INDIAN ARMY
SENTINELS OF NATIONAL SOVEREIGNTY
The power of a King lies in his mighty arms...
Security of the citizens at peacetime is very important because State is the only saviour of the men and women who get affected only because of the negligence of the State.

— Chanakya

**DSA™ MISSION**

We endeavour to sound **ALERTS** and create **AWARENESS** about the myriad dimensions and manifestations of **DEFENCE** and **SECURITY** in India and around the world.
The most critical events in the world of defence and security revolve around the Islamic State, its territory and global efforts to wrest it back into freedom. Violence in Yemen, Nigeria, parts of North Africa and other hot spots pales in global importance when it comes to IS and its ghastly apocalyptic vision. So the world ranged against it conducts regular air strikes to beat it back, destroy its headquarters, takes out its key players through armed drones and tries to cripple it financially and economically. These efforts have been going on from sometime in late 2014 and yet the IS continues to sustain its terrorist campaign funded from the territory it controls.

So the world debates the moot point – when and by who will the ground campaign begin. For, after all, the IS is an entity that is run by humans, albeit of a type the world has rarely seen. So to neutralise such humans how much can machines do, even if they’re the most advanced and lethal in the world. The value and contribution of hi-tech machines is most apparent in small wars against irregular forces like the IS. Especially when it comes to surveillance and targeted strikes by drones. But at the same time the limitations of machines are also most apparent in these types of campaigns for at the end of the day there is a requirement for boots on the ground.

Which is why the Army has such tremendous value and contribution to national security. It is not for nothing that they’re called the sentinels of national sovereignty. For the Army is the ultimate statement of national power and prestige. Success by the Army is a source of immense national pride and achievement. And a failure, like in 1962, is a scar that doesn’t ever go away. More than 50 years later it hasn’t. For Army operations are the essence of military capability, national power, a statement of sovereignty and the final application of force. There is no option after that of the Army for a nation, any nation, including India. Which makes it all that more critical to understand its qualities, capabilities and its limitations.

The key to military power and application of force is the individual foot soldier with an automatic weapon. Ultimately combat operations will come to the skill and training that this individual possess in order to fulfil national military aims. For sure air strikes have a degrading effect, psychologically and military a powerful tool to employ against the foe. But for all their tremendous impact they cannot control the ground, which is where women and children need to live and feel safe, that being the final political goal for any military operation. Similarly no destroyer or submarine can substitute for the presence of a skilled soldier manning a picket in a vulnerable zone. He represents, in essence, the last mile connectivity of the state to its citizens in danger.

This is the current and future of military operations as the world lurches from terrorist danger to another and India confronts its many insurgencies. The requirement for clearing Raqqa of its IS nightmare is the same as is the case with the militants in Jammu and Kashmir, Naxals in the jungles, the same skilled trained foot soldier. For that soldier will reinforce the authority of the state. Without his final contribution the writ of the state cannot be applied in the crippled zone, within or outside of the country. He is, after all, the last application of military, diplomatic and political power of a nation.

So it makes sense to invest in that direction rather than keep pumping in valuable monies in big ticket items. Granted they have a role too, especially in preventing war. But then the focus generally has been to keep upgrading that aspect of military power and lesser so for the foot soldier, the one who is doing the most risky of operations for his country and which have the greatest current and future value. The foot soldier is the barometer of national military power and performance. Every evaluation begins from there, so it makes sense to pay greater attention at that, the most basic level. The effort thus far has been haphazard, lacklustre and without a clear vision. The Indian Army soldier, therefore, is not yet of the 21st cent. He needs to be, because he is going to occupy that strip of land with his boots on the ground.

Manvendra Singh
Armies are known worldwide for a special reason and that is their hardcore discipline. The first and mandatory step for all recruits who join the Army is to indoctrinate discipline in their lives from the moment they don olive greens. As a matter of fact, this passion for discipline stays with them even after retirement from the force. This very strong, impressive and motivating personality trait also reflects in their communities and society. In case of the Indian Army, while discipline is the bedrock of this force, the fact remains, that an amalgamation of the diversity of the nation as a whole sets it apart from other military establishments all over the world.

Kargil illustrated how men from different regions of India showed grit, guts and iron discipline to relentlessly dislodge entrenched Pakistani terrorists from their Motherland; and many United Nations Peacekeeping Missions around the troubled world applauded for their intrinsic humane approach to their responsibilities. These are rare qualities of head and heart and are the hallmark of the Indian Army.

India with so many different castes, creeds and credos has an Army that has absorbed all of them so well that it has become a perfect example of social and communal harmony, not shared by other Armies of the world. It is the only Army where all religions get the same respect and all religious festivals are celebrated with the same enthusiasm and fervour ... again a rare and commendable attribute of the Indian Army.

This is a big factor for the excellent performance of our Indian Army in war fighting, peacekeeping/peacemaking international obligations and in disaster management assistance to civil authority within the country. This harmony has played a stellar role in the performance of Indian Army personnel during peacetime as well as during the war. Their abilities, calibre and competence during natural calamities like floods in Jammu and Kashmir and the more recent unprecedented rains in Chennai within the country, or rescue operations during devastating earthquake in Nepal, have been outstanding and exemplary.

The slogan of Indian Army, ‘SEVA ASMAKAM DHARMA’ was adopted as the motto of the institution as these words enshrine the noble Indian ethos of ‘Service’. The path of service in Indian culture and philosophy has from time immemorial, been the path of the ultimate realisation and salvation: ‘Service is our Creed’. This mission makes the Indian Army unique in the annals of defence forces.

The organisational structure of the Indian Army is so strong and cohesive that it works like a big family supportive of each other at all times. The Indian Army is synonymous with its commitment to the Motherland along with its safeguarding prowess during attacks on international borders and insurgencies within the national borders. The units of Indian Army work like a big family supportive of each other at all times. The organisational structure of the Indian Army is so strong and cohesive that it works like a big family supportive of each other at all times. The Indian Army is synonymous with its commitment to the Motherland along with its safeguarding prowess during attacks on international borders and insurgencies within the national borders.

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Jai Hind!
MESSAGE

It gives me immense pleasure to know that Defence and Security Alert is coming out with its special “Army Day” edition on the occasion of Army Day 2016. DSA has been a well read and reputed defence magazine, covering a vast array of defence and strategic issues thus playing a pivotal role in shaping the strategic paradigm.

The nation is witnessing major defence and technological improvements and fresh ideas emanating from the intelligentsia will guide these to their logical end. DSA is indeed a significant partner in this journey. I am sanguine that the literary association of the DSA magazine with Army will only grow in the times to come.

I also take this opportunity to extend my best wishes on the New Year 2016, to the editorial team and readers of your esteemed magazine.

Wish you all a very happy reading.

Jai Hind!

(Dalbir Singh)
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Army’s Role In Nation

The Indian Army represents a model for national development due to its high sense of purpose and secular outlook. Its contribution to nation building is inherent in the fulfilment of its primary function – ensuring the security of India.

Armed Forces the world over are essentially seen as security providers to the nation. In newly independent countries, being the most disciplined force available, their contribution to imbuing a National Spirit to bind the country together is momentous. Because of this reason few armies are as closely associated with the destiny of their nation as the Indian and Pakistan Armies. The present state of the two countries couldn’t have been more diverse, one a thriving democracy on the cusp of great power status and the other hobbling on imported crutches, besieged by its own demons. It is testimony of how an Army can make or break the foundations of a nation by either buttressing the government empowered by a Constitution to build a nation, or by usurping the power of the civilian government and in the process becoming an untrained but entrenched bureaucracy.

The Beginning
India came into being on 15 August 1947. However, historically, it can be argued that the Indian Army’s contribution to building the nation-State commenced with India’s First War of Independence. This was an uprising of the Indian soldier against foreign rule; undoubtedly one of the most inspirational events for succeeding generations during the freedom struggle. Towards the conclusion of World War II as the British prepared to leave the shores of India, Lord Wavell during his farewell address on 21 March 1947 remarked, “I believe that the stability of the Indian Army may perhaps be the deciding factor in the future of India”.

Independent India’s physical boundaries stretch across some of the harshest terrains in the world. It is a country with varied cultures, religions and languages. This drawing of boundaries and the upheavals it caused posed unique challenges to forming a viable and coherent national entity. The concept of nation building implied weaving many disparate groups together to live in harmony with each other in keeping with the fundamental values which came to be enshrined in the Indian Constitution.

The Indian Army’s role in dealing with the Partition holocaust was exemplary despite being deprived of one third of its troops and assets which had overnight become part of Pakistan. During the unprecedented violence of the Partition, the impartiality demonstrated by the Indian soldier helped take control of the situation and restore order, which restricted the casualties in the communal violence. Even as the country was smarting from the after-shocks of Partition, the raiders from across were knocking at the gates of Srinagar. The Indian Army played a stellar role to successfully save Kashmir and thus began the glorious saga of post-independence history of the Indian Army.

This early period was interspersed with a series of successful operations launched to consolidate some of the recalcitrant kingdoms as part of India. Further, in a swift offensive in 1961, the Army liberated Goa, Daman and Diu and finally rid the nation of foreign colonisers.

Reinforcing The Foundation
In the past six decades and more, the Indian Army has fought three major wars and another two limited wars with two of its neighbours. These wars were essentially fought to protect the territorial integrity, while also preserving the national fabric.

As for ensuring internal security, the ongoing operations in J&K and affected Northeastern States are aimed to counter the externally abetted proxy war and insurgencies. In J&K, while operating in a highly dynamic environment the Indian Army has assisted in creating circumstances where civil governance is able to function and fulfil its constitutional role. Similarly, in the Northeast too, the Indian Army’s actions have led to a distinct stabilisation of a previously deteriorating situation.

International Peacekeeper
Even beyond the Indian shores, the Indian Army has not vacillated in deploying to support peace initiatives in the region, whenever tasked by the Government. The Indian Army intervened in Maldives in 1988 to support a democratic government. This was one of the rare moments where India exercised its military arm to exert its role as a regional stabiliser to assist a friendly nation when requested. Another occasion was to assist in peacekeeping in Sri Lanka. The Sri Lankan operation also enabled the Indian Army to learn valuable lessons in low intensity conflict.

In order to support India’s efforts for world peace as a responsible member of the global community, the Indian Army is one of the largest troop contributing nations to UN Peacekeeping operations. Presently, approximately 6,800 troops are deployed in...
eight UN missions worldwide. In order to enhance India’s diplomatic efforts, the Army has established military training teams in various friendly countries. Military-to-military cooperation between India and other friendly countries has helped in strengthening bilateral ties. Being a part of the comity of nations, a country cannot gain a national identity till other nations recognise and respect it. Our initiatives overseas have led to achieving this important aspect of nation building.

**Contributor To Internal Stability**

The Indian Army has actively nourished democracy by its high standards of professionalism, dedication to duty and exemplary norms of discipline. The nation’s democratic stature has always been supported by the secular ethos and apolitical character of the Indian Army. The Army has remained a symbol of unity and secularism when called upon to battle internal strife faced by the country. The impartial face of the Army is evident while countering sectarian clashes, terrorism or insurgency. Here it is the Ultima Ratio Regis as an Army should be; the instrument of last resort when all else has failed to deliver.

The Indian Army has scrupulously kept away from the political arena and displayed unwavering loyalty to the elected government. The Army has progressed professionally due to its apolitical nature while the nation has been able to maintain its democratic character. With its professional growth, it has added credibility to India’s deterrence, thereby reducing the possibility of conflict and ensuring an environment for economic growth and progress. Since 1971 the statesmanship of our leaders backed by the deterrent of our Army and other services has ensured no major war. This has provided the social and economic stability to go up the road of prosperity and poverty alleviation.

**Physical Nation Building**

The Indian Army has been equally involved in the physical aspect of nation building. The deployment of the Indian Army in remote areas deficient in infrastructure and connectivity has led to better infrastructure being developed for the people in these areas. The Army projects offer employment and vocational opportunities to the local population reducing the probability of their youth succumbing to temptations of undesirable alternatives. The spin-offs of direct and indirect employment wherever Army is stationed contributes to the local economy and consequently, to the national economic growth.

The Border Roads Organisation (BRO) has made significant contribution in connecting the far-flung areas of the country with the national mainstream by construction of roads over some of the most inhospitable terrains of the world. Thousands of kilometres of roads have been paved and maintained despite life threatening conditions, thus providing valuable connectivity to inaccessible parts of the country.

In addition to roads and infrastructure, the Army medical teams have been frequently offering medical assistance and treatment to the inhabitants of remote localities. In some of these locations, the Indian Army is the only contact with the administration. In disturbed areas, the Army has undertaken Sadbhavana and Samaritan projects like installation of micro hydel projects; running of schools and vocational training centres. The Army has also constructed ‘model villages’. The endeavour of the Army has been to create projects that empower the people, emancipate the women, channelise the creativity of the youth and improve the general health standards of children and the populace. These projects provide employment opportunities for the people as also a stable platform for civil governance to re-assert itself.

While being operationally committed, the Army continues to be the ultimate responder of the nation for disaster management. From floods in J&K and the tragedy in Uttarakhand to the more recent Operation MAITRI launched in the aftermath of the Nepal earthquake – the Indian Army has been at the forefront of disaster relief operations.

The contribution of the Territorial Army units cannot be downplayed. These units have contributed immensely to re-forestation initiatives. They have

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**Army has contributed to the development of core values of liberty, equality and promoting fraternity**

**Lt Gen Ghanshyam Singh Katoch**

Director General of Perspective Planning in IHQ of MoD (Army). He has two Masters Degrees, one in military Science from Madras University and the other in Defence Analysis from the Naval Postgraduate School, Monterey, California, USA. His areas of specialisation are Force Structuring, Special Operations and Low Intensity Conflict. He has an abiding interest in Military History.
transformed large swathes of land which had been ravaged by natural and man-made disasters. These units are also seen as a means of employment for the local population. In the eco-sensitive zone of Siachen Glacier, the Army has taken the pioneering initiative to dispose the waste which has been created since deployment. Specialised TA Units are a skilled reserve available during national emergencies.

Contribution To Youth And Sports
The Indian Army is a reservoir of trained and disciplined youth. The Army led National Cadet Corps is engaged in grooming the youth, imbibing in them the qualities of discipline, selfless service and the spirit of nationalism. All the ideals that shape the armed forces are instilled in the young minds to develop their character, through qualities like comradeship, discipline, leadership, secular outlook, spirit of adventure and ethics of selfless service.

The Indian Army leads the nation in the field of sports and adventure activities. Milkha Singh and Dhyan Chand are national icons. Colonel Rajyavardhan Singh Rathore and Subedar Major Vijay Kumar have made the nation proud by winning silver medals at the Olympics. Four Army sportsmen have already achieved the quota berths for the Rio Olympics. The Army personnel have excelled in various sports domains including sailing, athletics, boxing and rowing. Likewise the intrepid mountaineers have successfully conquered various peaks in the Himalayas bringing out the importance of a culture of adventure. These contributions have firmly put the country on the sports and adventure map of the world while enhancing the culture of sports in the youth.

Veterans – The Invisible Bedrock
The Army veterans are a valuable resource available to the nation. These veterans have been exposed to a lifetime of discipline and sacrifice. They have contributed immensely to socio-economic and technological development, especially in the rural areas. Many have excelled in their second career in governance, diplomacy, strategic thinking, private industry and in various NGOs. The rich experience, motivation, knowledge, discipline, loyalty and patriotism of this retired community must continue to be harnessed and leveraged in national interest, by both the government and private industry. Veterans imbue the population with secularism, nationalism and self-sacrifice, qualities which have become part of their nature. This provides an intangible value addition to society and continues the Army’s role in nation building.

Underlying Ethos
The Indian Army represents a model for national development due to its high sense of purpose and secular outlook. Its contribution to nation building is inherent in the fulfillment of its primary function – ensuring the security of India. The Army has contributed in a major way to the development of core values of liberty, equality and promoting fraternity to assure dignity of the citizen and uphold the unity and integrity of the nation.

As a founding institution of the State, the Indian Army truly represents the maxim of ‘Unity in Diversity’. It is a national asset and must be nurtured and treasured as such. The soldier takes upon himself the unlimited liability of protecting the nation, even if it means making the ultimate sacrifice in the line of duty.
MANNING THE BORDERS

The LoC and AGPL are manned by the Army and the few BSF battalions deployed on the LoC are under command and operational control of the Army. As the Indo-Tibetan Border Police on the LAC is not under the operational control of the Army there is a lack of coordination and accountability, defeating the very concept of the one force one border as enunciated by the GoM.

“We do the difficult as a routine. The impossible may take a little longer.”
— An Indian Army Belief

The national aim is to ‘TRANSFORM INDIA TO A MODERN, PROSPEROUS AND SECURE NATION’. As security is a precursor to long-term peace, stability and development, securing India’s disputed and porous borders is a national imperative.

India’s land borders extend 15,106.7 km with seven nations including 106 km border with Afghanistan, touching 17 States and 92 districts. India also shares the longest disputed borders in the world, the Sino-Indian border extends 3,488 km, with China laying claim to over a 1,10,000 sq km of Indian territory. The India-Pakistan Line of Control (LoC) extends 772.1 km and the Actual Ground Position Line (AGPL) along the Siachen glacier extends another 126.2 km. Pakistan also occupies 13,297 sq km of Indian territory in J&K. Pakistan has been waging a proxy war for the last quarter of a century. India faces multiple and varied security threats and challenges across the full spectrum of conflict from small wars to collusive and hybrid wars to conventional and nuclear wars. The internal security threats emanate from across the borders with active support to terrorist and insurgent groups. India’s porous borders and lack of development in border areas are a major contributor to security concerns and challenges.

Unimplemented ‘One Border, One Force’
The Kargil Review Committee (KRC) Report, brought to light many grave deficiencies in India’s security management system particularly in the areas of Intelligence, Border and Defence Management. A Group of Ministers (GoM) was convened in April 2000, to review the national security system in its entirety and in particular, to consider the recommendations of the KRC and formulate specific proposals for implementation. Multiplicity of forces on the same border led to lack of accountability on the part of the forces. To enforce accountability, the GoM decided that the principle of ‘One Border One Force’ be adopted while considering deployment of forces at the border. The unsettled borders with China (Line of Actual Control) and Pakistan (LoC) were mandated to be manned and defended by the Army. The LoC and AGPL are manned by the Army and the few BSF battalions deployed on the LoC are under command and operational control of the Army. However, along the more sensitive LAC, the ITBP deployed alongside the Army continues to function under the directions of Ministry of Home Affairs (MHA). As the Indo-Tibetan Border Police is not under the operational control of the Army there is a lack of coordination and accountability, defeating the very concept of the one force one border as enunciated by the GoM. This needs to be corrected and the ITBP placed under operational control of the Army to ensure a more effective management of the sensitive LAC.
‘Face-offs’ On LAC
The 3,488 km long Sino-Indian border is a peculiar set of contradictions, being the longest disputed border in the world as also the most peaceful disputed border with the last shot in anger fired on October 25th, 1975. A fragile peace prevails ever since, with the disputed border being the ever present potential driver for conflict between the two nuclear armed neighbours – home to one third of humanity.

The mandate of the Army is to maintain peace and tranquillity along the LAC. The task has its own challenges as there is no common understanding of the LAC. The Sino-Indian border runs along some of the most inhospitable and hostile terrain in the world with altitudes averaging 15,000 feet and thus while temperatures are low at minus 20 to minus 30 degree Celsius, tempers run high due the high altitude effects on troops. As the borders are disputed, intrusions are a common occurrence on account of differing perceptions of LAC. China’s growing assertiveness is evident with the increase in frequency and depth of transgressions/intrusions.

Politically Timed Intrusions
These intrusions often lead to a ‘face-off’ between own Army troops and the PLA, which last from a few hours to a few weeks. Some ‘face-offs’ get prolonged, like the recent ones in the month of Sept 2014 coinciding with the visit of President Xi Jinping at Chumar and at Depsang Plains in April/May 2013. It is an established pattern that intrusions occur during high profile visits and meetings, the latest being reported on 14 Nov in Chushul sector coinciding again with PM Narendra Modi’s meeting with Chinese President Xi Jinping ahead of the G-20 summit in Antalya. Such high profile intrusions have the potential to spiral into a skirmish and can become a driver for conflict, however on account of the firm stance, professionalism and commitment of the Indian Army as also the PLA, these sensitive incidents have been contained, resolved and status quo maintained. The Army is likely to face more and more such situations, especially so in view of a firm and fair stance being adopted by the present Indian Government in guarding our territories.

Inadequate Infrastructure
Effective manning of the LAC is one of the more challenging tasks of the Army. The infrastructure on own side is poor and non-existent. The single road axis to most of the sectors is vulnerable to disruption both during monsoons and winters. This not only impacts operational preparedness and readiness but is also detrimental to administration and morale of the troops deployed, who feel isolated and take time and effort going on leave. On the other hand China has constructed state-of-the-art multimodal multidimensional infrastructure, focusing on the three ‘Rs’ Roads, Reserves and Radars for manning the borders. A concept which India will do well to replicate and practice.

It is also unfortunate that the government has not given adequate and due recognition to the many sacrifices of the Army troops deployed along the LAC. The Army had taken up of case of declaring the area along the LAC as Operation Falcon in 1987. This would have implied giving recognition and a sense of pride to the troops deployed along LAC and the next of kin (NoK) of the gallant soldiers who made the supreme sacrifice would be entitled to similar monetary benefits and family pension as granted to those deployed on the LoC. However, for reasons best known to the government, the sanction is still awaited.

It is to the credit of the Indian Army that given the many challenges and sensitivities they have maintained peace and tranquillity and ensured equilibrium along the LAC, under the most trying and difficult of conditions.

CI-CT Grid Along LoC
The Indian Army is mandated to ensure sanctity of the 772.1 km long LoC. A fragile agreed upon ceasefire exists along the LoC, with frequent ceasefire violations initiated by Pakistan, mostly engineered to help terrorists infiltrate to the Indian side.

Pakistan continues to pose a threat to India’s security. Its traditional hostility and single-minded aim of destabilising India, is not focused just on Kashmir but on a search for parity. This arises out of the two-nation theory, coupled with a desire to exact revenge for the 1971 humiliation over the separation of Bangladesh. Pakistan has waged a proxy war against India since Dec 1989. The terrorist infrastructure and organisations across the LoC are duly supported, funded and controlled by the ISI. The constant and continuous efforts by Pakistan Army to push in infiltrators has forced the Indian Army to establish a robust and effective counter infiltration grid based on an anti-infiltration obstacle system commonly known as the LoC fence. This is backed by an equally effective counter-terrorist (CT) grid in depth in J&K. The counter infiltration and CT grid not only complement each other but are integrated and this has contributed to ensuring that violence levels in Kashmir remain subcritical.

Battle Casualties
The Indian Army is by far one of the most battle hardened and combat rich military forces in the world, it is also one of the most professional, disciplined, committed and motivated forces. In spite of all the many challenges of task and terrain as also many constraints of availability of modern arms, equipment and other wherewithal, the Army has ensured an effective execution of the mandated role and tasks of defending the disputed borders. Though the role of the Army remains the same along the LAC and LoC, the modus operandi is at total variance. Troops
deployed along the LAC need to demonstrate maturity, understanding and restraint, whereas troops manning the LoC have to be ever vigilant and ready to thwart the mischievous designs of our adversary be it infiltration by terrorists or ceasefire violations. The LoC is peculiar in its own way, it is imperative to ensure sanctity of the LoC, moral ascendency over the adversary by the deployment and demeanour of troops and zero infiltration. The troops manning the LoC also need to ensure an equitable and proportional retaliation to the frequent ceasefire violations by Pakistan Army. Army manning the LoC also conducts CT operations as part of the CT grid. Since the beginning of the proxy war in 1989, 6,182 security forces personnel have made the supreme sacrifice in J&K alone. From an all-time high of 638 fatal casualties of security forces in 2000, these have come down to 51 in 2014 and 39 this year, including the gallant Col Santosh Mahadik, a fellow paratrooper, who made the supreme sacrifice leading his men from the front in true spirit and ethos of the Indian Army.

**Lack Of Modern Arms**

It is an imperative that the Army minimise the costs in terms of life and should be provided the requisite wherewithal. It is a well acknowledged fact that the Army lacks basic fighting and protection equipment. Though the Defence Acquisition Council (DAC) under the directions of the Raksha Mantri Manohar Parrikar has given the much needed impetus to modernisation and sanctioned procurement projects worth Rupees 90,000 crore demonstrating a resolve and urgency, however the basic arms and equipment remain obsolete. These include the replacement for the 5.56 mm INSAS rifle which is just a piece of metal as soldiers do not have any confidence in the rifle, a close quarter battle (CQB) carbine, light machine gun, multi-mode grenade which has been in the development stage for over two decades, night fighting devices and the bulletproof jackets and a ballistic helmet. Arming and equipping the soldier with basic weapons and equipment should be a priority, this will not only enhance the fighting efficacy of the Army but reduce costs in terms of avoidable fatalities.

**The Last Frontier**

Siachen sometimes called the ‘Third Pole’ is the highest battlefield in the world. The 126.2 km AGPL has over 150 isolated posts, located at altitudes in excess of 5,400 m, manned by the Army round the clock. The glacier’s craggy landscape, heavy snowfall and bone-chilling temperatures make it one of the most inhospitable places on earth. For soldiers, this is a place where mountaineering is more important than marksmanship. The harsh weather and high altitude terrain pose major challenges for troops to survive. Frostbite, chilblains, avalanches, snowstorms, crevices, lack of oxygen and appetite are a few of the many threats faced in addition to defending the borders. Survival alone is an achievement in itself. It is to the credit of the Indian Army and the soldiers who have defended the glacier with their many sacrifices. A tenure at Siachen gives an unmatched sense of pride and achievement to a soldier.

In addition to manning the LAC and LoC, the Army contributes to the development and well-being, taking care of the people of the border region in all aspects. The people inhabiting the remote areas are mostly dependent on the Army for all their basic requirements. There are also a number of villages along the LoC, some of these are located between the LoC and the fence, the Army ensures the well-being of our border region people in all aspects as part of Sadbhavana, from water and electricity supply to education, medical and vocational training. The effective manning and defence of our disputed and porous borders by the Army has contributed to maintaining peace and tranquility along the LAC and ensuring subcritical violence levels in J&K.

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January 2016  DEFENCE AND SECURITY ALERT

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Sentinels of the Northeast

Lieutenant General Harminderjit Singh Sachdev is an alumnus of Rashtriya Military School, Ajmer, the National Defence Academy, Khadakvasla and the Indian Military Academy Dehradun from where he was commissioned in December 1976 in the First Gorkha Rifles. In an illustrious career spanning 39 years, he has had an exemplary profile. His early service saw him participating in Operation Pawan in Sri Lanka and Operation Rakshak in Punjab. He also commanded a Rashtriya Rifles Sector in Counter Insurgency environment in J&K and a RAPID Division in the Desert Sector. He assumed the appointment of Director General of Assam Rifles on September 21, 2015.

Defence and Security Alert: Even after more than six decades of being part of independent India, the people of the Northeast feel alienated and have not wholeheartedly joined the national mainstream. What has created this wedge and what can be the panacea for the prevailing state of affairs?

DG Assam Rifles: The Northeast Region is characterised by extraordinary ethnic, cultural, religious and linguistic diversity. The predominance of tribal affinity, prolonged period of neglect and lack of development and insurgency all have contributed to the people not fully integrating with the national mainstream.

The wedge has been created by the geographical isolation, historical seclusion and economic deprivation due to lack of infrastructure, lopsided growth and years of neglect of the Region. This has further been compounded by the lack of focus, lack of understanding of the tribal, cultural and ethnic affinities and by the region being left on its own for a long period. All this along with resultant ‘On’ and ‘Off’ insurgency has resulted in psychological exclusion.

We need to address the causes. The focus should be on infrastructure development, employment generation and good governance reaching out to the remotest villages and the poorest people. All this can be achieved only if there is peace and harmony in the Region which could be achieved by addressing the grievances of the Insurgent groups and making the policy all inclusive. At the same time, the time is fast changing and the Region is on the path towards development and prosperity. The National Policy on the North East Region has undergone a paradigm shift and its implementation with heightened inclusion will bridge the gap between the Northeast and the Rest of India.

For years Assam Rifles has been doing excellent work for the welfare of the people of this region and has earned the sobriquet of the ‘Friends of the Northeast people’. How can this positivity be used as a catalyst to empower them to become dynamic stakeholders in the burgeoning National endeavour?

DG Assam Rifles: The Assam Rifles also known as the ‘Sentinels of the Northeast’, is the oldest Force in the region with 180 years of history and as a result it has created an iconic image for itself. Not very many know that it was Assam Rifles which was instrumental in providing safe passage to His Holiness Dalai Lama from Tibet. In addition the Force took active part in the Burma Campaign during World War II, wherein the succour, sustenance and hope provided by the gallant men of the Assam Rifles earned the Force the sobriquet of being the ‘Friends of the Hill People.’ The association of the Force with the People of the region has got engraved for eternity and is reflected in the Dhai Moorti (which depicts an Assam Rifles Jawan assisting a refugee family fleeing from Burma).
As such, the Assam Rifles is naturally geared, organised, equipped and best prepared to bring peace, normalcy and development in the region. The Force has a **phenomenal footprint in the region** with over **400 locations** where the Force is deployed. Thus we have the potential of being the lead protagonist in undertaking development projects in the North East Region and over the years the Assam Rifles has undertaken various capacity building and infrastructure development projects, in the region as part of the Civic Action Programme. We are also the **lead driver for Border Area Development Projects** executed under the states in the areas bordering the Indo-Myanmar Border. Some of the initiatives being undertaken by Assam Rifles are:

- Solar power and water supply schemes in the villages.
- Employment generation ventures such as Fruit Canning Plants and Socks making factory. We have trained over 12,000 persons in various vocational skills to include Electrician, Mechanic, Welding and Computer Operator skills in the last three years.
- Vocational Training and imparting specialised skills in various disciplines.
- In the last five years the Assam Rifles has conducted 160 Medical Camps, effectively one every fortnight, treating 30,000 patients.
- Promoting education through assistance to the rural schools in terms of furniture, study material, IT equipment, sports items and even school infrastructure.
- We have been promoting popular sports like Polo, Football and Archery etc.
- Lastly, we are trying to connect the people of Northeast Region with the rest of the country by means of National Integration Tours for the students and villagers who have never had an opportunity to see other parts of the country.

Some of the latest initiatives launched by us are adaption of one Village each per Assam Rifles Battalion, which will be developed as a Model Village and promoting schemes like the Jan Dhan Yojana of the Central Government and achieving a goal of enlisting one lakh families within the next quarter from the most far-flung areas of the Northeast Region.

**DSA:** **Strategically Northeast is a very important and sensitive region necessitating close cooperation and well-coordinated joint security operations with Army and other Armed Forces. How satisfied are you with the existing resource and intelligence sharing mechanism?**

**DG Assam Rifles:** The North Eastern Region has a deployment of a plethora of Security Forces in addition to Assam Rifles to include Army, Border Security Force, Central Reserve Police Force and State Police forces along with their affiliated Intelligence Agencies. As part of the overall security grid and considering the security situation, vastness of the area of responsibility, the lack of border infrastructure and other environmental realities, all the 46 Assam Rifles Battalions are deployed across six Northeastern States, for both Counter Insurgency Operations and for Border Guarding. The other CAPFs and Police forces are deployed for law and order, securing vital government installations and providing aid to civil authorities.
As far as integration of resources is concerned, since the Assam Rifles operates under the operational control of the Army a **very high level of resource integration exists**. Numerous successful joint operations conducted with surgical precision and minimal collateral damage are proof of synergy and professional integration of the Forces. Also there exists an established mechanism to ensure intelligence sharing amongst the Forces deployed in the Northeast. In all the States there is an Apex Body chaired by the Chief Minister of the State and intelligence at all three levels ie strategic, operational and tactical level is shared by all sister intelligence agencies.

However, there is **need for more resources** in terms of ‘boots on ground’, considering the vast area and difficult terrain in the Region, if we have to manage the Indo-Myanmar Border effectively as well as operate in hinterland against the insurgents.

**DSA: The unholy nexus between politicians, insurgents, anti-social elements and their vested interests continue to be the stumbling blocks to the return of normalcy and resurgence of the Northeast. What innovative measures do you propose to employ to untangle this logjam?**

**DG Assam Rifles:** I would not like to comment on the nexus, but yes the insurgent and anti-social activities like extortion, smuggling, implementing rule of the gun etc are preventing return of normalcy in the Region. Assam Rifles has a role of guarding the Indo-Myanmar Border and in the hinterland as Counter Insurgency Force. Hence, its role is aimed at prevention of anti-national and anti-social activities along the border and in the hinterland. Over the years, Assam Rifles have fulfilled both the roles admirably. Apart from neutralisation of large number of insurgents, it has also seized a large quantity of contraband being smuggled across the border, such as Gold, Narcotics and other Contraband Items etc worth over ₹22 crore in the year 2015 alone, which has to some extent choked the finances and weakened the parallel economy being run by the insurgents/anti-social elements. The efforts of the Force have also motivated and emboldened the locals to raise their voice against extortion and other illegal activities, to include forced recruitment undertaken by the insurgent groups.

Overall, Assam Rifles is only an instrument of the State for providing a conducive environment for the state machinery to function effectively. Now, when the security situation has improved, the onus is on the Central and the State Governments to follow policies that usher in lasting peace and progress.

**DSA: With the proliferation of hi-tech devices and abuse of social media, the very character of warfare and strategic operations has undergone a sea change. How is Assam Rifles preparing itself to stay a step ahead of the emerging security threats and challenges?**

**DG Assam Rifles:** Ever since the advent of civilisation, warfare and operations have been dynamic in nature, continuously evolving with the inventions of various technologies. Of late, the process has gone into ‘fast forward’ mode, wherein the hi-tech devices are available off the shelf at affordable prices. Of late, the cyber domain and social media have become a real challenge.

We are alive to the emerging threats in this domain and it is with this in mind **Assam Rifles has embarked on force modernisation** which is being undertaken in ‘Mission Mode’ to empower the last man on ground with the latest technology. Secure communications, Information Technology, Electronic Intelligence etc form a key facet of the electronic horizon of the Assam Rifles. Technology is also being exploited for intelligence gathering and surveillance to provide battlefield transparency and psychological ascendency to the troops over the Insurgents. Social media is being closely monitored to know the pulse of the population and evolve countermeasures.

The psychological preparation of the troops for absorption of technology, so that it can be exploited to its fullest, is also being undertaken as part of training modules and forms an important facet of force modernisation. In short Assam Rifles is fully prepared to meet the challenges through its own modernisation plans.

**DSA: There have been reports that Assam Rifles is trying to gag the media and muzzle the right of freedom of expression. Now we have a TV in almost every home, a mobile phone in every hand and the reach of the social media is phenomenal. If the reports are true, how effective can these measures be?**

**DSA interview**

**ASSAM RIFLES**
DG Assam Rifles: Assam Rifles fully respects the autonomy and freedom of the Press and at no stage was there an intention to impinge on the freedom or curb their independent reporting. I do not remember any such act or incident in the past where restrictions were imposed on the media unilaterally by the Force. Also we are aware of the dilemma of the media houses, who are constantly under threat from inimical forces. Having said that, let me say that the spirit of the letters was to invite attention of Newspapers to certain provisions and not allow banned organisations from conveying their ‘extortion demands/threats’ through the medium of Newspapers. I agree, the methodology adopted could have been more refined wherein the issue could have been raised through prescribed channels.

It must also be understood that the operating environment of the soldier today is extremely challenging and the pressure of being mission worthy is immense. The media reporting which is inimical to his efforts swells the pressure bubble and has a detrimental effect on the morale of the Force. The Military-Media relationship should be complementary and symbiotic without compromising the basic tenets for what they stand for.

DSA: Northeast is beautiful, endowed with surfeit of natural resources and is gateway to the vibrant East Asian region. As ‘Friends of the Northeast people’, how can Assam Rifles initiate a chain of progressive measures to herald an era of harmony, peace and prosperity for the people of the Northeast?

DG Assam Rifles: The Assam Rifles is already undertaking a lot of measures in this regard including intense Counter Insurgency operations to eliminate the Insurgents/terrorists and ensuring an incident free environment for growth to take place by providing a conducive environment for establishing of good governance of the Northeast.

Operationally, the Assam Rifles being a Counter Insurgency Force is a major stakeholder and can assist the Central and State Governments in bringing and maintaining peace in the region by undertaking:

- Assisting Central and State Governments to execute National and State level Development Projects in the far-flung and inaccessible areas by providing security.
- Being sensitive to the aspirations and concerns of populace and conducting operations which are intelligence based and surgical with minimal disruption/damage to larger section of society.
- Assam Rifles can play a major role as our relationship with Myanmar improves and there is opening of trade towards East Asian Region.

Moreover, the Assam Rifles on its part is actively involved in various Civic Action and Perception Management Programmes including engaging the youth in sports and self-employment schemes. The initiatives being undertaken by Assam Rifles towards Nation Building and integrating the people of Northeast with rest of the Country, have already been highlighted earlier.

DSA: The Assam Rifles functions under a dual control mechanism, under both the Home and Defence Ministries. This must lead to a lot of functional issues and complexities. As the Director General of the Force, are you satisfied with this system of functioning?

DG Assam Rifles: The Force has a unique system of a dual command and control mechanism, with the operational control under Ministry of Defence (MoD)/Army and the administrative control under the Ministry of Home Affairs (MHA). The existing system of dual command has been in vogue since independence, when the Force was under the Ministry of External Affairs (MEA). The Force came under the MHA from MEA in 1965, however the operational control of Force has remained with the Army. Though the system has functioned reasonably well in all kinds of operational environments and the Assam Rifles has prospered and attained the distinction of being the highest awarded Paramilitary Force under the Dual Command System, there is an underlying disconnect in duality of command. The duality of command leads to differing and varying tasks from the Ministries due to the varying requirements and doctrinal differences between the two Ministries. Both these requirements impinge on each other and affect the functioning of the Force. Moreover there are varying rules, regulations and policies which impact the daily functioning of the Force and affect its competency at the very core.

The Force is akin to the Central Armed Police Forces (CAPFs) regarding organisation, arming and equipping policy, funding policy, service conditions, promotion policies etc which is based on the philosophy of employment of
CAPFs. However, the operational DNA of the Assam Rifles is akin to that of the Army, leading to incongruence in execution of various tasks. There are a number of issues pertaining to prioritisation, utilisation, employment philosophies, welfare schemes etc between the two Ministries, which have little convergence.

The Command and Control of the Force is under debate so as to bring it under one Ministry, which is the need of the hour. Till then the Dual Command and Control System will continue to cast its shadow on the effectiveness and efficiency of the Force and morale of the troops. It needs to be resolved at the earliest.

**DSA:** The Assam Rifles has a distinct identity, which is different from both the Army and other Central Armed Police Forces. What makes the Force unique and what are the challenges faced by the troops of the Force?

**DG Assam Rifles:** Yes, the Assam Rifles has a distinct and unique identity, which makes it vastly different from the other armed forces in the Nation. Raised as the ‘Cachar Levy’ in 1835, the Assam Rifles is the oldest Paramilitary Force in India. Since raising, the Force has been deployed continuously in the remote and inhospitable areas in the North Eastern States. The Force has vast operational experience; both in conventional as well as sub conventional operations. Right from the World War I times, till date, the Force has proved its mettle time and again; be it within the Indian territory or overseas, with over 1,100 soldiers having made the supreme sacrifice in the service of the nation till date. Being one of the highest awarded Forces of the Nation is also a reflection of its professionalism, valour and dedication displayed by the gallant soldiers of the Force. The Force till date has won four Ashok Chakras (ACs), 35 Kirti Chakras (KCs), five Vir Chakras (Vrcs), 140 Shaurya Chakras (SCs) and 365 Sena Medals (SMs).

The Assam Rifles takes pride in being the only Force which is Forever in Operations. All Assam Rifles formations and Units are deployed in the six North Eastern States of India. Out of the 46 Battalions, 31 are in Counter Insurgency operations while the balance 15 are in Border guarding/dual role. Given the type of role and being a Northeast centric Force, the units are permanently deployed in counter insurgency areas or close to the Eastern borders. There is no peace-field profile for Assam Rifles battalions, unlike the Army or other CAPFs, because insurgency is prevalent in almost all locations where units of the Force are deployed. Even where the Units are located at places like Aizawl, Tripura or Tezpur, most of the troops are deployed in Company Operating Bases. To give you a fair idea, an Assam Rifles jawan may get a peace tenure of two and a half to three years in a 20 year cycle, whereas an Army jawan perhaps gets two years in peace in a cycle of five years.

Under such trying circumstances, the soldier of the Assam Rifles faces numerous challenges and dilemmas. First and foremost, which very few understand, is that he spends his entire lifetime under operational conditions in the Northeast. The families spend their time within the four walls of military stations and children grow up and undergo schooling under the protection of the gun! In spite of best efforts by the organisation, it is not always possible to provide all the amenities due to security constraints and remoteness of the areas. The second major issue that has cropped up post 1985, when the intake for Assam Rifles was made ‘All India Basis’, from the erstwhile ‘North East Region and Gorkhas’, is that personnel from far off places like Kerala, Uttarakhand etc do not get to be posted to places near their hometown, again unlike other CAPFs and Army. Lastly, is the pay and allowances and perks which perhaps are not in consonance with the Service Conditions.

Inspite of all the challenges, the soldier of the Assam Rifles remains motivated, professional to the core and proud of his achievements and service to the Nation. He remains steadfast in his resolve to uphold the sobriquet of ‘Sentinels of the Northeast’.

**DSA:** As a distinguished soldier and an able administrator, what is your vision for Assam Rifles and what ideas and thoughts would you like to share with the people of India and DSA readers around the world?

**DG Assam Rifles:** Assam Rifles is a very professional and potent Force. It has an enviable and proven record in every field and especially of its achievements and contribution to the Region and its people. It is synonymous with the Northeast and holds the key to the future of the Region. Towards this I have set for myself some Key Focus Areas, namely:

- **Make Assam Rifles a professional, proficient, well equipped and trained Force** to meet all the contemporary and future challenges effectively.
- **Empower the soldiers** with cutting edge technology and equipment in the field of surveillance, intelligence, communication and protection as well as improving their habitat in Company Operating Bases.
- **Improve training infrastructure** and capacity of training institutions being the Centres of Excellence.
- **Improving our stations to provide better quality of life to the troops and their families.**
- **To be the main driver for implementing Government policies/schemes** and to reach out to people in the interiors/inaccessible areas.

Lastly, not very many in the country know of Assam Rifles except Northeastern Region. It will be my endeavour to project the image of Assam Rifles not only in the Northeastern Region but at the National level as a Potent, Professional, Proficient and People Friendly Force, which is ‘Forever in Operations’. The Nation needs to sit up and take note of ‘one of the best Counter Insurgency Forces’ in the World and their only option in the troubled Northeast Region of the Country.
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The sterling job that the Army is doing as part of ‘Op Saddhavna’ has to be seen to be believed. The Indian Army has been engaged in nation-building through all the decades since Independence. That is the reason it is called the last bastion on which the country can fall upon. Can the Army contribute more to nation-building? It sure can, especially since it is steeped in discipline.

The saga of Indian Army is unique in conflicts and wars, guarding the borders, consolidating the integrity of the nation against insurgencies and terrorism, disaster and humanitarian relief at home and abroad and keeping the India flag high in the UN and across frontiers during various missions (West Pakistan, Sri Lanka and Maldives). It is not without reason that both Bangladesh and Sri Lanka have war memorials for the Indian military, even as we are still in the process of planning a national war memorial at home. If Indian leaders at various points in time have acknowledged that the Armed Forces are the last bastion on which the country can fall upon, it is because since Independence the country has been witness to the Indian Army along with the Indian Air Force and Indian Navy guaranteeing the country’s freedom against external aggression and the primary force employed in keeping the nation together in the face of internal discord, communal disharmony and fissiparous tendencies.

Epitome Of Tolerance
Look at the current slanderous campaign of ‘intolerance’ sweeping the country ostensibly for drawing political mileage, which was orchestrated prior to the Bihar elections with an eye on retaining the supremacy of numbers in Rajya Sabha. But amidst all the chaos of our tumultuous democracy, the country could learn a lot from the secularism that is one of the bedrocks of the Indian Army. A post by me on the social media as under providing a glimpse of the Sarv Dharam Sthal (all religions prayer hall) in my unit (photo on page 20) took many civilian friends by surprise. And many, many units of the Indian Army follow the same model.

The above is of special significance in our country where caste, creed, religion and reservations are being hyper-ventilated by political parties as part of vote-bank politics. In fact, a former Chinese President when asked to compare the economic progress made by China compared to India had replied that while China was concentrating on its economy, India was squabbling over religion – read Mandir, Masjid, Gurdwara etc. In India, with its diverse multi-religious, multi-lingual and multi-cultural composition, the Indian Army is the true example of secularism – a shining example of unity in diversity. This message of secularism is also carried home with personnel proceeding on leave and otherwise to friends in civilian areas. It is also significant to note the difference between the Indian and the Pakistani Armies, both legacy of British India. The Indian Army has been engaged in nation-building through all the decades since Independence. That is the reason it is called the last bastion on which the country can fall upon. Conversely, the Pakistani Army is holding the country to ransom through its private business-corporate empire running into billions of dollars, consistently carrying on with its state policy of terror, taking the country down the vortex of chaos albeit itself it has never won a war to-date. That is why it is said that while “India has an Army, the Pakistan Army has a country (Pakistan)”.

Not Optimally Utilised
Ironically, while the Indian Army has been engaged in nation-building, its potential has not always been optimised. Take the example of the 1947-1948 operations when the rabble of Pakistani irregulars and regulars were eventually on the run with the Indian Army in pursuit. Yet India made the strategic blunder of declaring unilateral ceasefire and approaching the powerless UN. Undoubtedly, the Commanders-in-Chief of both India and Pakistan were British officers at the time, but the folly was of India, thereby giving Pakistan a border with China it never had which changed the geopolitics of the entire region forever including China’s extraordinary overtures to Pakistan and more importantly the anti-India China-Pakistan nexus. But for India’s chronic lack of strategic culture and continuing policy of not including the military in strategic security formulation, the
Indian Army could have contributed even more in nation-building. A country like China first annexed Xinjiang and Tibet to secure the mainland while building her economy and post consolidation started flexing her muscles even in South China Sea only after it became a net importer of oil in 1993. Significantly, China announced her claim to Arunachal Pradesh only in year 2005. Even in the present era, we have failed to acknowledge that irregular forces have emerged with greater strategic value over conventional and even regular forces. While both China and Pakistan have advanced sub-conventional capabilities which they are employing in tandem against us, we have failed to establish a credible deterrence against these proxy wars by optimising our Special Forces, bulk of which is with the Indian Army. Such deterrence would contribute much more to nation-building as economic progress is intimately linked to national security.

**Saltoro Advantage**

We also fail to acknowledge that soft power actually softens hard power, soft power has no value without hard power and the mix of hard and soft power are must in current and future environments of hybrid warfare. Therefore, the facts that the Indian Military (bulk Army) holding 50 per cent obsolete equipment should be a matter of serious concern to us; a well-equipped Army can contribute much more to nation-building, both directly and indirectly. The Army has been holding the Saltoro Range (the highest battlefield in the world) since 1984 much to the disadvantage of Pakistan. That is why Pakistan has wanted India to withdraw from Siachen on some pretext or other and wants the issue to be discussed on priority even without including it as part of an overall discussion on Kashmir, as it should be. Siachen was an active battle zone till November 2003 when the ceasefire was enforced in the region due to persistent Pakistani pleadings. The Saltoro Range was one place from where casualties could be inflicted on Pakistan whenever she stepped up terror attacks on India. In the sphere of internal security and counter-insurgency operations in the country, the Army has been continuously engaged in active operations in the northeast region and in J&K throughout the post-independence period. Today, the northeast being looked after by Assam Rifles (AR) is not only officered by the Army but is also operationally under the command of the latter. The Army also provides the manpower for the Rashtriya Rifles (RR) that keeps the internal security in J&K to manageable levels in conjunction other Army units. The Indian Army also played significant role in subduing the Punjab militancy in 1984, a situation that Pakistan’s ISI is trying to recreate presently.

**Human Rights Issues**

In the context of Army’s counter-insurgency operations, the issue of the Armed Forces Special Powers Act (AFSPA) keeps cropping up periodically. What is not known by and large is that the AFSPA was never taken up by the Army. On the contrary, this was debated in two Parliaments and passed by the government of India, to be enforced where the civil administration has failed. The Army, when called upon to combat insurgency, does not have even police powers. Without the AFSPA the military would be rendered toothless. It would find itself dragged into unending litigation on often trumped-up charges. More significantly, the human rights record of the Indian Army is one of the best in the world and whenever any HR violations have taken place, the Army has ensured exemplary punishment.

The bottomline is that the Army has always acted firmly but fairly and has always employed the minimum force. Its impartiality and successes have led to success in all missions earning trust and admiration. Army’s conduct and compassion in calamities like the Bhuj earthquake, Uttarakhand disaster, Kashmir floods and Nepal earthquake have won loads of appreciation from the grateful population, especially as the soldiers disregarded own rest, comfort and shared food at the expense of reducing own rations. If the youth in educational institutions are inculcated in patriotism and national integration through the National Cadet Corps, the force behind it is the Army. The sterling job that the Army is doing as part of ‘Op Sadbhavna’ has to be seen to be believed. This ranges from running schools, adult education centres, computer centres, women empowerment centres, training in stitching, knitting, embroidery, shawl weaving, candle making, jams and pickles, small-scale hydro projects for electrification of villages, construction of roads and bridges, medical camps and veterinary camps in remote areas, polyhouse vegetable farming, provision of artificial limbs, advance medical treatment, cultural and educational tours pan-India, help in setting up cooperatives, organisation of sports and cultural activities, provision of LED lighting, generators, sports equipment, school textbooks and the like. In mid-2000s, when a Division in Western Ladakh wanted to hand over five out of the 10 schools run by the Army to the civil administration, there were mass civilians protest and demonstrations not to do so, lest education of their children would suffer.

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**Indian Army has been continuously engaged in nation-building**

The writer is a third generation Army officer who retired as DG Info Systems in 2009 after 40 years service. He participated in the 1971 Indo-Pak War, commanded a Special Forces Battalion in Sri Lanka, a Brigade on Siachen Glacier during Kargil Conflict, a Division in Ladakh and a Strike Corps in Semi Deserts. He is former Colonel of The Parachute Regiment. A leading defence expert, he is a visiting fellow in foreign Think Tanks and contributes regularly for Indian and foreign publications.
Discipline The Bedrock
Can the Army contribute more to nation-building? It sure can, especially since it is steeped in discipline. On the fourth day of his visit to UK in October 2015, President Xi Jinping said in his address in a conference at UK’s Confucius Institute that the British have learned the value of strict discipline in schools from China while the Chinese have learned from the British that children should have more time to play. While the world may have problems in levels of discipline, the Indian Army maintains steady balanced discipline. That is why the civil sector is eager to employ Army veterans. The problem lies in organising this holistically. The Directorate General of Resettlement (DGR) under the MoD and the Army Placement Organisation (APO) have limited capabilities due to organisational constraints of handling more than 60,000 Army personnel proceeding on pension annually – many soldiers in age group as young as 34-35 years.

Re-employment
Most of this young disciplined force is without jobs after hanging up their uniforms. There have been suggestions for their lateral induction in paramilitary forces, Central Armed Police Force and State Police forces but the job offers, if at all, are likely in insurgency areas, which is unworkable. When the case for raising of Rashtriya Rifles units was first mooted, the proposed concept was to have 75 per cent of the manpower from Army Veterans with balance 25 per cent from regular Army on deputation. The concept failed because veterans who have periodically been employed for counter-insurgency while serving in the Army can hardly be expected to volunteer for posting to such areas post retirement. So, there is a need to evolve a policy to gainfully employ these veterans for nation-building, optimising their skills and imparting additional skills as required. Given their Army training, they should also be integrated into the required ‘billion eyes on the ground’ concept in view of expanding threats to our internal security, as also use them for de-radicalisation programmes.

Compulsory Voting
India’s major strength is its democracy and within that the Army has earned the distinction of being termed a highly ‘apolitical’ organisation. At the same time, there is need to build our political institutions to the betterment of India, by choosing the right leaders. However, what we have witnessed over the years is that the ballot is biased in favour of caste, creed and religious preferences. With the secular and disciplined character of the Army, the soldiers can be banked upon to vote based on capability, which is the requirement of the day. Fortunately, the Election Commission of India has authorised every soldier to vote in State and General Elections in the place of his posting even if he has served in the station for one single day. Unfortunately, the soldiers have not been given the chance to so vote which actually amounts to denying their fundamental right under the Constitution. There is a need to make voting by the Military compulsory, as has been done for the population of Gujarat State.

OROP Imbroglio
Lastly, the President is the Supreme Commander of the Armed Forces. It is time to change from the Viceregal legacy. The US and French Presidents make sure to meet the troops informally on many occasions. It would do good if the President of India does so too. The OROP issue appears to have been mishandled and allowed to linger on for too long. All that needed to be done was reinstitute how pensions were being given pre-1973; that is the very basis of what the Koshiyari Committee had recommended.

On balance, the Indian Army has been continuously engaged in nation-building and can be relied upon to do so in perpetuity.
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Challenges For Modernisation

A new beginning has been made recently by commencing the process of raising the Army Design Bureau at Secunderabad. A lot however will depend on how the Army leadership nurtures this fledgling organisation and develops it appropriately to achieve results comparable to its naval counterpart.

The Indian Army is going through one of its glorious hours, operationally. It has gained notable success in its internal counter-terrorist and counter-insurgency operations and its deterrence strategy against external threats appears to be ‘on course’ and working. But the Army knows that the current situation could just be a lull and there would be many challenges to face in the future. Our potential adversaries may be emboldened in the future to confront us more aggressively on our border disputes and internally, the threats could get more serious, given the rise of terrorism globally and in the region. Hence, we need to utilise the current opportunity to address these challenges, so that we are better prepared to meet the nation’s mandate and aspirations in the future.

Delay Costs

The most serious challenges facing the Indian Army as it looks towards the future, relate to modernisation of the force. Modernisation of the Army is critical not only in the context of keeping the force ‘mission reliable’ but also to retain its credibility and effectiveness as an instrument of deterrence and war fighting. Modernisation involves acquisition of new, preferably ‘state-of-the-art’, weapons and equipment for making up deficiencies and replacement of obsolete equipment. It also entails upgrading old equipment, where possible, to extend their life and combat worthiness. Both these processes, acquisition and upgrading, are expensive and time consuming, with a related implication, ‘the more you delay, the more it costs’. The problem has to be seen in the context that, no new field artillery gun has been procured since the 155 mm Bofors gun contract of the mid 1980s, only a few new AD weapons have been acquired (and that too, only recently), much of the mechanised forces’ inventory is getting old and the mainstay of the Army’s operations on the LoC, in counter insurgency and the mountains, the infantry, continues to be burdened with obsolete INSAS rifles. The Army Aviation Corps, the fledgling new combat arm of the Army, is still struggling with age old Cheetah helicopters, which are in urgent need for replacement. The only silver lining in the clouds has been the continued acquisition of the relatively modern and robust T-90 tanks by the Armoured Corps and the continuing production of BMP-II infantry combat vehicles, which are the mainstay of the mechanised infantry.

Indian Army In Vanguard

Environmental realities related to the Army’s threat perspective and appreciated future employment dictate that, whatever the nature, spectrum or level of conflict that the country gets involved in the future, the Indian Army will always be in the forefront of conflict resolution, given the ‘land-centric’ nature of our territorial disputes and the inevitable need for ‘boots on ground’ in conflict situations. Be it sub-conventional conflict, humanitarian and disaster relief (HADR) missions, special missions in peacetime or the need to ‘fight dirty’ during war, the Indian Army will always be required to be prepared to take on tasks beyond its traditional role of conventional deterrence and war fighting. But is the Army prepared for these and other unforeseen challenges that can manifest in the decades ahead in our turbulent neighbourhood? Are our existing systems, procedures and higher ‘civil-military’ command structures (the political leadership, MoD bureaucracy and Army Headquarters) adequate to handle these military challenges in the most beneficial way for the nation? The answer would clearly raise a lot of doubt. Issues that plague us include lack of modernisation, inadequate structures and organisations, administrative and leadership styles and human resources policies. Some of these issues have been identified and are being addressed by the current leadership in the Army and the government; this article is focused on modernisation challenges and the way forward.

No Budgetary Backup

So, how have matters come to such a pass? Why have the Army’s modernisation plans been so inordinately delayed? Obviously, no single agency can be held responsible for the current situation and the intention here is more to identify area of concerns and suggest remedies, rather than apportion blame. However,
important to keep in mind that the Government, than is one other planning, nuclear policy, military deterrence and force structuring, operational capability building, mechanised warfare, counter-insurgency and UN peacekeeping.

The writer is former Vice Chief of the Indian Army. His expertise lies in the realm of national security strategy, military deterrence and force structuring, operational planning, nuclear policy, capability building, mechanised warfare, counter-insurgency and UN peacekeeping.

Lt Gen Philip Campose
PVSVM, AVSM, VSM** (Retd)

The fact that wars have not been fought for a long time covers up the deficiencies and obsolescence of equipment or the lack of modernisation.

The fact is that government after government has made repeated promises but not provided the requisite budgets for big ticket purchases. The risk-averse bureaucracy has mired itself in needless ‘red tape’ and procedures to justify its endless list of observations, leading to prevarication and delays. The Army bureaucracy has also not covered itself in glory on this issue, by themselves displaying risk-averseness and lack of seriousness in sustained pushing of critical proposals.

Finance Ministry Manipulation

Governments of the day are primarily responsible for allocating budget and sanctioning acquisition proposals, keeping in view the need for building capability and for modernisation. However, the ‘guns versus butter’ debate invariably gets the better of them, leading to major inadequacies in allocation of Capital funds for defence purchases. Currently, against a perceived annual requirement of ₹10,000 crore Capital budget projected by the Army for new schemes, only approximately ₹1500 crore are allotted. Further, not only are adequate Capital funds not allocated, but large portions are also subsequently withdrawn from the Defence Budget year after year by the Finance Ministry, to balance deficits under other Budget heads. This also results in the Finance Ministry delaying many of the ‘big ticket’ proposals after it reaches them for final clearance for unduly long periods without explanations. The bureaucracy of Defence Finance generally acts in concert with their counterparts in the Finance Ministry, the efforts thereafter being to somehow pin the blame on the leadership and procurement staff of the three Services. Inadequacy of budget leads to a lot of uncertainty among the prime stakeholders, the Army procurement staff, who remain unsure whether their proposals will get sanctioned, even after crossing all the procedural hurdles. A related problem is the substantial increase, year on year, in revenue requirements of the Army, which leaves very little for Capital expenditure, especially new procurements.

The fact that wars have not been fought for a long time covers up the deficiencies and obsolescence of equipment or the lack of modernisation, unless it is a case for assault rifles or bulletproof jackets, which have adverse implications on the operational capabilities of troops involved in counter-terrorist or counter-insurgency operations in peacetime. The defence bureaucracy, famous for risk averseness and prevarication, is extremely wary of big ticket procurements from foreign sources and thus has become adept at scuttling such proposals, on one pretext or the other. The only big ticket schemes that appear to have a chance of getting through are those negotiated through ‘government to government’ politico-commercial channels or those which are led by the Defence PSUs or Ordnance factories.

DRDO Is Sub-optimal

Other major problems affecting modernisation of the Army are the inadequacies and delays in achieving our goals of indigenisation and self-reliance in defence procurement. The DRDO is functioning sub-optimally in this regard. The DRDO has repeatedly proved itself incapable of producing ‘state-of-the-art’ Army equipment, which paradoxically, it continues to claim publicly. The Ordnance factories and Defence PSUs are mostly functioning below par – they lack global quality standards and surprisingly, the costs of their products are very high. Protectionism by the Government and the Ministry towards the DRDO, Defence PSUs and Ordnance factories results in a lack of level playing field for private players, who have relatively much more potential for manufacturing reliable big ticket weapons and equipment over the long-term. As of now, private players are only manufacturing components or sub-parts of Army equipment. A prime example of the malaise is the FICV ‘make’ project, which was initiated with much fanfare in 2008 and drew in a number of our leading private players, but was abandoned a few years later, without even a reference to these companies, who had already invested precious capital into these projects. Consequently, defence projects are seen as high risk ventures by the private industry, which need much more assurance from the Government, especially now that the risk averseness and lack of seriousness in sustained pushing of critical proposals.

Not only are adequate Capital funds not allocated, but large portions are also subsequently withdrawn from the Defence Budget year after year by the Finance Ministry, to balance deficits under other Budget heads.

Defence projects are seen as high risk ventures by the private industry, which need much more assurance from the Government, than is currently available, to motivate them to invest in these projects.
Indian army

NEW TRAJECTORY

than is currently available, to motivate them to invest in these projects. The new government is definitely making a very positive effort to address many of the inherent problems in the system, but it is still too early to comment whether these efforts will bear the desired results.

Army At Fault Too

The Army is also yet to get its act together on formulating General Staff Qualitative Requirements (GSQRs) and optimising trial methodology, processes which are critical for successfully concluding the procurement process in a timely manner. Part of the reason for the sorry state of affairs is that, unlike the Navy and Air Force, there is lack of continuity in postings of officers assigned to procurement functions in the Army. The Army continues to employ ‘generalists’, from top-end ‘directional’ functions to those at the ‘working’ level, whereas the need is to develop ‘specialists’ for these roles. Consequently, many of the procurement staff are on the ‘learning curve’ most of the time, resulting in repeatedly making mistakes and re-learning lessons which have been learnt before. Also, the Army currently lacks internal design expertise, like the Navy’s fifty year old Design Bureau, which is in a position to readily provide design inputs and continued interface to the Navy for procurement and development of new ships and weaponry. A new beginning has been made recently by commencing the process of raising the Army Design Bureau at Secunderabad. A lot however will depend on how the Army leadership nurtures this fledgling organisation and develops it appropriately to achieve results comparable to its naval counterpart.

The Panacea

What should be the Army’s response to these challenges? First and foremost, the Army leadership must convince the Government to allocate more budget to Defence and to the Army specifically, so that the Army is able to achieve its modernisation goals in a time bound manner. The government must seriously consider raising budget allocations for defence from the current 1.74 per cent of GDP to 2.5 per cent or more, as recommended by a number of studies in the past. The Government must start a system of ‘roll on budget’ so that Capital funds allocated for acquisition are not allowed to lapse. The PMO and the Ministry must collectively take responsibility for and provide more active support towards capability building of the Army.

The new government must increase significantly and concurrently introduced and monitored, modernisation of the Army will remain a pipe dream, with disastrous implications for India’s security in the future. Incentive must be provided to the bureaucracy to achieve big ticket procurement targets which are identified as critical for the Army’s modernisation. The Army must get its act together as far as developing expertise among its procurement staff and optimising its procedures. A lot has been initiated in the recent past, the momentum must not be lost.

Private Sector In Defence

The Government must concurrently work at removing the country’s unwelcome tag as ‘the world’s largest importer of weapons’, by added focus on India’s private defence industry. The private industry must be provided all possible incentives and encouragement to not only manufacture components or sub-systems for the Defence PSUs and Ordnance factories, or just take over their assembly lines, but to manufacture full systems independently. Incentive must be provided to the indigenous industry to go beyond manufacture of weapons and equipment based on existing technology and collaborations, but to start designing futuristic equipment and compete with global players in this regard. The Dhanush 155 mm artillery gun, small arms for the infantry like the assault rifle, carbine and rocket launcher, bridges and bridge layer tanks as also the wheeled amphibious Armoured Personnel Carrier are well within the capability of the Indian industry to produce, with some assistance from the DRDO. The new government has initiated a slew of measures to improve procedures and achieve better results in defence modernisation. However, unless the Army budget is increased significantly and accountability is concurrently introduced and monitored, modernisation of the Army will remain a pipe dream, with disastrous implications for India’s security in the future.
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Website: www.brahmos.com Mail: mail@brahmos.com
Most analysts agree that sub-conventional operations in tandem with conventional operations are likely to be the norm in future, wherein SFs are likely to play a major role. Therefore, it is important that we evolve doctrine, concepts of employment and organisational structures for our Special Forces which are relevant and best suited to meet future security challenges.

Special Forces (SFs) are small, elite military units, with special training and equipment that can infiltrate into hostile territory through land, sea or air, to conduct a variety of operations. The SF personnel undergo rigorous selection and lengthy, specialised training. They are not a substitute for conventional forces, but a necessary adjunct to existing conventional capabilities.

Limited Mandate
The largest component of our SFs is in the Army. Their present structure enables them to carry out only ‘direct action’ type of operations, like raids, direct and indirect assaults and other attrition-oriented tasks. However, they are neither organised nor trained to carry out other tasks, which the SFs of some other countries are capable of conducting. These include tasks like unconventional warfare, specialised reconnaissance, psychological operations, civil affairs, counter proliferation, sensitive special operations and other similar tasks.

At the national level, there is a proliferation of many types of SFs, which reduces focus, is not cost-effective and lacks accountability. Weaknesses in the system are known, but on account of various reasons, we have not been able to rectify them.

Threats, Challenges And Tasks
India’s strategic concerns are not confined to the subcontinent, but encompass the entire Northern Indian Ocean area, from the eastern seaboard of Africa in the west, to the Malacca Straits in the east and include Iran, the Central Asian Republics (CARs), Afghanistan, China, Myanmar and the littoral countries of South East Asia. This needs to be borne in mind when we look at structures and organisations.

India also aspires to be recognised as an economic and military power of some reckoning, with a permanent membership of the UN Security Council. These objectives can be achieved by ensuring a peaceful internal environment; security from external threats and capability to project power in the region, when our interests so demand. Such an aspiration requires India to modernise its military and equip it with contemporary high technology-equipment.

SFs have extremely important roles to play in these multi-faceted challenges, as even small components of these specialised forces, if correctly tasked, can bring strategic results and meet national aspirations, provided old notions and our propensity for the status quo does not circumscribe them!

Importance Of SFs
Operations of SFs differ from conventional operations in the degree of physical and political risk; operational techniques; mode of employment; independence from friendly support and dependence on detailed operational intelligence. SFs may be used against a wide range of adversaries, including terrorists,
insurgents, guerrillas, or regular combatants. Conversely, SFs can be used to support insurgents, guerrillas and regular forces, if that becomes a policy.

The SFs can contribute to deterrence and elimination options for weapons of mass destruction, by collecting real-time intelligence and precision strike capabilities against weapons, storage facilities and command and control nodes.

In low intensity conflicts, SFs can be assigned roles related to winning the hearts and minds of the populace. In a proxy war environment, the SF is the force of choice for conducting operations across the border, without inviting the political, economic and military risks of war. All this presupposes that the SFs are not just trained for ‘direct action tasks’, but their role covers the entire gamut of likely tasks.

Mass Conversion Lost Valuable Expertise

The evolution of the SFs in the Indian Army began from a small unit of volunteers called Meghdoot Force that participated in the 1965 War with Pakistan. In July 1966, the first Para (Cdo) battalion was raised and two such battalions participated in the 1971 War with Pakistan. Subsequently, another parachute battalion was converted and the nomenclature of the three battalions was changed to Para (SF) battalions. One more battalion – 21 Para (SF) was added in 1996. After that was the deluge, in the sense that a decision was taken to convert all parachute battalions of the Army to Para (SF), a great blunder, as by this policy change the Indian Army lost its expertise in conducting airborne operations, which have no commonality with SF operations!

The Army’s SFs units are arguably the best infantry units in our Army, but despite their nomenclature of SFs, they do not fall in the category of Special Operations Forces (SOFs) of countries like USA, Russia or UK, whose top rated units: US Delta Force; Russian Spetsnaz; and British SAS, are SF units in the classical genre.

Besides the SFs of the Army, India has other forces too, which are also clubbed in the category of SFs. These are the Navy’s Marine Commandos (MARCOS), two forces operating under the Cabinet Secretariat, viz the National Security Guard (NSG) and the Special Frontier Force (SFF), a few battalions of the Rashtriya Rifles and sundry pseudo police battalions designated as Commandos, Cobras etc! Even the Indian Air Force (IAF) has a commando force, named Garuda Commando Force.

The advent of SFs in the Indian Army has been in fits and starts. There are two main reasons for our SFs not being comparable to the SOFs of other countries. The first is the over-zealousness displayed by a few senior officers of the Parachute Regiment, mostly retired, who sabotaged the growth of SFs in the real sense. This would be elaborated later.

The second reason is the focus of the Indian Army on attrition-oriented operations. Consequently, Para (Cdo) units of the past, or Para (SFs), as they are now termed, have largely been employed as super or elite infantry. No doubt they have performed well, but they do not have the expertise to perform all tasks and roles that other professional militaries assign to their SOFs.

There have been three watershed events in the evolution of SFs of the Indian Army and by happenstance I have been associated with each.

Military Politics

In early 90s, a major exercise was undertaken to convert the then existing three Para (Cdo) battalions into SFs and increase the strength by another battalion. I was the DGMO at that point of time. A major change in the roles of the units, making them more akin to SOFs of other countries, was formalised. I also had the honour of being appointed the first Colonel of the newly formed SF, the only time they moved away from the Parachute Regiment, mostly retired, who sabotaged the growth of SFs in the real sense.

The COAs succumbed to the pressure from the Parachute Regiment lobby and the units reverted to again becoming super-infantry! The second reason is the focus of the Indian Army on attrition-oriented operations. Consequently, Para (Cdo) units of the past, or Para (SFs), as they are now termed, have largely been employed as super or elite infantry. No doubt they have performed well, but they do not have the expertise to perform all tasks and roles that other professional militaries assign to their SOFs.

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SFs TRUTHS

1. Humans are more important than hardware.
2. Quality is better than quantity.
3. SFs cannot be mass produced.
4. Competent SFs cannot be created after emergencies occur.
5. Most Special Operations require non-SFs support.
The second instance was when I was heading the Army Training Command. Once again, a fresh doctrine for the SFs was prepared, in conformity with the changing nature of war, but the Kargil War intervened.

Later, when I headed the Western Army, I validated the changed doctrine and concepts of employment of SFs in a major training exercise, but the Army succumbed to the status quo!

The third occasion was in 2001, when as the Vice Chief of Army Staff, I again attempted another restructuring exercise. It was duly approved, but once again the Parachute Regiment lobby scuttled the move, as soon as I retired in 2001!

The situation today is that we have regressed by making all parachute battalions into Para (SFs), resulting in losing all our expertise of Airborne Forces and stopped the formation of real SFs. Resultantly, the khichdi that exists today is neither fish nor fowl! This needs to be set right, so that the nation fields both entities – the best Airborne Forces and the best SFs.

**Recommendations**

Many security situations in future will demand the employment of SFs that can carry out much more than only attrition-oriented tasks. We therefore need to invest heavily in the right kind of SFs, which have the ability to meet the entire gamut of situations likely to be faced by us. This includes training in optimally exploiting both human and electronic intelligence capabilities; scientific and analytical skills; ability to use IT; language proficiency and knowledge of cultural, social and behavioural patterns of the target populace.

The fragmented structure of our SFs also needs a relook. For starters, the three SFs of the Army, Navy and Air Force need to be placed under the command of a separate tri-service command, which should be placed under the Chief of Defence Staff (CDS), once that appointment becomes a reality and in the interim under the Integrated Staff of the Chiefs of Staff Committee.

**Anti-hijacking Role**

In most countries, the SFs are also tasked for anti-hijacking and hostage rescue missions. However, in India, these tasks have been assigned to an independent organisation – the NSG – headed by a police officer. Besides not being a cost-effective option, these tasks are actually carried out by personnel of the Army, who constitute the entire complement of the Special Action Group (SAG) of the NSG and are on deputation from the Army. The other portion of
the NSG, ie the Special Rangers Group (SRG), which is manned by personnel from the Central Armed Police units, has now degenerated into a force almost exclusively assigned to VIP security. The proximity to VIP politicians has had an adverse impact on their primary function, as well as on their discipline, deportment and professional efficiency.

There is a strong case for withdrawing the SAG complement from the NSG and assigning the anti-hijacking and hostage rescue roles to the reorganised SFs. The residual NSG can be restructured for the exclusive role of VIP security. This again is not a new proposal; I have myself proposed this twice, once when I was the DGMO and again when I was the VCOAS. However, on both occasions, when I moved out of the scene, the hierarchy of the army succumbed to the entreaties of the NSG and reverted to the status quo!

Most analysts agree that sub-conventional operations in tandem with conventional operations are likely to be the norm in future, wherein SFs are likely to play a major role. Therefore, it is important that we evolve doctrine, concepts of employment and organisational structures for our SFs, which are relevant and best suited to meet future security challenges.

Can We Replicate Osama Strike?
When units of the United States SFs had stormed the hideout of Osama bin Laden in Pakistan, there was much speculation in our media whether our SFs were capable of mounting a similar action. The answer is not a simple yes or no. Such a strike needs to meet at least three essential criteria. The first is ‘political will’, which we neither have nor apparently want to cultivate! The second is meticulous knowledge of the target area as well as the target, which our intelligence agencies have never been able to give and the third is the capability of the force to achieve the desired end state. Hypothetically, even if our political leadership somehow is able to find the necessary ‘will’ and by some miracle the intelligence agencies are able to give ‘actionable’ intelligence, our SFs units as presently structured, are not capable of a similar action.

By merely calling our units Para (SFs), we are deluding ourselves if we think that they are in the same league as the elite SOFs of the world. Notwithstanding this, our SFs units are manned by specially selected brave men, who are well trained and have better equipment than other units. Although their equipment may not be as sophisticated and modern as other elite SOFs, they have the capability to carry out attrition-oriented tasks. Their major weaknesses relate to having no integral helicopters to train for the wide variety of missions they are designed to perform and lack of network centricity that is essential in such missions today. It is unfortunate that overtures for setting up a state-of-the-art elite SFs unit, mooted by me and others a number of times, did not fructify on account of three reasons – refusal of the IAF to part with helicopters; emotional attachment of senior officers to their regiments and the comfort of the status quo! My detailed recommendations made on combining all SFs under a joint Special Forces Command has also been scuttled by the Chiefs, as they do not want to lose their

The SFs are tasked with missions that are beyond the capability of regular military units

SFs resources to a joint entity!
I do hope the Chiefs and other stakeholders revisit our SFs capability and make our SFs as capable and elitist as those of other countries. Today, it has become a dire necessity that can no longer be sacrificed at the altar of expediency and turf considerations.

Special Forces Need Special Equipment
The SFs are usually tasked with missions that are beyond the capability of regular military units. These missions require special tactics, skills and personnel. SFs units are usually much smaller in size and operate in smaller groups (usually 4 to 12) than conventional units. SFs also require special weapons and equipment, but the most important part of a Special Forces unit is the highly motivated and best trained individual.

In the coming years and decades, SFs are likely to be in great demand, as they will be particularly suited for many emerging missions. Many such missions will require traditional SFs capabilities, while others, such as counter-proliferation and information warfare, being relatively new, need to be specially developed.

The SFs face two major challenges. Firstly, they must integrate with conventional forces, government agencies, other forces and international agencies, when needed, while preserving the autonomy necessary to protect and encourage the unconventional approach that is the soul of the SFs. Secondly, SFs will continue to be tasked for surgical, stand-alone operations, which should be timely and in any environment. Language capability and regional and cultural orientation makes the SFs discrete, low profile and effective. The low cost/high payback ratio makes it the force of choice in many sensitive and intricate missions.

The nation does not need SFs, which are merely better infantry units. In case only better or super infantry units are needed, I am sure all our infantry regiments would be able to field at least one battalion each, if not more. What the nation does need are SFs, which are structured comprehensively, for a full spectrum capability, trained and ready for victory, or in other words – a total force of quality officers and soldiers. The future organisational structures must be value-based and an integral part of the Joint Team. They must be given the most modern weapons and equipment the nation can provide. The nation’s SFs must change to meet the challenges of today ... tomorrow ... and the rest of the 21st century.
A nation like India, with its immense diversity is virtually a tinderbox waiting to be ignited if certain socio-economic-political imperatives are not followed or fulfilled by either the governments or society. The Idea of India and its promise must never be sacrificed at the altar of pettiness and sectarianism.

Over the last 68 years or so, India’s internal conflicts have ranged from Pakistani planned and supported insurgency and terrorism in Jammu and Kashmir and other Indian States, on-off-on internal unrest in some of India’s restive Northeastern States including Assam, persistent efforts by Pakistan’s notorious spy agency, the ISI, to foment communal trouble in Punjab and fan Khalistani separatism, growing Naxal-Maoist Left Wing Extremism (LWE) threats in India’s hinterland, occasional sectarian, communal and language tensions, organised crime, money laundering and drug trafficking being the major internal security challenges confronting the Indian State.

Common Factors In Internal Security
Internal Security has many constituents and apart from external influences impacting it, there exist certain common factors which grossly contribute to its contours in the Indian context. Some of these are briefly discussed below:

• India is home to countless faiths and sub-faiths, cultures, castes, languages, regions, customs and its diversity, though uniquely beautiful is indeed mind-boggling. Unquestionably, India’s quintessential strength lies in this diversity, yet it also lends itself to major internal strife when provoked both from within or external influences.

• The other nation born from the womb of Mother India, since the parent nation’s violent partition in 1947, Pakistan, remains obsessively anti-India, grossly interfering in India’s internal affairs, fanning terrorism not only in J&K but in some other States also besides endeavouring to foist separatist feelings in some States of India notably Punjab. Pakistan’s continuing mischief inside India has adversely contributed to the internal security health of India – a factor which successive Indian governments have tended to underestimate despite having to go to war with Pakistan in 1947-48, 1965, 1971 and the Kargil conflict 1999.

• Mediocre and insensitive governance in some States, especially those reeking in poverty and caste divides, also lend themselves to adverse internal conflicts within the nation. One of the major reasons leading to the alarming growth of LWE can be clearly attributed to this factor plaguing the nation.

• Politically, the loss of major influence, across the length and breadth of a vast and diverse nation like India, of the two national parties, importantly the Indian National Congress and the current ruling party, the BJP and the exponential growth of regional political formations in various States also contributes to the rise of regionalism and the overall internal security health of the nation.

• Some politicians of varying ideological hues, pandering to their local vote banks indulge in electoral communal mobilisation by provoking imaginary divides, stoke the fires of regionalism and separatism, for temporary gains.

• India is now a youth predominant nation, with over 65 per cent of its population being under 35 years and thus India is naturally growing into a very aspirational society with millions of youth looking for suitable employment, better living standards and a million dreams of theirs remaining to be fulfilled. Any delays on such vital societal issues automatically contributes to economic and social frustrations which may lead to serious law and order problems.

The nuances of some of the serious internal security challenges and suggested national response to contain/manage/eliminate the internal conflicts within India are discussed briefly in the succeeding paragraphs.

Tackling Terrorism And Asymmetric Wars
India’s security establishment will also now have to be alive to the evil winds emanating from global Islamic jihadi outfits like Al Qaeda, the Taliban in the Af-Pak region and now alarmingly from DAESH (ISIL). Though Indian Muslim youth have remained unaffected by their vile propaganda, yet a few appear to have been affected within the nation and thus
monitoring the movement of Muslim youth to the Middle East will have to be ensured.

As the security organs of the nation further streamline their functioning by synergetic endeavour and undertake better counter-terror capacity building, our polity and importantly, the Central government has to speedily undertake additional measures to further strengthen our counter-terror mechanisms and response. Thus, all political parties in India must not politicise terror and a broad national consensus among all these parties must be reached on the national strategy and measures to be adopted to combat terror.

Secondly, in keeping with the nation’s resolve, India must prepare sound pre-emptive strike plans on terrorist infrastructure in PoK and elsewhere in Pakistan, if ever required.

Thirdly, India must determinedly endeavour to constantly improve its intelligence gathering, analysis and dissemination machinery both HUMINT and TECHINT. Pakistan has to be made to realise, both through dialogue and failing which by speedy and effective kinetic responses, as required, that terrorism against India will not pay. Stern action against all indigenous separatist leaders must be taken in case they indulge in anti-national or any form of secessionist activities. India must never be seen as a soft State, either by nations inimical to us and, importantly, by its own citizens.

**Combatting Left Wing Extremism**

The late Chinese Communist Party supremo and strongman, Mao Zedong, had succinctly observed that ‘Revolutionary warfare is never confined within the bounds of military action because its purpose is to destroy an existing society and its institutions and to replace them with a completely new structure’. It brooks no elaboration to state that among the internal security perils afflicting India, the most alarmingly burgeoning is LWE commonly dubbed as the Naxal-Maoist threat. The LWE threat currently spans nearly 200 districts spread over 16 States with a wide swathe running across the centre of the Indian hinterland from the Nepal-Bihar border to the Karnataka and Kerala borders, in a south west orientation, commonly referred to as ‘The Red Corridor’.

It is also well known that some of the areas in this ‘Red Corridor’ are totally bereft of any governmental presence and control and the LWE cadres refer to these as ‘liberated zones’. That Naxal-Maoists have cross-border linkages with some neighbouring countries compounds the seriousness of this growing threat to India.

**Causal Factors**

To rid the nation of LWE, it will be prudent to analyse the reasons for the growth of this scourge. These are a lack of a clear-cut national policy in combating indigenous insurgencies, poor intelligence capability at the grassroots level, ill-equipped, under-trained and poorly-motivated police and central police organisations (CPOs) and, above all, a total neglect of locally significant development programmes in the LWE infested areas. That most State governments have not implemented the various constitutional forest and land ceiling laws in these areas, enacted as early as in 1955 to safeguard the basic rights of tribals and the poor in rural areas has compounded and fuelled LWE. Thus, even some well-educated youth have been drawn to this movement both on idealism and romantic notions of fighting for ‘the have-nots’ against a cruel, corrupt and insensitive establishment.

It is a well-accepted fact that one of the major causative factors for the growth of Naxal-Maoism is that, since independence, the fruits of development have not trickled down to the vast marginalised sections of Indian society. The ever growing disparities among the many layers in our society is seen by the poor as exploitative of their basic rights and such sentiments consequently get the underprivileged...
fall into the trap of the Naxal-Maoists. It is also a well-known fact that some local leaders from different political dispensations maintain regular contacts with these militants, in their constituencies, to reap electoral benefits, something which is indeed shameful.

Intelligence reports also indicate that LWE is slowly but surely spreading its tentacles to urban centres and the National Capital Region which has a fair amount of industry, trade unions etc. Thus unemployed youth in these areas and some industrial workers are being drawn to the LWE ideology – all these developments portend many future problems arising for the Indian State.

To merely attribute the spread of LWE in the backward regions of the country to exclusively socio-economic factors will be rather simplistic. Currently, the Maoists-Naxals have explicitly refused any peace parleys with the government and are indulging in the worst forms of violence not only against the police forces but also against innocent civilians and lower level State government functionaries. Thus the first priority of the State should be to take head-on these violent cadres of the Naxals-Maoists, eliminate/capture as many as possible without causing any heavy collateral damage to own civilians, villagers and also those among these extremists who wish to surrender to the State.

Use Military Training Facilities
The stated policy of ‘Clear, Hold and Build’ is eminently workable provided there is synergy in the will and action between the political and security elements of the nation at the State and Central government levels. Efforts to sharpen our intelligence capabilities at the grassroots level in the LWE infested areas should be undertaken. Though it is the stated policy of the government not to employ the Army against own civilians, however, based on hard intelligence, small detachments of Special Forces could be used for executing lightning raids on the LWE leadership, in conjunction with employing helicopters and drones of the Air Force. Besides, the Indian Army should undertake training of CPOs and State police personnel in special operations tasks including in fighting through ambushes, night and stealth ops, bomb diffusing and IED neutralisation missions.

The J&K Impasse
A major problem for the Indian establishment which has distinct external and internal dimensions to India’s most serious security challenge has been, unquestionably, India’s northern and eminently strategic State of Jammu and Kashmir. Since J&K’s tumultuous accession to the Union of India in Oct 1947, the State’s relationship with its parent nation has been a roller coaster ride. It is to the credit of the Indian Army, the J&K police and some of our CPOs that India has adequately thwarted Pakistan’s violent machinations. Credit must be given to the common people of J&K that notwithstanding intense Pak subterfuge inside the State, by and large, they have not succumbed to Pakistani temptations based on religion, terrorist activities and heavy doses of financial largesse to the separatist leaders residing inside the state and taking their orders from Pakistan.

Though matters have improved to some extent, the desired levels of emotional integration between the Kashmir Valley with the rest of the nation is still wanting in certain spheres. By a consistent, cohesive, humanitarian and synergetic endeavour the unrest in the Valley can be suitably addressed. If the late 80s/early 90s of the last century was the near successful era of Conflict Initiation by Pakistan in J&K, it has taken nearly 20 years and thousands of casualties to both the people of J&K and India’s security forces in the years of suffering which can be referred to as the Conflict Stabilisation stage. Notwithstanding sporadic violence perpetrated by the Pakistanis and their paid agents inside the Valley, the stage is well set for the Conflict Resolution in J&K. It is thus more than imperative for the Centre, the State government and all concerned establishments to conceive and importantly implement an all-embracing security and development policy for J&K. The economic package announced by Prime Minister Modi during his recent visit to the State must be speedily sent to the State and various projects, as conceived, be fructified with alacrity. The unique and first ever experiment of totally disparate parties, the PDP and the BJP State coalition government, must be made to succeed in the larger interests of the State and the nation.

The security establishment in J&K must keep strict vigilance on the activities of the separatists.
and their Pak and ISIL flag waving cadres. As we permit democratic forms of dissent in the Valley, seditious activities should be put down speedily and adequately. Pakistan has to be firmly told that J&K is an internal matter for India and the only issue left over by the baggage of history is the reintegration of PoK/Gilgit Baltistan. We must never forget that in the past whenever some Kashmiri separatist leaders have spoken of peace and moderation, they have been eliminated by Pak’s notorious ISI.

The Northeast Conundrum
Northeast India is the only expanse in South Asia which is strategically encircled by Nepal, China, Bhutan, Myanmar and Bangladesh and is connected to the Indian activities by a narrow piece of land, namely the Siliguri corridor in West Bengal.

This region is ideal as a land bridge to the ASEAN nations with immense yet untapped, economic potential. Notwithstanding being land, resource and water surplus, this region remains largely underdeveloped in spite of the fact that overall militancy has markedly declined in the region, though Assam, Nagaland and Manipur still remain of security concern.

Though most Indians, including of the establishment, refer to the seven States of the NE, by and large collectively, it must be borne in mind that each of the States is different from the others with diversity not only in its ethnicity but security dynamics. Importantly, it is vital for the Indian State to introspect as to why, after 60 years of prolonged efforts by New Delhi, Conflict Resolution has not been successful in this region except in Mizoram which remains an encouraging example for the nation. Most NE scholars and security analysts opine that this strategic region suffers from a variety of deficits. These are a basic needs deficit, an infrastructure deficit, a resources deficit, a governance deficit and, importantly, a deficit of understanding between the region and the rest of the nation.

The Centre’s recent announcement of a ceasefire and peace agreement (details being still worked out) with the NSCN (IM) has been an encouraging development for not only Nagaland but the entire region. However, the Indian Army and the Assam Rifles and the local police must not dilute their counter-insurgency operations and further augment their intelligence capacity building in the entire NE region.

The youth of this region is uncommonly talented, physically robust and highly motivated and the Central government must reach out to them with commitment and sensitivity – both the region and the nation will benefit. In addition, as India now ‘Acts East’, this region’s economic development and India’s foreign policy engagements with the neighbourhood nations, in synergy, can prove substantially beneficial.

Keeping At Bay Intolerance/Communalism
A nation like India, with its immense diversity is virtually a tinderbox waiting to be ignited if certain socio-economic-political imperatives are not followed or fulfilled by either the governments or society. Thus ethno-religious-ideological fault lines, which exist in India and most other nations, have to be managed with a sense of fairness and balance for all sections in a society. Rough riding the way of life of minorities leads to more alienation and consequently more security problems for the nation. Thus Indian leaders, of all political hues, must never lose sight of this vital cardinal and not only profess but practice inclusiveness and secularism. The Idea of India and its promise must never be sacrificed at the altar of pettiness and sectarianism. India’s internal security conflicts of all shades demand that. By any standards, India today stands at the cusp of becoming a reckonable global power. Let us not miss India’s moment, but, by enlightened leadership, synergy amongst all its peoples and institutions and determined implementation re-energise the India Story as never before.
Terror threats in India are likely to increase. The need for greater sensitisation of the public towards these threats is an imperative. The Army is a huge, well-trained and motivated resource available to thwart terror attacks.

How effective is the Indian Army in meeting counter-terrorism threats in urban environment and what is the state of coordination with State police forces?

The threat of urban terror in India continues unabated although a big ticket event such as the 26/11 attack on Mumbai has not been repeated. A ‘threat in being’ remains live as long as Pakistan’s policy of fighting proxy war on Indian soil continues.

Good Intelligence
It is partially to the credit of our intelligence agencies that they have been able to proactively read the indicators and take out the threats before they could dangerously manifest. It is also Pakistan’s inability to handle too many situations simultaneously (Afghanistan, internal security and India) that there has been some let up in the last few years. However, the entry of Daesh (ISIS) into the devious world of terror has further enhanced possibility of terror threats. Daesh does not appear to be having an India focus at present except the generic attempts at online recruitment and influence which have been going on all over the world. These are precursor to possible serious actions later whenever Daesh has been able to build relationships with surrogates.

Threat-in-being
However, terror groups have a penchant for surprise and could execute heinous acts for publicity, inflict fear in target countries and populaces and send home messages of their arrival or return to action. The threats of lone wolf attacks, so called fedayeen and planned group-based actions are all within the scope of the nature of attacks which could occur. Hijacking, kidnapping, extortion etc would be left in the shade if a threat of chemical or biological attacks on urban Indian centres emanates; the indicators for this are as yet low. The Maoists have not adopted typical urban terrorism as part of their concept of terror and remain limited primarily to rural areas. United Liberation Front of Asom (ULFA) is now under control thanks to good cooperation from Bangladesh. The possibility of resurgence of serious terror threats in Punjab is not yet real. This essentially leaves LeT, JeM and potentially Al Qaeda and Daesh as threats which could manifest in different shades of terrorism.

Paris Methodology
That is the situation prevailing in India and from the spectrum of available threats the priority modus operandi which should attract our attention appears to be multiple small team attacks at an urban centre to cause maximum casualties, force a hostage situation and provide a media spectacle; Paris, Mumbai and various TTP attacks on Pakistan Armed Forces establishments could be the models that terrorists may seek as these seem to have delivered the intent that was sought. They could be replicated on different government institutions and vulnerable areas and vulnerable points in Tier 1 and Tier 2 Indian cities. Memories of plans of LeT to target India’s National Defence College (NDC) in Lutyen’s Delhi are yet fresh. Similar plans also existed against the Indian Military Academy at Dehradun. The attack on Parliament on 13/12 remains a grim reminder of the reach of determined terrorists who care little for their own lives and carry insane motivation to inflict harm on their adversaries.

So given the type of threats how ready is the Indian Army to meet them; should it at all be involved in counter-terror aspects outside protecting its own establishments; what is the core response concept against terrorism? Many questions, all needing answers.

Potential Targets
The prime targets for terror attacks remain metropolitan cities (metros) due to international visibility, potential for causing mayhem and comparatively easier safe houses from where the launch can be conducted. Tier 2 cities, which are well known for tourism or form part of some industrial/commercial base are also potential targets. An intelligence appreciation done from the terrorist
perspective will look for ease of approach, good targets such as malls, airports, hotels, educational institutions and government establishments; also quality of potential response by security forces (SFs). In this regard it is important to remember that after 26/11 four hubs of the National Security Guard (NSG) were established at Mumbai, Kolkata, Chennai and Hyderabad; these have been upgraded to a strength of 460 each and a fifth hub is to come up at Ahmedabad by the end of 2015.

Counter-terror Grid
If a terror attack is to take place at any of these metros the first responder will obviously be the local police who may be able to muster some armed police but that’s all. If an immediate contact takes place with terrorists the response will be situational with the nearest police force reacting first. However if it extends into a standoff of the Mumbai type the local NSG hubs will immediately react. The Army with its high standards of training and presence in almost all major cities can always be relied upon for response as per need. It has infantry units in all these cities; Mumbai has one, Chennai one, Kolkata has one with an infantry formation next door while Hyderabad and Ahmedabad too have sufficient infantry units if the NSG needs assistance. The Commando (Ghatak) platoons of these units are experienced in all forms of counter-insurgency and counter-terrorist situations and at least a composite company of well trained and experienced troops can be produced at most times by all these units. While there is a turnover system of 30 to 36 months freshly arrived units realise the import of this responsibility and get down to training core strength of troops and officers well before their arrival. Many of these units make arrangements with Special Forces units in different Commands to train at least a segment of their trainers who then train the rest. It is however, important to remember that while structured SOPs exist for response there is nothing fixed about them and the first available may respond earlier than others; the sequencing being irrelevant.

Tier-2 Vulnerabilities
While the metros are reasonably catered for in terms of availability of forces, local police, NSG and Army it is the Tier 2 cities like Indore, Coimbatore, Nagpur, Mysore and Bhopal which may have a problem. Army units are present in the cities or their vicinity but these are not necessarily from Infantry which can respond on their own to terrorist standoffs. Infantry units which form the core of response from the Army are not present there except in Indore where two demonstration battalions with the Infantry School and Army War College exist. Both, however, would have administrative commitments and it would be difficult to extract core strength from them unless suitably tasked, sensitised from time to time and rehearsed. After all aid to civil authority responsibility exists and strength needs to be provided irrespective of other responsibilities. Yet, responding to a terror standoff is not anybody’s call unless specially trained for it.

Two aspects need particular analysis. Firstly the capability of infantry or other units of the Army, their equipment, state of manpower and training; and secondly, the degree of coordination with the local administration including the police forces.

Men And Arms At Hand
Army personnel are trained in basic individual military skills, specialist skills and collectively for their unit roles for conventional tasks. None are actually required to be trained in counter-terrorist skills for their main task. Infantry units are fully trained for counter-insurgency (CI) tasks (not CT role) as their secondary role. Some, not all, artillery, air defence, engineer, mechanised infantry and armoured units have experience in counter-insurgency. Since the raising of Rashtriya Rifles, almost 25 years ago, a large number of personnel from these Arms have individual experience of counter-insurgency. Besides this, it is pertinent to realise that all units, including infantry, continue training for their main conventional
tasks while located at peace locations near or in these cities. There will be times when units move out for collective training in the form of exercise with troops (EWT). During these periods only rear parties exist at main locations and these are incapable of performing any organised role in CT operations. Equipment and arms with these units are not designed for CT tasks. For example, AK 47 rifles, the basic personal weapon for CT operations, are not available as these are held in CI areas as sector stores which are handed/taken over during relief. The 84 mm Carl Gustaf Rocket Launchers (RLs) and Automatic Grenade Launchers (AGLs) are held only with infantry units and not with units of other Arms except mechanised infantry. Demolition teams exist with engineer units and to an extent with infantry units (pioneer sections) only.

**Pre-positioned Counter-terror Teams**

Thus on the face of it and at a generic level while Army units from other Arms are capable of undertaking CT operations when called upon to do so their effectiveness may be marginal unless proper schemes for CT operations are drawn out as part of aid to civil authority and tasking and equipping done accordingly. This calls for specialised equipping of such units from sector resources and intense training which has to be continuous. While most such units can produce 35 to 40 per cent of their strength at the outset such numbers may never be required; the requirement to my understanding would be approximately one company (100 men) of well trained and well equipped personnel under experienced officer leadership. If I was to task Army stations to keep such resources ready for response well before the NSG arrives in Tier 2 cities I would insist on larger quantum of officer and JCO leadership as this makes better effectiveness in crunch situations. I would be willing to absorb all criticism for the sake of higher effectiveness. Command HQ of the Army need to be sensitive to such situations and pre-position certain sector stores and create task oriented teams through cross attachments in each major station located near Tier 2 cities. Army Commanders Special Financial Powers must be used for procurement of matching radio sets to communicate with Police control rooms and some essential specialist equipment such as stun grenades and wall climbing and assault equipment.

**Command And Control Clarity**

Command and control is always a major problem when it involves multiple forces. This needs to be resolved well before as part of civil-military liaison conferences and specifically between Army, Police and NSG. As a rule the Army does not function under command of any other organisation and this sometimes creates awkward situations which need to be avoided through frequent meetings, joint exercises and respect for each other. Pre-arrangement for joint control rooms and communications is also a pre-requisite.

The Army usually functions in this domain through its various Area and Sub Area HQs which remain in touch with civil authorities. They draw up the internal security schemes. However, where a field formation HQ exists local liaison is also followed up by such HQ as most resources would ultimately come from them.

Meetings and conferences must importantly develop trust and respect rather than ego and disdain. These must lead to joint recce of identified sites, drawing of maps of potential targets and arrangements for conduct of operations 24x7 once contact has been established.

**Continuous Vigilance**

In the field of training there is a degree of seriousness which needs to be adopted through which local police authorities impart knowledge on local customs, practices and hindrances in conduct of operations include religious festivals etc. Intelligence dossiers must be prepared and exchanged from time to time. Most infantry units have a few personnel experienced from NSG; they can form core teams for training other nominated personnel. There is a need for more regional hubs for training Army personnel in CT operations. At these hubs, room shooting facilities (close quarter combat) and urban models need to be constructed for realistic training.

In addition to assistance in CT operations in urban environment the Army needs continuous vigilance and response mechanisms for terror attacks on its own establishments. On the face of it almost every establishment anywhere in India is vulnerable because the psychological gain for terror groups will be huge if they can successfully target these establishments. The Category A training establishments, regimental centres and military hospitals could be prime targets. Recce of these is easy through various online means available and 24x7 security may prove a problem. It is important that the three Services conduct security alarms in military garrisons from time to time and also coordinate these with local police who usually have good intelligence networks.

Lastly, terror threats in India are likely to increase. The need for greater sensitisation of the public towards these threats is an imperative. The Army is a huge, well-trained and motivated resource available to thwart terror attacks. It realises its responsibility too but must continue to train and demand resources in terms of equipment and training facilities to better its skills.
Lieutenant General GS Chandel, YudhSeva Medal is the 22nd Director General of Rashtriya Rifles, an elite Counter Terrorism and Insurgency Force. Lieutenant General GS Chandel joined Officers’ Training Academy in 1977 and was commissioned into 5 BIHAR in March 1978. In an illustrious service career spanning 38 years, the General has gained tremendous operational experience which includes command of an Infantry battalion deployed on the Line of Control in High Altitude Area in Counter Insurgency/ Counter Terrorist environment; wherein he took part in Operation Vijay as a frontline Commanding Officer and for which he was awarded the prestigious YudhSeva Medal. The General commanded a Mountain Brigade in the Northeast in counter-insurgency infested area, a RAPID (Strike) Division along the Western Border and a Mountain Corps along the Northern Borders in the East. He has held various important staff appointments to include those in Military Intelligence Directorate at Army Headquarters and General Staff Operations appointments at Command & Corps Headquarters. He has also been a Commando Instructor at Commando Wing, Infantry School. In addition to Yudh Seva Medal, the General Officer has been awarded with Army Commander’s Commendation Card twice.

General Chandel is an alumnus of Defence Services Staff College, Wellington. He has also attended the Higher Command Course at Army War College, Mhow and the National Defence College Course at New Delhi. He holds a Masters Degree in Defence Studies from Madras University, MPhil in Defence and Management Studies from Indore University and MPhil in Defence and Strategic Studies from Madras University. He is also a Law Graduate and has been a Research Fellow at the Institute for Defence Studies and Analyses, New Delhi.

The General Officer has been associated with Multi Agency Centre during its initial stages of establishment and also with J&K Operations Group and Intelligence Group. He had also been participating in deliberations on proxy war in J&K at National Security Council Secretariat (NSCS) while he was posted at Army Headquarters. He has attended inaugural Civil-Military Joint Training Programme at Lal Bahadur Shastri Administrative Academy at Mussoorie.

The General Officer is widely travelled and has been part of Indian Army delegations abroad.

The General also holds the office of the Colonel of the Bihar Regiment since Aug 2014.
As the Su-30MK detects an F-16 to its right, the IAF pilot quickly pulls the stick and moves to the side, entering his jet into an enviable left-hand position as it locks horns with his opponent in a classic dogfight.

These are men in their flying machines and their friendly war games.

In the time of peace, such mock exercises help the participating air forces to compare the capabilities of the fighter planes and the level of pilot air combat training of the opponent.

Such exercises have a long history, going back to the Cold War era.

India, however, has been a recent entrant.

The Indian Air Force (IAF) participated in the international exercise for the first time in 2003. That exercise, called Garuda I, was held with France with which it has a long time defence alliance. It was held in India with the IAF pilots using Russian Sukhois (Su-30s), while France brought its Mirage 2000 fighters.

Garuda II, held out of ISTR airbase in France, saw the first ever foreign deployment of the IAF in its modern-day history when it participated with six Su-30Ks.

In 2010, the IAF Su-30s paid their second visit to France but this time it was made by the definitive thrust-vectoring version – the Su-30MKI. In addition to the FAF Mirage 2000s, Rafales and Indian Su-30MKIs, Garuda IV saw the participation of the Singaporean Air Force (SAF) F-16s, IAF Il-78MKI air tankers in addition to FAF KC-135FR tankers and E-3F airborne early warning and control system (AWACS) aircraft.

Garuda V was held in 2014 in India, and saw the participation of FAF Rafale fighters pitted against IAF Su-30MKIs, MiG-21s and MiG-27s, supported by Il-78MKI tankers and A-50I AWACS aircraft.

However, the Garuda series of exercises had one basic flaw: No information was revealed about the results achieved in the mock air combats, under the strategic partnership inked between the two countries in 1998, even more than ten years after the first such exercise was held.

The situation has been different in the joint exercises with the US Air Force (USAF), where each side claims victory and superior air power.

The purpose of the USAF to hold joint exercises with IAF, even though the two countries are not allies, is to gain more information about the aircraft of its main rival Russia, such as MiGs and Sukhois, which the IAF has many in its armoury.

The first joint exercise between the IAF and the USAF was held in 2004 at Gwalior airbase under Cope India. The USAF brought six F-15Cs from the 19th Fighter Squadron (FS) from the 3rd Fighter Wing (FW). The IAF participated with Mirage 2000, MiG-21 Bison, MiG-29 and Su-30MK/K (without thrust-vectoring engines) fighters and MiG-27L fighter-bombers. Cope India 2004, however, lacked an overall scenario and included only separate offensive and defensive air combats.

The scenario followed the American dissimilar air combat training (DACT) concept: 1 vs 1 and group air combats between small groups US fighters pitted against dissimilar less-capable opponents.

According to the Indian side, the results of the mock air combats were 9:1 in India’s favour.

Even Col Mike Snowdgrass, Commanding Officer (CO) of the 3rd FW stationed in Alaska, had some good words for the IAF pilots and their machines.

“The opponent had not only quantitative advantage, but the IAF pilots were very proficient in handling their planes and were well prepared in tactical aspect .... Su-30MK proved to be their best aircraft, together with the upgraded MiG-21.
Our training against Red opponents is probably not so good because the opponent proved better than we supposed it to be ...," he said.

The beyond visual range (BVR) air-to-air combats demonstrated that the F-15C and Su-30MK can detect each other with their radars at similar distances but the Indian pilots were able to launch their R-27 missiles earlier and therefore were declared winners in the engagements.

In the manoeuvring combats, the Su-30, even without thrust vectoring, proved superior to the F-15C, largely thanks to its large internal fuel capacity allowing the IAF pilots to keep their afterburner engaged for longer time thus retaining better manoeuvrability performance and avoiding speed decay.

In addition, the Indian MiG-21s on several occasions utilised the so-called ‘silent’ intercept tactics, using information on the air targets supplied by an Su-30 while keeping their radars switched off during their attacks. As a result, the Americans had to admit the fact that a 2nd generation fighter, such as the classic MiG-21, had been effectively turned out into a 4th.

The Cope India 2004 results were discussed not only in the Pentagon, but also in the US Congress. The not so positive outcome in these mock air combats prompted the Congress members to propose immediate funding of the modernisation of the F-22 and F-35 fighters.

The next exercise in this series, Cope India 2005, held at Kalaikunda Air Force Station in West Bengal saw the participation of 12 F-16C Block 50s from the 13th FS of the 35th FW, stationed in Japan. The IAF participated with Mirage 2000s, MiG-21 Bisons and MiG-27s together with their most modern assets, represented by the thrust-vectoring Su-30MKI fighters. Another important feature of this exercise was the use by both sides of AWACS assets, represented by one USAF E-3C aircraft.

The results were similar to those reported in the previous exercise – the IAF aircrews were able to use the information derived from the AWACS aircraft in a faster and more effective manner.

In the summer of 2008, the IAF took part for the first time in the large-scale Red Flag exercise held at Nellis AFM in Nevada, USA, despatching six Su-30MKIs from the 20th Squadron Lightning, supported by two Il-78MKI tankers and one Il-76MD transport.

After the exercise, USAF’s Col Terrence Fornof said the IAF had experiencing problems with the Russian-made engines, and the IAF pilots were prone to committing fratricide – killing of friendly aircraft during the air combats.

He also said that the timing between the take-offs of IAF aircraft was 60 seconds, which was two times longer than that used in the air arms of many developed countries.

He also opined that America’s F-15 can outgun the Su-30MKI, and that the IAF cannot be regarded as a serious threat in the close air combat arena.

This was cohesively countered by the India side point by point.

In August this year, Su-30MKI from 2 Squadron participated in the exercise ‘Indradhanush’ along with Typhoon FGR4 jets of the Royal Air Force (RAF) of Britain at RAF base in Coningsby.

India claimed 12-0 victory.

The British media, however, refuted the Indian claim, but admitted that the Su-30MKI could be a lethal weapon in skilled hands.

The official RAF representative was more modest: “The RAF pilots and the Typhoon fighters fared well in the joint exercise with the Indian Air Force. Both sides gained useful information which will be taken into consideration in future exercises.”

There are actually no winners or losers in such exercises. These should only be used to evaluate the level of skills of the pilots and the organisation of the flight operations. Not to score brownie points.

Yashwardhan Joshi

The writer is a PIB accredited correspondent with more than 20 years of journalistic service and has been writing for Insight Feature Service (IFS) formerly National Press Agency (NPA), since 2011 on current political and economic situation in the country. He was also special correspondent with the United News of India (UNI).
MESSAGE

The Indian Air Force is celebrating its 83rd anniversary on 08 Oct 15. Living up to its motto, ‘Touch the Sky with Glory’, the IAF has been a stellar guardian of the Nation’s skies ever since its inception in 1932. Perennial churning of radars and ceaseless vigilance by air-warriors is an uncompromising requirement to keep our airspace secure. Be it guarding National Frontiers or responding in the hour of humanitarian crises, the IAF continues to serve with pride and distinction. It is therefore said that while the IAF is ‘Exclusive by Profession’ it remains totally ‘Inclusive in Service to the Nation’.

The heroic deeds of our gallant predecessors have left their footprints in the annals of history and they will always be remembered by our Nation with a sense of gratitude. Building upon the strong foundation laid by our founding fathers, generations of visionaries have propelled the IAF ‘Ever Forward’ in its path towards becoming a capable and potent Air Force.

This year, we have commemorated the heroism of our legends on the fiftieth anniversary of the 1965 Conflict. We were indeed privileged to have done so in the benign presence of Marshal of the Air Force Arjan Singh DFC, who so ably led the IAF as its Chief during the Conflict. The Indian Air Force salutes the bravery of its heroes and martyrs.

The IAF has evolved considerably, and can look back with justified pride and satisfaction at its achievements over the last 83 years. The demands of sustaining operational readiness are unrelenting. With diverse operating terrain, climatic conditions and vast air space to defend, the IAF trains its air-warriors to meet any contingency.
By consistently displaying exemplary response, courage and professionalism, our Service has earned accolades, both within India as well as abroad.

The IAF’s ability to respond swiftly and surely to calls of Humanitarian Assistance has been put to test on several occasions in the past year. Be it airlift of 200 tonnes of drinking water to the Maldives, evacuation of Indian and foreign nationals from Yemen or the response to the earthquake in Nepal, IAF ensured that it has been at the forefront of our National response.

Our Air Force has embarked upon a systematic and phased process of modernisation to meet the requirements of the 21st century. As with any such endeavour, IAF has laid due emphasis in ensuring that our training methodologies and wherewithal are shaped to operationalise these potent weapons and weapon-enabling systems. We are duly supported in our efforts by the domestic industry, which stands ready to be a greater participant in strengthening our indigenous capability as part of the “Make in India” vision.

On the 83rd anniversary, I would like to assure our countrymen that the IAF stands ever ready to safeguard our territorial integrity with a high degree of operational preparedness. IAF extends its whole-hearted support to the Nation’s march towards progress and prosperity.

DSA Magazine has played a stellar role in promoting public awareness about the Indian Armed Forces and in highlighting the achievements of IAF through an array of well researched publications. On behalf of all air-warriors, I compliment the DSA team for the special issue on Air Force Day and wish them success in all their future endeavours:

Jai Hind!

Air Chief Marshal
Chief of the Air Staff

01 Oct 15
It gives me immense pleasure to forward you this letter for Defence and Security Alert (DSA) magazine which is dedicated to defence and security professionals. Being a regular reader, I find this magazine very informative and unique in terms of security-related issues into detail. The magazine also covers a wide range of improved technologies and in-depth knowledge of various equipment and gadgets. Many readers have appreciated the detailed analysis of the Indian Army's Military Forces and Security Forces, and are very interesting and research-oriented.

2. DSA is celebrating its golden anniversary and we invite you to contribute to the future.

Best regards,

Shri Praveen Agarwal
CEO, Defence and Security Alert Magazine

(Dated: 29th September, 2015)

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I am happy to note that Defence and Security Alert magazine will be publishing an Easter edition in the month of October 2015. The entire team behind the publication of Defence and Security Alert deserve appreciation for their efforts. It is believed that the Defence and Security Alert magazine has a very short span of time, but the content and layout of the magazine are of high standards.

DSA has, of late, received a call from one of its subscribers to introduce various issues of national importance. It has also shown interest in publishing articles and stories on various issues that are of national importance. The contents are available in the field of defence and security, and it is no different from the contents of the magazine which have been published in the past. The contents are based on the latest technological information.

The magazine is published on a periodic basis and in the field of security and technological areas, the professional concern of the Defence Forces, the Central Armed Police Forces, and the Police Organisations of the country reflected in the magazine would be reflected in this magazine and the same.

I wish the DSA many more glorious milestones in the days to come.

(Signed)

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Shri Praveen Agarwal
Publisher and CEO
Defence and Security Alert
Pratiksha Bhavan, 4/13, Jasola All Road,
New Delhi - 110022
LETTER OF APPRECIATION

It is indeed a matter of pride that "Defence and Security Alert" magazine is celebrating its 25th Anniversary Edition in the month of October, 2015.

1. The "Defence and Security Alert" magazine has continuously been covering all the important subjects of the current security scenario of the country from time to time and I find all of them very informative and knowledgeable. I would like to take this opportunity to convey my deep appreciation to you for the same. I am convinced that the magazine will continue to respond to the new challenges and opportunities with the same vigour and determination and set higher standards of excellence in the future.

2. On this memorable occasion, I, on behalf of "National Security Council" and on behalf of the entire magazine, extend warm greetings and felicitations to the entire team of DSA and wish them many more glorious successes in days to come.

(Roorki Darshan Sharma)

MESSAGE

1. On the occasion of 25th Anniversary of Defence and Security Alert, I wish to compliment the Team which has innovatively conceived and improved the layout and content of the magazine over the years. DSA covers contemporary Global Security and Strategic issues in most professional manner. In particular, coverage of wide spectrum of subjects and selection of Themes for each of the Issues, ensures that interest of the professional community is kept alive.

2. Considering the rich flavour of the content, I can say that DSA has become one of the leading Defence and Security Journals of India in a very short span. I wish DSA and all Members of the Team, continued success and many more laurels in times to come.

New Delhi
14th September, 2015
(Lt Gen N C Marwah (Retd))

4. Measures for Defence and Security Alert

The myth of 'India not having a strategic culture is slowly dissolving. This is amply evidenced from the changing nature of publications by our national leaders; the emergence of new strategic analysts; and material publications - all these pointing to a growing, strategic community, and national perspectives — in these esteemed, growing community, proactive, poised and perceptive, which is at the forefront of national interests.

The "Defence and Security Alert" has taken note of this change, and is helping a seminal contribution to it in one way or the other. It is effectively writing as a member of the growing discourse on strategic and security issues, and in a platform that showcases the evolution of India's strategic literature. The special DSA issue of September 214 covering the topic of Indian Think-Tanks x International Security, for instance, was very well conceived. It is bringing the issues emerging with the greatest interest and security role in the region, neighborhood, and beyond.

In the coming years, we will ensure that DSA to play a seminal role in enhancing public awareness in India on strategic and security affairs, which appears to be a major challenge for our country to attain the desired goal.

Date: 19th December 2015
City: New Delhi
QUALITY ASSURANCE
IN THE ARMY PROCUREMENT PROCESS

There is a need to redefine and strengthen our QA/QC system in a manner which would, apart from fulfilling the contemporary QA/QC requirements, will also facilitate indigenous manufacture of quality military equipment.

Global military expenditure in 2014 was a whopping US$ 1,776 billion amounting to 2.3 per cent of global GDP. The top 10 arms producing firms in the world account for arms sale to the tune of US$ 10,000 to US$ 30,000 million annually. Defence industry is USA’s largest net exporting industry contributing 7 per cent of the country’s exports. Israel exports 70 per cent of its defence industrial output and accounted for 2 per cent share of the total world defence exports during the period 2009-2013. India on the other end of the spectrum accounts for almost 14 per cent of the world’s arms imports. This dubious distinction is the result of consistent lack of vision and the inability to nurture our domestic manufacturing capabilities. Even a modest aspiration to become a regional power cannot be achieved unless we build a minimum level of military manufacturing base. With a visible change in the current dispensation, the Indian defence industry is showing signs of confidence and the ability to emerge onto the world stage. This augurs well for the Indian economy and our national security.

Military Standards
For our domestic industry to take a quantum leap in defence manufacturing, management of quality is an extremely critical factor. Quality begins with standards. Standards lay down specifications as well as processes and systems which ensure that the products will perform the tasks they are designed for. To facilitate growth of a sound domestic military industrial base, an Indian set of documents and publications specifying military standards, laying down tests and procedures, establishing internationally accredited laboratories, credible assessment and certification capability etc are essential requirements. Putting in place a credible mechanism to facilitate quality management assumes great significance especially in the ‘make in India’ context.

It is said that the inspiration for creating ‘European Foundation for Quality Management (EFQM)’ came from Cornelius Van Der Klugt, the famous ‘Philips’ President. He realised that 55 per cent of their turnover was derived from suppliers of components to Philips and therefore success in achieving total quality was only possible if the component suppliers also adopted the same attitude to quality management as Philips. There is indeed a big lesson in this old Philips story for the Indian Defence Public Sector Undertakings (DPSUs) and the fledgling Indian defence industry in the private sector.

Quality Management
Management of quality encompasses quality planning, quality control, quality assurance and quality improvement. In order to encompass the entire ambit of quality management, Quality initiatives must include appropriate techniques as well as a ‘quality culture’ which is a people’s factor.

QA and QC are closely related aspects of quality management. While QC is the tool to verify the quality of the product and for matching the actual quality of the output with benchmarked specifications, QA is the process used for managing the quality. The purpose of QA is to prevent defects from entering into the product. It is a proactive management practice to assure a stated level of quality of the product. The success of any project requires both QA and QC aspects to be addressed concurrently. If we only apply QA, then we have a set of processes that can be applied to ensure great quality in our delivered product but the product itself is not actually quality checked. Likewise, if we only focus on QC, then we are simply conducting tests without any clear vision.
of making these tests repeatable for understanding and eliminating problems in testing\(^1\).

NASA was the first to produce a set of procedures, specifications and systems to meet its requirements for the highest possible level of equipment reliability. These became known as Mil specifications. Manufacturers were required to conform to these specifications if they wanted to become part of the lucrative military market. NATO followed this by making Allied Quality Assurance Publications (AQAPs) and UK developed Defence Standards (Defstan) 05 series. Industry soon recognised the necessity for manufacturers to abide by the recognised set of quality standards. The British Standards Institution adapted the Defstan 05 series into a virtually identical set of documents called BS 5750 series. Others too followed and the European EN 29000 and the international ISO 9000 standards for quality systems came into being.

**QA/QC In Indian Army Procurements**

All weapons and equipment of the Indian Army, whether procured through Capital or Revenue route are evaluated by the Directorate General of Quality Assurance (DGQA) prior to induction. This organisation was initially raised as Inspectorates at Production Agencies in 1869. During WW-II, an Inspectorate of Inspection was established under MGO’s Branch and Ministry of Industry and Supplies. In 1946, it became part of the Directorate of Technology Development in MGO and in 1955 came under the Controller General Defence Production (CGDP). Subsequently, the R&D and inspection functions were bifurcated into two separate organisations, Directorate of R&D and Directorate General of Inspections (DGI). DGI was later designated as the DGQA. The role of DGQA is to provide QA of defence equipment procured from Ordnance Factories, Public and Private Industry as also ex import. It however does not cover Local Purchase and Direct Procurement by users.

DGQA carries out evaluation as per the applicable standards to ascertain the equipment performance under varying climatic and operational conditions by stimulating stringent environmental conditions and also to predetermine the potential causes of failure under operational and storage environment. It provides QA evaluation, technical services/guidance, defect investigation, product improvement inputs and vendor registration functions for the user. DGQA functions under Department of Defence Production (DDP).

It is important to highlight here that the Ordnance Factories and the Defence Public Sector Undertakings which are currently the main domestic production agencies (PAs) of defence equipment also function under the DDP.

**Shortcomings**

Infirmities in the existing QA system have been repeatedly articulated by the stakeholders especially the three Services. Several studies in the past including performance audit of DGQA by CAG have commented on the functioning of DGQA under DDP as an organisational infirmity. The QA agency (DGQA) and Production Agency (PA) under the same umbrella is a glaring lacuna.

Services which are the end users and the major stakeholders have no control over Quality Assurance agencies and have often expressed their reservations on the aspect of Command and Control of DGQA not being aligned to meet their requirements in the most efficient manner. Under the existing system, accountability of Quality Assurance agencies to the users, the three Services, is not very structured and defined. Although the QA agencies are intrinsically linked to the procurement process right from the GSRQ formulation stage to the Pre Delivery and Post Delivery Joint Receipt Inspections, their lack of accountability on quality control is conspicuous. The Services have always felt that accountability of the QA agency to the users is a must. Building in accountability will also result in speeding up the DGQA evaluation process and cutting down a great deal of the voluminous paperwork during the QA evaluation.

Lack of appropriate technical support for the Services during the in-service phase of equipment is another issue that needs to be addressed. Under the existing system, although the DGQA investigates defect reports initiated by the user during the exploitation phase, it seldom results in follow up action which should result in practical and cost effective modifications.

There is also an apprehension that the DGQA and the DPSUs functioning under DDP is an inhibitor in providing a level playing field to the private industry. The present system of QA/QC in Defence Industry comes with various linkages which are enabling by intent but often lead to a larger conflict of interest. Involvement of DGQA with the Private industry in the existing system is very limited and is confined mainly to Vendor Registration. As an agency which is the repository of tremendous domain expertise, an enhanced charter can enable the DGQA to play a pivotal role in the indigenisation efforts.

**Accidents Caused By Bad Quality**

One of the major implications of inadequate QA/QC is accidents and loss of life, both in operational as well as training environment. This fact is very significant because in most cases, these accidents occur due to material issues rather than human error. In our context, accidents which have been caused by defective ammunition and defective barrels in tanks, artillery guns and air defence weapons are glaring examples. There is a need to move over to third party
assessment and the MoD to strip itself of the inspector jacket. There are good practices being followed around the world from which we can draw lessons. For example, the role of the MoD Inspector in UK has changed to reflect the new arrangements with many of the mandatory ‘inspection’ duties which were earlier being carried out by them, now being made the responsibility of the supplier and change from inspection of products to a more systems approach, based around the Suppliers Management System based on risk\textsuperscript{2}. The Chartered Quality Institute (CQI) of UK, with full participation of the industry, has evolved a quality management system for defence equipment. CQI is the chartered body for quality management professionals. CQIs Defence Industry Group (DIG) is an active group of its members working in defence industries and is committed to developing capacity and competence in quality management and quality assurance; offering networking and professional development events and on line discussion and resources\textsuperscript{3}.

The Way Ahead

There is a need to redefine and strengthen our QA/QC system in a manner which would, apart from fulfilling the contemporary QA/QC requirements, will also facilitate indigenous manufacture of quality military equipment. Some of the aspects which can give a fillip in this direction are:

- **Preparation/Revision of Manuals And Guidelines.** There is a need to formulate/revise key manuals of QA/QC for military equipment as a first step towards carrying out a much needed streamlining of our quality management systems and to inculcate best practices for QA in the domestic military industry.

- **Third Party In QA/QC.** We must set up a structure modelled on the CQIs DIG of UK. This must be done jointly by the MoD, the industry and the three Services. There is a need to set up adequate laboratories accredited by National Accreditation Board for Testing and Calibration Laboratories (NABL) which are well equipped to certify military equipment. Only those tests should be undertaken by DGQA, which are not possible to be carried out by these laboratories. This would go a long way in cutting down lead time for evaluation of multiple projects. Documents which clearly spell out Indian Military standards combined with a QA management system similar to the CQIs DIG would provide a clear understanding about the Mil standard QA/QC requirements to the industries.

- **QA agencies must be placed under the respective Service Headquarters with their charter appropriately framed.** This would delink them from the PAs and enable QA concerns of the Services to be addressed. A single window interaction of industries with the QA agency and the Service headquarters will go a long way to obviate the long-standing trust deficit as well as the lack of accountability and responsiveness towards the user.

Conclusion

A good QA/QC system, apart from making the procurements more efficient, will also act as an enabler of domestic military industry. With the Indian industry coming of age and our new war cry of ‘Make in India’ getting louder, it’s high time the government took the industry and the Services on board to establish efficient structures for quality management. D-A

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3. www.thecqi.org/DIG
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HPE 3PAR StoreServ Storage
The Indian Army has stellar achievements in its role in aiding the civil authorities when natural or man-made disasters occur or a law and order situation arises or insurgency/insurrection manifests, the role is defined as 'Aid to Civil Authority', the details are in the various official documents. In 2005 the Disaster Management Act was passed and the National Disaster Management Authority (NDMA) was set up and under it the National Disaster Response Force (NDRF) was established, which currently has 10 battalions and addresses natural and man-made disasters. The vision document of NDMA lays out the charter and hopefully in the future the tasks enumerated will be achieved. The NDRF has been employed to the best of its ability and the website lists out its achievements, these are commendable for the period it has been in existence.

NDRF Inadequate
In spite of NDRF being in place the Army is still being called out in aid of civil authorities during natural disasters, the latest being flood relief at Chennai in December 2015. For a country of 1.3 billion with diverse and difficult terrain the current organisation of NDRF will always prove inadequate and the occurrence of natural disasters is guaranteed by virtue of India being in a high seismic zone and susceptible to nature’s fury, hence it is certain that the Indian Army will continue to provide relief and succour to the citizens. The last three years saw four major calamities, in 2013 the Uttarakhand cloud burst and heavy rain caused untold damage to life, infrastructure and ecology, hurricane Phailin inflicted misery on Orissa, in 2014 the floods in Kashmir Valley witnessed huge damage to property and infrastructure besides loss of life and 2015 saw the worst floods in Chennai and Tamil Nadu. In all these the Army played a major role to provide rescue, relief and help and each one was unique in the assistance that was vital, this pattern will continue if one goes by the sheer scale of disasters that is the norm in India.

Natural And Man-made Disasters
To summarise the disasters that have occurred around the world throughout history and that may occur in the future and for which we need to be ready include earthquakes, floods, hurricanes and tornadoes, landslides or debris flow, cloudburst and thunderstorms, tsunamis, drought and famine, wild fires, extreme heat, pandemics, snow storms and avalanches and chemical/biological/radiological (CBR) leakages. Besides these we are witness to some man-made disasters such as coalmine collapse or flooding, train accidents, train plunge into rivers, air crashes (Charkhi Dadri), accidental water release into rivers, borewell deaths and stampedes at religious...
congregations. In the future many other tragedies may transpire and the environment including the Army must be alert and responsive to emerging challenges.

**Disasters In The Making**
Natural disasters the world over are increasing in frequency and intensity for many reasons, however the primary drivers, appear to be evolution of the earth internally and externally, climate change, over exploitation of the earth resources at fragile places and rapid but uncontrolled urbanisation coupled with population increase in certain countries. A comparison of the damage caused by similar events in the recent past *vis a vis* some decades ago will show that we are vulnerable to severe damage now for reason highlighted, if Hurricane Phailin damage is compared to the hurricane damage in Andhra Pradesh in 1977 the difference is stark because of development and increase in population, so there is a cause of concern and need to mitigate the damage cannot be overemphasised. Urbanisation is creating so many concerns that consequences of natural disasters will be compounded, an earthquake in an area of high population density will result in greater casualties, cause fires to add to the problems, removal of casualties from collapsed buildings and rubble will delay rescue and relief operations, restoration of civic amenities will take longer. In similar vein floods in urban areas will destroy facilities besides casualties in larger and higher numbers and deprivation of food, water and other essential commodities. In modern cities the dependence on electricity and power, in their absence destroys the economy of the urban area and becomes the source of diseases due to sanitation and sewage failure. Hurricanes and tornadoes cause similar failures to infrastructure and support systems.

**Severity Increased by Urbanisation**
Today a cloudburst initially affects the area of deluge but the downstream effect of water flow destroys everything in its wake, for example in Uttarakhand more damage occurred on the banks of the rivers where majority of the people reside than the actual place of the cloudburst. The 1993 earthquake at Latur can be called mild or the 2001 Bhuj one may also be not severe, but if a similar one were to occur in a large metropolis the casualties will be extremely high. The climate change has attered the intensity of rain, cloudburst, drought, temperatures and pollution, in the future these will add to the problems of natural disaster. The examples are to highlight the changed complexion of rescue, relief, restoration and recovery efforts required in the modern world.

**Disaster Prediction Improved**
Whereas the increase in damage with every natural disaster is a fact of life, simultaneously the prediction and forecasting capability is also improving which does help in provision and placement of relief in a shorter time frame and possibly pre-empt the event by moving assistance /help in advance. Concurrently the methods and equipment available for relief in natural disasters are better, technologically advanced and superior in performance, thus providing the ability for faster and quicker action. Advanced technology allows pinpoint accuracy to dispatch rescue teams, modelling to predict future problems and forecast possible regions of concern. In the future natural disaster rescue and relief operations will be under media scrutiny, awareness and greater citizen expectations, these will be seen through a microscope and standards in developed countries, it is good for the country and also puts the onus to perform on agencies tasked. There are a host of new issues that arise with development of infrastructure, population increase and expansion of the economy into the service sector. The complexity of rescue, relief and restoration will increase, time for relief overall may go up and the vulnerability...
of people trapped, isolated, buried or without sustenance will be greater, this may at times result in disease and infection. All this will be due to modern structures being stronger and resilient to insertion of men and vulnerability of individuals to delayed relief and weather impeding relief at times. Disasters in remote areas pose their own dynamics of inaccessibility, poor infrastructure, lack of medical backup and no support system.

New Procedures
The new problems have generated a requirement of developing organisational and individual skills, equipment and means of rescue, for instance recovery from collapsed high-rise building require heavy equipment, generally not authorised or held by first assistance units, time being critical the early availability of such equipment cannot be overemphasised. Similar is the case for recovery from underground mishaps where quick intervention is necessary or fast flowing water. So what should be the future preparation that should be included in the planning, readiness and equipment of the Army?

Whilst the Indian Army has the requisite manpower to deploy quickly to respond to the challenge of natural disasters and the men work for protracted periods to ensure that no citizen is left unattended, there is a need to improve the capability in equipment, response time, rescue capacity, medical assistance, evacuation means and shelter facilities.

There are certain common essentials that first assistance teams require in large quantities which are generally in short supply as a result of natural disasters, these are medical assistance to include surgical and medical teams, potable water, food, shelters, evacuation means and power generation systems, hence with increase in population these must be catered for in the relief planning for natural disasters. The recent floods in Chennai once again highlighted these essential items or means.

Quicker Response Time
Response time can be improved by better anticipation and closer coordination between local, State and Central agencies. The current organisations were designed decades ago and have failed often either to anticipate or call for assistance in time. Better transportation means must be available to first response teams, the emphasis must be on air insertion supported by helicopters to rescue and move out casualties, today with increased helicopter fleet in the civil sector coordination can provide the desired capacity. Rescue capacity is critical for earthquakes, floods, hurricanes and involves creating modern equipment and transportation means. The specialised equipment for rescue operations should be procured and deployed on regional basis with greater focus on large urban areas.

Stockpiling Basic Requirements
The coordination system must become horizontal rather than continue to remain vertical, local commanders must have the power to take the initiative and address the disaster. The approval and audit system for disaster relief for the Army must undergo an overhaul, rather than wait for a calamity or disaster to occur. Powers must be given to procure such equipment that is required at zero notice with post audit. Medical assistance is the primary necessity to ensure high survival rate amongst injured or trapped people, with the initial rescue troops specialised medical teams must be co-opted and additional resources built-up rapidly. This is most important given the fact that in disasters medical facilities will be either destroyed or become nonfunctional.

To begin the change the way preparation is made for natural disasters the first step may be to procure specialised equipment from the Prime Minister’s Relief Fund and place it zone or region wise to be used by the Army, NDRF, Navy or civil agencies of states. Training on this equipment should be coordinated amongst all stakeholders on a periodic basis, this will achieve better coordination and synergy. The procedure for expenditure on aid to civil authority is complicated and time consuming, for natural disaster the need is to centralise the release instead of the present method, the existing paperwork post the assistance is burdensome and delayed of course with excessive paperwork. The administration reforms need to address the issue of simple but effective financial procedures for unforeseen requirements and where the welfare of the citizen is critical. The above recommendations and suggestions can be improved upon by experts but suffice to say that the protection of the citizen during natural disasters should be the primary concern of the government and its agencies.

Whilst India has not had any major wild fires, it has had the others in some measure and therefore possesses some knowledge of issues involved, but the complexities arising and involved mandate that greater focus on anticipation, prediction, planning and organisation. Also the equipment in use will need enhancement and improvement besides continuous introduction of technologically modern tools and implements. The commitment to ensure the well-being and safety of the citizens of the country is always prime for the Indian Army.
**UNIVERSAL CONTRIBUTION**

**UNIVERSAL PEACEKEEPING**

Much of our participation in United Nations peacekeeping operations is obviously linked to national security interests. In preparing ourselves for continued participation in United Nations peacekeeping operations into the 21st century, we must take into account the radical changes in the nature of the peacekeeping commitment.

During much of the seventy-year history of the United Nations as an organisation, of all its activities, peacekeeping operations have attracted maximum attention. Primarily because conflicts make dramatic news and the deployment of an international military force by the Security Council to preserve a fragile peace, makes a good story that can capture public interest in this electronic age.

As one of the founding members of the United Nations, India’s contribution to the maintenance of international peace and security has been second to none. In no other field of activity has this been manifested more than in United Nations peace operations commencing with our participation in the operations in Korea in 1950. The United Nations operation in Korea, led by the USA, was a major military undertaking. India participated militarily with a medical unit comprising 17 officers, 9 junior commissioned officers and 300 other ranks. We then provided a Custodian Force of 231 officers, 203 junior commissioned officers and 5,696 other ranks under the command of Major General (later Lieutenant General) SPP Thorat for the Neutral Nations Repatriation Commission of which the Chairman was Lieutenant General (later General) KS Thimayya. India also contributed significantly to the Indo-China Supervisory Commission deployed in Cambodia, Laos and Vietnam from 1954 to 1970.

Congo

The use of armed military contingents was first authorised by the United Nations Security Council for deployment with the United Nations Emergency Force (UNEF-1) in the Gaza Strip and the Sinai after the Arab-Israeli War in 1956. From 15 November 1956 to 19 May 1967, eleven infantry battalions from India successively served with this force. A total of over 13,000 all ranks participated. Major General (later Lieutenant General) PS Gyani and Brigadier (later Major General) IJ Rikhye were force commanders in this operation. This operation became a model for many subsequent peacekeeping operations. The initial success of UNEF-1 apparently led the Security Council to readily accept a request by the Congo in 1960 for intervention on attaining independence from Belgium. The United Nations accepted responsibility for ending secession and re-unifying the country. The rules of engagement were modified to cater for use of force in defence of the mandate, in carrying out humanitarian tasks and in countering mercenaries. India’s contribution to this operation was not only substantial, but most critical. Between 14 July 1960 and 30 June 1964, two Indian brigades comprising a total of 12,225 all ranks participated. 36 Indian personnel lost their lives in the operation and 124 were wounded; Captain GS Salaria of the 3rd Battalion the 1st Gorkha Rifles was posthumously awarded the Param Vir Chakra.

Cyprus And Namibia

The United Nations operations in Cyprus, launched in 1964, saw three Indian force commanders; Lieutenant General PS Gyani, General KS Thimayya, who died in harness on 18 December 1965 and Major General Diwan Prem Chand. Major General (later Lieutenant General) Prem Chand also distinguished himself as the Force Commander in the United Nations operations in Namibia in 1989, which oversaw that country’s transition to independence.

Over the years, the Indian Army has provided commanders, military observers and staff officers to many of the United Nations missions deployed to keep the peace in various parts of the world. In Iran and Iraq in 1988/90 after the bloody conflict in the region; on the Iraqi-Kuwait border after the Gulf War in 1991; Angola in 1989/91 and again in 1995/99; Central America in 1990/92; El Salvador in 1991; Liberia since 1993; Rwanda in 1994/96; Sierra Leone in 1998/2001; Lebanon from 1998 to date; Ethiopia-Eritrea in 2001/2009; the Democratic Republic of the Congo from 1999 to date; Cote d’Ivorie from 2003 to date, Burundi in 2003/2006; Sudan from 2005 to date and the Golan Heights from 2006 to date.

In addition, sizeable military contingents were made available for the United Nations operations.
in Cambodia in 1992/93 with two successive battalion groups; in Mozambique in 1992/93 with a battalion group; Somalia in 1993/94 with a brigade group; Angola in 1995 with a battalion group and an engineer company, as also a Deputy Force Commander in Brigadier Saxena; Rwanda in 1994/95 with a battalion group; in Sierra Leone in 2000/2001 with a Force Commander, Major General Vijay Jetley and a brigade-size contingent together with military observers and staff officers; in Ethiopia -Eritrea in 2001/2009 with a battalion group and a Force Commander in Major General Rajinder Singh.

**Yugoslavia**

It may also be relevant to mention that in so far as the former Yugoslavia was concerned, the Government of India had, at the request of the then UN Secretary General Boutros Boutros Ghali, deputed the writer as the first Force Commander and Head of Mission, in which capacity I set up the operation and ran it from 03 March 1992 to 02 March 1993. Ironically, I did not have any Indian troops or police as part of the Mission due to political compulsions.

Major General Inderjit Rikhye was the first Military Adviser at the United Nations Headquarters in the early 1960s. More recently, Lieutenant Generals Randhir Mehta and Abhijit Guha have held the post of Military Adviser within the Department of Peacekeeping Operations.

For many years since the early 1990s, India was the top contributor for UN peacekeeping operations. As of 30 September 2015, we are in third position behind Bangladesh and Ethiopia.

**Current Deployment**

The current deployment of 7,793 personnel as on 30 September 2015 reflects the commitment of troops, military observers and staff officers and civilian police from India in 10 of the 16 United Nations missions now deployed. It includes a brigade group contingent, a number of military observers, staff officers and police personnel in the Congo; Lieutenant General Chander Prakash served as the Force Commander of MONUSCO till recently. A brigade group together with military observers, staff officers and police personnel is deployed with UNMISS in Southern Sudan; in its earlier incarnation with responsibility for what was then a unified Sudan, India had provided a Force Commander in Lieutenant General JS Lidder, who acquitted himself with great distinction. A battalion group now serves with UNFICYP in Cyprus, UNAMA, UNISFA, UNOCI and UNMIL in Liberia where India has the unique distinction of being the first to provide a formed police unit comprised entirely of women; a commitment that continues.

**Impact Of Participation**

India’s spontaneous, unreserved and effective participation in United Nations peacekeeping operations over the years is a reflection of the country’s commitment to the objectives set out in the United Nations Charter. Not in terms of rhetoric and symbolism, but in real and practical terms, even to the extent of accepting casualties to personnel (over 150 fatalities to date). This commitment has been acknowledged by the international community, successive Secretaries General and the United Nations Secretariat. But even more significantly, the effectiveness of such participation and commitment to United Nations peacekeeping efforts has drawn respect and praise from fellow professionals of other countries and many others that have served jointly with our commanders, military observers, staff officers and contingents, in various parts of the world. Hence, the image of the Indian Army in the international arena is that of a highly competent, professional and well-trained force.

**Stake In International Stability**

Much of our participation in United Nations peacekeeping operations is obviously linked to national security interests. Our participation in the Korean War and the operations in Cambodia was a reflection of our stake in the stability of East and South East Asia. Our vital interests in West Asia, both in terms of our energy requirements and our historical connections with the region, were more than adequately reflected in our participation in the United Nations peacekeeping operations undertaken in

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**CUNPK has established itself internationally as a Centre of Excellence**
Many cases do not complement the mission mandate. The major powers, pursue their own agenda that in missions that are set up. Regional players, as also both locally and internationally. This invariably poses and located within a credible political framework phenomenon. But it needs to be carefully calibrated more injured. Hence, this is not a new concept or number of fatalities and many Indian contingent suffered a Tshombe. In the process the Katangese rebels led by Moise against mercenaries and to launch combat operations mission and this was used had a brigade group in that in the early 1960s. As mentioned earlier, India the mission mandate was first resorted to in ONUC use of force for protection and implementation of protection of civilians has become a mandated task in United Nations peacekeeping operations. A task with many ramifications that need to be understood by the political and military leadership. There is a great many clearer; where the consent or cooperation of the belligerent parties cannot be relied upon; where constitutional authority does not exist in many cases, or if it does, there is limited control. In such situations, today's peacekeepers are not only required to keep the warring parties apart to the extent they can, but are increasingly called upon to safeguard humanitarian relief operations, monitor human rights violations, assist in mine clearance, monitor State boundaries or borders, provide civilian police support, assist in rebuilding logistics infrastructure like roads, railways, bridges and to support electoral processes.

Protection of civilians has become a mandated task for many UN peacekeeping missions. A task with many ramifications that need to be understood by the political and military leadership. There is a great deal that can be stated on the subject, but for the purpose of this article, three or four points may be made for evaluating appropriate responses to the current demands of UN peacekeeping.

Mission Mandates Undermined
Use of force for protection and implementation of the mission mandate was first resorted to in ONUC in the early 1960s. As mentioned earlier, India had a brigade group in that mission and this was used to launch combat operations against mercenaries and Katangese rebels led by Moise Tshombe. In the process the Indian contingent suffered a number of fatalities and many more injured. Hence, this is not a new concept or phenomenon. But it needs to be carefully calibrated and located within a credible political framework both locally and internationally. This invariably poses problems because of inadequate political support to missions that are set up. Regional players, as also the major powers, pursue their own agenda that in many cases do not complement the mission mandate.

The use of force demands that appropriate resources be made available. In almost all UN missions deployed today this is wanting because those who have the resources both in terms of trained manpower and equipment, (namely, the developed world), are not participating in UN peacekeeping operations. If UN peacekeeping is to remain effective, the developed world must return to the commitment. And this should go beyond the present arrangement of seeking positions in senior management and command, to provision of ‘boots on the ground’ as it were.

The connotations of the use of force must be clearly understood by Security Council members who mandate it, the staff at UN HQ and by troop contributors; and the concept imaginatively evolved. Peacekeepers must be mentally and physically attuned to the fact that the use of force will mean inflicting casualties on belligerents. And, that casualties may well be incurred by members of the force.

Senior leadership and command and control aspects assume added significance. To ensure that junior leaders and personnel in the field are not made ‘scapegoats’ when the mission is asked to account for casualties that may be inflicted on belligerents who seek to target innocent civilians including women and children. In that context whereas ‘protection of civilians’ is fine, how is ‘protection of peacekeepers’ against human rights activists and belligerents that exploit the situation, to be ensured? This is a command responsibility that will need particular focus.

Centre For United Nations Peacekeeping
Finally, it is no doubt appropriate to place on record the fact that in order to build on our expertise and experience in this arena, the writer had the privilege of setting up a Centre for United Nations Peacekeeping (CUNPK) in September 2000 with support from the Ministry of External Affairs and Army Headquarters. The CUNPK besides overseeing the training of contingents earmarked for peacekeeping operations, undertakes conduct of training courses for our sub-unit commanders, military observers and officers earmarked for deputation on staff appointments. It is a measure of our commitment to the UN, that a minimum of fifteen vacancies on each of these courses, are offered to developing countries, with all expenses incurred on travel from home country and back, training, accommodation and meals, borne by the Ministry of External Affairs, Government of India. A number of developed countries like the USA, UK, Australia, Japan, Norway etc also subscribe to these courses on a self-financing arrangement. It is indeed a matter of great satisfaction and pride that, in the last fifteen years, the CUNPK has established itself internationally as a Centre of Excellence and is now often called upon to conduct specialised international courses on behalf of UN DPKO.
The New Soldier

In The Age Of Asymmetric Conflict

We are still to learn the right lessons from the Mumbai attack and many other attacks inflicted upon us. Emphasis remains on increasing mass rather than velocity. Changing organisational design is hard and time consuming and usually requires dealing with difficult personality issues and internal politics within the organisation.

Asymmetric conflict is not a new phenomenon. Throughout history, the great captains of war grasped the idea that the essential purpose of war was to defeat the enemy forces. If defeat could be accomplished by means other than the physical destruction of all or part of the enemy’s forces, that would be a more desirable outcome as it would obviate a long drawn out campaign, with all its attendant costs in lives and treasure. The underlying principle was an understanding that defeat is not necessarily synonymous with destruction and that the opposing force could be defeated if asymmetric means were employed, pitting one’s strength against the known weaknesses of the enemy. Over the ages, great victories more often than not have been won not so much by the larger armies with bigger guns but by those armies which were prepared to adapt faster to new ideas and concepts of warfare. An apt example is the story oft told in Christian mythology, of David slaying Goliath. A classic underdog tale, David, a young shepherd armed only with a sling, beats Goliath, the mighty warrior. A deeper analysis however makes it clear that in effect, the use of asymmetric means by David, shifted the advantage clearly in his favour.

Dynamics Of Asymmetry

David’s victory was a vindication of the physics of war. In physics, Force is a product of Mass into Acceleration. Increasing Velocity thus has a far greater impact than the simple addition of Mass on the quantum of energy produced. What David’s slingshot lacked in mass, it more than made up for in acceleration, giving him the edge in battle. While Goliath may have been a bigger and stronger foe, he really had no chance against an enemy who was prepared to adapt existing technology for war fighting. The same could be said of Rommel’s victories in Africa against a much larger and better equipped foe. In modern times, the larger mass of Saddam’s Army was defeated comprehensively by a smaller US force possessing greater acceleration through the application of air power. And when the nature of that particular war turned into sub conventional conflict where US air power could not be applied, victory quickly turned into a stalemate. Similar examples abound in Indian history, such as the victory of Alexander over a much slower albeit stronger Porus, the Battle of Panipat in 1526 which established Moghul power in India and Clive’s victory in the Battle of Plassey in 1757 which was the starting point to the events that established the era of British dominion and conquest in India.

Network Centric Warfare

Today, technology has enabled interconnection of participants and the distribution of sensors on the battlefield at a reliability, continuity and data transfer rate never before imagined. When integrated with precision long range weapon systems, the lethality achieved at the point of decision gave rise to the concept of Network Centric Warfare (NCW). Future conflict is moving towards this end as witnessed by the conflicts in Iraq and more recently in Afghanistan, Libya and Syria. Though direct and indirect engagements will continue to exist, the network has enabled collaborative engagements in which the sensor is not always identical to the shooter. Because sensors can be linked to distant shooters, entire systems can be used to eliminate platforms rather than symmetric platform-on-platform engagements. This is the reality of modern warfare.

In the Indian context, the linearity of the land battle with respect to conflict on our borders will not change, though the battle space will get extended in depth. Information Warfare, especially with respect to cyber-attacks will however transcend the linear...
The enemy is mutating. Our soldiers need to mutate too

Mutating Enemy
As of now, the thrust on training potential officers is on developing leadership skills and combat ability to enable effective command at sub unit level, physical fitness, discipline and military ethos. All this has stood the Armed Forces in good stead over the years. However, for the modern age, the imperative is also to cultivate free thinking and a questioning attitude. The officer can no longer simply be a conformist, never deigning to question orders. This also applies to the men under his command. This does not imply disregard to authority. It simply denotes a higher level of awareness, where the soldier is not only aware of what he has to do, but why he has to do it. This throws up alternatives in work execution, as end term goals get related to the accomplishment of the task at hand. If standard drills and operating procedures are appropriate to getting the job done, then they must be followed. Otherwise, different courses of action must be advocated for task accomplishment rather than following a particular procedure for the sake of form. As weapon systems and means of communication change, old ways of doing things must give way to the new. This also places an onerous responsibility on training institutions, to prepare soldiers for the tasks they are likely to face. All such institutions would require a drastic reorientation of course curriculum if appropriate dividends are to be reaped. The enemy is mutating. Our soldiers need to mutate too.

Change In Military Mindset
To better address the challenges of tomorrow, the Indian Armed Forces are modernising, but the pace is slow. Lethargy over the last two decades in equipping the field force has led to serious voids in many areas. Fortunately, these issues are now being addressed through purchase and manufacture of big ticket items like artillery guns, aircraft, ships, surveillance and reconnaissance systems and the like. Besides equipping of the force, mindsets too have to change to confront the challenges posed by an enemy using asymmetric means against us. This would require a change in organisational structure and design. Putting a new organisational model in place is certainly no easy task and will take years of sustained effort. But from this will flow strategic capabilities which will enable leveraging the considerable mass of the armed forces to achieve operational goals. Let us consider the Indian response to the attack on Mumbai by armed terrorists on 26 Nov 2008. By any yardstick, the response was sluggish and decision-making was slow because

Current-day Challenges
The soldier of today is thus confronted with a variety of challenges. He has to be prepared for conventional conflict in an increasingly network centric environment, where threats from multiple quarters have to be addressed, to include cyber warfare and the nuclear overhang. Sub conventional conflict is also becoming increasingly challenging, with non-state actors, either acting independently or with the support and connivance of hostile states, posing a challenge to the authority and integrity of the target state. Security forces operations against such groups are conducted under the gaze of an all intrusive media, where a small scale tactical action could potentially have consequences with strategic impact. Such hostile groups operate under the cloak of invisibility, merging with the population. They use upper end modern weapon systems and operate with precision, using the latest communication means to coordinate their activities. The challenge thus is immense and the soldier has to be trained for it.

space and assume an all-encompassing character. In the context of sub conventional conflict the zone of conflict will remain non-linear and will cover the entire affected population at large. Technology as a tool is being increasingly leveraged by non-state actors, with devastating effect to coordinate and execute attacks against the State, especially against vulnerable sections of the population with precision, as witnessed in the November 2015 attacks in Paris and also in the downing of a Russian plane by terrorist groups. Closer home, the Indian State is engaged in sub conventional conflict with militant and terrorist groups based in parts of Northeast India, J&K and in the hinterland, where Left Wing Extremism has impacted a large number of districts in India, in an area popularly referred to as the Red Corridor. In addition, terrorism has assumed international dimensions with the spread of Wahabi ideology and the growth of organisations such as the Lashkar-e-Taiba, Al Qaeda, Indian Mujahideen and more recently, the Islamic State.

The writer is NCR based defence analyst and a former Director, Centre for Land Warfare Studies (CLAWS) New Delhi.
not exist or were not designed for swift response. We are still to learn the right lessons from this and many other attacks inflicted upon us. Emphasis remains on increasing mass (raising new units), rather than velocity (streamlining decision-making structures and improving mobility). Changing organisational design is hard and time consuming and usually requires dealing with difficult personality issues and internal politics within the organisation. Large militaries are saddled with deep inertia, which explains why the higher leadership is content with acquisitions as symbols of forward movement rather than attempting major organisational reform. This also explains why we still do not have a Chief of Defence Staff or why the entire logistic support system in the Army has not been overhauled in keeping with the challenges of the twentyfirst century.

In today’s day and age, war fighting is not about individual battles but the ability to look beyond the battle, at the end state to be achieved. Lack of appropriate strategies has emboldened Pakistan to continue with its support to terrorist groups operating from Pakistan against India and has encouraged China to take up a virulent stand on the border issue. Our twentieth century organisational structures are unlikely to evolve through serendipity to confront the challenges of tomorrow. The need of the hour is an organisational structure which has hierarchy for organising work as well as adequate scope for lateral interactions to promote and maximise the growth of mind power. Finding the right mix of hierarchy and collaboration as well as the right mix of individual and mutual accountability while creating new organisational structures would be the defining challenge.

Information Overload
The digital age has not reduced complexity. On the contrary, we have too much of raw data with too little time available for analysis, leading to information overload. This has led to long hours at work, too little time to contemplate and think, continuous fire fighting on getting routine activities done and strained interpersonal relationships. At the end of it all there is little to show for in terms of progress or productivity. In management terms, as interaction costs head towards zero, the volume of interactions is headed towards infinity. (Interaction costs involve searching for information and knowledge, coordinating activities and exchanges and monitoring and controlling the performance of others). The key to creating value is not just in providing top-down direction, vertically, but also in enabling and motivating staff and commanders to work at the lateral level. That is why existing organisations, which are constructed as vertical silos need to give way to structures that enable horizontal collaboration, to enable the mind power of our soldiers to be exploited in full measure.

Click Masters
Tomorrow’s soldier could rightly be characterised as Generation C. This is the generation which is connected, communicating, content-centric, computerised, community oriented, always clicking – hence the name. In India, this is the generation which was born after 1990 and for the most part comes from an urban or suburban background. This generation has grown up with the Internet and mobile communications and is very familiar with technology. It is this generation which will form the core of the military in the coming decade and will start playing a more dominant role in military affairs. One of the effects will be the way information is transmitted and consumed. The linear set ups which are an essential ingredient of hierarchical systems will no longer be the only means of getting information. They will get more and more diffused as nonlinear information flows increase. The inherent danger here will be that much of this information may neither be verified nor analysed – but may still be accepted at face value. Increase in transparency levels will also lead to a different set of security concerns which will need to be understood and addressed.

Generation Gap
We will increasingly witness a generation gap in the way this set of Generation C functions in relation to the rest. While the upper age limit of the digitally literate older generation will rise, they will remain far behind the junior and middle rung group dominated by Generation C in their digital behaviour and in terms of their ability to absorb, assimilate and employ technological tools. The proliferation and increasing sophistication of communication, interaction and collaborative technologies and tools could perhaps lead to redefining the way the armed forces operate. Can we do so? On the operational front, Generation C is already wired for taking on the requirements of NCW and in meeting the threat posed by terrorists and other groups inimical to the state. They need but a guiding hand to propel them in the right direction. We are indeed living in exciting times. The future holds great promise for the Indian Armed Forces and the future Generation C. But a great deal of maturity and understanding would be required to let Generation C fulfill the role which their upbringing and circumstance have fortuitously given.
WOMEN FIGHTER PILOTS
A Slapdash Act Of Tokenism

It is apparent that the government has failed to think-through the likely long-term implications of the convoluted issues involved. The sole justification for the decision (given both by the Air Force and the government) is that the said decision is a ‘progressive step’ in keeping with the aspirations of Indian women.

Since the induction of the first batch of women Short Service Commission (SSC) officers in 1992, the country has been witnessing an unhealthy and detrimental competition between the three Services. Every Service wants to be seen as the leading champion of the ‘equality of sexes’. Resultantly, a race for one-upmanship is underway to induct women in maximum number of fields and policy decisions of colossal significance are being undertaken in a totally cavalier, slapdash and hasty manner. No attempt is being made to study likely long-term implications of multiple issues involved and their effect on the fighting potential of the Services.

Current Policy
Presently, women are being granted SSC in a large number of areas in the three Services. However, permanent commission is being awarded to them only in Judge Advocate General and Army Education Corps of the Army and their corresponding branches in Navy and Air Force; Naval Constructor in the Navy; and Accounts, Technical, Administration and Meteorology Branches in the Air Force. Significantly, women are not allowed in combat jobs in all the three Services at present.

It appears that the Air Force has decided to be the first to induct women in combat functions in the fighter stream. The chronology of the events leading to such a major policy decision over the last few years makes interesting reading.

On 16 May 2012, in a written statement in the Rajya Sabha, Defence Minister Antony had categorically stated that there was no proposal to induct women into combat duties in the defence forces including as fighter pilots in the Air Force. He went on to add that induction of women in combat duties had not been recommended by the studies carried out by the Headquarters Integrated Defence Staff in 2006 and a High Level Tri-Services Committee in 2011. He also informed the House that a detailed Government policy letter had been issued on 11 November 2011.

Similar views were expressed by Defence Minister Parrikar at Pune on 30 May 2015. Ruling out combat role for women, he cautioned, ‘One needs to give an apt thought on what could be the fate of women combatants if they are taken prisoners by the enemy in a war. That is not allowed anywhere in the world’.

Complete Turnaround
Air Chief Marshal Arup Raha took over as Chief of the Air Staff in December 2013. In early 2014 at Kanpur, he stated, ‘As far as flying fighter planes is concerned, it is a very challenging job. Women are by nature not physically suited for flying fighter planes for long hours, especially when they are pregnant or have other health problems’.

In light of the above unambiguous assertions by the government and the Air Force, there was astonishment hearing the Air Force Day address of the Air Chief on 08 October. In a complete turnaround, he declared, ‘We have women pilots flying transport aircraft and helicopters. We are now planning to induct them into the fighter stream to meet the aspirations of young women of India’.

Within a fortnight, the government accorded approval to the proposal on 24 October 2015.

Irrational Incongruities
The Air Force has over 1,300 women on its rolls including 94 pilots and 14 navigators. According to the government press release, the first women pilots
for flying fighters would be selected from the batch which is presently undergoing Stage-I flying training at Air Force Academy, Dundigal. After initial training of 18 months, based on their fitness and willingness, the trainees will be selected for Stage-II training in the fighter stream in June 2016. Thereafter, they will be imparted advanced training for 12 months and be allowed to enter the fighter cockpits by June 2017. After due assessment of their suitability by the instructors, women trainees will be assigned to fly different types of combat aircraft, i.e. Su-30 MKI, MiG-29, Mirage 2000 or Jaguar.

**Bizarre Revelation**

The decision has given rise to a number of worrisome issues. In a written reply to the Lok Sabha on 04 December 2015, Minister of State for Defence Rao Inderjit Singh informed the House that the government had accorded approval to the entry of women into the fighter stream of the Air Force on ‘experimental basis’ for a period of five years. It was a bizarre revelation. No such stipulation was mentioned in the government’s approval of 24 October. Apparently, within a short period of six weeks, the government appears to have had second thoughts. It converted a blanket approval into a provisional experiment.

Interestingly, even ACM Raha continues to entertain doubts regarding the physical suitability of women. While announcing the decision to induct women in fighter stream on 08 October, he had to concede that women pilots might face problems in terms of physical fitness. However, he claimed to be hopeful of the problems being overcome.

**No Clarity**

Most shockingly, ACM Raha appeared totally confused regarding the role to be assigned to women fighter pilots. In response to a query, he categorically declared that ‘women fighter pilots need not necessarily get involved in combat across border and could be assigned tasks within the country, especially air defence, training and qualified flying instructions’. Realising the oddity of the averment, he went on to correct himself by adding that if the need arose they would also do proper combat roles. He demonstrated totally muddled thinking by claiming that he saw no incongruence in women fighting in a real combat scenario. It is shocking that a decision of such enormous proportions has been taken without defining the envisaged role for women fighter pilots.

If ACM Raha is to be believed, the Air Force will have two streams of fighter pilots, one for operations across the border and the second one restricted to operating within the country. One has not heard of a more preposterous proposition – drawing of an operational *Lakshman Rekha* for air battles, which women pilots are not to cross even while pursuing hostile aircraft.

**A Hasty Decision**

One fails to understand government’s compulsion in according approval for such a critical issue without being fully convinced of its appropriateness. No country takes decisions that impact operational preparedness, risk fighter aircraft worth millions of dollars and endanger lives of pilots without due deliberations. What happens if at the expiry of the trial period of five years, the government realises infeasibility/futility of the experiment? Will all the expenditure incurred on women pilots’ training be considered a waste? What about the resultant shortage of male fighter pilots as some training vacancies would have been appropriated by women?

The government has stated that it has already taken up ‘a comprehensive review pertaining to induction of women in armed forces both in short service commission and permanent commission and once finalised more and more branches would be opened up for induction of women to give them the space which they deserve in the armed forces of the country’. If that be so, it would have been prudent to defer such a major decision till the receipt of the review report.

Perhaps the most perplexing aspect of the issue is the fact that the High Level Tri-Services Committee had opined against the induction of women in combat duties in 2011 and the government had accepted its recommendation. What has changed...
to prompt a rethink now? Similarly, in early 2014, ACM Raha considered women to be physically unsuited to flying fighter planes for long hours. Pray what evolution in women physique has taken place in the last one year for him to revise his opinion!

**Senseless Tokenism**
Tokenism is the policy and practice of making a perfunctory gesture towards the inclusion of members of minority groups. It implies a policy or practice of making only a symbolic effort. It generally lacks genuine intent/conviction. In fact, it is an exercise in political expediency to give the impression of being equitable and all inclusive. It aims to earn plaudits by appearing to be progressive by resorting to non-serious gimmicks, such as hiring a few persons of a minority group to demonstrate intent to desegregate. The decision to induct women as fighter pilots smacks of tokenism of reckless nature.

It is apparent that the government has failed to think-through the likely long-term implications of the convoluted issues involved. The sole justification for the decision (given both by the Air Force and the government) is that the said decision is a ‘progressive step’ in keeping with the aspirations of Indian women. In other words, it is being conceded by both that it is not a need-based decision: The country does not require women fighter pilots. It gives rise to a vexing question: Is it the responsibility of the Air Force to satisfy aspirations of all segments of the society? Howsoever strong the pressures may be, it should resist temptation to masquerade as an equal opportunity employer.

**Pandering To Vocational Whims**
The *raison d’etre* of the Air Force is to ensure security of the nation. It is neither a flying club for adventure thrills nor a hobby club for recreation. It is mandated to win wars. No one can demand a right to fly fighter aircraft to satisfy vocational whims. It is for the armed forces to select and recruit the best material available to discharge highly challenging responsibilities of national defence.

Nearly 25 years have passed since the decision to induct women was taken. The Services are mired in numerous court cases filed by women officers. Worse, instead of earning kudos for inducting women, the Services are getting flak from the judiciary, media and self-appointed champions of gender equality. Adoption of slogans like ‘women empowerment’ and ‘women’s liberation’ may make an organisation look progressive, but can prove highly detrimental for the fighting potential of the Services. Howsoever righteous and morally upright the principle of equality of sexes may be; it should be applied to the armed forces in a conscientious manner without succumbing to populist pressures. National security imperative should never be compromised at the altar of political expediency. The policy to induct women as fighter pilots needs to be revisited.
Defence and Security Alert

The Indian Army is synonymous with honour, discipline, integrity, loyalty, valour, duty, respect, sense of sacrifice, patriotism, selfless service, moral values and ethics. They are the guardians of our national integrity and Sentinels of National Sovereignty. From controlling the world’s highest battlefield in Siachen, to executing major rescue operations, the Indian Army has fought adversities and locked horns with intruding enemy forces to ensure a safe and secure India for all of us. They have earned India’s profound appreciation and reverence for their unwavering commitment to these virtues in war as well as in peace, at home and as UN Peacekeepers around the world.

THE COVER

Pride of India, the National Flag holds centre stage innervating the gallant soldier resolute in his determination to defend the Motherland in the backdrop of a gathering storm symbolising challenges to National Security.

THE THEME

INDIAN ARMY

SENTINELS OF NATIONAL SOVEREIGNTY
BRAHMOS
Enhancing Indian Army’s Firepower

The Indian Army, one of the largest standing armies in the world, is equipped with huge conventional and strategic arsenal to defend and protect nation’s sovereignty and integrity. As India has faced many security challenges from time to time, the Army, operating from the most difficult and sensitive terrains of the country, has successfully carried out numerous complex operations to protect the nation from any internal or external threats.

Given India’s volatile neighbourhood, it is imperative that the armed forces are well stocked with the appropriate arms and ammunitions. Indian Army, to add more firepower to its capabilities, has equipped itself with the world’s leading supersonic cruise missile – BRAHMOS. The advent of the BRAHMOS cruise missile system has given the Indian Army the much needed capability and punch to undertake deep surgical strikes.

BRAHMOS, with a fine combination of speed, precision and power, has three times more velocity, 2.5 to 3 times more flight range, 3 to 4 times more seeker range and nine times more kinetic energy than any existing state-of-the-art subsonic cruise missiles.

The land-attack version of BRAHMOS has been operationalised in the Army since 2007. The Indian Army has already inducted three regiments of mobile land-based configuration of BRAHMOS in its arsenal. All are equipped with Block-III version of missile, which was tested on May 8 and 9 in the year 2015.

Sudhir Mishra, CEO & MD BrahMos Aerospace & CC R&D, DRDO, remarked after the excellent launch, "BRAHMOS today has once again flawlessly demonstrated its capability in the Eastern Sector. This launch is definitely a huge morale booster for our armed forces who are its proud possessors”.

The missile has also proved its mettle for firing in steep dive mode, thus enabling it to be employed in mountainous regions. The deep penetration capability of the missile system against hardened targets has also been validated.

The Indian Army has truly benefited from the induction of BRAHMOS weapon system. The ‘fire-and-forget’ missile has the capability to take on surface-based targets by flying a combined hi-lo trajectory, thus evading enemy air defence systems. Inclusion of the powerful strike missile in Indian Army has given it a distinct tactical advantage to knock down any enemy target even in the most difficult and hidden terrains.

The multi-platform, multi-target cruise missile, capable of flying up to 290-km at a top speed of 2.8 Mach, has validated its capability in sea-to-land, sea-to-sea, land-to-land, land-to-sea and subsea-to-land configurations. It is now gearing up for flight test in the air-to-ground configuration from the IAF’s frontline supersonic long-range fighter aircraft Su-30MKI.

Jointly developed by DRDO of India and NPOM of Russia, the potent BRAHMOS missile has significantly grown from strength to strength over the years and added new capabilities to meet divergent war scenarios. It is going to remain a world-class system in the coming years.
Synergy With CAPFs

Having seen the congruence of tasks between the Indian Army and the CAPFs especially at and near the borders, the necessity of cooperation clearly emerges. A salient issue which emerges is the good synergy at the ground/tactical level.

“There is immense power when a group of people with similar interests gets together to work toward the same goals.”

— Idowu Koyenikan

G lobalisation has significantly impacted the security environment and is seamless and engulfs the whole globe in myriad ways directly and indirectly, in small or large measure, immediately or sooner rather than later. Threats and challenges could be transient, requiring immediate and short-term policies or more enduring and requiring a range of policy actions/approaches. A continuous and holistic security scan is essential. Their relevance to national security is multi-dimensional in form of imminence, severity and risk. Global trends indicate increased instability and ironically globalisation in some cases has been the driver of instability and conflict.

Strategic Security Environment
A quick scan of the external and internal security environment gives us: Islamic State, Al Qaeda, Ukraine, Somalia, Yemen, Syria, South China Sea, Middle East, Af-Pak region, South Asia, economic and resource confrontations as also internally Left Wing Extremism, demographic shift, religious fundamentalism, internal fault lines and multi-party democratic practices and a reasonable guarantee that all security forces are going to have their hands full in the mid to long-term. The scope and multi-dimensional security challenges mandate synergy and coordination amongst the security forces. While each force has a specific role, organisational structure, ethos, training standards, equipment and core competence many a time their area of operations, tasks and challenges overlap and coordination is the key for optimum efficiency and operational results. There needs to be clarity at the political and policy making level with established practice of centralised control with decentralised operations having produced best results.

The Indian Army is mandated to safeguard the integrity and sovereignty of India and its assets both externally and internally and has done a splendid job so far. It is acknowledged that they have not acted alone but in concert with other Security Forces, Intelligence Agencies based on guidelines laid down by the polity.

Apart from conventional war and CI/CT operations, we need to be ready for media and public war (war of narratives), non-contact war, ideological war by non-state actors increasingly supported by States, outsourced war (to contractors, mercenaries etc), cyber/network and information war – security challenges across all dimensions of land, air, sea, space, cyber, psychological and DIME). Internally apart from ongoing CI operations in J&K, Northeast, LWE, the exploitation of socio-political, ethnic, economic and linguistic fault lines, vocal immature media and alarmingly the new trend of forces like Islamic State which occupy ideological and geographic space and draw many supporters across the globe. Conflict parameters are becoming a continuum with different forms of conflict in varying degrees being fought concurrently.

Overview Of Central Armed Police Forces
Not surprisingly there is some ambiguity when we refer to CAPFs as to which all forces are designated as one. The MHA website ‘http://www.mha.nic.in/armedforces’ have nominated seven Forces as listed below. All of them are under the administrative control of of MHA.

● Assam Rifles (AR)
  Conduct counter-insurgency operations in the northeast and other areas where deemed necessary, under control of the Army. During peace and ‘proxy war’, ensure security of the Indo-Myanmar borders. During war, rear area security in the Tactical Battle Area. Act as penultimate interventionist force of the Central government in internal security situation, under the control of Army; when the situation goes beyond the control of central paramilitary operations.

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[iii] http://www.mha.nic.in/armedforces
[iv] http://www.assamrifles.gov.in

January 2016  DEFENCE AND SECURITY ALERT
- **Border Security Force (BSF)**[^v]: A border guarding force of India. Established on December 1, 1965, it is a paramilitary force charged with guarding India's land border during peace time (less disputed borders) and preventing transnational crime.

- **Central Industrial Security Force (CISF)**[^vi]: The CISF came into existence in 1969 with a modest beginning, having three battalions, to provide integrated security cover to the Public Sector Undertakings (PSUs). CISF is no longer a PSU-centric organisation, instead, it has become a premier multi-skilled security agency of the country, mandated to provide security to major critical infrastructure installations of the country in diverse areas. CISF is currently providing security cover to nuclear installations, space establishments, airports, seaports, power plants, sensitive Government buildings and heritage monuments.

- **Central Reserve Police Force (CRPF)**[^vii]: Broad gamut of duties performed by the CRPF are crowd control, riot control, counter militancy/insurgency operations, dealing with Left Wing Extremism, overall co-ordination of large scale security arrangement especially with regard to elections in disturbed areas, protection of VIPs and vital installations, checking environmental degradation and protection of local flora and fauna, fighting aggression during war time, participating in UN peacekeeping missions and rescue and relief operations at the time of natural calamities.

- **Indo-Tibetan Border Police (ITBP)**[^viii]: The ITBP is deployed on border guarding role along the Indo-China border spanning 3,488 km from Karakoram Pass in East Ladakh to Jachep La in Arunachal Pradesh and occupying border outposts at heights ranging from 9,000 to 18,000 feet. They have also taken up their new challenge for disaster management especially in the Himalayas. ITBP is also providing security to the Embassy and Consulates in Afghanistan, security to Border Roads personnel and have been inducted for peacekeeping operations.

- **National Security Guard (NSG)**[^ix]: The National Security Guard (NSG) was set up in 1984 as a Federal Contingency Deployment Force to tackle all facets of terrorism in the country. Thus the primary role of this Force is to combat terrorism in whatever form it may assume in areas where activity of terrorists assumes serious proportions and the State Police and other Central Police Forces cannot cope up with the situation. The NSG is a Force specially equipped and trained to deal with specific situations and is therefore, to be used only in exceptional situations. The Force is not designed to undertake the functions of the State Police Forces or other paramilitary forces of the Union of India. All the personnel are on deputation.

- **Sashatra Seema Bal (SSB)**[^x]: SSB was set up in early 1963 in the wake of the Indo-China conflict to inculcate feelings of national belonging in the border population and develop their capabilities for resistance through a continuous process of motivation, training, development, welfare programmes and activities in the then NEFA, North Assam, North Bengal, hills of Uttar Pradesh, Himachal Pradesh and Ladakh. The recruitment has been expanded to most border States.

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**Strength of Central Armed Police Forces and Assam Rifles**

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<tr>
<th>Force</th>
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<td></td>
<td>GOs</td>
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<tr>
<td>Central Reserve Police Force</td>
<td>4997</td>
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<td>Border Security Force</td>
<td>5034</td>
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<td>Central Industrial Security Force</td>
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<tr>
<td>Assam Rifles</td>
<td>10269</td>
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<td>Total</td>
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(Figs updated up to 13 May 14 in http://www.mha.nic.in/armedforces<http://www.mha.nic.in/armedforces> website)

[^v]: http://bsf.nic.in
[^vi]: http://www.cisf.nic.in
[^vii]: http://itbpolice.nic.in/
[^viii]: All photographs downloaded from Google Images
[^ix]: http://nsg.gov.in/organisation_history.php
[^x]: http://www.ssb.nic.in

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[lt Gen PR Kumar PVSM, AVSM, VSM (Retd)]: The writer is an alumni of the National Defence Academy and was commissioned into the regiment of Artillery on 15 Dec 1976. He is former Director General Military Operations and Director General of Army Aviation. He superannuated after 39 years of glorious service on 30th Sep 2015.
Pursuant to the recommendations of the Group of Ministers on reforming the National Security System, SSB was declared as a border guarding force and lead intelligence agency (LIA) for Indo-Nepal border (January, 2001) and Indo-Bhutan border (March 2004) guarding 1,751 km and 699 km, respectively.

**Cooperation Between Army And CAPFs**

Having seen the congruence of tasks between the Indian Army and the CAPFs especially at and near the borders, the necessity of cooperation clearly emerges. A salient issue which emerges is the good synergy at the ground/tactical level. As matters move up the chain even within the operational level and especially at the planning, policy and strategy making hierarchical chain the ego-cum-turf wars come in the way. Many other issues of visibility, relevance, accountability, narrow ownership interests also add to the relationship dynamics more so at the Ministry level which ironically is fuelled by some in the senior hierarchy of the individual Forces. There is certainly a strategic necessity of institutionalised coordination and convergence within CAPFs by MHA and at the NSCS and NSA level on a quarterly basis and monthly at the operational level when SFs under different ministries are involved.

**Border Mgt And CI/CT Operations:** India has its land borders with seven neighbours (including Afghanistan) of approximate 15,000 km. State and non-State sponsored proxy war, support of secessionist and non-secessionist movement by external forces, difficult terrain, demographic cross-border movement, smuggling including arms, narcotics and currency and manning of borders by different forces reporting to different ministries obviously leads to lack of synergy and efficient border management. To illustrate the issue is the present manning of the Line of Actual Control with China by a mix of Army, ITBP under MHA, Vikas Battalions under Cabinet Secretariat; Bhutan border by SSB and BSF. After the Kargil conflict the GoM (Group of Ministers) constituted a task force for management of national issues which made numerous pathbreaking recommendations. It recommended CRPF as the primary national level CI Force thus allowing BSF and ITBP to revert to their primary task of border mgt. It recommended Army should be responsible for managing disputed borders against Pakistan and China. Synergy of intelligence operations was touched upon. The Army has a very close, direct and intrinsic system of command and control which is not the case with CAPFs along the border. While operational environment for conduct of CI/CT operations dictates fair degree of cooperation at the tactical level between Army and CAPFs, the same is not happening at the apex level. Joint operations are becoming routine for border management and CT/CI operations. Since it impacts operational planning and execution, CAPFs as a practice must synergise any border infrastructure and management activities with the Army especially along the LoC and LAC.

**Aid To Civil Authorities:** Maintenance of law and order, essential services, humanitarian and disaster relief and other types of assistance are mandated tasks to the Army. The last is an open-ended assignment where the civil authorities can seek assistance of the Army in varied other fields as well. To illustrate, during the Commonwealth Games at Delhi, the Army was tasked to construct a foot bridge against a tight time frame as the one constructed by civil agencies had collapsed. Cooperation with CAPFs deployed locally or tasked is a must.

**Civic Action In Insurgency Affected Areas:** Military and policing actions are only one vertical of tackling insurgency and not necessarily the most vital. Concurrent civic action programmes to improve living conditions, infrastructure development, empowering women and youth etc are being done routinely by Army. Increasingly CAPFs operating in the area are also carrying out similar tasks which naturally should be coordinated at both operational and ground levels, as sanctions for projects are done at operational level.

**Information, Cyber And Network Environment:** Security forces are being subjected to information, cyber and network intrusions 24x7 to weaken their institutional structures. There is a need to regularly share trends, good practices, SOPs and case studies at all levels. This increasingly needs to be monitored at the apex level of the Government.

**Synergised Modernisation, Procurements Of Arms And Equipment:** Synergy automatically implies operating with compatible arms and equipment especially for surveillance, reconnaissance and most importantly communications. This is especially true for border mgt and CI/CT operations. There have been innumerable instances where incompatible equipment made joint operations sub optimal. With limited budget for capital and revenue procurement prioritisation of the same becomes an imperative which should be overseen and dictated at the apex level of MHA/NSCS and the Army should be consulted.

**Training And Empowering The CAPFs:** The Army has been providing quality training at their training establishments individually for all ranks of the CAPFs and also collective training to units and sub units. While individual skill and operational
instructions have a larger scope to include technical, tactical and operational aspects, collective training has generally focused on border management and CI/CT operations. CAPF units have undergone pre-induction training for CI/CT operations and many officers do a four to six month attachment with Army units deployed in both border and insurgency affected areas. CAPFs have found these training capsules extremely useful. There is however a need for the supervisory cadre to co-opt themselves more vigorously along with their men in the training.

Logistic Synergy: Army and CAPFs have pan-India presence especially along the borders, difficult and insurgency affected areas. They have some measure of institutionalised logistics cooperation along the border where both forces are deployed. There is a strong case of carrying out a review of the same and come up with a concept of centralised logistic support with a command and control organisation at the apex, with operational and tactical level synergy both during peace and war. The study can be undertaken by the Army with suitable representations from other Services and CAPFs to include representatives from MoD and MHA.

Humanitarian Assistance/Disaster Relief (HADR): The Army has invariably been the first responder especially in border and remote areas. The CAPFs have also been contributing immensely to the same. While national disaster relief operations are being coordinated at the apex level by the Cabinet Secretary, cooperation and coordination will optimise and make relief operations more efficient at the regional and local level.

UN Peacekeeping Operations: Indian Army has tremendous expertise and experience for conduct of UN peacekeeping and peace enforcing operations. Increasingly CAPFs are also being deployed for policing and other security related tasks. Army is capable of providing quality training for above tasks at their Centre for UN Peace Keeping (CUNPK). In the mission area where both are deployed the Army can empower the CAPFs for carrying out their task optimally. There is a necessity of compatible equipment especially in communications.

Handling The Overlaps
We will continue to face multiple security challenges which will firstly require clear-cut policy formulation at the apex level and concurrent synergy, coordination and cooperation between the Army and CAPFs. While each Force has been mandated very specific roles and tasks, most times their areas of operations and even objectives are overlapping. For optimum efficiency the Army and the CAPFs need to synergise for border management and CI/CT operations, aid to civil authorities, HADR and UN missions, logistic support and the Army can empower the CAPFs by training them. We have come a long way in establishing synergy between the Army and CAPFs and with vision, vigour and capable leadership security challenges can be anticipated and tackled head on with confidence and in a timely manner.

“Competition has been shown to be useful up to a certain point and no further, but cooperation, which is the thing we must strive for today, begins where competition leaves off.” — Franklin D Roosevelt
As we continue to elude the adoption of the CDS system in its full play ‘jointness’ will bypass us. In the event of a full-scale two front war, India will pay a heavy price for its failure to fully integrate her defence forces and bring, ‘unity of command’ in various theatres of operation.

Similar to an orchestra, all components of the military, in a conflict situation, have to act in unison and require proper coordination. As in an orchestra so also in military operations there has to be one person to conduct the show. If there are multiple conductors then it is not possible to achieve complete harmony and strike the right notes.

To elaborate on this point, it needs be mentioned that during Second World War, United States government decided to keep its Strategic Air Command, outside the command of General D Eisenhower for ‘Operation Overlord’ (invasion of Europe by Allied forces). However, when Gen Eisenhower told the President of United States of America that in which case he must find someone else to command, ‘Overlord’, the President had to relent. In this context one may also quote, Gen Albert von Wellenstein on the issue of conduct of battle. ‘Never will I accept a divided command – no not even were God Himself to be my colleague in office. I must command alone or not at all’. This is the very essence of the concept of principle of unity of command which alone can bring about complete, ‘jointness’ in battle.

If we were to examine and analyse the causes of our 18 major defeats down from Alexander to Plassey, a fuzzy, ponderous and pedestrian system of higher Defence management, as articulated by Sir Jadunath Sarcar, runs like a warp thread in the management and conduct of battles by the Indians.

**Ghost Of Curzon-Kitchener Controversy**

Even after independence, cohesion or what one may call ‘jointness’ in military operations has remained elusive. Except during the first Kashmir War (1947-48) where there was some degree of coordination, essentially because of the lingering effect of Second World War, this essential feature of conduct of war has remained a distant dream.

During the 1962 War with China, Indian Air Force, for some unknown reason, opted to stay out. China had extremely limited offensive air capability ex Tibet during that period and since operations were above the tree line in the Himalayas, Indian Air Force would have been most effective against long columns moving on narrow tracks and other targets. While Indian Air Force stayed out, Pandit Nehru, the then
Prime Minister of India pleaded with the President of USA (through two letters to President Kennedy) for dispatch of fighter aircraft to support the Indian Army in operations against the Chinese.

The proposal for adopting the CDS system was first fielded in 1947 by the first Governor General of India. Lord Louis Mountbatten, who had first hand experience of unified command as the Supreme Allied Commander (unified command consisted of army, navy and air force) of South East Asia during the Second World War. This proposal was cold-shouldered by Pandit Nehru.

In response to a letter from Lt Gen Chhibber then Director Military Operations, Lord Mountbatten wrote, ‘But there was another reason. Although Prime Minister Nehru agreed with me in principle, he said it would give the Indian politicians the impression of perpetuating the idea of great Commander-in-Chief of India. Lord Ismay and I worked hand in hand on these proposals, but I thought it would come better from him than the constitutional Governor General, as I then had become. He also tried to negotiate a CDS, but met with the same opposition from Nehru and for the same reason’.

Mountbatten continues, ‘The last time Nehru stayed with me here, in the Broadlands, before the Chinese invasion on the North East Frontier, I urged him to appoint General Thimayya to the CDS post right away as I could see trouble brewing up. I warned him that if a war came, the Indian Army would suffer a quick defeat. He [Nehru] said there was no question of there being a war as India wishes to be at peace with everybody. To this I replied that it took two sides to decide whether there would be a war or not and that if China or Pakistan were to invade there would be a war on your hands. This (CDS system) he was unwilling to adopt as Krishna Menon too was against it’.

This deep-rooted suspicion bordering on paranoia and an abhorrence of the military by these two (Nehru and Menon) blurred their vision of national security imperatives and the geostrategic realities of the region. Nehru lived in a world of make-believe. The only time he faced a real crisis of leadership was in 1962, where he simply failed and failed miserably. The Nehruvian legacy seems to persist to this day, both in the political class and the bureaucracy. Though now and then attempts have been made to pull the CDS idea out of cold storage, but what has come out of these exposures to daylight are the sidetracking of the central concept of CDS system as such. There have been half-baked attempts to resolve the national security paradigm but in reality it has been a parablepsis of the solution to the emerging security demands.

1965 Chamb Operations

During 1965 War against Pakistan there was very little air support for ground operations by the Indian Army. Indian Air Force spent time chasing what is called, ‘air superiority’ or what later came to be known as favourable air situation. Lt Gen Harbaksh, the highest field commander during this war in his book, War Dispatches, records Air Marshal Soni’s assessment of the IAF’s performance, ‘the manner and circumstances in which the IAF went into action in 1965 in the Chamb Sector are illustrative of the political hesitation that delayed the decision on the employment of the IAF ... until all but too late .... This also exemplified IAF’s own half-hearted participation before the desperate reaction of the Pakistan Air Force, which led to an air war ... but the IAF missed a rare opportunity to demonstrate more fully to the Indian Army that it exists otherwise than being a fighting service for its own good.’ Obviously ‘jointness’ between the Army and the IAF was missing during this war.

During the 1971 War in East Pakistan, there was some degree of coordination as distinct from ‘jointness.’ At Longewala the IAF did come to the aid of the Army. Elsewhere, even proper coordination was lacking. Though from the morning of 01 December, the Indian Army on the Western Front was placed on highest state of alert, yet on December 3, Pakistan Air Force struck at, not only forward air bases in Punjab, but as deep as Agra and these attacks met with no challenge from the IAF. Obviously, even on the pressing need for alertness, Army and IAF were not on the same page.

Kargil Counter-temps

Leave alone ‘jointness’ serious discord between the Army and the IAF surfaced during the Kargil operations. IAF took one full week of dithering and delay before this issue could be taken up with the RM etc for deploying armed helicopters. Another nine days followed before the IAF was given the green signal. Air Chief’s indifferent responses from 9/10 May
The Kargil Review Committee chaired by defence analyst K Subrahmanyam, in its report and recommendations, skipped the important issue of adoption of CDS system for the Indian defence forces. In my presentation to Arun Singh Committee set up at the same time to look into the future shape of the Indian Army, the imperatives of adopting the CDS system, as such, was brought out. It was recommended that while we adopt the CDS concept, to start with there could be two theatre commands, one for Andaman and Nicobar Islands and the second for Northern Theatre. To alley the apprehensions of the IAF of being overwhelmed by the larger Indian Army, the first theatre commander of Northern Theatre could be an Air Force officer. The Committee accepted these recommendations as also the raising of a Mountain Corps for the Tibet border. Later a group of Ministers under Mr Advani did take up the issue of creation of a CDS, but finally nothing come of it.

**Parrikar Notes Infighting**

Leave alone ‘jointness’ even full coordination between the three components of the defence forces continues to be under stress. *Raksha Mantri*, speaking at the *India Today* Conclave, made a telling observation when he stated that, ‘there is no integration mechanism that exists between the three Services and there is a lot of infighting amongst them. I will recommend a mechanism for the creation of the post of Chief of Defence Staff (CDS). His observation of infighting amongst the Services is indeed a serious indictment and projects a poor image of the armed forces of India. What now appears to be on the cards is the creation of a post of permanent Chairman Chiefs of Defence Staff Committee (CDSC) with two years fixed tenure. RM observes that CDSC will coordinate the functioning of three Service chiefs and be the single point of advice to the government.RM seems to forget that he and his government can seek all the advice from the Defence Secretary alone, who, believe it or not, is officially responsible for the defence of India. We copied this bit from the British, not realising that Secretary of Defence there is Defence Minister while in India Defence Secretary is a babu.

**Single Point Advice**

How the permanent CDSC will deliver on the imperatives of integrating various components of the three or two Services, as applicable, synergise and optimise their individual potential into one whole, in a theatre of operation, to maximise the chances of positive outcome in the battle, is anybody’s guess. Such an ethereal and unstructured arrangement, working against turf battles, with casual coordination cannot deliver in a complex modern battlefield. One can overlook the RM’s naivety on issues of national security and the nature of war and conduct of operations, but unfortunately most of India’s national security experts fail to grasp the essentials of integration of forces and the imperatives of unity of command. Except for Jaswant Singh who had deep understanding of national security issues, political class in India has, by and large, remained ignorant of the essentials of this subject.

Germany’s spectacular victories and rapid advances into Europe and later into USSR during the Second World War, were the result of close integration of mechanised forces and Luftwaffe. Ashley Tellis in his book titled, *Stability in South East Asia* purported to be a report prepared for US Army, ‘If India initiates conflict, (against Pakistan) it can surmount numerical but not operational deficiencies. IAF does not contribute operationally. The Indian Navy is irrelevant except as a risk fleet but China’s forays
into the Indian Ocean Region have brought into focus the relevance and importance of the Indian Navy and the imperatives of having a strong navy.

The more recent talk of having a permanent Chairman Chief of Defence Staff Committee (as the fourth four star general) will not be able to deliver on the imperatives of integrating various components of the three or two Services (as applicable) and weld together, synergise and optimise their individual potential into one whole, in a theatre of operation to maximise the chances of positive outcome in the battle. The argument that government will have a single point of advice is merely one part of the requirement but the more important aspect is the pressing need for ‘jointness’ and unity of command at the operational end in various theatres.

Over the years, there has been much opposition from various quarters against the adoption of the CDS system as such. The political executive continues to be frightened by the bureaucracy with the mirage of a military takeover of the country. The propensity for turf battles between various components of defence forces, the unwillingness of the Service chief to be consigned to only staff functions and bureaucracy pitching one Service against the other to bring about a discord, militates against adoption of CDS system in its full play.

Both Prime Ministers Vajpayee and Manmohan Singh often expressed the view that India’s security parameters run from Suez to South China Sea. While one of the brighter defence secretaries espoused the view that Chief of Defence Staff is needed by only those countries which have global interests, whereas Indian military’s role is to defend country’s borders and shores!

Earlier, after the 1971 War, Prime Minister Indira Gandhi wanted to adopt the CDS system and appoint Gen Sam Manekshaw as the CDS. There were then serious objections from the Air Chief with full support from Defence Secretary KB Lal. Unfortunately, the core and kernel of the CDS system, in its full spectrum, has been escaping the IAF and most of India’s defence fraternity.

Naresh Chandra Committee Recommends CDSC
Whenever a compelling proposal comes up, the method adopted by the bureaucracy is to seek appointment of a, ‘so called’ expert committee or a task force. Keeping in line with this ploy, the Naresh Chandra Committee was constituted. It observed that the CDS in its full play would not pass muster (why not?) and instead post of a permanent CDSC with two years tenure be created, who besides being a single point of advice, will also promote inter-Service cooperation and coordination. This recommendation overlooked our past experience and issue of turf battles and was a half-way house solution which bypassed the inescapable imperatives of theatre commands which alone can generate, ‘jointness’ and optimise fighting potential of various components taking part in the battle. The creation of Integrated Defence Headquarters as an adjunct to MoD has been yet another Jhumla.

In our context the possibility of a two front war cannot be ignored. The complexities of a two front war which haunted the German General Staff for more than half a century, across two World Wars, are not easy to comprehend and resolve. These would certainly be outside the scope of present system of command structures. Such a situation will impose a range of complications, such as, the need to evolve a joint strategy, judicious distribution of resources and forces between the two fronts in line with the overall strategic plan.

CDS system would also be able to evolve a mechanism to acquire compatible and complimentary weapon systems and equipment for integrated deployment of combat elements, suitable for a particular theatre of operation. This would reduce the need for over one and a half dozen present set of commands (C-in-Cs) to 6 to 8 theatre commands.

As we continue to elude the adoption of the CDS system in its full play, ‘jointness’, will bypass us. In the event of a full-scale two front war, India will pay a heavy price for its failure to fully integrate her defence forces and bring, ‘unity of command’ in various theatres of operation.
If there is a trained military dog *in situ* there is always a very high possibility that the troops would have received some kind of credible warning given the Remount and Veterinary Corps discovery of the high quality of sight and hearing of dogs.

A bout half a century ago the Indian Army Remount and Veterinary Corps published a study on the acute sight and smell capabilities of dogs and suggested ways of employing canine squads for military purposes. Several breeds including the German Shepherd, the Labrador and the Doberman Pinscher were identified as eminently suitable animals for tasks ranging from sniffing out explosives to tracking terrorists/criminals, as guard dogs and infantry patrol partners.

**Inadequate growth**

The Indian Army, the Border Security Force and the Indo-Tibetan Border Police have set up breeding and training stations but the number of dogs produced per year is inadequate for effective patrolling of India’s vast land frontier. This fact has been highlighted by the ease with which Pakistani terrorists manage to penetrate the Line of Control in Jammu and Kashmir and the International Border in Punjab and strike at Indian targets in spite of the fact that a barbed wire fence has been erected to prevent intrusions.

**Change In Terrorism Pattern**

The official riposte is that successful infiltrations have fallen drastically over the past three years but the indications are that there has been an, as yet, unquantified growth of ‘indigenous’ terrorists in Jammu and Kashmir. This can be seen in the audacious posing for a photograph by about a dozen young Kashmiri men with Kalashnikov rifles. The photograph is believed to have been taken in an orchard which implies that there is support for the terrorists in the Jammu and Kashmir hinterland and, currently, it is showing signs of growth as indicated by the large numbers of those waving Pakistani and ISIS flags after Friday prayers.

Official figures presented in Parliament suggested a dramatic increase in ceasefire violations in 2013, 2014 and 2015 compared to 2012 but the number of attempted infiltrations have fallen from 221 in 2014 to 92 (till September) this year. The figures presented in Parliament suggest that the Indian security forces are aware of where the infiltrators have managed to successfully infiltrate across the LoC and the International Border as gauged by the numbers presented. There were 121 successful infiltrations in 2012; 97 in 2013; 65 in 2014 and 17 (inclusive of one Naveed who was nabbed alive by civilians) in 2015. Cumulatively this means that there are nearly 300 of Pakistan trained terrorists who are currently operating in Jammu and Kashmir.

**Tenets Of Counter-insurgency**

In counter-insurgency terms this is not a small number that can be dismissed offhand. To be able to track this number down and eliminate/neutralise them the government would have to deploy at least 6,000 and up to 15,000 security personnel to be able to sift the hinterland for willing and unwilling harbourers, inaccessible jungle hideouts and even urban habitats. These figures are drawn from the empirical studies by China’s iconic Mao Zedong and the Bolivian charismatic guerrilla fighter Ernesto Che Guevara who have analysed the effect that one guerrilla fighter can have on the mobilisation of the State security forces.

The figures also reveal that although there is a barbed wire fence and day-night sensors along the International Border from Gujarat in the south to 550 km inside Jammu and Kashmir up to heights too tortuous to sustain a fence in the vicinity of Grid Reference 9845 from where the LoC merges into the Siachen Glacier intrusions are taking place. It consists of a double row of pillars strung with concertina wires, interspersed with motion sensors and thermal imaging devices which are supposed to set off an alarm if anyone touches or loiters close to the fence.

**Insufficiency Of Dog Squads**

There are also infantry dog squads as well but that there is a paucity in numbers is borne out by a recent report of a journalist who was taken on a conducted tour that at least one of the outposts he had visited had...
In Deployment

resorted to cultivating the loyalty of local pariah dogs: A definite improvement on the practice of hanging disused cans and cowbells to warn of someone at the periphery. This was sought to be improved in the 90s by the Rs 750 crore project of increasing the height of the barbed wire fence around sensitive cantonments and capping that with a string of beer bottles ostensibly to neutralise rocket propelled grenades (hundreds of which have been captured from terrorists) that would explode prematurely if the piezoelectric crystal in the nose cone hits something hard well before the cantonment infrastructure. But several cantonments were still hit by Pakistani terrorists, one of them being Kaluchak.

Inanities Galore
The journalist also reported that Indian security forces had found a novel way of scaring away Pakistani K-9 squad by brushing the fence with the urine of a panther. How the panther was milked of its urine was not explained.

Not withstanding this kind of gimmickry, there is something radically wrong if Indian security forces – the Army and the Rashtriya Rifles along the Line of Control in J&K and the Border Security Force along the International Border in Punjab – are unable to detect the kind of intrusion that has occurred at different times through various points. As in the recent case of Naveed, the only one captured alive. From Faisalabad in Pakistan he had entered India with three others in July. For more than a month he was reconnoitering places right up to Srinagar and finally decided to strike a BSF bus that normally took a particular route in Udhampur. Unsanitised by the usual road-opening party the terrorist and his companion opened fire killing two BSF personnel and injuring 11 others. His companion was killed in the return fire by the BSF jawans, Naveed tried to take hostages to carry out an even more nefarious plan (possibly demanding release of captured terrorists) but he was overcome by rustic Indian youth who pounced on him and pinned him down. Two of his deadly companions are roaming around freely in Jammu and Kashmir or deeper inland.

Before that Pakistani troops crossed the LoC, killed an Indian soldier, beheaded him and took his head away. There was no effective riposte in public perception except belligerent threats and inane references to biryani.

Under-utilised Ferocity Factor
In all these cases (and more) if there is a trained military dog in situ there is always a very high possibility that the troops would have received some kind of credible warning given the Remount and Veterinary Corps discovery of the high quality of sight and hearing of dogs. They can warn against ambushes and intrusions in more proactive ways than the thermal imagers strung up along the LoC which do not appear to be functional.

The current method of deployment of the K-9 squad is on-leash patrols in search of improvised explosive devices, caches of arms and explosives and in cordon-and-search operations. Time and again one sees on television a demonstration by a German Shepherd dog of its ferocity in the attack role. This is a capability that has been under-utilised in military dogs in India.
The German Shepherd, the Rottweiler and the Belgian Molinois (which the Chinese have deployed along the Line of Actual Control against us) can be trained to aggressive action. The Labrador and the Dobberman Pinscher tend to have a friendly attitude.

Reorientation Of Methodology
To be able to be better able to guard the inviolability of the barbed wire fence that India has erected at such a high investment in money and labour it will have to change the orientation of operational deployment of the dog squad. Static defences like the barbed wire fence tend to induce complacency and false invulnerability to the owner of the device. The Naveed case illustrates that there is at least one tried and tested way of suborning this static defence. One other way could be digging underground tunnels from the Pakistan side, under the fence to a selected spot on the Indian side (three tunnels were found). The presence of attack dogs will add a new organic element to India’s defences.

The current deployment pattern is one handler managing one dog held on a leash. This should change to use one or more attack dogs managed collectively by a section of ten troops without a leash but with common command and body signals. This collective approach is intended to orientate the dog to who is friend and who is foe — a basic requirement in warfare.

In the event of contact with hostile elements it is a foregone conclusion that the dog would be the first to be aware of hostile presence. If well trained the dog would make known to its handlers that there is another presence in the area. It can then be ordered by any member of the section to attack even while members of the section open fire in the direction indicated by the dog. By this sequence of events there is at least one surety: That the hostile entity has lost the element of surprise and the ambush is aborted.

In forested areas the tactic of using attack dogs in a ‘wolf pack’ configuration comprising several attack dogs will avoid putting the lead officer – a tradition hallowed by Indian Army practice – from becoming the first casualty as in the recent case of Colonel Santosh Mahadik. The dogs would creep stealthly towards their objective and if discovered would be shot at. That would give the position of the gunman to the rest of the patrol party who can provide covering fire even as the dog reaches close enough to launch an attack on the terrorist.

Dogs can warn against ambushes and intrusions in more proactive ways

Collateral Advantages
At the base of the Indian Army pyramidal structure is the section of ten men. In counter-insurgency/counter-terror operations the accent is on manpower intensivity. The dogs make up that requirement bringing to this fighting unit the advantages of greater battlefield awareness. Two, the bonding between the men and the dog (dogs) tends to negate the stress generated by presence in an operational area. Three, if there is tension within the unit over leave and other family requirements the bonding with dogs will help abate stress and tension. While ‘one handler—one dog’ also has therapeutic side-effects, collective responsibility has a different flavour.
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**REST OF THE WORLD**

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<td>US$ 35</td>
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