

Seminar Report

MILITARY STRATEGY FOR THE FUTURE—BROAD CLASSIFICATIONS AND DIRECTORIAL PRINCIPLES

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DETAILED REPORT

General: The changing characters of war as well as the well-defined and undefined threats are the challenges which the Indian armed forces will face in the future. These are inclusive of rising uncertainties, subverting factors, diverse and complex adversarial forces whose nature is hard to predict. Technology and its rapid development, which brought about the revolution in military affairs (RMA), is now creating an arms race of the non-nuclear field between states and is also available to the sponsored substate actors and even the non-state actors. There is a need to crystal gaze for visualising the future security environment to determine our responses. The two and a half front war ideas in discussion, at present, are a reality and need to be the basis of articulating our strategies.

The Future Security Environment and Military Strategy of the Indian Army for the Future

The speaker for the subject theme was Lieutenant General Rakesh Sharma, Param Vishisht Seva Medal (PVSM), Uttam Yudh Seva Medal (UYSM), Ati Vishisht Seva Medal (AVSM), Doctor of Philosophy (PhD) (Retired), former Adjutant General. The highlights of ideas are given below.

The larger national security debate encapsulates aspects like environmental and human protection but the scope of the theme stipulates the aspects directly relevant to land warfare. The first step is to understand the various elements that constitute a challenge to the security environment.

- Complex environment. India has both allies and adversaries, in addition to this, there are some neutral nations too. The complicity of big corporations in political situations cannot be ignored.
- Diversity of threats. Limiting to the challenges in the subcontinent, India has multiple players—state actors, state-sponsored non-state

actors, violent extremist organisations, multinational corporation (MNCs), and so forth. For example, the war in Congo is not between warring tribes but in-between companies like De Beers and Chevron.

- Lethality. It took 300 years for the musket to transform into a machine gun but that is not the case today. Change is the only constant in today's technological landscape. Some of the threats are nonnuclear electromagnetic pulses (EMPs) with China acknowledging their capacity in open sources. It has the capability of rendering all electronic devices redundant for a limited period of time. More importantly, it can be disseminated by drones. Swarm technology related to drones has the potential to change the way traditional wars are fought. This technology exists in our own neighbourhood—China tested 67 drones altogether in June 2017.
- Intense terrain friction. Unlike yester years, regions on both sides of the Indo-Pak border are now heavily populated with a vast built up. In the past it was possible to abandon these areas, but today, any war will have to account for these areas.
- Information and media wars. The way knowledge is embedded by journalists is much faster today. Any war today will have to be fought in the public domain.

Therefore, the battle space today is diffused. There are military, non-military, conventional, unconventional, asymmetric and hybrid warfare, all to be encountered during a war. The duration can be short, medium or open-ended and the level of conflict can range from no contact to nuclear. Therefore, strategy for the future includes all these aspects.

- It is imperative to have many dynamic military strategies under a grand military strategy.
- Informational wars must be explicitly included.
- There also needs to be a shift from our current defensive stance to a more offensive position.
- Authorities have been myopic in considering nuclear weapons as

just political weapons, especially when Pakistan's policy revolves around tactical nuclear weapons.

- Public order/humanitarian assistance and disaster relief (HADR) is another aspect that must be included.

Ultimately, defence is a unified responsibility and must be treated as such instead of silos.

Maritime Strategy for the Future

The speaker for the subject theme was Vice Admiral Anup Singh, PVSM, AVSM, Nao Sena medal (NM) (Retired). The highlights of the presentation are given in succeeding paragraphs.

'Revenge of geography' is often spoken of in the Indian context but we miss the geographical advantage which India enjoys. The second largest peninsula in the world, it oversees the entire Indian Ocean region. It has 200 ports, of which 60 are operational and are presently adequate. This position, therefore, leaves us with no option but to monitor the sea lanes of commerce. It is this part of the reason why the United States wants India to become the spearhead of the region with further aim to counter the spread of China in the Indian Ocean. When one analyses the three major oceans of trade, the Indian Ocean is the smallest, however, it connects the Pacific and the Atlantic Ocean. Hence half of the world's container traffic passes through it. This makes India's position significant. There are also various choke points across the Indian Ocean—Bab-el-Mandeb-Mozambique, Suez Canal, Strait of Hormuz (seventeen and a half million barrels of oil pass through it every day) and Malacca Straits (China's Achilles heel).

On a comparison of the strategic depth of India and Pakistan, India is at a clear advantage. Our resources do get stretched when we visit the east coast of Africa but India has successfully accomplished this multiple times. On the east coast, the Andaman and Nicobar Islands, which are 800 NM away from the mainland, are India's biggest asset. It is time India starts treating it as a strategic asset. The Andaman Command was raised 16 years back but it is still outfitted with only the legacy equipment. A submarine base can definitely act as a check

on the Chinese actions. There is an urgent need to mark and counter-mark the People's Liberation Army (PLA) Navy. Opportunities like the one presented by Vietnam must be seized. India should also try to build dependencies. However, Pakistan lacks such depth. It only has one port at Karachi and a blockade by India can choke Pakistan.

On the other hand, the PLA Navy has transformed itself in recent years. China is increasing its area of influence by building bases and ports in distant areas, for example, Gwadar and Djibouti, though it does not have a strong logistics train yet. India has a small exclusive economic zone (EEZ) when compared to nations with scattered islands like Mauritius. India can form an important alliance with the smaller island nations. These do not have the resources to explore and exploit their extensive EEZs and this is where India can step in, for example, India is already assisting in a joint exploration plan between Mauritius and Seychelles. There is also an increased resistance in African nations towards Chinese doles, creating another opening for India.

On an analysis of the strategic front, there are various possible allies in the larger Indian Ocean region. Japan, with a common adversary and strong complementarities is an obvious choice. Vietnam has offered to host the Indian Navy in Kamaram Bay. Indian Navy has a strong history of cooperation and must build on that to take advantage of Indonesia's proximity to important choke points on the Sea lines of communication (SLOCs). Even apart from Chabahar, India has strong bonds with Iran. We have been neglecting Myanmar, leaving an opening for China. We must expedite existing agreements like the trilateral agreement.

The Future Air Security Environment and Air Strategy for Future

The speaker for the subject theme was Air Marshal Anil Chopra, PVSM, AVSM, Vayu Sena Medal (VM), VSM (Retd). The highlights of the talk are presented in following text.

In the last few decades, armies and navies the world over have been procuring more aircrafts than ever before. This need is purely because of their speed of response and the accuracy. The Indian Air Force (IAF)

is the fourth largest air force and is growing both in state of the art technology and quantity.

Our adversary, the People's Liberation Army Air Force (PLAAF) is modernising at an unprecedented pace which needs to be configured as to how India plans to enhance its air power. A few facts regarding shaping up of PLAAF, which need to be considered are as under:

- 700 x 4th generation plus fighter aircrafts existing,
- reorganising with the target to stabilise at around 80 squadrons,
- emerging as a world-class aviation industry, generating latest generation stealth technology, attack helicopters, and so forth, all of which are operational/on schedule as of today,
- consciously integrating Air and Space, making it part of one command,
- large surface-to-surface missile systems,
- production of unmanned aerial vehicles (UAVs) of all classes and categories,
- world leaders in cyber warfare, with a very aggressive position
- advanced logistical infrastructure in Tibet.

Recently the IAF Chief of Air Staff (CAS) stated that by 2032, IAF should have the required number of squadrons. India must also get its act together on its UAV programme and the only option is indigenous production. This can also be used extensively in providing the army with the required critical close air support. The IAF must also support the army in moving reinforcements/ intervalley movement and the Indian Navy with support in its maritime missions. The network-centric capabilities of the IAF need to be further improved. The IAF must make use of airborne early warning and control (AWACs) and also the NETRA drone (made by the Defence Research and Development Organisation (DRDO)) for reconnaissance and surveillance missions. The IAF will also have to seek the requisite permissions from the governments of Bhutan, Nepal and Myanmar to occasionally fly into

their airspace, if required. The prospect of a full-scale two-front war is unlikely, however, should the prospect become a reality, India will have to be alert due to the good synchronicity of the PLAAF and PAF in terms of equipment and strategy. Pakistan is also very likely to offer its airfields in the Pakistan-occupied Kashmir to China in this scenario. The IAF should also invest in its border infrastructure (especially in the north-east), make an air base (such as Pearl Harbour) in the Andaman and Nicobar Islands, strengthen its maritime ability in conjunction with the Indian Navy and form strategic partnerships with China's adversaries.

Future Space and Cyber Warfare Strategy

The speaker for the subject theme was Lieutenant General Davinder Kumar, PVSM , VSM** (Retiredd), former Signal Officer in Chief (SO-in-C). The highlights of the presentation are given in the succeeding paragraphs.

Today, the role of space and space assets are the key components of the global security architecture, which includes both civilian and military usage of space. A dispassionate appraisal of India's space capability in terms of defence, leads to a number of questions which need closer scrutiny. Not only the gaps in the capabilities, but also the hurdles in executive and space organisations make it difficult to achieve a competitive level of capability and the subsequent formation of a space strategy viable for our defence. The core of the problem is the inability of the security establishments to come to grips with our weaknesses,

India needs immediate techno-visual upgradation of its space program to meet its national security requirements. Military-space programs will consist of a national space vision and policy. A space doctrine will exist for the implementation of these programs. The nation, therefore, prepares the following capabilities:-

- space control,
- space power,

- space situational awareness,
- counter-space capabilities.

China is recognised to have full-spectrum space capabilities, second only to the United States. The counter-space exercises conducted by China in 2013 generated silent panic in the United States and forced them to change their own space strategy. China is also the only country with a direct ground-to-geosynchronous orbit attack capability, as demonstrated in 2013. China has been known to use satellites to knock other satellites out of orbit. They have also developed a ‘robotic arm’ to clear the earth’s orbit of space debris. China is the only country in the world which conducts four different launching operations at once. While India has done well in space exploration, particularly in areas of remote sensing, weather forecasting, navigation, and so forth, our military capabilities are lacking. India must focus on overcoming its technological gaps to ensure that they can stand against China in the domain of space capabilities.

India must ally itself with countries such as the United States, France, Russia, and Israel to ensure that China does not remain a dominant threat to our space capabilities. India must adopt a dual approach and focus on building full-spectrum space capabilities in the next three to five years, while at the same time leading dialogue on the issues of space-based weapons, space governance, and so forth, to ensure our national interests are not compromised. The technology gap between India and China is large, which can be bridged through the application of space situational awareness while a robust application of counter-space capabilities will be the pillar of our space capabilities.

India’s cyber security strategy 2013 articulated a clear vision, which was the creation of a secure and resilient cyber space for the civilian, commercial and government spheres. Cyber poses a threat to both the security and privacy of every individual. Cyber warfare can also be used as an instrument in critical warfare. Cyber power is also used as a tool in civilian warfare and economic warfare.

Future Hybrid and Special Warfare Strategy

The speaker for the subject theme was Lieutenant General P C Katoch, PVSM, UYSM, AVSM, SC (Retired). The highlights of the presentation are given in the succeeding paragraphs.

Hybrid warfare is not waged against a nation's military but against a nation itself. Hybrid war is undeclared, borderless, continues in perpetuity and is not governed by international rules and laws. All forms of warfare that is, from conventional warfare to space warfare, are part of hybrid warfare and special forces are an important part of this. Today, the country needs a comprehensive national hybrid warfare strategy but before this is, there is a need to put the structures of this strategy in place to plan a move forward.

Recently, a study was carried out by the Development, Concepts and Doctrine Centre (DCDC), United Kingdom to understand and ascertain the future security strategy trends. Certain highlights of the study are as under:

- In the future, soft power, backed by the hard power will be employed by the nations to achieve their national aim,
- People provide asymmetric edge to conflict, though technology forms the most important ingredient,
- Chemical, biological, radiological and nuclear defense (CBRN) and the non-state armed group (NSAG) threats to increase in the coming times,
- Change in balance of power—asymmetrical war by non-state actors will be on the rise.

Hybrid warfare is not a new reality—China and Pakistan are engaging in it since long (against India, involved in Afghanistan and Myanmar). It has been proven that conventional forces and straight-jacketed diplomacy may not be a match for the hybrid war. Presently, India still focuses on the two and has not yet fully invested into the domain of hybrid war with full impetus. Lessons can also be drawn from Russia's interventions in Ukraine (Crimea); China signalling

the use of clandestine methods and the US & UK ways of employing various means of hybrid warfare globally. The United States has already evolved a seven-point *standard operating procedure* (SOP) for hybrid war. There is also a need to study deep coalitions which are presently shaping up and some of which are in the offing. India should now be directly engaged with Afghanistan with enhanced defence ties. India's national security strategy must ensure a safe and secure environment for the population.

Therefore, India's future national security strategy in this domain should include:-

- Focus on economic development,
- Develop strategic alignment with the United States (but national interest to be in the forefront),
- Deal with Pakistan as it deals with India to weaken its support to hybrid war,
- Establish multiple deep coalitions with a specific role for the special forces.

Hence, there is an immediate need to create a national operations division under the highest political authority to shape the environment in India's favour.

Nuclear Strategy

The speaker for the subject theme was Lieutenant General Amit Sharma, PVSM, AVSM, VSM (Retiredd). The highlights of the presentation are given in the succeeding paragraphs.

India's nuclear doctrine is a continuum since the 1970s—credible minimum deterrence. By 1956, India's first nuke reactor was operational and by 1998, it was fully weaponised. The sole reason for this was national security in the backdrop of unstable peace and security situation in the subcontinent. Finally in 2003, the nuclear strategy was promulgated (and remains as the same document till date). The three main pillars of nuclear doctrine—no first use (NFU) (but not

everyone is behind this anymore—may need a relook in the future), massive retaliation and credible minimum deterrence (this remains the core principle) remain unchanged. NFU must be seen with a threat of massive retaliation. This principal of NFU relies on two important features that is, firstly, the military capability to retaliate with full force, if this eventuality takes place and a fully-functional political decision mechanism, Nuclear Command Authority. With a tactical nuclear weapon with Pakistan a reality today, it is important to understand that despite its name ‘tactical’, it still remains a strategic asset with Pakistan and its use will definitely not be at the level of formation commanders for obvious reasons. Therefore, military strategy has to be evolving with the foreseeable threats in future and maintain a pace not only to match them with time but also to defeat them to achieve the national aim.

CONCEPT NOTE

“The higher level of grand strategy [is] that of conducting war with a far-sighted regard to the state of the peace that will follow”

— Sir Basil H. Liddell-Hart

Introduction

The changing character of war and, well defined and undefined threats are a challenge which the IAF face in the future. These are inclusive of rising uncertainties, subverting factors, diverse and complex adversarial forces whose nature is hard to predict. Technology and its rapid development which brought about RMA is now creating an arms race of the non-nuclear field between states and is also available to sponsored substate actors and even non-state actors. Hegemonism, new spheres of influence, power politics, resources control, revisionist states, substate actors, global terrorism, spread of weapons of mass destruction and cyber warfare are sources that have the potential to escalate into a conflict. Military history teaches that the neglect of historical determinism makes it vulnerable to military surprise, defeat and ignominy. The assumption, therefore, is a reminder to the strategists to visualise security threats, the character of conflict and to always remain prepared for such an eventuality, hence, there is an undeniable need for our joint military strategy to evolve with time to be relevant in the future.

Objective

To enunciate, discuss, analyse and deliberate the strategy that the IAF must adopt in the future.

The seminar seeks opinion and recommendations from experts on vital spheres of military strategy in a future context for all parts of the conflict spectrum and in all domains of warfare.

Basis and Rationale of Military Strategy

Military strategy is derived from the National Security Strategy (NSS), in India. In the absence of NSS, the military strategy is based on the general understanding of the security requirements of the nation. The concepts of victory or war termination also remain undefined in the realm of conventional war as well as sub-conventional war, and the politico-military aims remain imprecise if not ambiguous in the internal security calculus. There is a need to crystal gaze for visualising the future security environment to determine our responses. The two and a half front-war ideas in discussion at present are a reality and need to be the basis of articulating our strategies.

The need is for future warfare strategies to stay relevant and effective in any kind of battlefield scenario. Military strategy must adapt rapidly and frequently according to the objectives. In anticipation, future strategy should be evaluated since it takes much longer to alter the military forces so that they maybe responsive to new objectives and concepts. Accordingly, options for controlled escalation/response also need to be evaluated and capability generation undertaken.

Besides conventional war, RMA provides the capability to conduct non-contact war and prompt precision strikes, the domains of cyber, space and asymmetric warfare create their own dynamics and challenges. Precision weapons will change the very concept of engagement of targets in a battlefield, which will lead to a change of tactics at the operational and strategic levels. Development in time compression and speed will soon have battles that would be fought employing platforms such as hypersonic vehicles and missiles without having to actually go into the tactical battle space. The time of highly-skilled and multifaceted special forces to gain exponential dividends is ripe and this needs to be exploited during peace and war.

Indian Army Strategy for the Future

The Indian Army has to contend with two adversaries in three distinct terrains which divide the capability on functional basis, besides, the strategies of the two adversaries differ vastly adding to the complexity of devising means to the ends. RMA has added to the means dimension,

war is unlikely to remain confined to the front line, in all probability it will address vital areas deep inside the heartland. Precision tools will add to the destructiveness of the capabilities and disrupt C4ISR to threaten cohesive actions. In the internal security calculus, the half front war must be addressed to arrive at a strategy to bring the political dialogue to fruition. Planning for certitude, hence, is a compulsive need for a comprehensive, all-encompassing and futuristic army strategy. India's military strategies and doctrines must be flexible and proactive and capable of application in any unforeseen circumstances.

Maritime Strategy for Future Encompassing Power Projection

Indian Ocean, the third largest ocean with vital trade routes, connects the world's advanced economies of the Pacific and Atlantic rim with the energy-producing region of West Asia and Africa. Indian Ocean region (IOR) has enjoyed a very high strategic significance in the calculus of the powers of the day since the early days of cold war. With the rising profile of China, the global strategic orientation, economic centre of gravity and balance of power is shifting towards Asia-Pacific region. Hence, there is a need for the Indian Navy to evolve a future maritime strategy to address the need to secure IOR and provide India space to remain proactive and relevant in the overall security domain in the region.

Air Strategy for Future Encompassing Power Projection

India faces a complex situation when two adversaries in a collusive mode with an expansive and modern force pose threats to India. Strategic theorists envisaged a future that should control airspace, directly attack the enemy's centres of gravity (COG) and the ability to fight. Past experience where protagonists were equally matched suggests that victory in conflict required integration of the air, ground and sea efforts, hence there is always a need for the air strategy that translates the important axiom of access into an operational reality relevant within the future context. With the advancement in both aircraft capabilities and armament, IAF has to seek and evolve strategies to assist land battles for an early conflict resolution on favourable terms thereby projecting itself as a war-winning entity for the nation.

Future Generations Space and Cyber Warfare Strategy

Space and Cyber warfare have added new dimensions by making war real time and distantly controlled while eliminating violence/collateral damage to achieve the desired results. All the three services that is, Indian Army, IAF and Indian Navy, need to evolve a joint space and cyber strategy to be relevant in the future wars which, therefore, urges a de novo approach to achieve national goals, when required.

- Space and cyber warfare have added new dimensions by making war real time and distantly controlled while eliminating collateral damage, to achieve desired results. Space-based assets have become pivotal to strategic security and play an essential role in the conduct of future military operations. Cyber warfare will invariably form an essential component of every scheme of future operations, which are likely to be intensely, net-centric.
- Reliance on space and cyber to enhance capabilities for real-time solutions have associated problem areas. It has added a new dimension to the future conflict scenario which has the potential to bring a nation to a situation of chaos before the conflict starts in the physical domain.
- Hence, both space and cyber warfare assume an important place in the future conflict scenario which needs to be developed, integrated and acted upon in any given eventuality.

Future Generations Hybrid and Special Forces Warfare Strategy

The term ‘hybrid’ has dominated much of the discussion about modern and future warfare, to the point where it has been adopted by senior military leaders and promoted as a basis for modern military strategies. In our Indian context, which has potent hybrid threats from more than one direction, it is essential that Indian military strategy must encapsulate the hybrid warfare capability to ward off any such threat.

Over the past decade, special forces have honed their cross border, counter-terrorism ability and notched significant operational successes. Adopting a new vision for special operations forces that shifts from

a tactical focus to a focus on a strategic role will require a shift in priorities and a concomitant rebalancing.

Emerging Contours of Nuclear Strategy

Nuclear deliverance is essential for the national security to cater for as a deterrent. Due to the destructive power of nuclear weapons and almost certain universal condemnation, the probability of their use remains extremely low but an unquestionable possibility due to the political volatility. Therefore, nuclear strategy of the country has to be seen in the context of a developing scenario in the neighbourhood and beyond.

Participants: The participants will be from the three services, strategic community, veterans, academia and media.

Venue: Manekshaw Centre, Delhi Cantonment, New Delhi.

Seminar Coordinator: The coordinators for the seminar are Colonel H S Burn, Deputy Director, Centre for Land Warfare Studies (CLAWS) and Colonel Anurag Bhardwaj, Senior Fellow, CLAWS.