

Seminar Report

INFANTRY : ROLE AND EMPLOYMENT IN FUTURE OPERATIONS

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Seminar Co-ordinator: Col Ratanjit Singh
Rapporteurs : Pragya Surana and Harsh Upadhayay



Centre for Land Warfare Studies

RPSO Complex, Parade Road, Delhi Cantt, New Delhi 110010
Phone: +91.11.25691308 Fax: +91.11.25692347
email: landwarfare@gmail.com • website: www.claws.in
CLAWS Army No. 33098

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CONTENTS

Executive Summary	4
Highlights of the Keynote Address	6
Seminar Highlights and Recommendations	8
Concept Note	13
Seminar Programme	16

EXECUTIVE SUMMARY

Future operations will be intense in combat and Infantry cannot operate in isolation within them. Situational awareness and short decision cycles in an environment of transparent battlefield information overload and electronic warfare will be necessary to achieve victory.

It is important that organisational cohesion and structure of the subunit identity be maintained within the Infantry, and an Infantry soldier must be empowered for the future by being provided better weapon systems than his counterparts. The Infantry needs to be more lethal with better survivability, improved surveillance and communication capabilities, resulting in a lean and mean force. Consolidation, upgradation and modernisation of the Infantry must be undertaken on priority to cater for the future battlefields.

The Indian Army and particularly the Infantry will continue to remain embroiled in a proxy war as well as in the management of the Internal Security (IS) situation. Sub-conventional operations require common training, equipment and employment strategies. While carrying out these operations, the Infantry needs to be adaptable and further overcoming the rigidity of formations is very important. Providing tailor-made equipment for diverse engagements/operations and proper local language training is also important.

The future Special Forces (SF) role orientation also needs revision and it must be enhanced, furthering Indian Army's capability with regard to psychological dislocation of the adversary, surgical operations and facilitation of theatre-level degradation.

To further sharpen the edge of the Infantry, grouping the theatres, cross joining of Infantry and armoured/mechanised units ab initio, training in amphibious and airborne operations and providing Army Aviation with more helicopters to support vertical insertion operations need fructification.

Technologically, the Infantry needs to be made sturdier for the future, bringing in the required enhanced capability it needs. The Future Infantry Soldier As a System (F-INSAS) concept could be amended as the Future Infantry Section as a System allowing for easier battle management within the section. Additionally, better weapons, ammunition, communication, guidance, surveillance, training and medical equipment need to be provided to fulfil the futuristic requirement.

HIGHLIGHTS OF THE KEYNOTE ADDRESS

General Bipin Rawat, UYSM, AVSM, YSM, SM, VSM, ADC, The Chief of the Army Staff in his inaugural address highlighted the following issues:

Future operations will be intense in combat. Infantry cannot operate in isolation. They have to learn to fight future wars along with other arms and services. Our Army and particularly the Infantry will continue to remain embroiled in a proxy war and in the management of the IS situation.

Infantry will operate in a varied environment where the success of the operation to a large extent will depend on the junior leadership. Infantry must learn to operate in small teams. The future battlefield environment will be more transparent and the Infantry will have to operate in stealth. There is no rushing into battle and all are expected to manoeuvre. Basic tactics are the 'bread and butter' of the Infantry.

Infantry has given shape to various kinds of organisations, i.e., SF, Airborne Forces, Scouts and the Mechanised Infantry. Presently, the SF are being utilised for minor tactical operations which are well within the capability of Infantry. The *Ghataks* of the Infantry were created to become as agile and versatile as the SF and, thus, have the ability for these operations. Scouts were meant to give dividends out of proportion and not for a ground-holding role. A relook is required on the Scouts' employment and they have to operate on the 'sons of the soil' principle.

The organisational cohesion and structure of the subunit identity of the Infantry should be maintained. If there are manpower constraints, organise accordingly but do not operate with under-strength subunits incapable of carrying out the given task.

An Infantry soldier must be empowered. He must be trained for the nature of warfare by giving him high-quality training. However, with empowerment, comes the ability to take initiative. For empowerment, it is also important to provide necessary wherewithal to the soldier.

The soldier and subunit commander must be capable of reading the battle but at the same time must not rely on complete information being available to him. They must have the ability to operate in a partially opaque environment.

The Infantry soldier must be provided with a better weapon system than his counterparts; Infantry must have a superior assault rifle than others. A Request for Proposal (RFP) has been signed yesterday (March 23, 2018) for assault rifle, light machine gun, sub-machine gun and man-portable anti-tank-guided missiles (ATGM), specifically for the Infantry.

SEMINAR HIGHLIGHTS AND RECOMMENDATIONS

General

An Infantry soldier remains the most potent weapon due to his unique ability to function in diverse terrains; from high altitude, snow, jungles to desert and against any type of adversary, while other arms remain restricted by terrain, weather and the type of adversary.

The future battles will be short, intense, fluid and swift in which advanced technology will be exploited and a typical linear battlefield will be replaced by a combat situation with a 360° threat.

Situational awareness and short decision cycles in an environment of transparent battlefield information overload and electronic warfare will be necessary to achieve victory. To effectively function in such an environment, availability of more precision weapons with longer ranges, net-centric capability, smarter logistics chains and matching mobility with mechanised forces will be a pre-requisite.

Future battlefield will also be the ultimate test for junior leadership, and hence, empowerment and mentorship of the upcoming leadership is required.

Future Profile, Role and Employment of Infantry

The Infantry soldier must be prepared to play a role across the entire spectrum of warfare. The world is moving away from long-drawn conventional wars of the past to short, intense and limited wars under a nuclear overhang. Further, in the Indian context, the likelihood of a conflict breaking out in the mountains is far higher and the Infantry will be the primary force in such a scenario. Thus, Infantry's role is likely to remain central in the future but both troops and commanders need to be equipped adequately to improve functionality.

China has restructured its Infantry forces and reorganised the armed forces into combined armed brigades. Mass attacks and wave tactics are unlikely now and they do not follow the concept of holding positions, unlike the Indian approach. Pakistan, on the other hand, still deploys its Infantry in a manner similar to India.

Even though mechanised warfare is possible along the Indian Western borders, increasing built-up areas, terrain friction and shrinking deserts are reducing the space for manoeuvre. Even where mechanised warfare is suitable, the Infantry will continue playing an important supporting role.

Thus, the Indian Infantry needs to be more lethal with better survivability, improved surveillance and communication capabilities, resulting in a lean and mean force. Consolidation, upgradation and modernisation of the Infantry must be undertaken on priority to cater for the future battlefields. Consequently, the concept of holding ground has to change. Ground can be held with situational awareness, mobility and firepower. Infantry should be channelised for dynamic operations.

To achieve better results and sharpen the edge of the Infantry, the following may be considered for the future:

- Grouping the theatres for Infantry Battalions, i.e., restricting each Infantry Battalion to two theatres for field and peace tenure with the operational tasking being unchanged while rotating officers and a certain amount of troops to other theatres.
- Cross joining of Infantry and armoured/mechanised units ab initio to achieve better cohesion, that is, of having Armoured Brigades or Infantry Brigades in a 2,1,1 profile.
- Training the Infantry in amphibious and airborne operations to provide India capability to be a regional net security provider.
- Army Aviation to be provided with more helicopters to allow for more vertical insertion options for the Infantry.

Infantry in Sub-conventional operations

Sub-conventional operations require common training, equipment and employment strategies. The Infantry also needs adaptability while carrying out these operations. The important focus issues are:

- Overcoming the rigidity of formations as a section may not be available but only a squad might be available, and there is a need to be able to create different formations according to the existing requirement.
- Shorter, specific engagements require different equipment which need to be tailored for each such engagement. A soldier should be able to choose weapon or equipment according to his requirement.
- Training needs to be overhauled with a specific emphasis on language training.

The army is also operating under a constant media glare which highlights the importance of a coordinated approach across the rank and file of the army. Ideally, a person carrying out the operation should also not address the media.

Future Role and Employment of SF

The future SF role orientation needs revision and it must be enhanced, furthering our capability with regard to psychological dislocation of the adversary, surgical operations and facilitation of theatre-level degradation. Some recommendations are:

- At national level, political control is required by establishing a permanent secretariat. Additionally, a Tier-1 structure needs to be created which gets input benefits from the National Security Council.
- Creation of a centre of excellence which can engage in intellectual policymaking and can provide the intellectual inputs for the SF.
- Fast-track procurement process be put in place for the SF.
- A 'Headquarter SF' and staff at theatre level be provided to facilitate operational ease.
- Communication infrastructure with regard to language, culture and behavioural skill training to be provided.
- Remuneration to SF personnel be based on retaining of skills rather than just joining the unit.

Further restructuring of SF can also take place by reducing four current subunits in SF units to three, thus releasing manpower to create information statecraft organisation, increase civil affairs capability, improve training capability, build testing and evaluation structure for personnel/weapons/equipment/organisation/application, create research repository, communication, secretariat in NSC and staff at theatre level.

Technological Future of Infantry

The Infantry needs to be made technologically sturdier for the future bringing in the required enhanced capability it needs. First and foremost, the F-INSAS concept could be amended as the Future Infantry Section as a System rather than Future Infantry Soldier as a System allowing for easier battle management within the section. Further recommendations are given ahead.

Weapons and Ammunition

- Better assault rifles and third-generation ATGM are the immediate requirements (RFP already issued as per COAS in the Keynote Address).
- Better sniper rifles with up to 1200 m range need to be acquired.
- Extended range mortar munitions to increase the existing 81 mm mortar range within the Infantry Battalion to close to 7000 m.
- For bunker-bursting, Thermobaric Flamethrowers with ranges up to 1000 m (like those developed by Russians) to be acquired.
- Dazzler System by Defence Research and Development Organisation or Zombie Gun (psychotropic weapon for mind control) as developed by Russia be acquired for crowd control.

Communication, Guidance and Surveillance

- Secured communication with data transmission capability below battalion level.
- Mini/micro unmanned aerial vehicles at battalion level to be given especially at pressure points on the Line of Control/Line of Actual

12 INFANTRY : ROLE AND EMPLOYMENT IN FUTURE OPERATIONS

Control (e.g. RQ-11 used by the US troops or ORBITER used by Israeli troops).

- With Indian Regional Navigation Satellite System available now, the focus should be on the GPS-enabled radio for the Infantry.

Training

- Training simulators to help in decision-making process as well.
- Paintball ammunition for the weapon which is actually being handled for more realistic training.

Medical

Better trauma management can be done with clotting bandages available to complete operational Infantry.

CONCEPT NOTE

General

The ultimate success state in a conflict scenario is the subjugation of the adversary. In spite of the idea that some future wars can be fought without contact, the submission has to be in physical terms. Infantry remains the common factor whether prosecuting operations in different types of terrain or carrying out different types of operations, that is, nuclear, conventional or sub-conventional operations. The evolution of warfare and conflict spectrum, thus, demands a constant review of the role and employment parameters of Infantry, including SF.

Role and Employment of the Infantry

The primary role of the Infantry in conventional operations is to hold ground, capture territory and defeat the enemy. In sub-conventional operations, Infantry's role is to contain or eliminate the threat and safeguard vital areas while keeping collateral damage to the minimum while the nation state continues its growth, development and peaceful activities. Within the changing future battlefield(s), both conventional and sub-conventional and keeping in mind the likely adversaries, the role of the Infantry needs introspection. During peacetime, the Infantry's added role is also to carry out aid to the government through High Availability Disaster Recovery operations.

The employment of the Infantry will depend upon future fighting concepts and battlefield requirements. Methodology to achieve the winning positions and victory will require optimum employment of the Infantry but prediction of the conflict spectrum correctly can only define how the Infantry progresses ahead to match the employment parameters. Irrespective of how the battlefield is shaped through stand-off vectors, the Infantry is likely to be a key parameter to deliver positive results and favourable war termination (allowing for the overall political aim achievement by creating the bargaining position required for India).

Future Battlefield

Prediction of the future conflict spectrum requires some crystal-gazing; however, the future conventional operational environment, whether proactive or reactive, will be challenged for time (duration). The conflict will likely morph into a hybrid one which itself will change continuously. There will be a higher tempo of activities and the operations will have much greater intensity.

The combat zone will be deeper than before, definitely wider and simultaneity in the battlefield may be a key feature. Primacy may shift to artillery fire assaults, air and missile strikes, that is, operations at a stand-off distance; however, the Infantry will remain crucial and will be the physical force to determine success and thus create the physical winning position. The possibility of nuclear escalation will continue to be a constant factor, especially between Pakistan and India. In a nuclear battlefield also, however, operations will be prosecuted relentlessly by all arms and logistic elements.

Sub-conventional operations, on the other hand, are likely to see further development in attack profiles. Many non-state actors are already threatening the neighbourhood of India and they are likely to shift their operations towards mainland India. These operations are already Infantry oriented and are likely to continue in the future too. Sub-conventional operations will also manifest during the conventional operations scenario.

Future Infantry Configuration

Thus, the Infantry of the future needs to be optimally configured to successfully conduct operations across the entire spectrum. For this, it needs to be lethal with effective night-fighting capability. State-of-the-art communication systems are required to make situational awareness a reality. It needs cross-country mobility with mechanised forces and chemical, biological, radiological and nuclear protection capability while retaining effectiveness. It, thus, also needs to be light and capable of small team mobility. Other important imperatives include the capability to fight as small teams, capability for air transported

and heli-ported operations, ability to carry out sustained operations in high-altitude terrain, very high level of junior leadership training and high level of psychological conditioning.

Conclusion

‘Boots on Ground’ will always be a primary requirement in the Indian context. The biggest advantage that the Indian Army has is it is fully trained, perennially committed (hence, always ready) and versatile Infantry. Proactive developments, keeping in mind the future battlefields and warfighting methodology, will go a long way in setting up the Infantry in the desired path. Based on the future prognosis, optimal enhancement in the Infantry’s prowess, equipment and effectiveness will allow it to fulfil the future defined role(s) and allow for gainful employment in all types of terrain and scenarios.

SEMINAR PROGRAMME

0945–1015h	Tea and Registration
1015–1020h	Welcome Remarks by Lt Gen BS Nagal, PVSM, AVSM, SM (Retired), Director, Centre for Land Warfare Studies (CLAWS)
1020–1045h	Keynote Address by the COAS
1045–1050h	Vote of Thanks by Col Ratanjit Singh, Seminar Coordinator
1050–1100h	Introduction of the Book ‘A National Security Strategy for India–The Way Forward’ by the author, Lt Gen Philip Campose, PVSM, AVSM**, VSM (Retired)
1100–1105h	Book Release by COAS
1105–1110h	Chairperson—Opening Remarks by Lt Gen Rakesh Sharma, PVSM, UYSM, AVSM, VSM, PhD (Retired)
1110–1130h	The Changing Role and Employment of Infantry by Lt Gen Y K Joshi, AVSM, VrC, SM, Director General Infantry
1130–1150h	The Changing Role and Employment of Infantry in Future Sub-Conventional Operations by Lt Gen PJS Pannu, PVSM, AVSM, VSM, Deputy Chief IDS (DOT)
1150–1210h	Small Team Operations—A Vision Blueprint by Lt Gen S Kulkarni, PVSM, AVSM, SC, SM, VSM (Retired)
1210–1230h	Questions and Answers
1230–1245h	Tea Break
1245–1250h	Chairperson—Opening Remarks by Lt Gen BS Nagal, PVSM, AVSM, SM (Retired), Director, CLAWS
1250–1310h	The Future Profile/Capability of Infantry by Lt Gen A K Singh, PVSM, AVSM, SM, VSM (Retired)
1310–1330h	The Changing Role and Employment of Special Forces by Maj Gen B K Jain, VSM (Retired)
1330–1350h	Technology and Infantry by Lt Gen Vinod Vashisht, AVSM, VSM** (Retired)
1350–1410h	Questions and Answers
1410–1420h	Closing Remarks by Lt Gen BS Nagal, PVSM, AVSM, SM (Retired), Director, CLAWS
1420h Onwards	Lunch