

Book Review

Preparing for the 21st Century Battles

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Battle Ready for the 21st Century

Edited by Lieutenant General A K Singh, PVSM, AVSM, SM, VSM

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This is a comprehensive collection of excellent set of fresh studies that covers all aspects of combat as applicable to the Indian environment in the 21st century. To quote from the foreword by Admiral Arun Prakash, former Chief of Naval Staff: "By compiling and editing the valuable collection of essays the editors have rendered yeoman service to the cause of India's national security."

The book has 15 Chapters which deal with various aspects of modern warfare and the capabilities that the Armed Forces must develop to successfully deal with them in this century. The opening Chapter deals with the Notion of Victory. It covers all aspects of victory starting from the tactical level onwards to the operational level and finally at the strategic level. To put the discussion in contemporary perspective it competently scans a series of global conflicts. Operations Desert Storm (1991), Iraqi Freedom (2003), Enduring Freedom (Afghanistan), Syrian Conflict and Israel's mowing the Lawn Strategic Doctrine are discussed. It would have been interesting if these would have been compared with the surrender of Japan after the use of nuclear weapons on Hiroshima and Nagasaki. It thereafter analyses the Indian context right up to the surgical strikes. Finally, the aspect of 'calibrating victory' in the Indian context is discussed. It asserts that with China the potential exists from a flare up to a wider confrontation, whereas with Pakistan it would most likely be a punitive response that may escalate into an all-out war. In the case of China there is a need to build a credible deterrence and, if required, a quid pro quo in selected areas. As argued by the author, there is a need to rethink victory in the current century.

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The next chapter emphasises the need for a dynamic military strategy that caters to a wide spectrum of future conflicts ranging from conventional to sub-conventional and multi-space domains. The military strategy for conventional conflict ideally should be 'dissuade, deter, deny and defeat'. In the case of hybrid and sub-conventional conflicts the strategy should be 'disrupt, degrade and defeat'. This calls for the Indian Army to be capable of fighting a 'new generation warfare' with kinetic and non-kinetic capabilities. Undoubtedly, there is a need for a second-strike capability in nuclear deterrence. A point to ponder is how India's nuclear strategy is impacted by both Pakistan and China having second strike capability.

Grey Zone Conflict has been comprehensively tackled in Chapter 4. There are four main principles of fighting this ambiguous conflict. First, identify competitors and their strategies, second respond with full range of tools, third adopt a whole of Government approach, and fourth, strengthen vulnerable and weak links. The tackling of such conflicts primarily involves identification and synergised use of civil and military security agencies to attain the overall mission. The other aspect is to build capabilities for multi-domain warfare. The discussion on the impact of technology focuses on Data, Quantum, Robotics and Unmanned Aerial Systems (UAS) swarms. Technology would lead us gradually to less of open confrontation thereby transforming the character of War. Chapter 6 deals with Cross Domain Synergy in future combat. The aspect of a force being capable of operating effectively in land, sea, air, cyber and space is a must for conflicts of the future. Future wars would be in multiple domains and jointness would play an important role. The Chief of Defence Staff (CDS) would play an important role with the Theatre Commands. Cross domain synergy is imperative for the Indian Armed Forces. The subsequent Chapter deals with Crisis Management and Escalation Control. This is an extremely well researched paper and gives details of Herman Kahn's seminal work on Escalation. Kahn's escalation ladder has 16 steps starting from crisis and thereafter the entire matrix. The chapter thereafter deals with two events, the Kargil War and Balakot air attack. The nuance of these events where escalation was controlled against a nuclear backdrop is brought out lucidly.

New Generation Warfare

Reimagining Mountain Warfare is dealt with in detail in Chapter 8. It discusses the necessity to fight an asymmetric war in the mountains. This requires accurate Intelligence, Surveillance and Reconnaissance that are crucial to fight operations intelligently, including placing of troops in areas where the adversary is likely to launch offensive operations. Use of kinetic and non-kinetic weaponry would be extremely important in such operations. The defences must be hardened to make them indestructible against Precision Guided

Munitions (PGMs). Logistics will be primarily based on the aerial route and include drones and other means. The leadership would need a directive style with minimum orders and ability to carry out fully delegated operations without communications.

A significant aspect of the book is the chapter devoted to new types of urban warfare, which are increasingly an important feature of modern warfare. It is a nightmare for a soldier to fight in a crowded urban terrain with civilian population and critical financial and technological and communications hubs all around. The author comprehensively discusses the subtleties of these operations based on his study of the combat in Grozny, Mogadishu, Baghdad, Fallujah, Mosul and Aleppo. The major aspects are the following:

- Intelligence Preparation of the Battle and identification of the Centre of Gravity.
- Employment of intelligence resources and weapon systems.
- Technology enabled operations to include information, cyber, AI and Air Dominance.
- Operations planned centrally and executed in a directive style on a mission mode.

Mechanised forces must isolate the urban areas and decimate the adversary by PGMs and drones. Thereafter based on the terrain undertake assault by armour or ground troops. The chapter also covers aspects undertaken by the Indian Army in its counter-terrorism operations. It is rightly stated that Urban Warfare in an Information Age requires Transformation-- a change in mind set at the political, strategic and tactical levels. Operations in this mode are manpower intensive and difficult to undertake in densely populated cities.

The book also discusses Artificial intelligence and Cyber operations. Artificial Intelligence would enhance the speed of operations in all domains of warfare. Cyber operations can disrupt combat synergy and together with Artificial Intelligence would change the fundamental nature of how wars are fought at the tactical level.

Multiple Domains

On the maritime domain the analysis reveals that over the next decade challenges at sea are bound to escalate. An emergent collusion between a more capable Pakistan Navy and a Chinese Navy with more resident capacities in the Indian Ocean Region will raise the bargaining stakes for China and likely to embolden Pakistan to pursue asymmetric warfare with greater vigour. There is clearly a need to build a strong Indian Navy to deal with rising maritime security challenges. In his analysis on the relevance of aerospace power, the author emphatically states that India needs an optimum force structure of 30-32 squadrons

against the current holding of 28 squadrons and an Aerospace Command. Regarding the two-front challenge posed by China and Pakistan, the author argues that it is a serious issue for the Armed Forces. However, contingency plans need to exist for such a contingency. In addition, the Central Armed Police must be modernised to deal with counter-terrorism operations so that the military can focus on thwarting complex external security threats.

The remaining part of the book analyses aspects pertaining to Intelligence, Artificial Intelligence (AI) & Cyber, Information & Psychological Operations and Disruptive Strategies which deals with aspects of Smart Power. The Chapter on Disruptive Strategies is unique. It emphasises the need to disperse own forces and disrupting the adversary's strategy through pre-emptive offensives within his territory. It asserts that military power is the ultimate yard stick for national power. To outmatch the adversary by adopting a pre-emptory offensive defence posture will be a major factor in disrupting adversary's plans. The Chapter lucidly describes how in the case of a conflict with China, there is a need to isolate Tibet and place the Mountain Strike Corps in a manner that resources are available *ab initio*, while retaining the capability for a quid pro quo. The Chapter rightly blurs the distinction between State and non-State Actors and underlines the importance of technology.

Overall, the book is extremely well-researched and a significant contribution to the strategic studies field in the country. It is a must-read for armed forces officers, defence policy makers and diplomats.