tool to further his agendas. The PLA has also become an instrument to not only defend China’s sovereignty from external threats but also a medium for global power projection. These have enabled Xi to consolidate absolute authority over the PLA and the CCP, and shape the organisations in compliance with his thoughts.

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Introduction

The People’s Liberation Army (PLA) has been a vital force that enabled the successful culmination of the Communist revolution and led the Chinese Communist Party (CCP) to power in 1949. Over the years, it has played a crucial role in Chinese politics and has been imperative in the CCP’s growth, struggle, stability, and success. However, the institution, especially under Xi Jinping has come to act as a military linchpin under the top leader. Additionally, centralisation of power in the hands of a single individual has become the dominant theme of CCP-PLA relations. These, notably, were echoed during Xi’s speech on the event of the CCP’s 100th anniversary on 01 July 2021, where he reiterated the necessity for the Party to maintain “absolute leadership” over the armed forces, along with the continuation of “comprehensive measures to enhance the political loyalty of the armed forces”.¹ With China progressing to achieve its second centennial goal for 2049 and moving towards the PLA centennial in 2027, what has the CCP’s 100th anniversary meant for the CCP-PLA relations as well as the Xi-PLA relations? Concurrently, how would the military’s role be shaped in Chinese politics and regional and, to some extent, global ambitions?

Tracing the History of CCP-PLA Relations

On 01 August 1927, the CCP launched an armed uprising to counter the anti-communist purges by the Kuomintang in Nanchang, the capital of Jiangxi Province, under the leadership of Mao Zedong, Zhou Enlai, and Zhu De. This was viewed as a bid to transform what was then called the “Chinese Workers’ and Peasants’ Red Army” into the people’s army.² However, it was the ninth meeting of the CCP at Gutian, Fujian province in 1929, where Mao, while addressing the men of the Fourth Army, iterated the military’s role, stating, “It was “to chiefly serve the political ends”.³ By 1938, he had written in an article that “the party commands the gun, and the gun must never be allowed to command the party” (*dang zhihui qiang*).⁴ Such an arrangement was intensively visible during the administrations of China’s two paramount leaders, Mao and Deng Xiaoping, who themselves were active commanders of the PLA. Their special standings enabled them to utilise the PLA to back their power base in China’s elite politics. For instance, Mao gradually involved the military for political

purposes in the period preceding and during the enormous embroilment in the Cultural Revolution⁵, while Deng utilised the PLA - though many military units were initially reluctant - to suppress the protests and demonstrations during the Tiananmen Square incident.⁶

However, the CCP-PLA relations have not always been seamless; contradictory characteristics have often marked them. In particular, while the CCP has sought to control the PLA, the latter has grown as an organisation that has been guided by its own specific interests, which have, on several occasions, contradicted those of the Party. Further, many of the successors, with the exception of Deng, lacked the charisma and other abilities and qualities needed to guarantee the Party's absolute control over the military.⁷ Thus, post-Deng, there were reports of elements of the PLA that resisted or tried to resist the authority of the Chinese leadership. Additionally, during the era of Jiang Zemin and Hu Jintao, increased corruption was experienced in the military along with instances of the PLA being ill-prepared to carry out responsibilities.⁸ A glimpse of worsening military corruption was caught when Jiang opened an investigation into the Yuanhua Group in 1999, which used military connections to evade taxes of approximately \$ 6.3 billion through smuggling.⁹ Further, Gen Liu Yuan (retired)'s speech in late December 2012, where he stated that "No country can defeat China [...] Only our own corruption can destroy us and cause our armed forces to be defeated without fighting", was a searing indictment of the concerning state of the armed forces.¹⁰ This issue became more daunting with the indictment of Bo Xilai, which was viewed as a political crisis. But, more importantly, his indictment was alarming due to his connections with the army and irregular use of the police force.¹¹

Apart from the corruption and issues of elite politics, the PLA was also suffering from an out-dated organisation. The PLA under Jiang and Hu emphasised ground forces irrespective of the PLA adopting the doctrine specified in China's defence white paper of 2004, which necessitated integration and joint forces.¹²

CCP-PLA Relations under Xi Jinping: Loyalty, Discipline, and Efficiency

In this context, extensive reforms were carried out to the military command structure under Xi which included organisational

changes, administrative measures, and extensive purges of the military personnel to ameliorate the widespread corruption. The objective here was to strengthen regulatory regimes to recuperate the PLA’s discipline, efficiency and capability. The aim was also to bolster the PLA loyalty through large-scale personnel reshuffles prioritising the ones faithful to Xi to hold key military positions and ensure wide-spread promotion of Xi’s image as the ‘commander-in-chief’. These have led to a gradual decline of the PLA as a force in Chinese politics, which was already taking place since the 1980s.¹³ The initial phase of the reforms, introduced in a series of announcements in winter 2015-16, included “above the neck” (*bozi yishang*) reforms, which comprised changes to the three fundamental pillars of the PLA – the CMC, the services, and the theatres. Similarly, there were a series of “below the neck” (*bozi yixia*) reforms which included force structural changes; these contributed to China’s joint war fighting, deterrence and military operations other than war (MOOTW). These were also carried out in an effort to achieve the agenda for developing the PLA into a “modern military with Chinese characteristics that can win information-age wars” while ensuring absolute loyalty, discipline, and efficiency from the personnel.¹⁴

Further, since coming to power, Xi has sought to build an image of the top leader of the PLA. Undoubtedly, Xi has been the second most powerful leader since Mao, particularly with enshrining “Xi Jinping Thought on Socialism with Chinese Characteristics for a new era” in the State Constitution, followed by inducting the same into the CCP Constitution at the 19th Party Congress in 2017.¹⁵ Holding the posts of the Commander-in-Chief of the PLA, Chairman of the CMC, and President of China, Vijay Gokhale, a former foreign secretary and India’s Ambassador in China for a brief period, stated that not even Mao assumed this level of power, who often had to share authority with Zhou Enlai even at the peak of his leadership.¹⁶ However, in Chinese elite politics, what has mattered is the amount of loyalty a leader has sustained and expanded, both in the CCP and the PLA. Evidently, this is something that has become a central theme in Xi’s leadership.

Xi’s image building as the PLA Commander-in-Chief

Primarily, the reforms started with Xi beginning to consolidate his control in the ‘CMC chairman responsibility system’ as the

'commander-in-chief' of the PLA. In retrospect, the CMC chairman responsibility system, started in 1982 by the constitution of China, was based on a single-head system where the top leader had the final say.¹⁷ Nonetheless, the CMC chairman responsibility system would often run up against problems of civilian control of the military with no military background. This issue started arising post the Deng era, where the system had started to experience discrepancies in interests and decision-making, particularly under civilian leaders like Jiang and Hu, who, lacking any kinds of military experience, were leading senior professional military experts.¹⁸ These gave way to increasing reliance on few professional military officers, which subsequently led to a reduction of the decision-making powers of the CCP, especially with instances of the officers having separate political interests or being corrupt.¹⁹ Thus, major changes to the CMC were imperative while Xi gradually began to consolidate control over the military policy-making body. Further, these reforms allowed Xi to overhaul the CMC membership and handpick trusted leaders who could carry out his agenda while removing those who were either too old, unreliable, or corrupt. In particular, the responsibilities of Xi Jinping as the CMC chairman were delineated in an article in *People's Daily*²⁰, which emphasised on the "party's absolute leadership over the army"; the essentiality to ensure that the Party Central Committee and the CMC have a "firm grasp of commanding power over the highest military leadership; and the importance of major issues of "national defence and army building [to be] made and decided by the chairman of the military commission".

Major reforms were also brought into the four general departments of the forces - the General Staff Department (GSD), General Political Department, General Logistics Department (GLD), and General Armament Department (GAD) — which were disbanded post an announcement in January 2016 and replaced with 15 smaller functional CMC departments, commissions, and offices that would report directly to the CMC, and, thus, to Xi Jinping.²¹ Notably, these departments, built on the Soviet model, were developing into expansive, semi-independent entities, particularly during the eras of Jiang and Hu.²² This indicated towards large-scale corruption and power factions, further reducing central control.

A considerable change was also brought into the administrative constructs, which were transformed from seven military regions to five joint theatre commands. Interestingly, this change had a dual purpose: transforming the PLA into integrated joint forces while shaping the forces’ orientation in compliance with China’s regional threat perceptions and strategic core interests. Notably, the erstwhile military regions had no operational control over air, naval, or missile forces during peacetime. In contrast, the current theatre commands have the capability to manage conventional forces within their respective areas of responsibility and plan and execute operations in an effort to improve joint war fighting operations and win “intelligentized” wars.²³ This was not a new goal; since the 1990s, the Chinese military strategists began acknowledging and understanding the importance of modern battlefield capabilities of advanced command, control, communications, computers, intelligence, surveillance, and reconnaissance systems (C4ISR) and logistics systems. The inspiration was taken from the US military, particularly as the US joint command system cemented with the 1986 Goldwater-Nichols Act, showcasing their operational capabilities during the Gulf War, in the Balkans, and during the Taiwan Strait crisis in 1995-96.²⁴ On the other hand, each command now has a geographic responsibility which often seem designed according to China’s perceived threats and strategic interests. Thus, the Northern Theatre has been responsible for Northeast Asia and, particularly, the possible threats arising from Mongolia, Russia, or North Korea; the Eastern Theatre focuses on Taiwan and Japan and, thus, the disputed areas of the Taiwan Straits and the East China Sea (ECS); the Southern Theatre covers the South China Sea (SCS) and land borders with Southeast Asian states; the Western Theatre handles the land borders with India and Central Asian states; and the Central Theatre takes care of the defence of the capital as well as provides support to other Theatre Commands, if needed.²⁵

Another important reform was the size reduction of the PLA ground forces. In particular, the ground forces witnessed a reduction by 300,000 personnel, a goal Xi announced during the 2015 military parade in September that year.²⁶ An objective was to reduce the share of armed forces, which had earlier constituted to be approximately 70 per cent, to now declining to less than 50 per cent.²⁷ This was commensurate with the realities of the 2015

defence white paper which stated the need to change the “traditional mentality that land outweighs sea must be abandoned, and great importance has to be attached to managing the seas and oceans and protecting maritime rights and interests”²⁸ while devoting the resources for more efficient use, ensuring a “stronger battle capability”.²⁹

Also, through the reforms, Xi aimed to address a few organisational weaknesses that failed to be rectified during the prior administrations. Notably, the organisational culture had been prioritising the interests of the ground forces above others, which was not synergising with the demands of advancements in the air, maritime, and space domains. Further, a greater focus on the ground forces seemed to hinder the PLA transformation towards a seamless joint command structure. These underpinned the fact that the security situation during Xi has been becoming relatively and increasingly complicated; China’s security and strategic relations with the US, Japan, Taiwan, and even India have been worsening. These require the PLA to prepare to win “informationized local wars” (*xinxihua jubu zhanzheng*),³⁰ for which the foundation remains the ability to conduct joint operations.³¹ Thus, the reforms undertaken between 2015 and 2018 were dedicated to rebalancing service composition with more weightage on navy, air force, and missile forces while cutting down on troops equipped with outdated armaments, office staff and personnel of non-combat organisations.³² Thus, China announced the creation of the Strategic Support Force (SSF) and Joint Logistics Support Force (JLSF), facilitation of theatre commanders to supervise and manage conventional forces within their respective regions, and establishment of independent training departments under the CMC to facilitate joint training.

Weeding out ‘Baneful’ Influences

The most important objective of this reform was to consolidate greater control over the ground forces, weed out the corrupt elements from the army, and consolidate authority over the PLA in absolute, thereby setting an example for other senior PLA members. Thus, the cuts came in the backdrop of Xi’s massive anti-corruption campaign. In retrospect, while fundamentally the PLA had been the Party’s army, Xi and his colleagues worried about weakening CCP control over the PLA. A part of the worry

was the likeliness of the PLA prioritising the nation’s or the people’s interests over the Party’s. This concern had come to the forefront during the Tiananmen Square incident when few party units refused to use force against the protesters.³³ Thus, a concern had been revived that some officers were advocating for transforming the PLA into a “national army” (*jundui guojiahua*), which, if actualised, could act as a serious threat to the CCP’s regime survival, stability, and legitimacy, as well as act as a risk to Xi’s leadership.³⁴ Further, Xi remained apprehensive about the PLA placing own personal interests before the Party’s. Xi recognised the problems of corruption in the PLA, which were festering since the 1980s, along with a weak central control which could tarnish the CCP’s public image, obstruct readiness and morale, and restrict the willingness of the senior officers to comply with the reforms.

However, the loyalty issues mainly came to light with the indictment of the two highest-ranking military officers and the “big tigers” of the PLA and former Central Military Commission vice-chairmen - Guo Boxiong and Xu Caihou – as a part of Xi’s on-going anti-corruption purge.³⁵ In fact, in the past few years, many senior officers and their close associates had been toppled due to corrupt practices. Nonetheless, greater significance can be placed on a factional overhaul signifying towards Xi’s efforts to strengthen the PLA’s absolute loyalty towards the commander-in-chief. Interestingly, both Guo and Xu, like many others, were close confidants of Jiang. In fact, both of them owed their eventual promotion to CMC vice-chairmanship to Jiang and, thus, remained a part of faction which fell out of favour during Xi’s command and control.³⁶ Thus, Xi, with his anti-corruption campaign, has sought to purge “enemy factions” and fill senior positions in the Party and the PLA with allies and the trusted generals.³⁷ A similar fate ensued General Fan Fenghui – linked to the two “big tigers” – who was accused of corruption and attempting a coup, irrespective of participating in numerous high-profile diplomatic exchanges and tipped for a CMC vice chairman position at the 19th Party Congress in 2017.³⁸

The purges reiterate the imperatives of the political army building as the foundation of the People’s army, the Party’s absolute leadership over the army, and ideological and political construction focusing on firm ideals and beliefs. These were a central theme in Xi’s 2014 speech in Gutian which emphasised proper ‘ideology,

politics, and work style'. However, these instances have also revealed the complex and often unpleasant elements of the factional politics in the CCP, and the PLA, pointing out the role of patronage and loyalty to climb up the military positions. With Xi in power, China has been witnessing the rise of a new power-seeking faction under the commander-in-chief's patronage with an indication of weakening power-sharing between factions. By appointing his trusted men across critical positions in the PLA while incrementally eliminating protégés from rival factions, and tightening military discipline, Xi has ensured the absolute loyalty of the Chinese military.

PLA and China's 'Development Interests'

Particularly noteworthy are PLA's linkages with the development interests of China, which have been witnessing increasing advancements under Xi. This was reiterated during Xi's speech on the event of 100 years of CCP where he emphasised the role of the PLA to protect "national sovereignty, security, and development interests". Interestingly, since 2013, the development interests of China have increasingly been connected to the Belt and Road Initiative (BRI)³⁹ which, though assures no military involvement in the infrastructural projects, also acknowledges that "where national interests expand, the support of the military force has to follow".⁴⁰

These, when juxtaposition with China's growing footprints into strategically vital domains, do unravel a grander intent by the strategic minds of China, led by Xi. The PLA, in this context, does not just become an instrument to defend China's sovereignty from external threats but also acts as a tool for global power projection. These also hold more significant implications for China's neighbouring powers and major countries in the region, which have or would likely start witnessing infrastructural projects being undertaken under the banner of the BRI in their neighbourhood. These infrastructure projects do hold considerable implications for China's neighbouring and regional countries like India, Japan, Australia, the US, countries in Southeast Asia and Africa, and more, considering the growing security concerns and apprehensions related to the instances of financial, environmental, and social unsustainability of the BRI projects as well as the ambiguous and non-transparent interest policies.

Conclusion

At the turn of 100 years for CCP, the past, present, and future developments of the PLA hold enormous implications for not just China but also for Asia and the Indo-Pacific Region at large. Irrespective of the sustenance of PLA’s already decreased role in Chinese politics, the Chinese military is likely to be a tool to further Xi’s domestic, regional, and global agendas. As Xi echoed the Maoist sentiments of CCP-PLA relations in his centenary speech, reiterating that the PLA “must command the gun and build a people’s military of its own”, it is only expected that Xi would further enhance consolidation of power and control over the PLA in future, enact greater measures that reinforce his authority, and shape the PLA further in compliance with the “Xi Jinping Thought on Socialism with Chinese Characteristics for a new era”. This also means that the PLA, as directed by Xi to prepare for war and stay “absolutely loyal, absolutely pure”, would be better equipped to undertake complex operations in the regional and global arena.

The PLA under Xi would also seek to quell any protest or act of dissent in its internal domain with the help of its armed police (now under the CMC) while aiming to resolve the ‘Taiwan question’ through ‘complete reunification’ and expand its control over its core strategic interests in the SCS, ECS, as well as India-China border. Lastly, with China’s implicit warning to competitors and rivals of finding themselves “on a collision course with a great wall of steel” if “any foreign force [tries] to bully, oppress, or subjugate us (read the CCP and the Chinese people)”, the PLA advancements would unlikely board well for countries, especially with India, the US, Japan, Australia, etc.⁴¹

Endnotes

¹ “Full text: Speech by Xi Jinping at a ceremony marking the centenary of the CPC”, *Xinhua*, July 01, 2021, Accessed on September 21, 2021. http://www.xinhuanet.com/english/special/2021-07/01/c_1310038244.htm.

² “Memorable moments in the history of PLA”, *China Daily*, August 01, 2018, Accessed on September 21, 2021. <https://www.chinadaily.com.cn/a/201808/01/WS5b60ed92a31031a351e914f9.html>.

³ Maj Gen (retd) Prof. G G Dwivedi, “An Expert Explains: The PLA and its relationship with China’s Communist Party”, *Indian Express*, August 23, 2020, Accessed on September 21, <https://indianexpress.com/article/explained/peoples-liberation-army-communist-party-of-china-6562035/>.

⁴ "The People's Army", *Quotations from Mao Tse Tung*, November 06, 1938, Accessed on September 21, 2021. <https://www.marxists.org/reference/archive/mao/works/red-book/ch09.htm>.

⁵ Ellis Joffe. "The Chinese army in the Cultural Revolution: The Effects of Intervention", *The China Quarterly*, No. 55, July-September 1973, pp. 450-477.

⁶ During the Tiananmen Square incident, many units of the Chinese military were extremely reluctant to move against the protesters, as they were indoctrinated to believe that the PLA was people's army, and not the party's. This led to delay in breaking the demonstrations, which, coupled with inadequate training and inappropriate equipment of the military units indicated towards the inadequacy in training and inexperience in urban military operations reiterated the need for stronger CCP-PLA coordination and control, with a greater focus on military operational training. Please read, Andrew Scobell. "Why the People's Army Fired on the People: The Chinese Military and Tiananmen", *Armed Forces & Society*, Vol. 18, No.2, Winter 1992, pp. 193-213.

⁷ Peter Kien-Hong Yu. "The Dialectical Relationship of the Chinese Communist Party and the PLA", *Defense Analysis*, Vol. 16, Issue. 2, July 02, 2010, pp. 203-218.

⁸ Timothy R. Heath. "The Consolidation of Political Power in China Under Xi Jinping: Implications for the PLA and Domestic Security Forces", *Rand Corporation*, February 07, 2019, Accessed on September 21, 2021. https://www.rand.org/content/dam/rand/pubs/testimonies/CT500/CT503/RAND_CT503.pdf.

⁹ John Garnaut. "Rotting from Within", *Foreign Policy*, April 16, 2012, Accessed on September 21, 2021. <https://foreignpolicy.com/2012/04/16/rotting-from-within/>.

¹⁰ Ibid.

¹¹ Jeremy Page and Lingling Wei. "Bo's Ties to Army Alarmed Beijing", *The Wall Street Journal*, May 17, 2012, Accessed on September 21, 2021. <https://www.wsj.com/articles/SB10001424052702304203604577398034072800836>.

¹² "China's National Defense in 2004", *Information Office of the State Council of the People's Republic of China*, December 2004, Accessed on September 21, 2021. <http://en.people.cn/whitepaper/defense2004/defense2004.html>; Michael S. Chase, Jeffrey Engstrom, Tai Ming Cheung, Kristin A. Gunness, Scott Warren Harold, Susan Puska, and Samuel K. Berkowitz. "China's Incomplete Military Transformation: Assessing the Weaknesses of the People's Liberation Army", *Rand Corporation*, 2015,

Accessed on September 21, 2021. https://www.rand.org/content/dam/rand/pubs/research_reports/RR800/RR893/RAND_RR893.pdf.

¹³ The PLA’s declining role in Chinese politics can be understood by analysing the highest decision-making body of China, the Politburo Standing Committee (PBSC) where no PLA personnel has participated since 1997. The second most powerful political institution, the Politburo, too, has witnessed only two PLA representations since 1987. In contrast, the PLA constituted between two-third and one half of the Politburo between 1980-1982 and more than one-third between 1982-1987. The absence of the PLA from the highest decision-making bodies have kept the military out of most of the important national decision-makings, while reiterating that the PLA is a “party’s army” and would do what the party, or the commander-in-chief directs it to. Please read, Gerald Segal, “The PLA and Chinese Foreign Policy Decision-Making”, *International Affairs*, Vol. 57, No. 3, Summer 1981, pp. 449-466; Kate Hannan. “The Role of the Military in Chinese Politics”, in S. Ratuva et al. (eds), *Guns & Ruses: Comparative Civil-Military Relations in the Changing Security Environment*, 2019, pp. 201-214; Christopher K. Colley, “How Politically Influential is China’s Military?”, *The Diplomat*, April 27, 2019. Accessed September 21, 2021. <https://thediplomat.com/2019/04/how-politically-influential-is-chinas-military/>.

¹⁴ Dennis J. Blasko. “The PLA Army after ‘below the neck’ Reforms: Contributing to China’s Joint Warfighting, Deterrence and MOOTW Posture”, *Journal of Strategic Studies*, December 27, 2019, Vol. 44, Issue 2, pp. 149-183

¹⁵ Xiang Bo. “Backgrounder: Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era”, *Xinhua*, March 17, 2018, Accessed on September 21, 2021. http://www.xinhuanet.com/english/2018-03/17/c_137046261.htm.

¹⁶ Sanjiv Shankaran. “Is Xi Jinping the most powerful and dangerous man in the world?”, *Times of India*, July 31, 2020, Accessed on September 21, 2021. <https://timesofindia.indiatimes.com/blogs/cash-flow/is-xi-jinping-the-most-powerful-and-dangerous-man-in-the-world/>.

¹⁷ Chien-wen Kou. “Xi Jinping in Command: Solving the Principal-Agent Problem in CCP-PLA Relations”, *The China Quarterly*, No. 232, December 2017, pp. 966-885.

¹⁸ Ibid.

¹⁹ David M. Lampton. *Following the Leader: Ruling China, From Deng Xiaoping to Xi Jinping*, Berkley, CA: University of California Press, pp. 47-77.

²⁰ “Commentator of the People’s Liberation Army Daily: The work system should be further tightened and implemented (解放军报评论员：工作制度要进一步严起来实起来)”, *cpcnews*, January 28, 2015, Accessed on September 21, 2021. <http://cpc.people.com.cn/pinglun/n/2015/0128/c78779-26464541.html>.

²¹ “China Reshuffles Military Headquarters”, *Xinhua*, January 11, 2016, Accessed on September 21, 2021. www.xinhuanet.com/english/2016-01/11/c_134998692.htm.

²² Joel Wuthnow and Phillip C. Saunders. “Chinese Military Reforms in the Age of Xi Jinping: Drivers, Challenges, and Implications”, *China Strategic Perspectives*, No. 10, March 2017, p. 6

²³ At present, the PLA strategists are anticipating a new, developing style of warfare which evolves from “informationized” towards “intelligentized” (智能化) warfare. This kind of warfare will focus on AI, along with a range of technologies, which are changing the form of warfare. Please see “Experts: Military Intelligentization Is Not Merely Artificial Intelligence” [专家：军事智能化绝不仅仅是人工智能], *People’s Daily*, December 6, 2017, Accessed on September 21, 2021. <http://military.people.com.cn/n1/2017/1206/c1011-29689750.html>; “Lt. Gen. Liu Guozhi: The Development of Military Intelligentization Is a Strategic Opportunity for our Military to Turn Sharply to Surpass” [刘国治中将：军事智能化发展是我军弯道超车的战略机遇], *CCTV News*, October 22, 2017, Accessed on September 21, 2021. <http://mil.news.sina.com.cn/china/2017-10-22/doc-ifymzqpq3312566.shtml>.

²⁴ Joel Wuthnow and Philip C. Saunders. *Chairman Xi Remakes the PLA*, National Defense University Press, 2019, p. 8

²⁵ The introduction of the five Theater Commands play a great role in accentuating Xi Jinping’s desire to make the military a more effective and capable fighting force, an imperative for national security and attainment of China’s core strategic interests. It also remains a landmark progress in implementing the military reforms and building PLA’s joint battle system. The Theater Commands are designed in such a way that each unit remains responsible for their respective areas which focus on China’s strategic priorities shaped by regional environment. If anything, the establishment of the Theater Command and the formation of the joint battle command system remains a strategic decision by the party, headed by Xi, to realize the Chinese Dream of a strong military. Please read Joel Wuthnow and Philip C. Saunders, “Chinese Military Reforms in the Age of Xi Jinping”, *China Strategic Perspectives*, No. 10, March 2017, pp. 23-37; “China’s military regrouped into five PLA theatre commands”, *China Military Online*, February 01, 2016, Accessed on September 21, 2021. http://english.chinamil.com.cn/news-channels/china-military-news/2016-02/01/content_6884789.htm.

²⁶ “China to Cut Troops by 300,000: Xi”, Xinhua, September 3, 2015, Accessed on September 21, 2021. www.xinhuanet.com/english/2015-09/03/c_134583730.htm.

²⁷ “facts and Figures on China’s Military Reform”, Xinhua, December 19, 2017, Accessed on September 21, 2021. www.xinhuanet.com/english/2017-12/19/c_136837189.htm.

²⁸ “China’s Military Strategy”, *The State Council, The People’s Republic of China*, May 27, 2015, Accessed on September 21, 2021. http://english.www.gov.cn/archive/white_paper/2015/05/27/content_281475115610833.htm.

²⁹ “PLA Non-Battle Personnel Downsized as part of Military Reform: Report”, *China Military*, March 5, 2018, Accessed on September 21, 2021. http://eng.chinamil.com.cn/view/2018-03/05/content_7959328.htm.

³⁰ Please refer to note no. 23

³¹ Joel Wuthnow. “A Brave New World for Chinese Joint Operations”, *Journal of Strategic Studies*, Vol. 40, No. 1-2, February 2017, pp. 169-195.

³² Shannon Tiezzi, “The Real Reason China is Cutting 300,000 Troops”, *The Diplomat*, September 08, 2015, Accessed on September 21, 2021. <https://thediplomat.com/2015/09/the-real-reason-china-is-cutting-300000-troops/>.

³³ Andrew Jacobs and Chris Buckley. “Tales of Army Discord Show Tiananmen Square in a New Light”, *The New York Times*, June 02, 2014, Accessed on September 21, 2021. https://www.nytimes.com/2014/06/03/world/asia/tiananmen-square-25-years-later-details-emerge-of-armys-chaos.html?_r=0; See Andrew J. Nathan and Perry Link (eds). *The Tiananmen Papers*, New York: Public Affairs, 2001: Andrew Scobell, no. 5

³⁴ Andrew Scobell. “China’s Evolving Civil-Military Relations: Creeping Guojiahua,” *Armed Forces & Society*, Vol. 31, no. 2, January 2005, pp. 227–244.

³⁵ James Mulvenon, “Scraping Poison Off the Bone (刮骨疗毒): : An Examination of the Campaign to Eliminate the Baneful Influence of Guo Boxiong and Xu Caihou”, *China Leadership Monitor*, no. 52, Accessed on September 21, 2021. <https://www.hoover.org/sites/default/files/research/docs/clm52jm.pdf>.

³⁶ Ankit Panda. “Xi Jinping’s PLA Ambitions: Why Guo Boxiong Had to Go”, *The Diplomat*, April 07, 2016, Accessed on September 21, 2021.

<https://thediplomat.com/2016/04/xi-jinpings-pla-ambitions-why-guo-boxiong-had-to-go/>; “Military Daily: Guo Boxiong and Xu Caihou’s corruption problem is not the crux of their problem (军报：郭伯雄、徐才厚贪腐问题不是他们问题的要害), *China Military* (中国军网), May 27, 2016, Accessed on September 21, 2021. https://news.qq.com/a/20160527/018042.htm?utm_source=The+Sinocism+China+Newsletter&utm_campaign=472b96a287-Sinocism05_30_165_30_2016&utm_medium=email&utm_term=0_171f237867-472b96a287-29587217&mc_cid=472b96a287&mc_eid=c8bcf382a4.

³⁷ Please see, “Willy Wo-Lap Lam, “The Xi Jinping Faction Dominates Regional Appointments After the 19th Party Congress”, *The Jamestown Foundation*, February 13, 2018, Accessed on September 21, 2021. <https://jamestown.org/program/xi-jinping-faction-dominates-regional-appointments-19th-party-congress/>.

³⁸ Don Tse. “Why General Fang Fenghui Was Purged”, *The Diplomat*, January 14, 2018, Accessed on September 21, 2021. <https://thediplomat.com/2018/01/why-general-fang-fenghui-was-purged/>.

³⁹ Please read, Nadege Rolland, “Securing the Belt and Road: Prospects for Chinese Military Engagement Along the Silk Road”, in Nadege Rolland (eds), *Securing the Belt and Road Initiative: China’s Evolving Military Engagement Along the Silk Roads*, The National Bureau of Asian Research, September 2019, Accessed on September 21, 2021. https://www.nbr.org/wp-content/uploads/pdfs/publications/sr80_securing_the_belt_and_road_sep2019.pdf.

⁴⁰ “On China’s Sea Power (*Zhang Wenmu, Lun Zhongguo haiquan*),” *Beijing: Haiyang*, 2014; Wang Huayong, “Lieutenant General Wang Huayong, Political Commissar of the East China Sea Fleet: Resolutely Defending Sea Rights, Bravely Facing the Future War (*Haijun Donghai jiandui zhengwei Wang Huayong zhong jiang: Jianjue hanwei haiyang quanyi, weilai zhanzheng yongyu liangjian*)”, *Zhongguo junwang*, March 6, 2016, Accessed on September 21, 2021. http://www.81.cn/jwgz/2016-03/06/content_6944549.htm.

⁴¹ Jagannath Panda, “CCP at 100: Xi Jinping’s Future Foreign Policy Manifesto”, *IDSA Issue Briefs*, July 07, 2021, Accessed on September 21, 2021. https://www.idsa.in/issuebrief/ccp-at-100-xi-jinping-future-jpanda-070721#footnote35_74gz41d.

India-US Partnership in Afghanistan: Challenges Ahead for India

Shri Gaurav Kumar[@]

Abstract

India and the US have many shared common interests in the region. The two countries aspire for peace and stability in South Asia. However, the recent developments in Afghanistan have dramatically changed the geopolitical scenario of the region. India and the US are going to face many serious challenges in Afghanistan including terrorism, Chinese presence, and dilution of democratic values. The pathway for India's future engagement with the Taliban Government is mired by serious inherent challenges which India needs to navigate along with the US and other like-minded countries. It also needs to recalibrate its strategy amidst change in its relation with its old allies.

Introduction

The US foreign policy initiatives are often criticised for their lack of deep understanding of the complex political and social intricacies of the country where the US intends to bring 'change' — either through diplomatic means or through military interventions. Cold war, and the post-cold war, era are full of examples where US interventions have gone awry due to its lack of understanding of the local and regional dynamics. Since the Vietnam War, inability of the US to take the risk of high casualties is another major reason for some of its failures. In Afghanistan, the other option for the US was to keep minimum military presence and force the Taliban to fulfil its promises. It could have asked the international community to back its presence in Afghanistan and make financing, and funding, conditional on progress in peace talks. However, its risk aversion mentioned above led to a catastrophic result with the overthrow of the democratic government.

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The withdrawal from Afghanistan appears ill-implemented and is similar to its hasty withdrawal from Iraq in 2011. Once the US forces left Iraq, the ISIS started to spread its influence forcing the US to redeploy forces back in Iraq. The US had to redeploy a small number of troops in Iraq in the early 2014 which by the end of 2015 rose to 3,500 and by mid-2016 to around 5000 troops.¹ President Joe Biden in his 26 July 2021 meeting with the Iraqi Prime Minister Mustafa al-Kadhimi clearly stated that the US was not going to be involved in any combat mission by the end of 2021. The US inability to take further risks in Afghanistan is again similar to its inability to take a risk in Syria in 2013 when, despite drawing the red line by the Obama administration to act against the Assad regime in case it uses chemical weapons, it failed to act against the regime when it carried out a chemical attack near Damascus that killed more than 1,400 people.² The US intervention and its withdrawal from Iraq, Syria, and Afghanistan suggest lack of a strategic end-goal. To the analyst, the withdrawal does not appear to be based on ground realities.

The complete drawdown of the US forces from Afghanistan, from both combat and non-combat role, the rapid ascendancy of the Taliban, and the quick surrender of the Afghan Government raise a list of questions that needs a comprehensive analysis. It has security and geopolitical implications for the region and for both India and the US.

The Withdrawal and the Consequences

The US had based its withdrawal from Afghanistan on two conditions: reduction of violence and formation of an inclusive government based on the intra Afghan dialogue. A cursory look at the data from May-August 2021 suggests the violence increased many folds once the international troops started withdrawing from Afghanistan.³ The “in together, out together” plan was welcomed by the Taliban with increased attacks on the government officials, media person, and Afghan forces. According to a United Nations Assistance Mission in Afghanistan (UNAMA) report, “It was particularly concerned about the acute rise in the number of civilian casualties in the period from 01 May 2021, with almost as many recorded in the May-June period as in the entire preceding four months”.⁴

The Afghan Taliban had announced its interim government formation on 07 September 2021. The list of the ministers was contrary to what was promised by the Taliban. The list includes top terrorists, some including Sirajuddin Haqqani⁵, the new acting interior minister, with huge rewards for their arrests. It hardly reflects the ethnic diversity of Afghanistan, as most of the ministers are Pashtuns, and there are no women ministers. The Taliban's deliberate attempt to not fulfil its promise portrays both the US and its policy and influence in the region in poor light; rather US inability to force the Taliban to stay committed to its promises.

Fine-tooth Comb Policy vs Wait and Watch Policy

Under the Biden administration, India's and US interest in Afghanistan differed. For the US, it was clearly an exit at any cost policy. For India, it was that the US withdrawal should be based on a condition that is conducive for regional peace. At the moment, the outcome is clearly at odds with what India would have expected.

The Indian Foreign Minister, when he spoke at the 'India@75: The Freedom Summit', said, "While India's interests converge with the US' in the east, there are divergences in the west, particularly Afghanistan".⁶ Clearly, he was suggesting to the US unwillingness to stay in Afghanistan until it shows signs of stability. India had, since 2018, shown reservations on the manner and the mandate of the US-Taliban peace negotiation and the agreement. Although, India in principle has agreement with the US that there is no military solution to Afghanistan, it has its share of reservations on the kind of leverage the US is giving to the Taliban and its patrons in Pakistan. Despite the growing synergy between India and the US, and relationship moving from bilateral to multilateral levels, India had little option but to engage the US in whatever ways it can on the issue of Afghanistan.

The complete withdrawal of the international forces leaving behind a messy Afghanistan operated by the Taliban and controlled by the Pakistan is a likely scenario India was worried about. Foreign Secretary Harsh Shringla, during his three day visit to US, had said that the situation in the war-torn country was a key part of discussions and India and the US would assess Pakistan's actions in Afghanistan with a 'fine-tooth comb'⁷. Mr Shringla also said that both India and the US are adopting a 'Wait and Watch

Policy'. India is closely engaged with the US on developments in Afghanistan and is calibrating its actions in response to the evolving situation.

The US and India have shown willingness to act together on the regional issues. However, particularly considering recent developments in Afghanistan, there are little military and diplomatic options for India to make both the Taliban and Pakistan accountable for what is happening in Afghanistan. Pakistan's long tested strategy of double games, polished with the strategy of denial, has many buyers among US policy makers and it has been successful in selling its story to the US forces. Ryan Crocker, former US Ambassador to Pakistan from 2004 to 2007, recalls his meeting with the former Pakistan Army Chief General Ashfaq Kayani in the leaked 'Afghanistan Papers' by Washington Post. Kayani said to former Ambassador, "You know, I know you think we're hedging our bets, you're right, we are because one day you'll be gone again and it'll be like Afghanistan the first time, you'll be done with us but we're still going to be here because we can't actually move the country. And the last thing we want with all of our other problems is to have turned the Taliban into a mortal enemy, so yes, we're hedging our bets".⁸ Openly, Pakistan officials have denied any control over the Taliban. The conversation aptly summaries Pakistan's strategy in Afghanistan and the US' limited options vis à vis Pakistan in Afghanistan.

Indian investments in Afghanistan in the last 20 years have been exceptionally high. It has made investments in people-oriented projects meant to directly benefit the masses. Its ultimate aim has been to balance Pakistan and safeguard its interest through its strategic investments in the region. Therefore, with the fall of the democratic government in Afghanistan and ascendancy of the Taliban, India can no longer gain the same preferential treatment and condition in Afghanistan. The development also implies that the US has little leverage left over the Taliban, and even Pakistan, as far as the Afghan affairs are concerned. The situation ultimately demands India to work with other players in the region to safeguards its interests.

New Dynamics and Turbulent Way Ahead

India has a few major concerns in Afghanistan. Firstly, the favourable conditions for India in Afghanistan since 2001 have

ended. Pakistan at the helm of affairs in Afghanistan might exploit Afghanistan for anti-India activities, particularly terrorism in Indian Union Territory Kashmir.⁹ There is all likelihood that Afghanistan may become a hotbed of anti-India terrorist groups. The Taliban spokespersons are giving conflicting statements as far as their views on India are concerned. On one hand, the Taliban leader Anas Haqqani in an interview to an Indian news channel said, “Kashmir is not part of our jurisdiction and interference is against our policy”.¹⁰ On the other hand, another Taliban spokesperson Suhail Shaheen told the BBC’s Hindi service, “As Muslims, we also have a right to raise our voice for Muslims in Kashmir, India or any other country”.¹¹ Recently, Indian Ambassador to Qatar, Deepak Mittal, met with the head of the Taliban’s political officer Sher Mohammad Abbas Stanekzai and discussed various issues including India’s concern that “Afghanistan’s soil should not be used for anti-Indian activities and terrorism in any manner”.¹² According to the Ministry of External Affairs (MEA) statement, the Taliban leader said that all the issues would be “positively addressed”.

Secondly, the Taliban is looking for international legitimacy and recognition. The attempts made by it to pacify India’s concern can be short lived as it also requires backing from the China and Pakistan to govern Afghanistan. A future India Pakistan tension will test the words of the Taliban spokesperson who has assured India of positive response. However, the conflicting views on the Kashmir issue clearly suggests influence of the Pakistan military on the Taliban. This portends that as far as their stand on the Kashmir issue is concerned, India will be less assured than what the Taliban has promised.

Geopolitical Scenario. Another major concern of India is due to change in the geopolitical scenario. In a China dominated region, geopolitics is no longer as favourable as what it was in late 1990s. The situation is at the cusp of many inflection points. Two of the main pillars of India’s Afghanistan policy in 1990s were Iran and Russia. In the recent times, when the India-China relations reached its nadir with serious erosion in their relationship, Iran and Russia have built a solid relationship with China. Ironically, India’s long term partner Russia has shown deep inclination towards Pakistan on the behest of China. India was deliberately kept out by the Russians from the TROIKA on Afghanistan, which included

Pakistan. The recent resolution against the Taliban at the United Nations Security Council (UNSC) under India's chair, sponsored by France, UK, and the US, was adopted with 13 members including India. Russia and China abstained from voting. Vassily Nebenzia, Russia's envoy had said Moscow "was forced" to abstain during the vote on the resolution on Afghanistan "because the authors of the draft ignored our principled concerns".¹³ This clearly brings out the growing fissures in India's relation with Russia.

India's closeness with the US has also strained its relationship with Iran. Iran has been vocal against the US policies in Afghanistan and had welcomed its withdrawal. Although Iran shared its reservations on the Taliban regime, it is less likely that it will oppose a force that has risen in its backyard and which might hit its own regional interests and local sectarian sentiments. Recently, Iranian President Hassan Rouhani has called for the enhancement of security and economic cooperation between Iran and Pakistan.¹⁴ Given the fact that India has invested heavily in the Iranian Chabahar Port primarily to navigate the Pakistan's blockade of its trade with Afghanistan, it will be interesting to see how the new developments will impact India's capacity to utilise the port for its trade with Afghanistan.

Traditionally, India has always backed the Northern Alliance, an umbrella of largely non-Pashtun groups from the northern Afghanistan since the emergence of the radical mujaheddin Taliban. The response of the Northern Alliance to the Taliban ascendancy has surprised India. The way the Northern Alliance was unable to mount a united counter challenge to the Taliban has eroded its credibility in New Delhi. Political infighting between the groups could be one of the reasons. Therefore, the possibility of India supporting a faction, or a sub-group, of the Northern Alliance is very low, and naturally would be very limited even if India tends to do so, primarily because earlier Iran and Russia were sympathetic to India's concerns and were anti-Taliban which now appear to be diluted by the recent developments. India, despite announcing e-visas for the Afghan nationals, has also not yet started giving e-visas after invalidating all visas in August.¹⁵

The most crucial concern of India is the China-Pakistan nexus in Afghanistan. Recently, the Taliban spokesperson Zabihullah Mujahid had said, "China is our most important partner and

represents a fundamental and extraordinary opportunity for us because it is ready to invest and rebuild our country". He further said, "There are rich copper mines in the country, which, thanks to the Chinese, can be put back into operation and modernised. In addition, China is our pass to markets all over the world".¹⁶ Clearly, the Taliban rule appears to give more prominence to its relations with China; therefore, increasing Chinese footprints in Afghanistan are inevitable. Taliban, at the helm of Affairs in Afghanistan, is certainly going to open a new frontier for India-China rivalry, with India's limited role as the most possible scenario.

The developments in Afghanistan are certainly going to widen the gap on regional issues between New Delhi and Russia, as suggested by Professor C Raja Mohan. Russia fraternising with the Taliban, building relationship with Pakistan and strengthening ties with China is not a good signal for India. With India's growing distance with Iran, India is at the likelihood of losing another valuable strategic partner. The Pakistan China nexus in Afghanistan will openly compromise India's security and strategic interests in Afghanistan and beyond.

The Afghan Questions

The questions are what can India and the US do about it? Will the Taliban be obliging its promises on non-interference, will it be accommodative of Indian and the US interests, and at what cost? The Taliban needs international support, both financially and institutionally, to function else it might face internal challenges. However, there is a limit to what international pressure can do given the fact that the international community itself is divided on the issue of terrorism and has less endurance now. India may, likely, give some recognition to the Taliban Government based on conditions and short of legitimising its rule. It will wait for the outcome of such condition based recognition and then only will look further to build its ties with the Taliban. At the same time, India would like to promote the idea of democracy, inclusiveness, and pro-people governance in Afghanistan. The effectiveness of all these strategies will be based on balancing and counterbalancing each other's interests. India has only Hobson's choice. Therefore, it is better to wait and watch and then do what is required in a manner that its choice compliments its strategic interests out of this region. India will have to work with the smaller Central Asian

countries, including its former partner Tajikistan, as well as European countries like France and Germany to reshape its Afghan Policy. With the Taliban at the helm with Pakistan's support, the task for India is cut out to look for new strategy and new alignments for the region.

Endnotes

¹ Berger, Miriam. "Invaders, Allies, Occupiers, Guests: A Brief History of U.S. Military Involvement in Iraq." The Washington Post. WP Company, January 11, 2020. <https://www.washingtonpost.com/world/2020/01/11/invaders-allies-occupiers-guests-brief-history-us-military-involvement-iraq/>

² Al Jazeera. "Timeline: US Intervention in Syria's War since 2011." Syria News | Al Jazeera. Al Jazeera, October 7, 2019. <https://www.aljazeera.com/news/2019/10/7/timeline-us-intervention-in-syrias-war-since-2011>.

³ Remarks by President Biden on the Way Forward in Afghanistan, The White House, April 14, 2021 <https://www.whitehouse.gov/briefing-room/speeches-remarks/2021/04/14/remarks-by-president-biden-on-the-way-forward-in-afghanistan/>

⁴ Afghanistan: Record number of women and children killed or wounded, UN News, July 26, 2021 <https://news.un.org/en/story/2021/07/1096382>

⁵ "Taliban Announce New Government for Afghanistan." BBC News. BBC, September 7, 2021. <https://www.bbc.com/news/world-asia-58479750>

⁶ India has divergences with US on Afghanistan: EAM S Jaishankar, The Times of India, August 16, 2021 <https://timesofindia.indiatimes.com/india/india-has-divergences-with-us-on-afghanistan-eam-sjaishankar/articleshow/85356796.cms>

⁷ Laskar, H. Rezaul. "India, US Keeping Close Watch on Pakistan's Actions in Afghanistan: Harsh Shringla." Hindustan Times, September 4, 2021. <https://www.hindustantimes.com/india-news/india-us-keeping-close-watch-on-pakistan-s-actions-in-afghanistan-harsh-shringla-101630786885165.html>.

⁸ The Washington Post's "Afghanistan Papers" and U.S. Policy: Main Points and Possible Questions for Congress, EveryCRSReport, January 28, 2021 <https://www.everycrsreport.com/reports/R46197.html>

⁹ Mohan, C. Raja. "Post-American Afghanistan and India's Geopolitics." Foreign Policy, August 18, 2021. <https://foreignpolicy.com/2021/08/18/afghanistan-withdrawal-india-china-russia-pakistan-geopolitics-indo-pacific>.

¹⁰ Gupta, Manoj. Haqqani Network Scion Anas Haqqani Says Taliban Won't 'Interfere' in Kashmir, Clarifies Pakistan Connection, CNN News

18, September 01, 2021 <https://www.news18.com/news/world/exclusive-talibans-anas-haqqani-says-wont-interfere-in-kashmir-clarifies-pakistan-connection-4150346.html>

¹¹ Khare, Vineet. "Afghanistan: Taliban Says It Will 'Raise Voice for Kashmir Muslims'." BBC News. BBC, September 3, 2021. <https://www.bbc.com/news/world-asia-india-58419719>. <https://www.bbc.com/news/world-asia-india-58419719>

¹² Haidar, Suhasini. Indian envoy in Doha meets Taliban leader, The Hindu, August 31, 2021 <https://www.thehindu.com/news/national/indian-envoy-in-doha-meets-taliban-leader/article36204178.ece>

¹³ Roy, Shubhajit. India in chair, UNSC adopts resolution on Taliban; Russia and China abstain, The Indian Express, September 01, 2021. <https://indianexpress.com/article/world/indias-presidency-uns-c-strong-resolution-afghanistan-china-russia-abstain-7479719/>

¹⁴ Iran seeks to enhance security and economic cooperation with Pakistan, Business Standard. April 22, 2021 https://www.business-standard.com/article/international/iran-seeks-to-enhance-security-and-economic-cooperation-with-pakistan-121042200426_1.html

¹⁵ Basu, Nayanima. India unlikely to reopen Kabul embassy in near future, only people-to-people links to continue. The Print September 06, 2021. <https://theprint.in/diplomacy/india-unlikely-to-reopen-kabul-embassy-in-near-future-only-people-to-people-links-to-continue/729007/>

¹⁶ China our most important partner, ready to invest in Afghanistan: Taliban, The Business Standard, September 06, 2021. https://www.business-standard.com/article/international/beijing-is-our-most-important-partner-says-taliban-121090300723_1.html

Review Article 1

India's China Challenge: A Journey through China's Rise and What It Means for India[@]

The rise of China has been one of the most written about subjects for over a decade. A positive development has been that several Indian authors have, in the recent past, come out with books on China from an Indian perspective. The book under review is by an Indian journalist who has lived in China as a reporter for The Hindu and India Today, and is well versed in the language. The book's objective is to examine the transformation that has taken place in China and delineate the challenges that China poses to India. The author aims to provide 'a ground level perspective' through interactions and interviews with Chinese scholars, tech entrepreneurs, journalists, and travel across the country, combined with desk research.

The Book

The book is divided into six parts. The first four focus on four key challenges posed by China to the world in general and India, in particular. These challenges emanate from its model of politics based on a one party rule; the economic dependencies created by its remarkable growth; the increasing assertiveness in international relations; and last, but not the least, the challenge of resolving the boundary question. Part five examines some of the challenges that China faces internally, particularly in Tibet, Xinjiang province, and in Hong Kong. The last part, titled 'Portraits', stands apart from the rest of the book and provides life stories of seven different personalities. With the foregoing bird's eye view, let us highlight some of the insights that emerge in each part of the book.

In the first part, the author observes that regardless of the economic changes in China, the core principle based on Mao's idea of a 'perpetual struggle' to retain power has remained intact and guides the politics. A new assertiveness started with the rise of Xi, who has emerged as the most powerful leader in China

[@]India's China Challenge: A Journey through China's Rise and What It Means for India. By Ananth Krishnan; Publisher: Harper Collins India (2020), Pages: 420, Price: Rs 599/-, ISBN: 978-93-9032-768-3.

(since Mao) and now controls the party, the military and the government. But faced with the challenges from a slowing economy and global tensions, there is a search for a new source of legitimacy for the Communist Party. The 'Chinese Dream' campaign by Xi is now a part of this effort and this transition is characterised as moving from 'becoming rich' to 'becoming powerful'.

The second part focuses on the economic transformation of the country and starts with a description of small shops in the coastal province of Zhejiang (chapter 4), where Kanchivaram sarees, Tanjore paintings, Rajasthani jewellery, Krishna paintings (all made in China) are for export.....yes to India! In addition, a range of branded products like Godrej locks, castors, airport equipment are made from steel produced from ore sourced from India.

The author observes that the conventional view in India about Chinese manufacturing is limited to the role of a centralised State in building infrastructure. But it is also necessary to recognise that the Chinese Government allowed local governments to experiment with policy to take up a bottom up entrepreneurship strategy and invest in human capital during the early part of the reforms, which, in turn, created the base. Even in electronics, the author cites an observation made by Tim Cook of Apple that the real reason why companies chose China was the availability of skills at one location.

He notes that the era of cheap jobs is getting over as Chinese workers are now better educated and not looking to industry jobs. Firms are moving to cheaper locations in South East Asia. However, shifting out of supply chains of sophisticated products like electronics is not as easy because China is not only a part of global value chains but also an important part of the global demand. Another key message is that many of the policies that enabled China's manufacturing rise were unique and may be difficult to replicate in countries like India.

The author notes that the Chinese governance structure is more decentralised than commonly understood, particularly in the area of urban development. The mayors in China are vested with powers for disbursement of funds which enable quick decisions. While decisions get politically influenced, the overall outcome is that Chinese cities are more liveable than in India on almost all indicators, including housing.

The author admirably observes that China increased its rail network to 1,20,000 km and its high speed network to 30,000 km. One reason for the success has been the single point responsibility model with the Ministry of Railways holding complete responsibility over planning, execution, and financing. The financing model has resulted in high debt but not all Chinese experts see that as a problem.

The author goes on to discuss the deep initiatives in taking up infrastructure projects in other countries, the China-Europe rail link and the Belt and Road Initiative (BRI). While many projects have run into difficulties due to the excessive debt burden on the host countries, the fact remains that China has virtually ripped apart the rule book for infrastructure financing. Also, the funding by the China Development bank, the EXIM bank, and the Asian Infrastructure fund now exceeds what multilateral institutions are able to extend. Even though the contours of the BRI are ambiguous, it has created a narrative around the inevitable ascendancy of China.

Krishnan observes that when it comes to innovation, the popular belief is that open and democratic societies have an advantage. In China, the State played a critical role in putting infrastructure in place and bringing back entrepreneurs but was smart enough to know when to get out of the way. In the case of start-ups, if they were successful, the owner was allowed to buy back the shares but if they failed, the local governments subsidised the losses. The rise of tech giants has been helped by restrictions on the entry of foreign companies.

Several Chinese tech majors like Baidu started developing apps aimed at capturing niche markets in India (till the time the Indian Government banned some Chinese apps). Investments by their tech and IT majors in Indian start-ups had also increased. Yet, these investments have not helped to shape China's overall policy towards India. Safeguarding access to private data has now emerged as a challenge for Indian policy makers. Even though Chinese capital has been beneficial, the implications of some of the most valuable start-ups in sectors like Fin tech ceding control is a source of concern.

In part three (chapters 7 to 11), the author devotes considerable space to the India-China relationship, in particular

the border issue, and brings the reader up to date till 2020 . He starts with President Xi's visit to India in 2014, the Indian PM's visit to China in 2015, each visiting the others home town, their body language, and the underlying nuances. He then traces the manner in which the mood changed following the Doklam standoff in 2017. While the spirits revived during the summit meets at Wuhan and Chennai, the relations plummeted to a new low following the Galwan clashes.

The fourth part (chapters 12 to 15) goes back in time to discuss, what the author calls, the 'Original Sins' that led to the 1962 war. The plural may be noted. He goes on to discuss whether that war was inevitable and draws attention to the contrast in the approach to the border question based on maps adopted by India, compared to seeing it as a '*leftover of history*' that needed settlement by the Chinese. According to the author, the irony is that the dispute was susceptible to a solution but with the passage of time, it is becoming harder. The voices in China who believe in a settlement are increasingly a minority. Regardless of how China views the problem, the author is of the view that there is merit in India taking the lead. The issue needs to be debated, stripped of sentiments and historical baggage, and the costs and benefits carefully reviewed. The author suggests that pushing back against the China narrative is one thing but a more difficult challenge is to come up with a concrete response to its rising influence in India's neighbourhood as China now sees itself as the lone challenger to the global hegemon and the *dominant power* in Asia.

Part five is based on his visits to Tibet Autonomous Region (TAR) and neighbouring provinces, Xinjiang and Hong Kong. They constitute, what the author calls, the 'Frontiers' and have witnessed continued unrest, matched by a determined bid to integrate them. The landscape has changed due to infrastructure construction in TAR and neighbouring provinces. Interestingly, many young Chinese from far corners of the country are getting drawn to Buddhist and Tibetan thought. But, the continuing stalemate in addressing the Tibetan question is undermining goodwill, if any. The story of Xinjiang province is one of suppression of the Uyghur population accompanied by investment in infrastructure. Forceful assimilation remains the government's strategy and changes in demography due immigration seem to be a common feature in both these regions. The piece on Hong Kong shows how the 'one

country two systems' model is morphing into the 'One China' model. During his travels, the author experiences monitoring of his phone which seems quite common.

The last part of the book begins by contesting the commonly held view (in India) that all Chinese are similar. He draws portraits of six persons, their lives and circumstances, which give the reader a flavour of the diversity in China.

General Comments

This book is interesting for the following reasons. First, it contextualises the recent changes in China against the backdrop of a long time period by connecting them to the relevant developments in the past. It is not a history book and the reader should not expect a systematic chronology as not all chapters have been written in the same year. Second, the narration of the author's interactions with various personalities lends a human touch and keeps the interest of the reader alive. Third, the author takes you on a journey across the country and presents a collage of views, opinions, and observations woven together with ample desk research and citations that help to provide a nuanced ground-level perspective.

The book covers a large ground comprising China's economic success, technological sophistication, military reforms, its forceful engagement and strategic positioning in international affairs, the environmental and social challenges it faces, and the tensions prevailing in some provinces. It provides a well-rounded account of the recent changes in a country that has had 'Comprehensive National Power' as its political objective.

The message the book conveys is that China is projecting not merely its success in different areas but its own vision of the world based on the China model of development. If India is to have a better grasp of its neighbour, there is need to invest more effort and attention in understanding the developments in China. It is a well written book and would interest all those who wish to understand contemporary China and the challenges it faces, and the challenge it poses, especially to India.

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Short Reviews of Recent Books

The Saga of a Braveheart: Lt Col Ajit V Bhandarkar Shaurya Chakra. By Mrs Shakunthala A Bhandarkar, (New Delhi: Vij Books, 2021), Pages: 150, Price: Rs 750/-, ISBN- 9789390917129 (Hardback).

‘The Saga of a Braveheart’ is authored by Mrs Shakuntala Bhandarkar, a Veer Nari (a braveheart’s wife), wife of Late Lieutenant Colonel Ajit Bhandarkar who laid down his life for the country on 30 October 1999, while personally leading a Quick Reaction Team (QRT) to eliminate hardcore terrorists who had infiltrated across the Line of Control (LoC) in Surankote, Jammu & Kashmir. She has wonderfully described Ajit’s journey till he attained martyrdom on that fateful day. The book gives the view from the perspective of his family and colleagues. This is also probably the first book written by a Veer Nari about her departed husband, thus giving a very personal insight into the family life and times of a military hero.

The book has 16 chapters and each chapter covers a different facet of the officer’s journey in chronological order. It has first person narrations by various people who shared experiences from his school, academy and Service life giving us a rare insight into his personality.

The book brings out the people who influenced shaping of Ajit’s military ethos. One such person was his Company Commander, Major DP Merchant at the Indian Military Academy (IMA), whom he held in awe like other cadets at the IMA. He was the one who influenced his choice to join the Madras Regiment.

After joining his battalion, 18 MADRAS, in December 1981, his first posting was in Sikkim. He was soon to experience that wonderful feeling of brotherhood and camaraderie. The book covers snippets of life in the battalion and its moves, as well as appointments tenanted by him in diverse places including Sikkim, Secundrabad, Gandhi Nagar, J&K and Ferozepur. While every officer in the army experiences similar career moves and paths yet its documentation provides an insight to the non-military background reader about life in the army and in far flung field and peace areas.

On being posted to the Officers Training Academy (OTA) in Chennai, as an Instructor, Ajit, as a young Captain, motivated his

Gentlemen Cadets to ensure they always excelled. It was also at Chennai that he met Shakuntala in January 1990. He got posted back to his battalion in March and they got married in October that year in Chennai. She fondly recalls how he initiated her into the army way of life and the culture and traditions of the battalion.

In 1993, Ajit attended the Defence Services Staff College, at Wellington, Tamil Nadu, where selected officers from the three Services are trained in command and staff functions. It is the steppingstone for professional growth and an extremely busy time for the student officers but also a place where one gets a chance to bond with one's fellow trainees. The book narrates a number of lighter incidents including one where due to his quiet nature, he got in the cross hairs of the conducting instructor for not participating in the discussions and who told him he would be sent to hospital for a 'lockjaw'; needless to say, the instructor was soon taken aback by his sudden 'josh' as he suddenly became very participative!

Post the Course, he was posted as a Brigade Major, a prestigious appointment, at the Indo-China border at Nathu La. In 1996, he got posted to the Military Secretary's Branch in Army Headquarters in another prestigious appointment. Living as a family in a big city after the separation of a field area brought the family close together. Ajit had by now helped Shakuntala transform into a 'confident and independent *fauji* (military) wife'.

In June 1998, on being promoted to a Lieutenant Colonel, he was posted to 25 Rashtriya Rifles in Surankote as the Second-in Command in an intense counter-insurgency environment.

30 October 1999 was the day that will remain etched in the memory of the family forever. This was the day Ajit led a QRT to eliminate five hard core terrorists who had infiltrated across the LoC. He was accurate in his assessment of their likely location and displaying rare gallantry, courage, and bold leadership, unmindful of any personal considerations, he eliminated three of them but in the process took a bullet on his forehead and succumbed to his injuries. For this act of gallantry, he was awarded the Shaurya Chakra, posthumously, on 11 August 2000.

In Delhi, 30 October 1999 was like any other day for Shakuntala as she was busy designing teaching aids for her class

while the boys were watching 'Tom and Jerry' on TV. The doorbell rang and she found her colleagues and an officer from Delhi Area at the door who then went on to break the terrible news to her. Readers who have watched such a moment in Hollywood movies like "Saving Private Ryan" or "We Were Soldiers Once and Young" will find the narration very evocative.

While the book is extremely easy to read and full of anecdotes, the essence is in what lies within the lines. Namely, the challenges faced by those who wear the uniform and their families; the unique bonding within the army; the cadet days bonding and Course spirit; and lastly, the strength of the regimental family which becomes more important than one's own home. More importantly, the book also sheds light on how the families cope with loss. The character and strength of Shakuntala and her transformation from a protected wife to a widow who had to bring up two young children comes out well in the book.

This is a rare book as the focus is on an army hero's military upbringing, dedication, camaraderie, and courage while at the same time, it gives an insight into his personality and relationship with his parents, brothers, wife, children, classmates, course mates, brother officers, and friends and also tells us how his passing away affected each one of them in different ways.

"The Military Wife" by Laura Trentham is a very good 2019 fiction novel about military life and coping with the loss of a spouse. This, on the other, is a real-life story. It is very difficult to imagine but is extremely motivating and exposes the reader to the sacrifice and patriotism of not only Ajit but also Shakuntala, her two sons and the rest of their family, and by extension, all military spouses. There is an immense sense of grief evident in the book. It takes a rare resolve to write such a biography.

Maj Gen Jagatbir Singh, VSM (Retd)

Irrawaddy Imperatives: Reviewing India's Myanmar Strategy. By Jaideep Chanda, (New Delhi: Pentagon Press; 2021), Hardcover Pages: 341, Price: Rs 1495/-, ISBN- 978-9390095346 (Hardcover).

What are the factors that are imperative for India's foreign policy? Does India follow one or many strategies for conducting its foreign policy in its neighbourhood? Is there an interplay of conflicting mosaic of objectives? Does India's history, geography,

demography, and culture shape its worldview and, hence, its strategy? These are some of the questions one needs to answer to understand Indian strategy for its foreign policy in general and for Myanmar, in particular. The author has been able to answer some of these questions in a detailed manner in his book. He has leaned on the familiar terrains of looking into culture, history, geography, and rightly so, to place emphasis on India's Myanmar strategy. By recounting the geographic and demographic details of Myanmar and all the crucial aspects of it in the first chapter, the author gives a preview of the chapters to follow. The author also underlines the fact that geostrategic importance of Myanmar is something scholars can't ignore while writing India's foreign policy for Myanmar. Chapters on historical perspective of the India-Myanmar relations throw up some interesting facts and information including Mrs Indira Gandhi's visit to Myanmar in 1969, and the treatment meted out to the Indian PM, and the rice diplomacy. These two chapters give the granular details of the crest and trough periods of India's relationship with Myanmar.

The most interesting chapter of the book is the fourth chapter on Myanmar consciousness, a term which the author claims to have coined. One can debate the assumption of the author as to whether there is an intentional lack of willingness amongst the top policymakers to engage with Myanmar, as they do with other neighbouring countries, but he has certainly highlighted various events and speeches where the top leaderships have ignored mentioning or inviting Myanmar, or recognising Myanmar as a south Asian country, despite the fact that this country is her neighbour. The Delhi centrality theory doesn't hold ground when we look at India's not so enthusiastic engagement with much of the Latin American countries and a large part of European countries for decades. However, the author has been able to drive a point that such a blind spot can lead to unsustainable policy. The chapters on the Kaladan project, the Rakhine conflicts, and the Tatmadaw are interesting but have details that are available on various other books and platforms.

In the other two chapters on Myanmar and India's Northeast and Defence Diplomacy, the author has brought out fresh dimension to the whole approach. In the Northeast chapter, the author has concentrated his views on Mizoram's relations with Myanmar and dishes out informative details, and links the chapter

to the Kaladan project, Rakhine conflicts, and overall sentiments of the Northeast. The chapter is a must read for amateur scholars on Northeast India.

The chapter on Defence Diplomacy stops short of opening Pandora's box. The author's claim that major breakthrough in India-Myanmar relations came through using defence diplomacy can be contested at many levels, and by many scholars. However, one part where the chapter lacks is on the policy prescription when it comes to India's stand on the military junta in Myanmar. The author has highlighted long association of Indian defence forces with the Myanmar forces. However, despite having near to perfect 'defence diplomacy' as the author appears to imply, India has not been able to synergies her interests with the Myanmar junta. India has time and again looked for a democratic government in Myanmar to strengthen ties. Here one needs to ask whether India has one strategy for Myanmar or has many i.e., for elected govt and for military junta. The chapter is, however, fascinating for many reasons including the crucial details and interviews of prominent players in India-Myanmar relations. The other chapters are equally important however, the flow of the book is maintained and nurtured by some of the chapters mentioned above.

The author must be complimented for balancing his book with a comprehensive subsidiary or supplementary materials as appendices. A voluminous book is dangerously close to a double edged sword – it can both, act as a long chain of logical ideas and information; or it can over flood and, hence, confuse. The author has been able to provide extensive primary and secondary data to support his arguments in a coherent way. Empirical data collected from his field visits reflect his understanding of the topic and fill the crucial void in the research on connection between Northeast India and Myanmar.

On the flip side, one expects the author to shed more light on India's strategic outreach to East Asia, and the role Myanmar could play. Although the author has talked about it in bits and pieces, a specific chapter on India's act east policy and the role of Myanmar could have been an added value to the book.

Overall, the book is comprehensive and original in its content with a lot for both an amateur scholar and an expert.

Shri Gaurav Kumar

Manthan: Multifaceted Reflections on the Indian Armed Forces. By Major General VK Shrivastava, VSM, (New Delhi: Vij Books India Pvt Ltd, 2021), Pages: 181, Price: Rs 895/-, ISBN: 9789390439041.

Military History is usually written in two forms: it can either be recorded as a detailed chronicle of leaders, battles, campaigns, strategies reinforcing historical parallelisms and theories, often catering to the academicians; or it could be a succinct piecing of the popular narrative that seeks to highlight accounts of individual gallantry, courage and honour. Very rarely does one read a book that straddles across the dual domains, in what is commonly referred to as a hybrid narrative. *Manthan: Multifaceted Reflections on the Indian Armed Forces*, authored by Major General VK Shrivastava, fills the vacuum of well-recorded military history in India, making his work a notable contribution to military literature. Given his rich background in the army, wars, counter-insurgency/ counter-terrorism operations and a post-retirement senior fellowship at the MP Institute for Defence Studies and Analyses, Major General Shrivastava comes into his own as a storyteller with flair, empathy and pride for his country. The western world is engulfed with a misconception that ancient India was negligent in skills featuring statecraft, strategy, the administration even though the numerous epics prompt tales of vast kingdoms and major battles won. *Manthan* is a book that precisely squashes the aforementioned myth. This book serves a perfect platter of India's historical strategic legacy, its deft implementation and lastly, branches out into introspection of defence capabilities. The author draws relevance from Indian mythology, skillfully featuring its relevance to contemporary statecraft and policy. The armed forces indispensability is established, vividly tracing the anatomy of cosmic defence planning and deeply intense strategic reciprocity between India and her neighbours.

The author pays a substantial amount of attention to the rich history of Indian Armed Forces from the British era, where the contingent was highly praised by the Allied nations for their role in World Wars I & II, to the post-independence civil-military relationship. However, through his writings, he identifies several political misfortunes in the Nehruvian period as a hindrance to the growth of the armed forces. Since independence, the top political

leadership in the country has been troubled by the probability of a military takeover. It is not undisclosed that people around Nehru exploited his paranoia of a military coup and started chipping away at the army in a maturing civil-military relationship. This argument has been substantiated in the book mentioning the failures of the then Defence Minister, VK Krishna Menon, during the Chinese aggression of 1962. VK Krishna Menon's fiddling with military leadership proved to be disadvantageous to the Indian Army. There is a heavy focus on the concept of adeptness – which the Indian Army has wonderfully endured over the years. What is remarkable about this book is the stamina of narration as it not only divulges the overall merits of the inter-linked historical perspectives but also presents a global historical perspective on Indian history. For this, Major General Shrivastava employs the use of relevant findings by defence experts from the Central Asian Region.

Subsequently, the chapters trickle down to contemporary conflicts, namely the Indo-China border aggression of 2020. The same year, Chinese People's Liberation Army tasted India's stern and lethal response to border domination. The book echoes distinctive observations on military strategy, technology and stratagem used as 'war tactics' in ancient India. The author's treatment of new-age conflicts and strategic initiatives, such as the QUAD, compliments his idea of the Indian Armed Forces' vast scope of integration and adaptation with changing times. *Manthan* is not simply a historical recital of India's victories and ordeals but is also a serious exploration of military leadership and the psyche behind orchestrating planned battles under dire circumstances. The author does not eulogise or unequally criticise failed army strategies in his work as coming from a military background, he understands the level of fairness and objectivity the military implements.

In the final analysis, the chapters carry futuristic recommendations and challenges that a non-military reader can easily understand. Hence, it is advised for people to pick up *Manthan* as the Indian historiography, more often than not, is deprived of quality literature uncovering details of operation, tactics, strategy and thorough understanding of Indian conflicts.

Ms Samriddhi Roy

Law of Armed Conflict: Application and Practice. By Major General (Prof) Nilendra Kumar, (Gurgaon: Thomson Reuters, Legal, 2021), Pages: 190, Price: Rs 495/-, ISBN: 9789390673735 (Hardbound).

The Law of Armed Conflict, also known as International Humanitarian Law (IHL), is a set of rules which seek, for humanitarian reasons, to limit the effects of armed conflict. The book can be divided into two parts; the first part containing six articles on various aspects of IHL; the second containing narratives confronted in armed conflicts between two neighbouring states. First part, incorporating six chapters, in the book has been authored by former military commanders and experts in IHL. This includes 'Introductory' remarks by Prof Umesh Kadam, 'Training of Troops under the Law of Armed Conflict' by Lieutenant General SPS Dhillon (Retd) & Major General Nilendra Kumar, 'Proficiency of the Indian Armed Forces in International Law related to Warfare' by Lieutenant General AK Ahuja & Major General Nilendra Kumar, and 'Dissemination of IHL within Armed Forces during the Pandemic' by the author himself. The rich personal experiences of authors in the IHL in the field and 'Foreword' by General VP Malik, the former Chief of the Army Staff of India, bring out the lessons learned and best practices expected to be followed in an armed conflict.

No true understanding of IHL can be attained without a solid appreciation of various complicated situations faced on the ground by a military commander. The second part of the book contributes to that appreciation with a nuanced sophistication. The author of the book, a well experienced former judge advocate general of the Indian Army, has presented various situations/narratives which could be faced by a military commander in an armed conflict. These are followed by expected responses from a commander under the IHL.

For example, situation 296 (on page 167) raises a relevant issue as to whether a military commander who discovers huge quantity of medical stores and equipment in an occupied area could sell the stores and use the proceeds for the welfare of his troops. To a person untrained in IHL, it may appear legitimate; the response explains that such an act is absolutely illegal under Article 33 of the first Geneva Convention of 1949. More than 300

such 'situations', contained in the book, exhaustively cover various Articles of the four Geneva Conventions of 1949, their Additional Protocols of 1977, and the Rules of Customary International Humanitarian Law. In addition, a few provisions of the International Criminal Court and various weapon ban/regulation treaties have also been explicitly covered.

This book, first of its kind in South Asia, will be a valuable addition in the field of IHL. It will be immensely useful to students, military and paramilitary officials, military medical practitioners, academicians, and the members of civil society who have any stakes in the field of international humanitarian law.

Wg Cdr UC Jha (Retd)

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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.

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