

Career Mobility and Job Satisfaction in the Indian Army: A Perspective

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Introduction

Do you have it in you? they ask; and implore all those who feel that they have the qualities 'to join', only to find after a certain period of time, that a large number of officers did not have the requisite qualities. Sounds disconcerting, but a hard reality faced by the Indian Army due to its hierarchical and pyramidal structure. After supersession some of the officers seek premature release to change track, while others continue to serve in a disinterested manner. Due to loss of interest and negativity creeping in towards their present job, they become an excess baggage for the organisation to carry. There are only a few amongst them, who work with the same zeal after getting 'overlooked'. This results in uneven distribution of work, for the 'performers', who get entrusted with additional workload. This contributes to increased pressure on the performers to achieve desired results. That is why it is said, "80 per cent of work in the Army is done by 20 per cent of the officers". This affects the morale of the 'doers' and efficiency of the organisation to a great extent.

The problem is getting further compounded due to an acute shortage of officers being faced by the Armed Forces. According to some reports, Indian Army faces a shortage of 25 per cent of its authorised strength which itself adversely affects the efficiency of the Armed Forces. Hence, there is a need to examine the system holistically so that the organisation becomes career friendly. The officers should remain positive, oriented and continue to contribute meaningfully for betterment of the organisation.

This article is a modest attempt to understand the factors that influence individual performance in general and the Indian Army in particular, and to analyse measures that could enhance the performance of the officers beyond the shelf life i.e. supersession and thereby contribute to the overall efficiency of the organisation.

Factors Affecting Individual Performance

For any organisation to grow and function efficiently, full hearted performance of employees is of utmost importance. An organisation can be only as effective as its employees want it to be. Besides educational qualification training and individual traits, performance of individuals depends on intangible factors such as motivation, morale and job satisfaction also.

Motivation can be defined as the willingness of individuals to exert high level of efforts towards achieving organisational goals and objectives¹. It is absolutely essential for an organisation to have highly motivated group of employees as motivation provides the stimulus for high morale. *Good morale* leads to employee enthusiasm, voluntary conformance with rules and regulations, and willingness to co-operate with others in accomplishment of an organisation's objective². In an organisation like the Army, *peer-group relations* / organisational cooperation is of paramount importance, as officers have to work as a team, communicate ideas / evolve and execute plans and involve everyone in the task. A lot depends on interpersonal relations within the team. In fact, all the variables viz motivation, morale and interpersonal relations are interdependent and contribute towards organisational efficiency and the resultant output, and are influenced by administration in the organisation.

Every person has individual expectations and aspirations in life and every one strives to make sure that most of them are met. Some of them even choose their careers keeping in mind their larger goals in life. When aspirations are met, individuals derive a sense of satisfaction and then they perform better. *Job satisfaction* represents a positive emotional state, resulting in self appraisal of one's job in defining social realities. Job satisfaction depends on different variables which could be classified either as organisational or personal or a combination of both. The organisational variables include appointments, assignments, job challenges, leadership, pay and allowances, promotional avenues and work ethos; whereas, personal variables range from place of posting, educational advancement, requirements/aspirations of the family to quality of life³ etc. Thus, it can be concluded that 'job satisfaction' and 'career mobility' are two important factors that play a major role in fulfillment of individual's expectations and aspirations; hence they determine the health of an organisation and contribute towards achieving organisational efficiency and future growth.

One of the major problems in the Army is the hierarchical and pyramidal structure of the organisation. It has a direct bearing on promotions within the military that lends itself to the largest number of superseded officers, with corresponding loss of motivation and morale. With fast changing socio-economic environment, aspirations of the officers are on the rise; however, with limited avenues of promotion/career mobility and early supersession, the commitment of the stagnated officers towards the organisation is receding day by day. Further, supersession carries a stigma, which creates a psychological strain on the officers and affects their efficiency. Thereafter, difficult service conditions, continuous work related stress and frequent postings to distant and difficult places other than those suited to an officer's potential make him more disgruntled. Therefore, since he has nothing substantial to look forward to, performance of the affected officer drops drastically, and he becomes dead wood with passage of time, adversely affecting the work culture and ethos of the organisation. In some cases, they even become detrimental to the growth of the organisation by dissuading and de-motivating the officers 'still in the run'.

Having said this, career mobility is not always about moving up. There are people in civil organisations who are happy with their current position and deliberately forego promotions to meet personal needs. Career growth means different things to different people. For some, promotion within the organisation means much, for others it may mean accepting a new assignment elsewhere or achieving the larger goal in life, like fulfilling family objectives or even achieving spiritual satisfaction. Growing in a career, as a matter of fact is taking out time to focus on the right things at the right time to keep the life moving in the right direction. Hence, it becomes a responsibility of the organisation to identify the needs of the people working in the organisation and institute measures to satisfy the aspirations and expectations within the organisational limits for all-round growth of the individual and the organisation.

Adverse Effect of Stagnation / Dissatisfaction in Career

Having analysed the variables that contribute towards individual performance, it is pertinent to examine the impact of stagnation and job dissatisfaction on the organisation as a whole. Career stagnation, also referred as career plateaus⁴, if not handled properly can be damaging to the employee as well as to the organisation. The resultant effects / issues related to career plateaus are analysed in the succeeding paragraphs.

Loss of Job Interest. After supersession, with reduced avenues for career growth, bulk of the officers lose interest in the job and feel that they are now less responsible and accountable to the organisation. Some officers become totally unenthusiastic and begin to consider their work as routine, inconsequential, and of no real value. Approach to work accomplishment becomes as if one is doing a favour to the organisation. This creeping in of '*chalta hai*' attitude, adversely affects the job performance and the resultant output.

Pessimistic Attitude and Low Morale. Some officers perceive the system of empanelment as unfair and lack of recognition leads to sagging morale. Denial of making it to the next rank, induces a feeling of failure and has a demoralising effect on some of the officers. They become indifferent and develop a pessimistic attitude towards work in general and life as a whole. For them everything starts with a big 'No' and this affects the organisation adversely. Attitude of the overlooked officers further becomes indifferent when they have to work under a relatively junior officer who makes the grade, and this too adversely affects the team performance.

Decreased Motivation and Interpersonal Relation. The effect of stagnation on many individuals is overwhelming. They get completely de-motivated, withdraw themselves from the working environment and create a cocoon around them. Some develop an outlook of hostility towards the organisation and make it evident with outbursts of emotion on petty issues and an approach of non-cooperation with peers and team members⁵. This adversely affects the interpersonal relations and performance as a team.

Dwindling Values and Ethos. Organisational values and ethos embrace largely the informal rules within which organisations function. Like rules and other unwritten societal expectations, the institutional ethos imposes constraints on the behaviour of organisations and the people who work within them. Although various aspects of institutional ethos are difficult to measure and evaluate, they are nonetheless extremely important in moulding the behaviour and performance of organisations that evolve within the environment. On reaching the career plateau most of the officers evade these implicit codes of conduct which adversely affect the functioning of the organisation.

Adverse Influence on the Family. For some, non-empanelment affects their dignity. Loss of pride generates frustration and sometimes the resultant impact moves from office to home. Stigma of failure not only affects the personal life of the officer but the family members as well. Loss of poise sometime percolates down to the family members adversely affecting the performance of the children at school, social behaviour and social life as a whole.

Possible Measures to Enhance Organisational Performance

On reaching 'career stagnation' and resultant drop in performance, the officers cannot just be weeded out, as the number of plateaued employees are simply too large. Besides, these officers, although they have reached the cross roads, are worthy and valuable, because they bring with them tremendous knowledge and experience required by the organisation. Career plateau can happen to every employee and it does not necessarily mean absence of skills or capabilities compared to others. In fact, human resource management research has recognised this phase as healthy and productive in an adult's development. In other words, the so-called plateau could represent a period of stability and maturity, where employees master work skills, pursue special family or personal interests; and improve functional, professional, and personal skills so that they can contribute more to their organisations⁶. Some of the possible measures that could be instituted to increase satisfaction and motivate officers for enhanced performance are as follows:-

(a) **Second Career Options.** There is a need to explore the avenues available to accommodate army officers in various specialised jobs / suitable positions in the private sector. Assured vacancies for lateral absorption into various civil administration, Central Police Organisations (CPOs) or PSUs need to be identified and guaranteed with statutory provisions. This opportunity should be extended based on the performance of an officer after supersession. This would motivate officers to do well and thus benefit the organisation.

(b) **Encouragement and Assistance to Pursue Own Interests.** Another way could be to employ officers in the area of own choosing. After getting overlooked officers could be posted to their preferred field so that their contribution is meaningful and worthy. Choices could be asked from the officers for their preferences and tenures could be decided, where possible, based on the performance for a specified period/ probation.

(c) **Sponsoring Higher Education.** After evaluating an officer's performance for a fixed duration after supersession, the top performers could be sponsored for higher education in India and abroad. This could be in varied fields e.g. MBA, IT, Research etc. Incentives like this would encourage officers to put in their best and enhance the performance of the organisation as a whole.

(d) **One Rank Up on Release from the Army.** Officers with outstanding performance need to be recognised and suitably rewarded. Persons whose performance continues to be high average even after supersession should be promoted to the next rank before retirement based on the evaluation by a Selection Board as is done for other promotion boards.

(e) **Integrating Work and Family Needs.** One of the broader and more complex issues faced today is the family dilemma that confronts contemporary organisational life. For greater satisfaction the need is to achieve a better balance or integration between work and family needs and responsibilities⁷. While at the local level efforts are made to implement family-friendly policies / approaches for the workplace, however, entrenched organisational practices make

this difficult to achieve. At higher level, there is a need to recognise and evaluate various aspects influencing the social spheres of life and address the same for a meaningful transition in work culture. By scaling employee's need to balance work and personal life, the larger issue of increased efficiency at work and in turn the enhanced performance of the organisation can be addressed to desired effect.

(f) **Change of Attitudes towards Plateaued Personnel.** It is not unusual for senior officers and subordinates to give up on and neglect the plateaued personnel. Such actions are quickly picked up by the affected officers to their advantage and these only compound the problems. Imposition of faith and confidence in the employee's ability is of paramount importance for deriving maximum gains to the organisation.

Conclusion

As far as career mobility is perceived, it is important to realise that it is not necessarily negative. Some organisations believe that 'plateaus' in career are necessary for keeping employees motivated and keep their energy and enthusiasm high while at work. Career plateaus are valuable to the individuals as they provide an opportunity to explore new ways of utilising one's skills and abilities, take more responsibilities and deliver better performance. Individuals who are successful in coping with this stage are more likely to plan better for the further stages of their career development, and are less likely to experience frustration and dissatisfaction. At the same time, while planning career mobility it is important to balance work with the other priority areas. It is important to revisit one's goals and ambitions keeping in mind the changing environment and formulate strategies to achieve the same.

Career management is arguably the most intricate and vital element for an organisation as large as the Army. This becomes more difficult in the wake of high expectation level of the officers and limited promotion and career development opportunities. Due to the pyramidal structure of the organisation, openings at higher echelons get reduced in inverse geometric progression and thus supersession at various levels of promotion is an inevitable reality. Further, factors such as economic, technological, policies and size of the workforce can and will impact on the career prospects. The existing vacancy based system may not be a correct measure of effectiveness/ efficiency of the organisation and needs deliberation.

There is, thus, a strong case to re-think the system of career planning and human resource development within and outside the Army. Time is now, to encourage officers to follow their interests and take advantage of the growing opportunities and contribute meaningfully for the growth of the organisation. The aim should be to reduce attrition and to remove disgruntlement amongst the officers who lose interest on getting overlooked and create conditions for increasing job satisfaction within the service. Measures like these will also assist officers to make a smooth transition to a second career. Besides increasing job satisfaction, there are other areas that can be improved to make the working environment more suitable to meet the post supersession needs and aspirations of the personnel, without compromising on the work ethos and culture of the Indian Army.

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Gangotri Glacier: Unveiling the Ground Reality

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Introduction

The melting of Himalayan glaciers has been a subject of ongoing controversy. Unfortunately, reliable data is not available with any Government department. There has been a total lack of genuine effort to get down to practical ground study of the state of Himalayan glaciers instead of depending only on satellite images. All these controversies could have been avoided if a ground check had been done and taken into account the “International Geophysical Year 1956-57” programme during which a number of Himalayan glaciers were studied and their snout position fixed. In 1955, Geological Survey of India organised an expedition to the Bara Shigri glacier as India’s part in this programme – but unfortunately no record of the same is available.¹

There has been no effort on the ground to end this controversy as can be seen from a recent statement made by Mr Jairam Ramesh, Environment Minister, in his talk with the Editor-in-Chief of Tribune dated 5 June 2010, while acknowledging that most glaciers were in retreat, he stated, *“Siachen glacier and Gangotri Glaciers are still advancing but at a decelerating rate”*.² Not wanting to contradict the Minister, the Government and aided department/institutions, tasked to monitor the Himalayas kept silent.

It is now left to non-government institution/organisations/individuals to unveil the ground reality.

Adventure cum Study Trek: A USI Environment Initiative

Considering the above, the ‘United Service Institution of India (USI)’ – the country’s oldest Institution (Established in 1870) which has encouraged military reconnaissances in remote areas since 1883 – has taken upon itself to study through ‘Adventure-cum-Study’ treks the Himalayan Glaciers and thus make a contribution to the knowledge base for the study of environmental degradation. The USI plans, in cooperation with other interested institutions, to ‘fix the snout positions, record the state of the ablation zones and study the degradation of catchment areas. For this, to begin with, the Gangotri Glacier has been selected. This article covers the Gangotri Glacier and the strangled Bhagirathi River.

A Day to Remember

We, a group of four (Neeraj, Vikas, Brajesh from the IMA and self) left Dehra Dun on 20 Oct 2010, had a night halt at Nehru Institute of Mountaineering (NIM), picked up their representative Vishal and an associated guide Raju⁴ for our venture and reached Gangotri, the road head. From Gangotri the initial plan was to trek up to Gaumukh, record/carry out observations, spend the night at Bhojbasa and the next day trek down to Gangotri and from there by vehicle to Uttarkashi. However, seeing the deteriorating weather conditions it was decided to go up and return the same day. Doing 40 km in a day at heights ranging from 10,000 to over 13,000 ft is tough going, but just as well we did this, for half an hour after our return to Gangotri it started snowing – a heavenly blessing. We had left at 0600 hours and returned at 1900 hours.

On the Heavenly Trail

Walking to the source of the Ganga from Gangotri is not only a trek-cum-pilgrimage but a unique educational experience on Himalayan ecology. Sketch ‘P’ refers.

Gaumukh (Height 3996 m). The snout of the Gangotri glacier was discovered in 1818 by two British officers. With this discovery and publicity, it became a pilgrimage destination – at that time an extremely tough journey in the absence of a regular track. In ancient times rishis went to the upper reaches of the Ganga, looking for peace and solitude in the silence of the snow-capped mountains – braving hardships that enhanced their rewards and prayers.

Gangotri (Height 3140 m). Located 250 km from Rishikesh, Gangotri marks the mythological descent of the celestial Ganga. A Gurkha commander, Amar Singh Thapa, in the beginning of the 18th century built a temple here in dedication to goddess Ganga. Later, the temple was rebuilt to its present granite sculptured form. It is the road head for the foot / pony trail to Gaumukh and beyond. The path takes off from just above the temple through a forest affording marvelous views of Sudarshan peak through gaps in the deodar trees lining the trail. The track passes through Chirbasa (meaning ‘place of pines’) and Bhojbasa (meaning ‘place of *Bhojpatra* tree’) over an easy gradient with stunning scenic views of the Bhagirathi Valley and the mountain overlooking it. The path throughout is on the right bank of the river. At places it is cut into the rock side with iron railing on the open side. The treeline formed by the bluepines ends at Chirbasa. Just short of Chirbasa, one gets a wonderful view of the trio Bhagirathi peaks with the tree line in the foreground.

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Chirbasa (Height 3600 m). At a distance of 9 km from Gangotri, Chirbasa is the usual first halt for most travellers. On the Bhojbasa side of Chirbasa there is a beautiful site on the river for pitching tents. Looking to the east, through the trees, one gets a splendid view of Mand peak (6510 m). From Chirbasa onwards it is tundra like terrain. The birch trees that formed the tree line here have all disappeared—victims of the axe for fuel. It is on the fine layer of ‘*Bhojpatra*’ under the bark of the birch tree on which the ancient sages wrote their manuscripts. Along the trail from Chirbasa, the Bhagirathi peaks are the beacons throughout.

Bhojbasa (Height 3800 m). Six km from Chirbasa, is a settlement for pilgrims and trekkers. It now has only a rest house - camp sites are also available. From here, 5 km walk over a gradual gradient (the last km over rocks) takes one to Gaumukh. On this walk, Shivling adds to the panorama of other peaks. Short of the snout of the glacier are makeshift temples set-up by sadhus.

Gaumukh is a moving site. A feeling of contentment takes hold of one, when you stand in front of the ‘cave like’ opening (now there are two) in a 200 ft high solid wall of ice through which the water gushes out. To reflect on the thought that you are at the source of India’s holiest river, in the waters of which millions of people in its course take a dip to purify themselves, is a fulfilling experience - always cherished throughout one’s lifetime. The source of the Ganga is considered the most sacred with maximum purifying power, followed by its confluence with other rivers. Many trekkers and pilgrims sip the sacred waters and fill bottles to carry home for distribution by teaspoon fills.

Looking from a point in level with top of the snout one sees the Gangotri glacier as one vast amphitheatre enclosed by 6500 to 7000 m high snowy mountains that feed it. The peaks Mana Parbat, Satopanth, Vasuki, Bhagirathi, Kedar Dome & Shivling stand out against the dazzling blue sky.

The river valley from Gangotri (temple) to the source, with its scenic splendour and spiritual serenity, gives one a unique feeling of absolute peace - it was the meditational abode of many saints and sages. All peaks, big boulders, waterfalls and streams joining it are linked to deities, saints and gods with their own legends and myths. This stretch of the valley is best described in the words of our sages :

Sheetal Mathe Ri, Sheetal Batayo Ri

Lau Lau Lau, Bhatku Chamaya Li

(It is cold above me and cold all around,

In such inhospitable surroundings,

I am roaming around with my desires.)

Startling Revelations

We succeeded in recording some striking ground observations. Having been here during the same period in October 2000, it was possible to note the changes in the state of the Gangotri Glacier, Bhagirathi river and its catchment area. What was then and now, is all recorded on film and in the form of a power point slide show, which leaves no doubt as to what is stated below :-

(a) The ‘Water outlet Ice face’ of the snout called *Gaumukh* (cow’s mouth) is shearing and crumbling with big blocks of ice lying near the water outlet The same is the state of the moraine covered ice shelves but receding at a slower rate.

(b) In all records to date, which I also noted ten years ago, there was only one water outlet (called Gaumukh) from which the melted water of the glacier gushes out but now there are two. The volume of water as compared to what I observed ten years ago in October 2000 is ‘more than double’ - a clear indicator of the increase in melting of the glacier from top and within. *From my observations, I have no doubt that the glacier is fast shrinking and its water outlet ice face (Gaumukh) receding more than 50 m a year.*

(c) GPS and GPS data recorder were used to fix the ice face outlet of the glacier and the slowly receding edges of

the snout area. The water outlet ice face and the edges were also photographed. The close-up pictures showing clearly the two water outlets (Gaumukhs), give a clear idea of shearing and crumbling of the glacier face and the volume of water flow. The snout position was recorded 250 m (Longitude 79 04 34.57 E. Latitude 30 55 47.12 N) from the ice face water outlets. Clear reading on the GPS could not be taken at the water outlets.

(d) The ablation zone of the glacier top is not snow or ice but covered by debris, boulders and rocks brought down for ages by the glacier from mountain slopes..

(e) The GPS data recorder showed the distance from the Gangotri temple to the snout to be 19.9 km, which is 1.9 km more than what has been stated for years.

(f) To stop the degradation of the stretch from Gangotri to Gaumukh the Government has limited the number of visitors to 150 per day, removed all *dhabas* (over 60 eating places) and ponies are not allowed to stop overnight on this stretch. However, it is seen that all this is still not sufficient to restore the environmental damage already done. Closing the area, as was done to save the Nanda Devi Sanctuary, appears to be under consideration.

(g) An NGO led by Dr (Miss) Harshvanti Bisht and Mr Ratan S Chauhan (NIM) have put in commendable effort in Bhojpatra (Birch) plantation and Eco-awareness campaign in the Gangotri-Gaumukh region. They have set-up a nursery at Chirbasa of plants/trees suitable for the region and are also cultivating medicinal plants. Considering that the period conducive to growth is only from May to September they have managed to maintain 50-60 per cent survival rate.⁵

Likely Future Scenerio. *Increase in temperatures will lead to accelerated discharge of glacial melt water in the next two decades, after this the discharge will come down to its original level and then start receding and finally dry up. With no healthy forests to cover the loss it is a disaster in the making – not in the distant future, but in our life time.*

The Strangled Bhagirathi

According to mythology, 60,000 warrior sons of King Sagari were reduced to ashes for having disturbed Kapil Muni during meditation. *Bhagirath* the King's great grandson decided to atone for the sins of his ancestors by undertaking severe penance. He prayed to goddess Ganga asking her to come down to the Earth and flow over the ashes of his ancestors so that they could rest in peace. His prayer was granted and Ganga descended to the Earth. To break the fall, Lord Shiva took the descent on his matted locks. The water gushing out of Gaumukh is believed to be the heavenly Ganga. In its course from Gaumukh to Devprayag it is named Bhagirathi after King Bhagirath – a name, even today, taken to epitomise unmatched grit and determination.

The Bhagirathi emerges from the snout of the Gangotri Glacier with the backdrop of the sacred Bhagirath Range and Shivling. Initially it is a stream flowing through glacial moraines. As it flows, it is joined by other snow fed streams. On the rocky mountain slopes can be spotted herds of Bharals (Blue Sheep) – one of the unique Himalayan wild animals. After a descent of about nine kilometers, at Chirbasa, the barren mountain slopes give way to forests of birch, blue pine, deodar and colourful bushes of different varieties. Towering snow-capped peaks are visible from number of spots in the valley.

A little below Gangotri, the Bhagirathi is joined by one of its main tributary the *Jad Ganga*. At Harsil, beautiful streams with crystal clear waters merge with it. In its stretch from Gangotri to Harsil, the Bhagirathi flows through forests of blue pine and *deodar*, rich in flora and fauna. From Harsil to Tehri, the river flows through scenic valleys with villages surrounded by cultivated fields and fruit trees. At Tehri the *Bhila Ganga*, a major tributary, joins the Bhagirathi. The stretch from Tehri to Devprayag is through a gorge. The road – following the river so far – takes off into the hills to bypass the gorge and links up with the river, now called Ganga, at Rishikesh.

The river stretch from Tehri to Devprayag through the gorge is one of the finest for river rafting. In the words of Ajeet Bajaj, Managing Director, Snow Leopard, a top river rafting organisation : “It is one of the most difficult and interesting white water stretch of the world, made more challenging as once you launch into it, without a road near by, you are totally on your own”. Unfortunately, *with damming of the river and run-of- river projects this stretch will never be the same again. Hydro-power projects are also affecting migratory path of fish like the mahseer, trout and other species.*

On 5 December 2001, lowering of the panels of the controversial 2400 MW Hydro - Electric Tehri Dam Project finally stopped the natural flow of the Bhagirathi River. 18 dams (four downstream from Tehri dam) along the Bhagirathi River are either in operation, under construction or planned. If these dams/run-of-the river hydel projects are allowed to go through, it would be the end of the holiest stretch of the river. The riverbed is left dry with the water running from one diversion dam to the other through one tunnel to another. The Centre after much vacillation, considering environment and religious concerns, has put a total ban on planned and under-construction dams on the 130 km stretch of the Bhagirathi from Gaumukh to Uttarkashi.⁶

The catchment area of the Bhagirathi – the most sacred stretch of the Holiest Ganga – is the most degraded stretches in the entire Himalayas. Before the Tehri dam came up the extent could best be judged from the muddy nature of the Bhagirathi water when it merged with the clear greenish blue waters of the Alaknanda at Devprayag.

Declaring the area between Gaumukh to Uttarkashi a ‘no-project area’ is not enough. There is an urgent need for an all out effort on reforestation and protection of existing forests and pastures; otherwise soil erosion in the catchment area will lead to fast silting of the controversial Tehri Dam, reducing not only the storage capacity but the minimum water level depth required to run hydro-power units. If this happens, the hydro- electric generating units – which is the main purpose of the dam – will have to be shut down. The ‘run of the river’ hydel projects will face the problem of shortage of water and excessive silt.

Author's Note

This article is mainly based on ground observations of the group recorded during the recent 'Adventure-cum-Study' trek from 20-25 October 2010 and my earlier trip to this area ten years ago in the first week of October 2000.

End Notes

1. News report in Times of India 11 November 2009 and other papers/ media reports. before and after the Copenhagen meet on Climate Change.
2. The Tribune, Chandigarh, Saturday, dated 05 June 2010.
3. USI Journals: Centenary Number, Oct-Dec 1970, page 530 and Vol CXL, No. 580, Apr-Jun 2010 Issue, page 156.
4. The Group consisted of : Col (Retd) KS Dhami, Capt Neeraj Mehta (27 Punjab, IMA), GC Vikas Sheoran (IMA), GC Barjesh Beniwal (IMA), Mr Vishal Ranian (NIM) and Mr RS Rawat (Local NIM associated guide).
5. Save Gangotri Glacier Campaign. Website <http://saveganga.org>
6. News Report: The Tribune, Chandigarh, Tuesday, 02 November 2010.

***Colonel KS Dhami (Retd)** was commissioned into the Scinde Horse on 12 Jun 1960 and volunteered for transfer to The Parachute Regiment in 1963. He took premature retirement from the Army in 1983. During his service as Bursar with The Lawrence School Sanawar from 1994-98, he organised many adventure activities in the Himalayas, river rafting and treks through the desert.

Recently, he proposed an adventure-cum-study tour of the Gangotri Glacier to study the effects of environment degradation. This trek, sponsored by USI in conjunction with the IMA Dehradun, was led by Colonel Dhami and undertaken from 20-25 Oct 2010. The study of Himalayan glaciers is a passion with Colonel Dhami who is a member of USI.

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Introduction

The 21st Century is characterised by two major trends in the context of the oceanic commons. First is the re-emergence of non-State violence - *barbarism* - defined as acts of mindless violence, is a repudiation of the social contract enshrined in the Peace of Westphalia, that has taken several centuries, countless wars and endless conflicts to forge as a civilized instrument of social conduct. No institutionalised arrangement exists for resolving violent disputes between non-nation State actors - barbarians, terrorists, extremists - and the nation-state viewed as a comity of nations.

The other trend is that of ultra-rapid industrialisation across the developing world. The projections are that the world economy would grow by 4.20 per cent until 2015, with the non Organisation for Economic Cooperation and Development (OECD) countries growing at 6.70 per cent against only 2.30 per cent of the OECD countries.¹ What this translates to, in security terms, is that as economies develop the race for resources, commodities and markets becomes very intense between the economies who already have these resources and the others who need these very resources for their own growth. Market forces, in the long run, may not be able to balance demand and supply of resources causing State intervention in the national interest. Resource geo-politics is the grand strategy that is now being played out in the international arena and is the central source of possible conflict in the future, particularly, at sea.

Threats to Maritime Security

From these emerging trends of the 21st century, seen in the context of ocean spaces, arise the contemporary threats to maritime security that in turn challenge the peace of the oceanic commons. The threat to maritime order at sea and the vulnerability of the maritime frontier can be from nation-states, hybrids (State sponsored terrorists), barbarians and environmental threats - either human induced or engineered or divinely ordained as natural outcomes of non-sustainable development. That these threats are serious, from a global perspective, can be gauged from the fact that two-thirds of all humanity and much of the global commercial and industrial infrastructure is contained within 100 nautical miles from the coastline.

Oceans are the global common for the intercontinental transportation of goods; it is a source of minerals, hydrocarbons and energy; and it facilitates the global weather system and its transoceanic currents sustain the earth's weather system. The sea is also the earth's largest garbage dump. The seas also simultaneously offer great opportunities for miscreants of all types to create insecurity not only in the oceans but also in the littorals. Hybrid terrorists (terrorists sponsored by state) operations have the potential to put at risk cities and ports, nuclear and industrial installations, leisure and adventure tourism centers all along the coast and the island territories.

The opaque vastness, veiled anonymity and limited governance of the oceans create their own challenges for legitimate state forces to maintain maritime order and hence states shun responsibility and accountability since legitimate authority in these waters do not exist. Therefore, it is important at this juncture to reassess threats, quantify risk associated with these risks and prioritise its programmes in the interest of developing a model for comprehensive maritime security. These assessments, seen at both domestic and international level can provide direction towards a new architecture and a multilateral mechanism to secure the oceanic commons on which much of international commerce, regional stability and national security rides.

Maritime Security Concerns

For India specifically, the threat to national sovereignty emerges mainly from a few State actors. The prospect of a regional clash escalating to an international conflict that would draw in extra-regional powers is unlikely but cannot be totally discounted. In the Indian context, the capability growth of some navies is a matter of serious concern, particularly when bilateral disputes about land and maritime boundaries, EEZ delineation, water use and resource sharing exist. So long as these capabilities do not impact the right to freedom of navigation and unimpeded lawful commerce that feed the Indian economy, they can be sidelined as the legitimate right and a sovereign decision of that country.

For the world also, the oceans have become a source of insecurity. Some nation-states, such as Iran, have defied UN resolutions² and have strategised to develop anti-access capabilities through shore-based interdiction mechanisms such as long range missiles and coastal batteries, and consequently indirectly threaten maritime trade as a hedge against international action for their transgressions. In the process about 60 per cent of the World's oil and 40 per cent of the World's gas resources are vulnerable.

In some parts of the world, internal politics and social deprivation have created a virtually floating refugee population that no nation would voluntarily accept and hence seaborne human smuggling into other states is assuming serious proportions as it directly impinges upon demographics and social stability of the host nation. All of these immigrations sail across the maritime frontier, since seaborne illegal migration is facilitated by relative lack of policing and the consequential porous nature of the coastal regions of the world. However, the security implications remain the same. The reason that coastlines are not accorded the same prioritisation that land borders enjoy is because transgressions over land frontiers constitute visible violation of sovereignty whereas, ingress through the coastal frontier somehow is not seen as violation of State sovereignty.

Barbarians have also begun to move seawards to launch their hideous operations that threaten population and assets on maritime frontiers. Seaborne violence, as evidenced from the Bali bombings and the recent Mumbai attacks, is emerging as a viable alternative and perhaps even a supplement to land-based attacks. At sea, today the visible manifestation of barbarism is piracy and armed robbery. Valuable cargoes carried in equally expensive ships are seized by pirates off the coast of Africa, in the Straits of Malacca and off harbours in South Asia and released only after

handsome ransoms are paid for lives of seamen and goods. What the future portends can be even more drastic – these very ships can be used by terrorists as weapons in attacking ports and harbours with devastating effect on the economy and downstream turbulence on international trade and relations, since each ship has several nationalities as stakeholders like the crew, owners, insurers or the charterers.

Non State terror groups such as the Al-Qaeda and previously the Liberation Tigers of Tamil Eelam (LTTE) own vessels of their own. The potential to cause massive mayhem and simultaneous disruption to the economy is evident when one imagines the impact of blowing up a hijacked mid-sized Liquefied Natural Gas (LNG) carrier in a busy harbour such as Mumbai.³ Everything within about 1,500m would be engulfed in flames (discounting secondary fires), potentially 500,000 people would be direct casualties and property worth several billions would lie in ruins. Toppling a container carrier in the narrow channel or fairway would block traffic and stop port operations for several months with enormous impact on port revenues and national economy.

With the requirement for fitment of Automated Information Systems(AIS) having become mandatory on vessels having displacement of greater than 300 tonnes, the Container Security Initiative (CSI) gaining increasing acceptance and the implementation of the International Ship and Port Security Code, the option of using small vessels for terrorist operations is attractive. Small crafts and submersibles for smuggling of not just drugs, commodities, metals, small arms and light weapons but also seaborne terrorist strikes have become the forte of barbarians. High-speed crafts packed with Improvised Explosive Devices (IEDs) and high explosives have also been used on suicide boats to ram into bigger vessels and such an operational strategy is not difficult to implement, even today, in a busy port. The threat envelope at sea, particularly in closed harbours and ports, therefore, now includes small vessels and shallow semi submersibles also.

In the future, weapons of war and mass destruction shipped by sea could possibly be traded at sea to finance terror and destabilisation operations ashore. Technology has enabled the use of sophisticated seaborne vessels, including submarines, by drug syndicates and human traffickers to facilitate contraband transfers. Thus, more than nation-states, transnational barbarians have become the immediate larger threat at sea. Unlike air traffic which is highly regulated with each airborne aircraft being under the control of one or the other Air Traffic Control Centre, ships at sea do not report to a maritime traffic centre and there is ambiguity about the definite position of ships at sea.

Faced with these threats from the sea, fundamental changes in the international maritime security environment have been engineered through regulation of international shipping with the introduction of the International Ship and Port Facility Security Code, CSI, Proliferation Security Initiative, and so on. In addition, advanced technologies of automatic messaging, sophisticated online ship/crew database, seamen screening systems have provided some respite.

However, no one nation or agency can mitigate against disruptive maritime threats on its own strength and regrettably the global oceanic commons today are no more secure than they were at the end of the 20th century.

International Affirmative Action

At the international level, there is the foremost requirement to regulate global seaborne traffic more reliably, accurately and timely since early detection of emerging threats allows better resource application. This would require basically two divisions of work. First, is the surveillance and monitoring aspect and the second, is the enforcement function. So far as surveillance and monitoring is concerned, rapid strides have been made through the aegis of the IMO in the last decade. The next step, it is proposed, would be to adopt an internationally accepted Maritime Routing and Reporting System (MARRS). It could be operationalised through the respective Navigational Warning Area (NAVAREA) coordinators with the objective of globally consolidating real-time maritime domain awareness through a shared common operational picture. The basic concept would be to organise the sea lanes of communication (SLOCs) into specified routes (outbound and inbound) with geographic reporting points (usually crossing points between different routes) that would be managed by the NAVAREA coordinator. Transfer of the operational plot, AIS or Long Range Identification and Tracking (LRIT) 4 information, would be formalised in a manner that when vessels transfer from one NAVAREA to another, control and monitoring responsibilities are also transferred concurrently in a formal manner.

The proposal is akin to the ‘flight plan’ concept followed in the aviation sector which necessarily has to be filed before any aircraft is allowed to get airborne. Similarly a ‘passage plan’, with specified Estimated Time of Arrival (ETA) at different points of the route, supplemented with a position, course and speed report rendered every four hours would pretty much map the entire seaborne traffic. Delays in ETA or diversion without intimation at the next reporting station would set off alarms and such violations are immediately recognised and corrective actions initiated before these assume critical proportions.

Though the international mandate is for fitment of AIS and LRIT only on vessels of displacement more than 300 tonnes, national legislation should reduce this requirement to vessels up to 10 tonnes with Distress Alarm Transmitters (DAT) included. Navies could cite security and other constraints to share information on warship movements, but this would have to be overcome by larger considerations and warships must not be exempt from these devices. They may however, incorporate appropriate security overlays to protect operational security. Working on such an agreed protocol may take many years but work must begin now.

The second aspect is that of enforcement of international law in the global oceanic commons. India, together with other powers, could take the initiative of creating a voluntary Indian Ocean Constabulary Force (IOCF), a regional instrument of law enforcement with specific jurisdiction limited to the high seas. The maritime asset base to operationalise the Force may be drawn not only from coast guard, naval or marine police but also from merchant marine resources of say, Australia, France, India, Japan, South Korea, South Africa, and the USA. This force could implement the MARRS architecture proposed in Figure 1. Subsequently membership could be expanded on ‘each according to his capacity’ basis. It would help immensely if such a force has UN recognition or mandate. ‘Violators’ of the sanctity of the global oceanic commons could be tried in the International Court of Justice under the aegis of the UN and not by any one participating nation. Of course, a common criminal procedure code would need to be also agreed to.

Though this concept is not easy to implement, particularly on jurisdictional issues and complex authority-responsibility relationships, it would perhaps find lesser opposition if a civilian character of a law enforcement agency is imparted to it. Therefore, assigning a ‘Commander Task Force’ (CTF) designation to such a constabulary function would most certainly be a proposal killer. Instead assigning a civilian title such as ‘Superintendent’, Indian Ocean Constabulary Force, would allay some fears. The Superintendent should be supported by international legal and state policing authorities on his staff/team.

Objective	Globally Consolidate real time maritime domain awareness through a shared common operational picture of all seaborne traffic
Concept	Organise the SLOCs as:- Specified Point Outbound and Inbound routes Definite Geographic Reporting Points Monitored by the NAVAREA Coordinator that integrates :-
Operationalisation	AIS Architecture LRIT Systems Satellite Based Surveillance Systems
Technology	ITeS for consolidating seaborne traffic database IMO, Lloyds National Shipping and Fishing Registries.

Figure 1. Maritime Routing and Reporting System (MARRS)

The National Agenda

Whilst at the international level the proposal for MARRS and the IOCF can be debated and refined and implemented for the global good, maritime security risks in the territorial waters must also be addressed as a common national agenda for all maritime nations. In India, the civilian segment of maritime security is especially at risk because of inadequate focus on this aspect of national security. Coastal security and policing of territorial waters needs preponderant priority and cannot be relegated to the back burner in any State since this is the interface between the oceans and the land. Here again a similar model of surveillance and rapid reaction support forces can be conceptualised. For meeting surveillance functions a mix of integrated coast radar/AIS/LRIT stations, High Frequency Surface Wave Radars for long range warnings, Unmanned Aerial Vehicles, port access and harbour defence systems can be conceived which all together converge actionable information at the national coastal security headquarters. This headquarters would be the national interface with the MARRS and the IOCF.

The second arm of this initiative would address force protection measures. In India, first intervention rapid reaction forces would be from the newly commissioned *Sagar Prahari Bal*. This initial 1000 strong force with support of about a 100 Fast Interceptor crafts has been approved by the Government and would be fully operational in a few years. Obviously this is hardly adequate to cover the 186 ports and the 7615 kms of coastline but it is a beginning. *The Sagar Prahari Bal*, once it assumes a responsible mass, would work with the IOCF and thus integrate into the international maritime security architecture for securing the oceanic commons.

Needless to say, a central organisation at the national level would be required to oversee the smooth functioning of these measures and resources. The foremost task would be to review force structures and force composition so that the entire threat and vulnerability spectrum of hybrid maritime security is seamlessly addressed. Such an exercise would be more about force restructuring within available resources, as different from force modernisation. It would, of course, make far more sense if all maritime force structure planning is centrally organised so that not only are duplications and overlaps definitely avoided between the competing maritime agencies but more importantly, voids overlooked by individual maritime agencies are determined and filled as part of a national exercise in ensuring comprehensive maritime security. Such an exercise should be undertaken under the auspices of the Adviser, Maritime Security, leading a team of non-partisan maritime security experts.

Tier III Action

Seaborne threats to maritime security, in the final analysis, have their origins ashore. Therefore, the interface between the sea and land needs to be also addressed to ensure security of the global oceanic commons. Therefore, the third tier would be the maritime states and districts of the Country. The requirement would be to sensitise the local population about seaborne threats and intrusions to the same extent as the frontier states of the hinterland have been sensitised to land border incursions. The administrative machinery may need to be realigned to these realities so that civic action supplements state action in the intelligence gathering, monitoring and reporting chain. Local coastal defence craft as a first intervention force would be required to be located at the minor ports which are most vulnerable to security transgressions. These coastal stations could be linked with the national coastal security headquarters and in turn to MARRS.

Conclusion

It is now given that as the global economy develops and world trade increases the flow of goods and resources across the global oceanic commons will witness a sea change in volumes and complexity. The SLOCs will be under threat from state, hybrid and barbaric forces acting to further their narrow interests and in conflict with the global good. Armed intervention by the states to seize assets and territories calls for cooperation between all stakeholders to overcome:-

(a) Anti-access and area denial strategies of some states, if need be by unified force.

(b) Hybrid actors promoting active illegal immigration and terrorism from the sea.

(c) Barbarians unleashing terror through capture and killing of innocents at sea and damage / destruction of property and merchandise.

(d) Illegal dumping of toxic and nuclear wastes which is endangering the oceanic eco-system and threatening the very survival of humankind.

The global oceanic commons cannot be governed, controlled or even managed by the action of any one state, however powerful or omniscient. Neither can ectopic crisis management organisations such as ad hoc task forces provide a lasting solution. These at best, achieve consequence management and impart an avoidable military character to what are essentially constabulary functions as for example, the control of piracy off the East Coast of Africa. Instead, policing forces are a more acceptable format in democracies and countries with liberal values. The stakeholders are numerous and their efforts and interests are dispersed. Collating a common operational picture through seamless transfusion of information, and backed up by first-line reaction forces – either international, regional or national and voluntarily organised or forcefully implemented – is a must if comprehensive maritime security is to become a reality in the future for the global good.

This paper has proposed the creation of a Maritime Automated Routing and Reporting System (MARRS) to address reliable, accurate and timely surveillance of the oceanic commons. This would be supplemented with national effort through an integrated coastal surveillance network. Towards authoritative governance of the oceanic commons this paper has proposed the creation of an Indian Ocean Constabulary Force under a commonly agreed framework and constabulary powers of law enforcement. At the national level, maritime states, in their own interest, must create rapid reaction forces, such as the Indian Sagar Prahari Bal, with the appropriate resources for interdicting potential threats in territorial waters. These forces would integrate with the IOCF in the long term.

Finally, the paper recognises that these are but ideas and for them to fructify into reality much more granularity in concept definition, study of international and national legal frameworks of action and capturing technology supplements to human endeavour would need to be incorporated.

*This Paper is based upon “Maritime Threats, Risks and Priorities: An Indian Perspective” presented by Commodore Sujeet Samaddar, NM (Retd), at New Delhi, in January 2010 at the Centre for Naval Analyses-National Maritime Foundation Conference.

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China's Military Strategy of Active Defence : Implications for India

Colonel Deepak Saini*

Introduction

China's '*reform and opening*' commenced in 1978. Consequently she has made rapid economic progress, improved domestic stability and interconnections with the outside world. Economic growth has also reduced threat of balkanisation; question of Taiwan though remains at large. Continued stability and economic growth has helped China in upgrading and reorganising her military on modern lines with expanding torrents of ambition and matching capability generation.

Some China watchers believe that possibility of outbreak of major hostilities between China and her neighbours particularly India¹ or amongst the ASEAN countries² is unlikely in the near future. This is based on inter-dependency of trade, globalisation, perceived increased transparencies being shown by the Chinese and presence of other regional powers in the region.

China hopes to avoid regional instability from affecting her border states, thereby her economic growth and domestic stability. However, changes in regional security will call for change in Chinese focus and her military deployment pattern which in turn will have vectoring consequences for the region. Reasons for instability include; Korean peninsula, Chinese interests in Myanmar, Pakistan and Afghanistan; disputed land borders with India, maritime boundary issue in South and East China Seas and her ability to access foreign resources and transporting them back to the mainland. A major interference in any such contingency would topple the apple cart. However, for the present, people argue that there is no imminent reason to believe that war is likely to happen in the region.

Growing Global Status and Future Leadership

In absence of the possibility of a conflict, emerging geopolitical and military balance between the USA, China, India and other powers in the Indian Ocean Region (IOR) is likely to influence day-to-day choices being made by smaller nations of the IOR. These choices will prove crucial in the later part of this century. In this sense, the question which arises is: Why do the Chinese have a policy of accepting accolades for growing into a global power, yet doing trifling little in terms of accepting commensurate responsibilities of shared interest of others in the region? Why is China's authoritarian regime unwilling to bind itself to globally accepted norms? Why is she hesitant to settle outstanding border disputes? Do the Chinese have a different 'design'?

Current situation is likely to continue, as the fourth generation Chinese leadership under President Hu Jintao and Premier Wen Jiabao grooms the next generation slated to take over at 18th Party Congress in 2012. While Hu steps down as General Secretary of the Communist Party of China, he continues as Chairman, Central Military Commission (CMC) or Commander-in-Chief of the PLA. Thus, Hu will continue to wield influence over national policy and in deciding top positions of 'Sixth generation' leadership! As for the Fifth generation, current Vice President Xi Jinping, is expected to take over from Hu and Vice Premier Li Keqiang is to succeed Premier Wen Jiabao³. Therefore, there will be no major national policy related shifts.

China's Military Strategy: Relevance of Active Defence

PLA adopted the path of 'informatisation' in 2002 and continues to retain interest in modern combat and counter-insurgency operations without actually participating in either. Modern China's operational or 'active defence' (*jiji fangyu*) component of the 'Guidelines' proclaims non initiation of wars, except to defend her 'sovereignty and integrity'. On commencement of hostilities, however, based on principle of active defence, China intends taking initiative to annihilate the enemy. Strategically, the guideline is 'active defence'; in reality, emphasis is on taking initiative as in 'active offence'. Chinese Defence White Paper of 2008 propagates implementing military strategy of 'active defence; i.e. her military shall strike after the enemy has 'attacked'; but what construes an 'attack' is elusive and not restricted to 'military attack'. Also what is perceived as 'threat' to China's 'sovereignty and integrity' is not known to the world. Modern history has many examples wherein Chinese leaders have claimed their pre-emptive military acts as 'strategically defensive' actions. The 1962 Indo-China war is a live example, so also China's intervention in Korea (1950s) and similarly for Vietnam (1979). It is therefore axiomatic to conclude that China is likely to continue with pre-emptive military actions to advance her core interests.

Above mentioned Chinese intervention pattern suggests that she does not subscribe to the theory of awaiting a military strike passively nor shall she give away an advantageous position in politics or military tactics. She retains the ability of striking first under the all encompassing argument of military pre-emption being a 'strategically defensive' act and 'active defence' the new sheathed tool for achieving her aim.

China's Space Programme

China has an active Space programme⁴ which commenced in 1992 and has reached an advanced stage, by 2025 she intends landing astronauts on the moon. In Jan 2007 China conducted an Anti-Satellite Test using a ballistic missile carrying a kinetic kill vehicle. Though this was intended to be a demonstrator, it brought down the curtains on Chinese claim of using space only for peaceful purposes⁵.

On the military side, China is acquiring technologies to improve her space based C4ISR capabilities. In addition it would be prudent to assume that the Chinese would be working on abilities to degrade their opponent(s) use of satellites by capturing or destroying them. This act apart from impacting the psychology of the adversary also goes well with the overall theme of 'active defence'.

Strategic Missile Force (SMF) or the Second Artillery Corps (SAC)

The SMF is believed to be equipped with 110-140 nuclear missiles, including 15-20 DongFeng 3, about 18-20 DongFeng 4, IRBMs; 20 DongFeng 5, ICBMs; and 60-80 DongFeng 21, MRBMs. The new generation DongFeng 31 (deployed 2007) and its improved variant DongFeng 31A is close to operational deployment⁶. Additionalities include 1,000 conventional theatre missiles as also the DongFeng 21 C, conventional MRBM, DH-10 Land Attack Cruise Missiles (LACMs) and Julang 1 (one SSBN; 12 missiles) alongwith Julang 2 (two SSBNs; 12 missiles each)⁷. China is also making concerted efforts to operationalise her Anti Ship Ballistic Missiles⁸ designed to hit an air craft carrier at sea.

Western writings suggest that currently China has six operational missile bases⁹. The CMC controls all SMF units under a strict four level Chain of Command i.e. CMC – Missile Base – Missile Brigade – Launch Battalion. The organisational structure therefore lends itself to be an essential ingredient of the ‘active defence’ capability of the Chinese.

Modernisation of China’s Ground Forces

PLA’s transformation from an inward looking army into an offensive and manoeuvre oriented force is ongoing. Recent military exercises viz, STRIDE, SHARP, WARRIOR, etc, have focused on force projection, joint command and control and sound logistics.

The Chinese army is organised into 18 Group Armies (GA), which are corps-sized combined arms units with two or three GAs allotted to each of the seven Military Regions (MR). Balance of regular ground forces and all army reserve units are under control of the 30 Provincial Military Districts, tasked for border defence and internal security¹⁰, implying, the GAs are practically not defence oriented. In addition, PLA has adopted ‘Integrated Joint Operations’ concept for operations at campaign level in demanding and complex electromagnetic environments¹¹. Under the ‘active defence’ guidelines PLA ground forces are the lead agencies and their largest long range military exercise ‘STRIDE 2009’ was conducted in August 2009, involving movement of 50,000 troops of four MRs to fight in unfamiliar areas. This, as per a Chinese military specialist, also tested long range force projection capability¹². Was this to validate the concept of ‘active defence’ for the PLA?

Upgradation of Chinese Air Force (PLAAF)

PLAAF plays a lead role in China’s ‘anti access’ and ‘area denial’ operations and is of great significance for ‘active defence.’ Today PLAAF is being upgraded for operating beyond China’s borders. Development and operationalisation of her fifth generation fighter, J-XX and the C-919 transport aircraft for strategic airlift are indicators in this direction.

PLAAF’s current fighter aircraft inventory is changing very fast. For the present it comprises of about 1,000 J-7s and J-8 IIs, 95-116 J-11s, 70 Su-27s, 76 Su-30MKK multi role fighters and 24 Su 30 MK-2; as also some 60-80 indigenous J-10 multi role fighters and about 200 J-11 air superiority multi role aircrafts¹³. She is upgrading her intermediate-range bomber and ground-attack capabilities with JH-7 fighter-bombers of which at least five regiments have been raised¹⁴. China is also simultaneously creating infrastructure and airfields in border areas.

PLAAF’s is also developing force multipliers i.e. tankers, AEW and AWACS, intelligence and electronic warfare aircrafts. It may also be recalled that during the 2008 Sichuan earthquake, a PLAAF communication relay aircraft cruised over the disaster zone providing command and control support to rescue troops, demonstrating a new capability.

On the long range airlift capability front, PLAAF has 14 IL-76 MD aircrafts (1990 vintage); has ordered 30 IL-76s and four IL-78 tankers (in 2005) from Russia. China is developing an indigenous four-engine turboprop transport plane of the C-130 class to replace Y-8 (An -12 Cub). Once these aircrafts are in place, her power projection capabilities will get enhanced, a major beneficiary being her ‘active defence’ propagation.

Naval Warfare Capabilities

Traditionally, China is regarded as a land power, but this is changing. China argues that her economic and political power is contingent upon access to and use of the sea, therefore, a strong navy is required to safeguard such access as also to maintain territorial integrity. Modernisation of Chinese Navy (PLAN) has been driven by two factors; possibility of military conflict with Taiwan and more recently, the growing need to protect her sea lines of communication.

The naval component of ‘active defence’ is termed as ‘Offshore Active Defence.’ China’s 2008 Defence White Paper describes PLAN as a strategic service, developing the capability to operate in ‘distant waters.’ PLAN is organised into: North, East, and South Sea Fleets. The South Sea Fleet also has two marine brigades¹⁵. In addition, her aircraft carrier programme is also fairly advanced and is likely to fructify by 2015¹⁶.

China has also expanded her amphibious fleet, today she has nineteen Type 072-II/Yuting and Type 072-III/Yuting-II class Landing Ships Tank, as also Type 071 Landing Platform Docks, which can carry up to four large air cushion landing crafts. Current amphibious fleet of PLAN is capable of transporting an army division across the Taiwan Strait¹⁷. However, additional transport capacities can be generated with container/merchant ships.

China’s submarine force is the largest amongst Asian countries. She has eight to ten nuclear and about sixty diesel-electric submarines. Additionally, she is building four new types of submarines; Song class or Type 39/39G; the Yuan class or Type 41; the Shang class or Type 93, a nuclear powered attack submarine (SSN) and the Jin class or Type 94 a nuclear powered ballistic missile submarine (SSBN)¹⁸. China therefore, appears to be in a great hurry to develop into a global naval power in the very near future.

What after Attaining Resurgent ‘Middle Kingdom’ Status?

This is how China’s ‘*reform and opening*’ is unfolding along with the ‘*active defence*’ component of her ‘defensive’ military strategy. So what lies in future for her neighbours? Would China through diplomacy, military coercion, threat

or outright financial buy or blackmail transform them to serve as her 'subservient' or 'tributary' States? What shall be the sovereignty status of these countries by 2030 when China proclaims arrival into the new Middle Kingdom? What, therefore, is at stake for India after losing 23,000 sqkm of territory to China in 1962 and a pending claim of 92,000 sqkm mainly in the East (Arunachal Pradesh).

Incidents of recent past are indicators of impending future. Therefore, we need to reconstruct issues of waiving off the need of Indian passport to travel to China for people of Arunachal Pradesh; stapled Chinese visas for Indians born in Kashmir, denial of visa to the GOC-in-C, Northern Command for a planned high level defence contact by Beijing. In addition, China's recent denial of sending 11,000 troops to occupy areas of Gilgit and Baltistan in Pakistan Occupied Kashmir (POK), while Pakistan's acceptance on presence of Chinese troops on its Northern borders has had some repercussions. This issue was subsequently re-coloured by China stating that presence of troops was on reasons of preventing an internal situation in Xinjiang and to construct tunnels, for an oil pipeline and a railway line to help China in obviating 6,000 mile sea route by directly transporting oil into the heart of her main land through Pakistan. Not to be missed is the shift in focus from India's Eastern areas (where the claimants are one on one) into the cauldron of J&K; and in specific the so called 'Northern Areas' which are not regarded as part of POK by Pakistan.

Parallels need to be drawn between North Korea and Pakistan. The sinking of the South Korean Cheonan class (1,200 tonne) warship by North Korea and its silent acceptance by South Korea and the USA, her biggest ally and peace keeper of the region, is notable. The answer to this passivity lies in North Korea possessing nuclear weapons, ballistic missiles, a large defence force, an unpredictable leadership and China's unstinted support. Same is the case with Pakistan. Today's Pakistan has nuclear weapons, ballistic missiles, a large defence force, is internally unstable and has China's unstinted support while continuing to remain a 'strategic ally' of America for the 'war on terror'.

Conclusion

China's recent clash with Japan over territorial waters, her demonstrative action of planting the Chinese flag in the deepest portion of the disputed South China Sea are indicators of future hot spots based on China's claims and her will to resolve the disputes by force, if necessary, amongst militarily weaker claimants. It should therefore be a foregone conclusion that China's fast paced modernisation of the PLA, the SMF, her space programme coupled with the policy of 'active defence' where preemption is a 'strategically defensive act' would help her in hardening of stance with her other neighbours where she has geopolitical and economic interests with pending boundary disputes and who may not accept her hegemony meekly.

It is in the light of China's shift in focus from India's Eastern areas to J&K including the 'Northern Areas' of Pakistan Occupied Kashmir that we need to see the situation morphing by 2030 into a different hue. Herein lies a strong possibility of this complete area being termed as a 'Core Area of Interest' by the Chinese for securing their land route for energy etc. In this sense it will be only axiomatic to presume that in case the J&K imbroglio shows signs of resolution by way of merging into mainstream India the issue may serve as a catalyst or a 'threat' to China's 'sovereignty and integrity' and call for activating her 'active defence' postulate. Therefore, there should be no misconception about maintaining credible military deterrence which we should be able to muster on our own while continuing diplomatic efforts for stabilising the region. In the recent past Indian leadership has taken steps towards this direction, however, much more needs to be done and at a much faster pace.

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The End of India's 1962 Syndrome

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In 1962 Mao decided to teach 'India a lesson'. India had achieved Independence in 1947 by peaceful means. China achieved their Communist government by incessant fighting for over two decades; a bloody struggle in which close to five million Chinese lost their lives. In India after 1947, there was talk about the needless expenditure on the Armed Forces and how a newly independent Nation could solve all ills by peaceful means. After all Mahatma Gandhi had made the Country independent with his mantra of 'non-violence'.

In China, however, the leadership was concerned with how to convert their relationship with Tibet from being a suzerain state to being an integral part of China. Their invasion of Tibet was successful upto a point; and immediately the Chinese encroached the area in Aksai Chin to build a road connecting Tibet and Xinjiang. Tibet did not accept the Chinese rule easily and a serious uprising took place in 1958-59. This uprising was brutally suppressed and Dalai Lama left Tibet for India. The Chinese felt that, to secure Tibet, they must go beyond it. Therefore, they made demands of territories both in Arunachal Pradesh and Aksai Chin, that India could not possibly accept as they had at that time hopes of regaining their influence over Tibet. After all the Dalai Lama, whom Tibetans considered next to Buddha was with them, and Aksai Chin plateau had been their territory since 1865. So the Indian leadership which had till then lived in a make believe world of "Hindi-Chini Bhai Bhai" (Indian and Chinese are brothers) pushed forward their positions in the so called disputed area. China launched concerted attacks both in Arunachal and Aksai Chin and gave a crushing defeat to Indian forces. Chairman Mao had taught India a lesson and the lesson did not pertain only to the disputed area. It was that India should not mess with China, that its claim to Tibet was valid and, that it had claims beyond, in Arunachal, in Aksai Chin, in Sikkim and small areas of Indian provinces of Uttar Pradesh and Himachal Pradesh.

Indian Army's defeat in 1962 war was a shock to the Armed Forces but it was a much greater shock to the Indian leadership and the people. The leadership felt helpless; some consequential changes were made and Nehru died within two years. India has suffered from '1962 Syndrome' for almost five decades now.

Since 1962, China has taken large strides in economic and military fields. The critical take off in China's economy started in late 1970s and its GDP grew by an average 9.9 per cent. Even if this figure is considered to be inflated, its most skeptical analysts consider 9 per cent growth per year as a true reflection. In 1990 average Chinese per capita income was \$350, by 2000 the per capita income rose to \$1000 and by 2008 it had reached a level of \$3000 per head.¹ Today China is accepted as the second largest economy in the world after the USA. It has surpassed Japan who was earlier the second largest economy. With such phenomenal economic growth, a large access to sea and a huge population, China was bound to have expansionist ambitions.

That ambition in the beginning as it relates to India mainly pertained to Tibet and Sino-Indian border. China annexed Tibet in 1950; only a year after the Communists came to power. The Chinese justify this action from history. They say that Tibet has been traditionally part of China since 13th Century, under Yuan dynasty. The Tibetans say that their country has been independent; although under Chinese influence for the three centuries (1644-1911) of the Qing dynasty and fully independent for 40 years after the fall of that regime. Tibetans emphasise that there is nothing common between the Tibetan way of life and the Communist China. At the time China annexed Tibet and in subsequent four years they did not think that it would be an easy task, that India would accept it as 'fait accompli', would not react or help Tibetans in their fight, even during their uprising in 1958-60. India under Jawaharlal Nehru in fact did nothing and the ease with which the Chinese were able to consolidate in Tibet, emboldened them further.

In 1957, India became aware of Chinese building a road through Aksai Chin area and this somewhat changed India's thinking about Chinese intentions. India started manning its border posts. This approach was both tentative and sluggish as India did not still feel that China would go to an all-out war on the issue of the so called disputed territories. But they were proved wrong. By fighting a war in 1962, China had proved many points. It had acquired control of Aksai Chin, opposition to occupation of Tibet had become a thing of the past, its point of view on the border dispute had gained legitimacy and it had got the status of a big brother in Asia.

Beginning with their success in 1962, Tibet is now firmly under Chinese control. Airports have been built and now Lhasa is connected with mainland China by rail which as a technical feat, is awe-inspiring. Extensive road network is coming up in Tibet and in Pakistan Occupied Kashmir (POK) and the latest reports indicate that China has stationed a division worth of troops in the Northern portion of POK. Incursions in Ladakh have become both frequent and aggressive. Story of the Chinese primacy in Asia starts from their occupation of Tibet and 1962 Sino-Indian conflict.

China's present stance in Asia and the world flows from its amazing progress in the economic field. It has money to pay for all the aggressive activities it is indulging in. With expenditure on defence at two per cent (leaving out the hidden costs) China is able to maintain an army of more than 2.3 million (plus very sizeable para military forces). This is after downsizing their Army. The PLA Air Force consists of more than 3,500 aircraft and these include SU 30 fighter bombers acquired from Russia and upgrading of other aircraft. It has mid-air refuelling capability which will allow them to extend their reach throughout the region. However, the main strength of the Chinese Armed Forces must remain their missile capability. The Chinese have approximately 1,000 short, medium and intermediate range missiles and some intercontinental ballistic missiles; with the nuclear arsenal available to them, this makes a substantial capability.

In framing their policy options India needs to crank in certain important happenings since 1962. China has moved from a neutral diplomatic stance as it related to Pakistan, to open hostility towards India. In 1970s and 1980s China gave a lot of support to Pakistan in arms and nuclear technology in order to support its involvement in Kashmir but during the Kargil war between India and Pakistan they did not openly favour Pakistan. That seems to have changed. China does not now recognise Kashmir as part of India. It has stationed troops in the Northern portion of POK. It has refused to endorse Chinese visa on Indian passports to those living in Kashmir and to prove this point further in a deliberately provocative manner, it has refused visa to the Indian Army Commander in Kashmir. The moot point is - whether the Indian Government is going to react by denying anyone residing in Tibet with visa on Chinese passport.

The other development in the last two decades has been China's efforts to bring in Asian countries, particularly India, under its hegemony by a process of encirclement. India has a large land border and an equally large sea coastline. In the west Pakistan is China's natural ally; in the north it controls Tibet directly and Nepal, where it is increasing its influence. In the east, there is Myanmar, with whom China stole 'a march by ignoring all human rights violations of the Junta regime and developed good relations with that country, when others, including India, were opposing the military regime. The soft belly in the east is Bangladesh which is getting massive aid in the shape of military equipment from China.

However, encirclement on land is of little consequence unless the Indian Ocean is secured. That is where China is focusing its attention now. China is actually aware of its need to create capability to move its energy and mineral requirements, for which it has invested heavily in Africa and Middle East, unfettered through the Indian Ocean. At present the sea lanes pass through the narrow Malacca Straits between Malaysia and Indonesia which could easily be blocked by the USA or India in the event of a Chinese war with India. To overcome this problem, encirclement from the south was also necessary. Consequently China has stepped up its support to island countries in the Indian Ocean like Sri Lanka, Seychelles and Maldives along with facilities for its Navy. It has developed Gwadar port in Pakistan close to the Strait of Hormuz and has ensured its naval presence at Chittagong in Bangladesh, Hambantota port in Sri Lanka, Marco port in Maldives and Coco Islands in Myanmar. Creation of ports and obtaining facilities for their use do not necessarily show a strong Chinese naval presence in the Indian Ocean as on the ground these facilities remain in the hands of the host countries. China has a Navy consisting of 65 submarines (9 nuclear and 56 conventional), 28 destroyers, 49 frigates, 84 amphibious lift vessels, 77 fast missile crafts, 170 other patrol and coastal combatants and 5 ocean going fleet tankers²; yet it cannot claim to possess a blue water navy. India on the other hand has one (ageing) aircraft carrier in service - should have another in a couple of years and is trying to build one aircraft carrier indigenously. It should have three aircraft carriers along with other ships by 2015 and can claim the status of a blue water Navy. Augmentation of the Indian Navy can be a major factor in control of sea lanes in Indian Ocean and a major worry for China.

The military scenario has drastically changed the region since 1962. China is a nuclear super power in Asia but nuclear weapons are also held by India, Pakistan and North Korea. Although China's superiority in nuclear weapons and delivery systems is well established the nuclear asymmetry does not matter much, as the chances of conflict have reduced considerably. The damage caused to the country even by a fledging nuclear power, is too large and a major deterrent to the two galloping economies of India and China. Thus nuclearisation of China and India would automatically be a deterrent between the two countries for an all out war.

But, one aspect which may mean direct intervention by India even if it means a full scale war in Tibet with China, it is the Chinese plan to divert the waters of Himalayan rivers to China. The plan called 'Western Route Scheme' proposes to build a massive hydro-electric dam on Brahmaputra River and divert its waters towards North instead of its present natural flow to the South irrigating Arunachal, Assam, Meghalaya and Bangladesh. A plan of this scale has never been attempted before anywhere in the world and may take half a century to make. But if it succeeds, the whole of eastern India and Bangladesh will be laid waste. India cannot afford to let this plan take shape and must make it clear that such a move will be prevented at all costs. This intention should be known to all including world organisations like the UN Security Council.

While the possibility of an all out war appears remote China has been working towards keeping India on the defensive and apprehensive. The stand offs in Ladakh have increased 100 per cent this year and China is laying a rail network upto Indo-Tibet border. In international arena India's effort to get a permanent seat in the UN, or India getting Country Partnership Strategy (CPS) 2009-12 that sought Asian Development Bank (ADB) to give \$ 2.9 billion funding to India's infrastructure projects including some in Arunachal Pradesh have been opposed by China. China had also opposed Indo-US Nuclear treaty at all stages.

With China's fangs becoming more visible, India has realised that while the outward show will be that of cooperation, in actual fact it will be competition in the economic field and confrontation in the military field between the two countries. India did realise this danger from 1962 onwards, although China's economic march was not visible then. India's response has been somewhat sluggish because of two main reasons. China and Pakistan straddle India's northern and western borders and have been in close relationship. China has been helping Pakistan with arms aid and has liberally transferred knowhow and materials to produce nuclear weapons. Their friendship cannot be explained in any other way except by a common anti-India stance by the two countries. India has now recognised that it may have to fight on two fronts in the event of a war.

The influence of the USA in shaping Sino-Indian relations is an important factor and will remain so for some time to come. In recent times, George Bush was the main architect of the Nuclear deal and described it as an act of grand strategic importance. China's importance had been recognised by Richard Nixon much earlier. Sino-American rapprochement pre-dates the Nuclear deal by almost three decades. Even so, this Nuclear deal under George Bush and a determined Indian Prime Minister, Manmohan Singh, has taken place amid a wider rapprochement between India and America and represents a new balance of power shift in Asian politics. It was felt that a stronger India can, in time, counter China's growing strength and maintain a balance in Asia.

Diplomatic relationship between India and the USA has been jerky from the time India became independent six decades back. Many reasons have been attributed for this uneven relationship between the two largest democracies. However, one underlying factor the political thinkers appear to have missed out; India has survived as a democracy, under very difficult circumstances for the last six decades in an area where survival of a democracy is almost impossible. Indians are proud of this democracy with all its warts. With such asymmetry in economic field, education, development and infrastructure it will take some time before an equal relationship develops. It is interesting to note that the two countries became closer to each other in private business field much before the USA realised that India should be taken note of in Asia. But now this realisation is palpable and India can deal with the USA with dignity as an equal. India has arrived and can now be considered as a counterweight to China. Equally, India needs the USA on their side so that China's activities remain in check.

In all this one factor however, seems to have not been given due importance in this otherwise realistic strategy in Asia: How to manage Indo-Pak relations so that India develops fast enough to counter China? Here the USA seems to be only concerned with how it can withdraw its troops from Afghanistan and feels that Pakistan can help them to do so. Therefore, the massive aid in money and military hardware continues even when everyone in America knows that this aid is hardly used by Pakistan to fight the Al-Qaeda or Taliban but to strengthen themselves against India and help terrorist organisations in Kashmir. Thus the US policy has become mutually contradictory between a relationship where India should become strong to counter China and Pakistan becoming stronger to weaken India. In simple terms the US policy appears naive and to the advantage of both China and Pakistan.

With so much of direct and indirect aggression India has had to think of counter measures. India has taken a number of steps in Arunachal Pradesh. It has undertaken a massive road building programme in Indo-Tibet border areas in the East. It has revised its earlier thinking of not having roads close to border and is building roads and infrastructure right upto the McMahon Line. Indeed our Border Roads Organisation (BRO) is an experienced agency which is working overtime and can more than match the Chinese road building effort. The augmentation of force levels in the eastern sector has also been started. Advanced landing grounds have also been constructed in half a dozen places for quick movement of troops and logistics. Tawang which in reality is the main focus of the Chinese in Arunachal, is today well defended. The tunnel under Rohtang pass will make access to Leh possible throughout the year and provide an alternate route.

These are all reactive measures; there is a need for India to be proactive. China has replaced Japan as the second largest economy and that itself would create tensions between the two countries. Japan did become a passive nation when it became affluent and after a massive destruction in World War II. But historically it has been a very strong Nation capturing large portions of China and confronting the USA in World War II. This change in status (China has recently overtaken Japan in economic terms) has obviously sent alarm signals in Tokyo. Consequently, Japan is in the process of shedding self-imposed restraint in security field. Article 9 of their Constitution renounces war and prohibits use of force to settle international disputes and bans that Country from having a formal military force. It has also taken measures to acquire 50 modern fighter bombers, mid-air refuelling facilities and an aircraft carrier for its Navy. A referendum is proposed for amending Article 9 of the Japanese Constitution. Japan should, therefore be considered a country ready for realignment to protect its security concerns. South Korea is also thinking on similar lines. However, these efforts are at present America centric but this strategic shift is also an opportunity for India.

India and China are both economically galloping countries and would be loathe to having any impediments in their path. At the same time flash points can arise with little warning. India may be on its way to forget 1962 debacle and confront China, should need arise. A cold appraisal of military potential of the two countries would show that India's security preparedness on their northern border is far superior to what existed in 1962. Chinese have also consolidated their position in Tibet but their capability to wage a sustained war in Tibet is still suspect. Except in Aksai Chin, the distance that Chinese forces have to traverse is long and their lines of communication are very vulnerable. Their rail link to Lhasa, though a big technical achievement, is extremely vulnerable and can be extensively damaged. The Chinese have themselves realised this fact and are concentrating on multiple road routes. Move of large bodies of men and material by road transport at that height is likely to pose considerable problems. Except in the immediate border areas, India does not suffer from this handicap and the present road building efforts should minimise transport problems.

Another aspect that India needs to crank-in, in its security consideration is: How the Tibetans will react in the event of a full fledged war between India and China? Tibetans are a proud, religious people who have not fully accepted Chinese rule. China on the other hand is trying to settle large number of Han Chinese in Tibet and is working against Dalai Lama, has declared its own Panchen Lama and is practically destroying the Tibetan way of life.

India formally recognised Chinese sovereignty over Tibet in 2003, 53 years after the Chinese moved into Tibet. But even today the possibility that a serious uprising can make Tibet unstable is very real. Such a scenario can pose serious limitations on the Chinese war fighting capability in Tibet. India will do well not to forget that the world is still not happy with China annexing Tibet and trying all possible means to bring in Communism in Tibet.

Indeed the entire question of Sino-Indian relations needs to be examined afresh without the baggage of 1962. China is a totalitarian state and their simmering discontent is not always visible. However, there is no doubt that it exists, and in an ample measure as the recent award of Nobel prize for Peace to a Chinese citizen has demonstrated. The affluence and suppression do not go together. Therefore, in the midst of glittering achievements there is certain hollowness in that society. India on the other hand is a vibrant democracy, having a younger demographic profile. Lately, it has started taking measures to modernise its Armed Forces and has taken note of the Chinese aggressiveness. If prepared, India should prove to be a very tough nut for the Chinese in case of a military confrontation.

Future Indian stance will entirely depend on the appraisal of Indian leaders regarding their security scenario. They will have to learn to work under pressure from all sides. Recently, the president of the USA has said that India's permanent membership in UN will depend on that Country solving the Kashmir issue; although, later while speaking in the joint session of the Parliament, he promised to support India for a seat in the UN Security Council. If India considers Kashmir as its integral part, then this statement should amount to interfering in an internal matter of our Country.

If the Chinese can think of encircling India with a protecting Himalayan Range and a vast coast, the possibility that India can do the same cannot be ruled out. If China has changed its stance on Kashmir, India should be doing the same for Tibet. A great nation like India needs a high standard of leadership. One of the steps Indian leaders can start with is to forget the 1962 Syndrome and deal with China on equal terms on reciprocal basis. Will they?

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Understanding China

General Deepak Kapoor, PVSM, AVSM, SM, VSM (Retd)*

The rapid rise of China in the last decade has evoked both admiration as well as consternation. Admiration is underlined by its ability to achieve double digit growth on a continuing basis, its massive strides in infrastructural development, its attempts at smooth transition from a communist system of government to controlled democracy, its rapid progress towards modernisation of its armed forces and its management of the geopolitical environment both at the regional as well as the global level. At the same time consternation is evoked because of the shroud of secrecy and uncertainty connected with the bamboo curtain, because of an inconsistency in its covert and overt approaches, attempts at domination of its neighbourhood by direct and indirect means and because of the possibility of use of its tremendous economic clout to the detriment of other nations round the globe. Uncertainty of its line of action on various international & global issues leaves countries in the region with a sense of apprehension. Therefore, does all this make China into somewhat of an enigma? While some of us may answer this question in the affirmative, to the discerning observer there is a 'method in the madness', a well conceived and well thought out design in most of China's actions. Like in acupuncture, the use of pressure points helps relieve pain from a seemingly unconnected part of the body, there is a subtle (and at times not so subtle) use of indirect means to achieve desired results, thus, the use of an economic bear hug with the US is expected to yield advantages at the geopolitical and strategic level. Likewise, bolstering Pakistan militarily not only enables it to gain overland access to Indian Ocean and vital middle east energy resources, it results in a grateful Pakistan continuing its intensely confrontational stance towards India thereby also acting as a proxy for China. Or a somewhat indifferent approach to North Korean or Iranian intransigence on the nuclear question earns their support while at the same time portraying China as a strong independent pole in the current world order. Or a stiff attitude towards all those countries who have hosted or accorded diplomatic courtesies to the Dalai Lama. Use of its tremendous economic resources to achieve desired strategic results is also a part of the overall design. Thus, infusion of massive aid to smaller countries in the Indian Ocean region has enabled China to get a foothold in these countries. Whether at the regional or the global level, a consistent assertiveness indicates a growing realisation of its own importance. While it is prepared to wait and bide time till its gross national power has comprehensively grown in all the contributory desired spheres, it is increasingly confronted with the fact that because of economic meltdown and negligible growth in a number of countries in the West, its relative growth stands hastened. Therefore, it is expected to emerge at the global level way ahead of the 2030 dateline that it had set for itself in the past. The strong possibility that the emerging world order may also incorporate the Chinese perspective which may be substantially different from that propounded by the US led West so far, cannot be ruled out.

It would also be discerned that there is a consistency in the Chinese approach both at the regional and the global level which is unequivocally dictated by the Chinese national interest. Thus, while China may align with India at Kyoto or Copenhagen or Cancun, it may not be willing to support India's entry into the United Nations Security Council. Likewise, while it has its claims to various South China Sea islands, it has avoided use of force to capture them in view of the necessity of maintaining cordial relations with other claimants. It strongly feels it has time and resources on its side whereby these would gradually fall into its lap strengthening its doctrine of achieving objectives by means other than war. One of the aims of series of military exercises carried out in 2009 was to convey a message to countries like India and Vietnam with whom its borders are not fully settled. Its assertion that South China Sea is part of its sphere of influence and therefore not open to others was highlighted when it opposed the US - South Korean naval exercises in that area recently. Its reluctance to devalue Yuan is another instance of its attempt to protect its national interest at any cost.

Recent expose of Wikileaks has highlighted the reinforced Chinese assertiveness in all spheres which has most countries worried. The other aspect which has emerged is that covert Chinese actions may be at variance with what it may be proclaiming overtly. Official sanction of cyber attacks against networks of other countries and against Google recently are some examples. While it is accepted that the very nature of covert operations underlines the necessity of duplicity, the frequency and speed at which it is happening causes alarm and consternation all round.

Therefore, in such a setting what should be the response both at the regional and the global level? There cannot be any readymade answers to this question and nor should they be attempted. However, there is a need to continuously engage China at various fora both at the economic as well as the geopolitical level. This would enable removal of some of the misperceptions and apprehensions at the regional level.

It would also allow for a better understanding of each others national interests. Where differences exist, a dialogue would help in narrowing them down. Secondly, developing a common approach to issues bedevilling the region like sea piracy, drug trafficking, terrorism, asymmetric warfare, low level insurgencies, role of the diasporas etc would lead to a better understanding of the intent and commitment of China and other nations of the region. Since Asia today is literally the centre of gravity of the globe, involvement of the USA and the West would be a pre-requisite in such an exercise.

The fact is, that there is ample space and scope for China and other countries of the region to grow economically unhindered needs to be understood by all. While there would be a degree of competitiveness in such a scenario, it need not necessarily lead to confrontation. Finally, from a national security perspective, it is important that the countries of the region either independently or collectively develop means to protect their core national interests, if a threat is perceived.

This necessity gets accentuated in view of the rapid strides towards modernisation of the PLA. It of course may lead to the spectre of an arms race in the region but that is attributable to an action-reaction syndrome. If the Chinese, who understand the language of force very well, were to cap their military spending, there would be a suitable matching response both at the regional and global level. But that is only in the realm of imagination, since a growing China aspiring to be a world power would like to enhance its comprehensive national power in all spheres, including military, which is a very vital component of the national power.

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Future Role and Shape of The Corps of Signals

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Introduction

The Corps of Signals will be celebrating its Centenary on 15 Feb 2011. It's journey through the last 100 years encompassing many wars and national emergencies, not only in India but in other parts of the globe, has been a saga of rich heritage. Signal communications have come a long way from heliographs, lamps and flag signalling to satellite communications, radio relay, internet and cell phone technology. This is an appropriate time to look at the future role and shape of the Corps of Signals.

Nature of Warfare

A revolution is taking place in the way wars are being conducted. This has been so visible in both the Iraq wars, NATO's actions in Afghanistan and the manner in which world's most powerful nations like the USA, China, Russia and NATO countries are organising and equipping their forces. At the heart of most military developments are the new systems and gadgetry incorporating latest electronics technology for surveillance, target acquisition and weapons. Nothing above the ground/sea seems invisible. Weapons delivered from the air, ground, and on and even below sea have become highly accurate and devastating. Electronics have made distances inconsequential.

In modern warfare, there is a need for sharing real time information amongst different echelons and components of a force, exercising effective command and control, keeping in view the urgency to speed up action employing the best possible assets, and to prevent casualties from friendly fire. Commanders and staff need up to date tactical picture of enemy and own assets much before the enemy is able to do so, in order to coordinate own effort and pre-empt him. Nuclear weapons have not been used in any of the conflicts so far, except towards the end of World War II, against Japan, but their mere existence affects the strategic thinking and measures have to be taken, for a rare contingency – if they are ever used.

Network Centric Warfare

This Doctrine has been propagated by the US Department of Defence and envisages 'translation of information advantage', enabled in part by information technology (combination of computers and communications) into a competitive advantage over the enemy. In order that information flows speedily vertically and horizontally, modern robust communication networks are necessary for real-time passage of information from the source to the decision makers and dissemination of plans and orders by them i.e. effective command and control.

This information would mostly be in the form of computer data, displays and overlays by various surveillance, intelligence and weapon systems, fighting formations, logistics entities as also command and control headquarters/nodes. The associated computer systems would store and update required information, process it and the authorised users will be able to access the same. The system will ensure that every user has same information. The conventional speech and text messages would supplement them and will not be the prime means. Highly sophisticated electronics, communications and software technology is involved in developing such systems and make them interwork. The Corps of Signals will plan, provide and manage the networks on which this information will flow.

Electronics Technology Advancements. Increased micro miniaturisation, storage and processing speed and power leading to easily understandable displays, hand held devices, video, internet / intranet, voice recognition / voice operation seem to be the direction electronics research is taking. Convergence is the buzzword!! Nano technology may not be too far off!! Side by side is the increased use of wireless for mobile communications, based on higher and higher frequency bands, which means shorter ranges, requiring increased number of relays and communication nodes. For longer distances, satellite communications and lower frequency radios would continue. Fibre optics will continue to be used, particularly for backbone communications.

The Electronics Age. The world is experiencing the Electronics Age and electronics are all pervasive. The military is heavily dependent on electronic communications, computers, other electronic gadgetry and internet for conducting operations on the ground, on the high seas and for the air battle. The citizens, businesses, financial institutions, law enforcement agencies and important services like transportation, health care, water supply and the rest are equally if not more dependent on electronics and computers. Any disruption to these electronic systems can play havoc with military operations, functioning of the Government and daily lives of the citizens.

Information Warfare. Such technology or systems on which the military and daily life of citizens are so dependent become a critical resource and hence a target for enemy action or conversely targeting the enemy. Therefore, electronic warfare and cyber warfare, targeting communication and computer systems electronically, in addition to attacking them with kinetic or radiation weapons have assumed great importance. These therefore are important components of 'Information Warfare', as these target flow of information. (It is clarified that Information Warfare, called 'The Fourth Dimension of Warfare', encompasses some more important aspects like deception, managing perceptions and propaganda, which are not discussed here). While most of the offensive aspects are practiced during hostilities, intelligence gathering facets of Information Warfare go on even during no war conditions, the world over.

American General Omar N Bradley had once opined that 'amateurs talk tactics but professionals talk logistics'. However, in this era of Network Centric Warfare, military professionals should first discuss 'Information ascendancy'. Information ascendancy/superiority has two connotations. It entails safeguarding own electronic and information systems against enemy electronic or kinetic attacks and at the same time successfully attacking the enemy's electronic/information assets, circumventing the defensive measures he would take. The attack has to be dovetailed with the overall operational plan and so timed that the enemy is muted at the critical junctures in the battle. A force which does not have updated information about the enemy and own troops will be like a blind boxer, trying to throw

punches but the same mostly missing the opponent!! To achieve success, great deal of technical intelligence gathering about enemy's information systems will have to be undertaken prior to commencement of hostilities.

(a) **Chinese Potential.** India has two likely adversaries who are challenging it's sovereignty i.e. China and Pakistan. China in particular is laying great emphasis on Information Warfare and this forms a very important aspect of Chinese Strategic Doctrine. China has set up a Cyber Base, which seems like Cyber Command, and raised Information Warfare brigades and divisions. This indicates an important direction of Chinese military modernisation. An important reality for planners of India's Defence networks must be to take into account Chinese capability to destroy satellites in orbit, which they have already demonstrated. There is another Chinese angle as well to be wary of. Indian providers of communication networks and power grids etc are using Chinese electronics components and hardware. It is possible to inject electronic sniffing, trojans and even virus producing bugs in such hardware/associated software, which could prove catastrophic when let loose. In this regard a short spy story is worth recounting here. Some Russian embassies acquired the US made photo copying machines. The Americans built in a chip, which recorded images of all documents photocopied. These were retrieved periodically by the maintaining crew. This was decades ago. These days much more sophisticated intelligence seeking and malfunction creating programmes can be inserted in chips.

(b) **Indian Capabilities.** The Corps of Signals, which is the electronics fountainhead, has taken some meaningful steps in this direction. However, there is a need for the top military leadership to lay much greater emphasis and accord very high priority to the offensive aspects of the Fourth Dimension of Warfare, as it is a very important force multiplier. No wars can be won without robust and sustained offensive action. Disabling/disrupting enemy's communications, computers and other information systems and at the same time safeguarding own, are the key for achieving information superiority, which is the aim of Information Warfare. India can and must surpass the Information Warfare capability of likely adversaries. We have the brains and electronics knowhow which need to be harnessed towards this goal. It is relevant to mention that India has youngsters like Ankit Fadia, who as a New Delhi based schoolboy wrote a book on hacking and was consulted by FBI of the USA for decoding terrorist messages dealing with 9/11!!!

Changing Role of Corps of Signals

Since its inception, the prime role of the Corps has been to plan and provide communications to the Army and to a limited extent to the Navy and the Air Force, primarily for command and control. After Independence, it has been responsible for ushering in a number of electronics systems in the Army. These are as under:-

- (a) Signal Intelligence
- (b) Computers
- (c) Electronic Warfare and lately
- (d) Cyber Warfare.

Electronics and Cyber Warfare are key components of Information Warfare and are the prime 'force multipliers' in Network Centric Warfare. In order that the Corps of Signals can focus on Information Warfare, it needs to reorganise itself and allocate additional resources, for raising new units. It should be formally assigned the role of 'Information Warfare' and 'Ensuring Information Superiority'. Accordingly, its personnel ought to be called Information Warriors.

The Corps of Signals has excelled in harnessing new technologies for developing state of the art networks for command and control. It has put in place automated modern networks like Plan AREN, ASCON, AWAN and Tactical Communication Network (TCS). These require reduced intervention by Corps of Signals operators, and commanders and staff can make use of them directly. This is gradually changing the role of the Corps of Signals from 'Operating' to 'Network Planning and Provision'.

Greater Emphasis on ISTAR (Intelligence, Surveillance, Target Acquisition and Reconnaissance) Systems and Communications. Modern communication networks have been given acronyms command, control, communications, computers, intelligence, surveillance and reconnaissance (C4ISR). The British use the Acronym C4ISTAR (TA stands for Target Acquisition). ISTAR part of C4ISTAR systems and networks are critical to achieve victory over the enemy in a Network Centric Warfare. The development of networks, therefore, requires greater focus and priority. Presently these systems and associated networks are being developed in isolation by different agencies. It would speed up matters, if a PMO (Project Management Organisation) is set up to coordinate, integrate and expedite development of such networks. The Corps has to ensure that these activities meet the set technical standards, are interoperable and can fully integrate with C4ISTAR.

Electromagnetic Weapons. These are a type of Directed Energy Weapons which use electromagnetic radiations to deliver heat, mechanical or electrical energy to a target to cause damage. They can be used against humans, electronic equipment and military targets, depending on the technology used. Research on such weapons needs to be carried out on high priority and the Corps of Signals should give the required impetus.

Low Intensity Operations. India has gained considerable experience in Low Intensity Operations. These are mostly conducted at company and platoon level. Electronic Warfare has played a key role even in this kind of warfare. Greater degree of Electronic Warfare capability should be inbuilt at battalion level and individual soldiers provided communications.

Cyber Warfare. It covers three areas - intelligence gathering, defence and attack. A beginning has been made by the Corps of Signals in Cyber Warfare. But the emphasis seems to be on defensive aspects. We should take a leaf from the USA and China, who have set up Cyber Commands. There is a need for building-up offensive capability.

Communication Networks in the Army

Communications at Corps Level and Below. The communication infrastructure down to Corps Headquarters is static, has been planned and stabilised over a number of years. It has more than one layer / alternatives and as such has resilience. Its operation and network management should pose less problems. The communications in the Field Force i.e. at Corps and below would need to be mobile and flexible, and require re-engineering quite often. These are also likely to suffer more damage as well; the degree would increase while going down to divisions, brigades and battalions/regiments. This is the area where active operations take place, which decide the outcome of a war. Also, reaction time is the least at these levels. Therefore, need for additional layers of communications in field communications cannot be over emphasised. In addition, more equipment and manpower resources would be needed, including reserves, and should be built-in the establishments.

Artillery Networks. Artillery (missiles, rockets, guns, mortars) is the most potent component of any Army, coupled with close air support including armed helicopters. They require the fastest, most secure and robust communications. The Corps of Signals should take a lead role in developing and integrating networks for fire support, so that these are fully integrated in C4 ISTAR.

Planning for Nuclear Environment. The possibility of a nuclear war is remote. However, fool proof communications with 200 per cent redundancy need to be catered for nuclear assets and constantly tested and reviewed, to meet any eventuality, howsoever remote.

Recommended Signals Set-Up at Corps Level. The following recommendations are made :-

(a) **Information Warfare Brigade.** It is recommended that an Information Warfare Brigade be made an integral part of each Corps. It should comprise an Electronic Warfare regiment and a Cyber Warfare regiment. A separate regiment is also needed for providing intelligence, surveillance, target acquisition and reconnaissance (ISTAR) network, so that their needs are taken care of by a dedicated Signal unit.

(b) **Command and Control.** The Chief Signal Officer at Corps Headquarters will be the overall commander and adviser on Communications and Information Warfare as also Electronic Warfare, on the lines of a Commander Corps Artillery (CC ARTY). The Chief Signal Officer will have to spend much more time on Information and Electronic Warfare aspects than hitherto fore and should be authorised required staff for this purpose.

Concluding Remarks

The Corps of Signals is gearing up for Network Centric Warfare as part of Revolution in Military Affairs (RMA). The military, functioning of the Government and life of citizens is heavily dependent on electronics communications and computers. Information Warfare is a fall out of heavy dependence on and criticality of such systems. China, the USA and NATO countries are laying great stress on this Fourth Dimension Warfare.

Modern static communications / backbone networks have been well developed by the Corps. However, the capability of China to destroy satellites in orbit is a potent threat to integrity of satellite based strategic and tactical networks. This needs to be taken serious note of. The architecture of communications at Corps and below has to have a number of layers with a view to ensuring their survivability against kinetic and electronic attacks.

Development of systems and networks for ISTAR portion of C4ISTAR needs greater urgency and focus. Their development should be put on fast track and a Project Management Organisation (PMO) set up for this purpose. Development of Electromagnetic Weapons should also be accorded priority.

The users are now able to pass their own messages, data and dial telephone calls. This has resulted in gradual dilution of operating role of the Corps and the emphasis is shifting to network planning and provision.

The growing importance of Information Warfare dictates that it should be formally made a primary role of the Corps of Signals and the Corps tasked to ensure information superiority, for which offensive aspects of Information Warfare need much greater emphasis. It is recommended that an Information Warfare brigade be raised as part of each Corps, with the Chief Signal Officer acting as the adviser to the Corps Commander, on the lines a CC Arty is for artillery. Informatics has brought about the Fourth Dimension Warfare and India should try and excel in this very important facet of RMA, for which the Nation has the required brain power and wherewithal.

***Lieutenant General Harbhajan Singh, PVSM (Retd),** of the First Course National Defence Academy and 10th Regular Course IMA, was commissioned into the Corps of Signals in Dec 1952. In 1971, after attending EDP Training in the USA, he started formalised Computer Training in the Army at MCTE, Mhow. He retired as Signal Officer-in-Chief in Jan 1991. Post retirement, he has been writing on National Security and Military matters.

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National Defence College - Reminiscences

Lieutenant General MN Batra, PVSM (Retd)*

On the morning of 1 April 1960 in Shimla, I received a call informing me that I had been posted to Delhi. Before I could ask any further questions, the line went dead. I thought it was one of those April Fool jokes but, coincidentally, that afternoon in my office I received an official letter directing me to attend the first course of the National Defence College (NDC) commencing in two weeks time.

When I reported to the NDC on Tees January Marg, the building which had housed the British High Commission for a number of years had recently been taken over by the Defence Ministry and renovations were in progress. The Commandant was Lieutenant General Bahadur Singh and the Senior Directing Staff for Air Force, Navy and Civil Services were those who had done the Imperial Defence College course in the UK. We were just 21 officers in the first batch of students.

The big day for the College was the official inauguration by Prime Minister Nehru on 27 April 1960. He spoke extempore to nearly 40 official invitees, which included Chiefs of the Defence Services, the Commonwealth and the Foreign Secretary and the British High Commissioner. I was really exhilarated at being part of the historical event. Later during the coffee break, we met the Prime Minister for an informal chat. He remarked that he had recommended a broad syllabus for the College so that students get exposed to all shades of opinion before advocating a policy for the country consistent with our National interests. This 'Open Window' approach was for me an important guiding factor not only as a student, but later as Senior Directing Staff (Army) and finally as the Commandant of the NDC in 1973-74.

Our first batch consisted of individuals who had strong views. We often clashed with our Directing Staff who had graduated from the Imperial Defence College in the UK (now called the Royal College of Defence Studies) as they tended to have a somewhat 'colonial' outlook. In that academic environment for just over a year our pioneer batch bonded well which helped overcome many problems later in our professional careers.

It was a welcome relief to come back to the College as a member of the Directing Staff after 10 stressful years, which included my appointment as Director of Military Intelligence. A few months later, the 1971 war was upon us and I was pulled out to act as a military spokesperson for briefing the world press on the conduct of the war. These assignments brought home the lessons we learnt in matters of national defence and strategy. As it happened, I was fortunate to take over as Commandant, NDC and was thus able to include most of these lessons into the curriculum of the College. To quote just three examples, it was quite apparent that newly joined senior officer students had very little exposure to economic affairs. I therefore, contacted our present Prime Minister, Manmohan Singh (who in the 1970s was considered to be the leading economist) to give the Opening Address on two successive occasions. These talks were in simple layman's language - without too many figures and statistics - and covered a broad survey of the world economy with particular reference to India. They were well received and, more importantly, made students realise that all National policies emanate from the economic strength of a country. During my tenure as SDS (Army) it was the practice during the Social & Political Study that only selected politicians at the Centre and States were invited to address the College. We were, therefore, only listening to the Government's viewpoint. This was not according to Prime Minister Nehru's "Open Window" approach as mentioned earlier. With the permission of the Ministry and soon after taking over as Commandant, we introduced panel discussions with other major political parties with a renowned journalist (Inder Malhotra) as the moderator much like the panel discussions we have on our leading TV channels today. I shall always remember one such politician, the late Piloo Mody (Swatantra Party) whose lively sense of humour kept us in splits of laughter!

After dealing with foreign military attaches in the capital as also our own attaches in all parts of the world for almost a decade, I was firmly of the view that a foreign tour by NDC students would broaden their outlook by personally meeting world leaders and understanding their policies towards us. Every time we put up a proposal for a foreign tour one or two would get through but most of them would be turned down by Finance. Somehow, I managed to convince the Defence Minister - after several one-to-one meetings - of the advantages of such tours. Since then, such tours in groups to different countries of the world have become a permanent fixture of the College curriculum.

On 27 April 2010, the NDC celebrated its Golden Anniversary. The celebrations were inaugurated by Vice President Hamid Ansari with the unveiling of a portrait of Prime Minister Nehru. Ex-Commandants living outside the capital were also invited as guests. I felt very proud being the only member of the alumni who was present in the same lecture hall 50 years later. The College now has the strength of 100 student officers including 25 foreigners. For many years, the Chiefs of our own Defence Services, as also Sri Lanka, have been amongst the alumni of the NDC. Over these past 50 years, the College has certainly proved to be one of the finest institutions of its kind in the world.

In conclusion, I would like to relate an incident during my second year as Commandant. The College was invited to meet Prime Minister Indira Gandhi for a 'Question and Answer' session at Parliament House. Half way through the proceedings, her Secretary handed her a note. Her facial expression changed completely. She then asked me to close the proceedings as she had to return to her office immediately. In her excitement, she literally 'hopped and skipped' down the corridor. As I took leave, she thanked me and said "The NDC has certainly brought good luck - I have just heard our scientists have successfully exploded an atomic bomb at Pokhran!"

***Lieutenant General MN Batra, PVSM (Retd)** was commissioned into the Corps of Signals in 1940. He saw active Service in Waziristan, North Africa, Palestine, Iran and Iraq during World War II. He retired as the Commandant National Defence College, New Delhi. Post retirement, he has been a regular contributor of 'middles' to the Times of India.

Brigadier Sir John Smyth, Bt, VC, MC, MP - His Life and Times*

Lieutenant General Baljit Singh, AVSM, VSM (Retd)**

Brigadier John Smyth, Bt, VC, MC, MP

Somewhere in the middle of the long list of Secretaries/Directors of the USI of India, there figures the name of Major William Slim (21 May 1930 - 16 March 1931) and a few spaces above, that of Captain John Smyth, VC, MC (1 April 1926 - 31 March 1929). They were to maintain the same inter-se standing in the Army, even while being Indian Army instructors at the Staff College, Camberley between the two wars, till the fateful months of February-March 1942 when Major General John Smyth (hereafter JS) GOC, 17 Infantry Division was 'sacked' from command at Rangoon and Lieutenant General William Slim assumed command of Burma Corps (I7 Division and 1 Burma Division). From that moment, while Slim would go on to be counted among the Great Warlords of Military History, JS would emerge with those qualities which had made the Sphinx arise from the ashes. Regrettably for JS, even though he would continue to reap honour and glory, but it would be without the pomp of the military ceremonial which Field Marshal Viscount Slim of Yarralumla, KG, GCB, GCMG, GCVO, GBE, DSO, MC would retain for life. Nevertheless, destiny's discarded military commanders such as JS have paradoxically always lived very varied, charmed and fanciful lives, as it hopefully will emerge from the narrative which follows.

JS came from a family of Country Esquires of modest property holdings, but adequate to meet the needs of essential domestic luxuries. The fourth John Smyth of Heath was born in 1748 and lived to the age of 63. He was first of the Smyths to enter public life, and was a Member of Parliament for 25 years. He became a Privy Councillor and was successively a Lord of the Admiralty, a Lord of the Treasury, Master of the Mint and a Member of the Government during the American War of Independence. It was his grandson, John Fitzroy Smyth whose remark at the age of ninety-four was to provide JS with a philosophy of life: "You must expect a little toothache, my boy, when you are over ninety, but that's no reason for going to the dentist". So, JS learnt early to take adversity in his stride without bellyaching, to accept mortal, personal losses in quiet mourning and welcome success without fanfare.

JS's grandfather Henry was the first of the clan to enter the Army and rose to be a Lieutenant General in 1876. His father, William John Smythe, a brilliant scholar with a double first at Balliol, entered the coveted ICS 'only to spend his whole life in the jungles of Burma.' But what a tragic recompense that Burma would extinguish the brilliant army career of his first-born (JS) and two years plus two months later, also incarcerate the mortal, heroic remains of JS's first born, Captain John Junior Smyth at the Kohima War cemetery.

It was a legacy of the British ICS couples that their progeny schooled in England and charted their future without parental nudging. JS had set his heart on the Indian Army and entered the Royal Military College (RMC), Sandhurst, 18th in merit among 250 in the class of 1911. But he would need to move up in the final merit to be certain of joining the Indian Army. Indeed, he ended the final term in Aug 1912, with the coveted Military History prize, four Blues in sports and ninth in the overall merit!

By the end of September 1912 he was attached to 'The Green Howards' (19th Foot, the First Yorkshire Regiment), for one year preparatory training, before joining the Indian Army at Sialkot Cantonment in the Punjab. Shortly, thereafter, he was invited to the Regimental Guest night in the Officers' Mess and, "When asked by the Colonel what I would like to drink - the usual choice being champagne or whisky and soda - I replied, quite unconscious of the sensation it was going to cause, 'lemon squash, please, Sir'. You could have heard a pin drop in the Mess. The CO, without a tremor, gave the order to the astonished waiter, which I thought was true hospitality."

Evidently, JS was a most likeable Gentleman-Officer so that even the hard-drinking Green Howards began wooing him. "The all-important decision which faced the Indian Army attached officers was to choose, or be chosen for, the Indian unit in which they would spend their regimental lives." Jack Turner, a term senior to JS, had been accepted by the 15th Ludhiana Sikhs and was full of their paeans but they had no vacancy. Just then, one of the two 15th Sikh officers doing a two-years course at the Quetta Staff College passed away and JS joined the battalion of his dreams, the 15th Ludhiana Sikhs at Loralai in Baluchistan.

JS was quick to win their trust and they were to follow him blindly. This bond of martial brotherhood was put to the ultimate test on 18 May 1915 (WW I) in France, when a detachment of the 15th Sikhs holding a segment of the trenches named "Glory Hole", faced imminent disaster as they had run out of ammunition. When one officer and 20 men of the Highland Infantry on the flank attempted replenishment, they were shot down to the last man. Two further attempts by the 15th Sikhs fared no better.

This was the stage when Lieutenant JS was ordered to pick up ten volunteers and make a final attempt. When he asked ten men to come forward, every Sikh present stepped out, including the fresh draft which had that day arrived from India! JS confessed that "This is what cured me of Blue Funk". Using six spare turbans they crawled, dragging three boxes of mortar bombs and three of machine gun bullets, under withering German shelling and automatic fire, in the mid-day sun for about 25 minutes.

Nine soldiers perished as they crawled, dragged and pushed the munitions boxes tied to turbans. The tenth was struck dead on reaching the beleaguered bunker. The shell-shocked eleventh stood up but a Sikh from inside the bunker reflexively reached out and pulled Lieutenant JS down. He emerged the sole survivor of the heroic mission, delivering just one box of mortar bombs. Two months later, JS was awarded the Victoria Cross (VC) and the Indian Distinguished Service Medal (IDSM) (posthumous) to the gallant ten volunteers. When Sir Winston Churchill narrated the action, the House of Commons stood up in salute. And the Czar spontaneously conferred the Order of St George on JS for conspicuous bravery.

The action was chronicled in the book 'Deeds that Thrill the Empire' which stated, "There are no finer fighting men in our Indian Army than the Sikhs....And there are no finer officers in the world than the men who lead them...and we

may be very certain that never will their glory fade....”.

JS was sanctioned special leave for the investiture at the Buckingham Palace. He was perplexed when the King after pinning the Cross, handed him a plain card board box. “But the King was charming and put me at once at my ease. He explained that the reason the VC was presented in such a plain box was in order that the actual value of the Cross and box together should not amount to more than one penny, so that our highest decoration of all should have no intrinsic value, whatever.” Of course it was a different matter when all his medals got stolen one year later, and JS had to reclaim a replica of the VC from the War Office. He remembered the Kings words, “somewhat wryly”, when the War Office charged him £ 1.11s.6d! That was his first brush with the bureaucracy.

JS was given a few days leave before they were to embark for Egypt. As he prepared to take the return train, he was accosted by the wives of two newly wed officers of the 15th Sikhs. They were deaf to his reasoning and were seated in his compartment as the train pulled out of Victoria station. Never mind the squabbles with the military police, the railways etc but he gallantly arrived with his charges at Marseilles. After exchanging greetings with the CO, he said “I have a confession to make, sir”. The CO raved and ranted for five minutes and then relented. “But tell me this. Just how the bloody hell does a subaltern – even a subaltern of the 15th Sikhs manage to bring two women right across France in the middle of a World War?”

Within months of the termination of WW I, the battalion was back at Peshawar in the North West Frontier Province (NWFP), embroiled in the Tirah campaign in Waziristan. JS was part of the Tochi column whose first task was to clear the Shinki Pass of the Mahsud snipers. JS had learnt early to respect the Mahsuds as “the most formidable fighting men of them all in the NW, in fact more than the Germans, Japanese, Arabs, Senussi, Wazirs and Mohmands that he had fought against.” Just when it appeared that the Pass had been cleared, the last Mahsud sniper picked him up, but from 900 yards it was not an easy shot. Nevertheless, JS had a bullet through one hand but without serious damage. His men pinned the Mahsud down till JS closed up and picked him clean! Though recommended for a Bar to his VC by Major General Gwyn-Thomas, he was awarded the Military Cross (MC) in January 1919, just a few months after the fourth anniversary of the VC.

General Gwyn-Thomas had carried a bottle of best champagne to quietly celebrate the end of the war but a year later, he thought otherwise. As JS records “I had been out on the mountain side all day in filthy weather. I felt too tired to eat and was preparing to get straight into bed when the General’s servant entered the tent with a tray on which stood a very large tankard full of that precious bottle of Bollinger, all poured out so that I could’nt refuse to drink it. Truly greater love hath no man than this.”

JS got his first break after WW I from the NW Frontier operations in 1920, when he was posted as GSO 3 (Intelligence), Army Headquarters. With just eight year service he was a seasoned, junior commander and among the most highly decorated for gallantry. So, he now deliberately applied his mind to the military academia and qualified for the Staff College, Quetta. Being high in merit, the Commander-in-Chief Lord Rawlinson nominated him to Staff College, Camberley for the 1923-24 course. Yet again, he passed high in merit-list and returned to Army Headquarters as GSO 2 (Training). For the first time since school and Sandhurst, he had time for sports and became Master of the Delhi Foxhounds besides playing Polo, Tennis and Hockey for the Army and narrowly missing playing for India and England. He was unlucky to miss the Kadar Cup, the blue-riband of Pig sticking!

Like a bad habit, he returned to 15th Sikhs in the NW Frontier as company commander after two years of instructorship at Camberley. But it broke his heart, when on 17 Jul 1936, he was given command of 45 Rattrays Sikhs (a sister battalion) even though this too was to become an umbilical affair. He had the unique experience of commanding a mixed force at Chitral, which included his own battalion also, for two years (1936-38) before it moved to a peace station, Allahabad. When the command ended in July 1939 and JS boarded the aircraft, the aerodrome at Allahabad resounded with the deep-throated chants of :

*“Wah guru ji ka Khalsa
Siri wah guru ji ki fateh!”*

JS was on leave in the UK when WW II commenced and the War Office were quick to snaffle him with the command of 127 Brigade in France. Though the British and French Armies suffered a crushing defeat but, from all accounts, it emerges that 127 Brigade were among the very few who put up a gallant resistance; “beaten but not defeated”, Major Jones the BM and Wright (batman of JS) winning the Military Cross and the Distinguished Conduct Medal (DCM) respectively. They had learnt to handle the Bazooka and knocked out at least two tanks when a Panzer detachment threatened the Brigade Headquarters.

On returning to India in Apr 1941, he had a minor surgery which unfortunately went awry. So, when he assumed command of the 18 Indian Division on 02 Oct 1941 (under raising at Secunderabad) JS was in fact still on sick leave. On 02 Dec 41, the designation of the 18th was changed to 19th. Its famous Dagger sign was in fact designed by Frances, wife of JS! But lo and behold, on 04 Dec 1941, JS was shifted to command 17 Infantry Division, also under raising, but at Pune. So JS in fact commanded three divisions in one week! May be this was fate’s hidden card to hand out several commands in succession and hastily before the destined downfall of a brilliant army career.

17 Infantry Division were equipped and trained for the War in Egypt and one of it’s brigade was on the high seas; when on 20 Dec 1941, they were assigned to Burma. JS disembarked post-haste at Rangoon with the leading elements on 28 Dec 1941. And soon, the 17th would join battle with the Japanese who had won every battle since Pearl Harbour. Two brigades of the 17th and two of the Burma Division (ill equipped and worse trained), fought several brave and brilliant encounters but they could not stem the winning streak of the Japanese offensive. On 23 Feb 1942, JS was faced with the dilemma (a) either withdraw his two brigades in contact or (b) blow up the only bridge over River Sittang and accept major losses in men and materials but, in so doing impede the Japanese advance and fall of Burma. He chose the latter.

In the event, 17 Infantry Division were reduced to one effective brigade, then on 02 Mar 1942 JS was “sacked” from Command! Every military history account leaves a clear impression that (a) Lieutenant General Hutton, the Burma Corps Commander was deaf to tactical ground realities visualised by JS (b) Field Marshall Wavell, the Supreme Commander having suffered a series of defeats (Al-Alamein, Mesopotamia and Crete) was desperate for victory and therefore, injudicious in assigning missions to field commanders and (c) Hutton and Wavell, and above all Sir Winston Churchill, blundered by collectively disregarding the better tactical judgment of JS, ‘to hold the line of River Sittang as the first defensive position in Burma’. Ironically, some ten years after WW II, Wavell was to admit his mistake and make sincere efforts with the Prime Minister, Winston Churchill to restore the rank and pension of a Major General to JS but to no avail. For, the day he was ‘sacked’ JS was a substantive colonel, temporary brigadier and an acting major general! Repent as they may, but all they could do was to give JS the honorary rank of a brigadier!

JS was neither given to self-pity, nor resentment nor indeed recrimination against his superiors. So he was quick to make a fresh start in life barely six months after he was ‘compulsorily retired from Service’. In fact, the twenty year span post retirement, which JS has covered in his autobiography, is packed with so much active and varied life that any man, in any walk of life, would be proud and envious of.

As we know, with hindsight of history, the war in Burma was to last another three years. And, was better qualified to comment on the Allied plans, prospects and conduct per se both in Europe and South Asia than JS, who had (a) fought in and traversed the battle-fields of Europe in WW I and again the opening phase of WW II and (b) trained and fought against the Japanese in defending Burma. So, his friend and instructor from Camberley, Major General ‘Boney’ Fuller (Retd), encouraged and facilitated his entry as a military correspondent to the Sunday Times and Daily Sketch etc. and broadcaster with the BBC (1943-48). Thereafter, JS never looked back and was soon counted among the best full time journalists in the Fleet Street.

But Frances and JS were to suffer a grievous personal tragedy when on 07 May 1944, their first born, John (Junior) got killed leading his company of the Queen’s Royal Regiment in the Battle of Kohima Ridge in Burma. Also a product of RMC, Sandhurst, he surpassed JS in possessing irrepressible, reckless courage on the battlefield. Assuming command of the company (as they stalled), when the company commander fell, he led the assault and they captured the Jail Hill Ridge at Kohima. Unmindful of his own safety, he moved about to care for the wounded, and it was then that a sniper’s bullet went clean through his heart. His grandfather and father had already bled for Burma and now, the son gave his life in Burma too. No wonder that the kin of the war dead from the UK, continue to visit war cemeteries such as at Kohima, even seventy years thenceforth, because the military deeds of courage and honour are imperishable in their human psyche; though sadly not so among us Indians.

JS was soon visited by good fortune. He was elected an MP on the Conservative ticket in 1946 and remained so for two terms. Sir Winston Churchill inducted him in his Cabinet (1951-55) as the Minister for War Pensions. Needless to say, this was a job after his heart as he headed several leagues/committees dealing exclusively with relief and rehabilitation of WW I and II ex-Servicemen. A year earlier, a Baronetcy had been conferred on JS, bringing the family history full circle, a hundred years down the timeline.

May be, the happiest, relaxed and most enjoyable of preoccupations which fell in the lap of JS was his iconic rise in the world of Lawn Tennis from 1946 to 59. Hamilton Price the well known referee and the Lawn Tennis correspondent for the Sunday Times before the war passed away, just about when the first post war Wimbledon, Davis Cup and Wightman Cup were to be revived after the war. During the morning conference the Sunday Times Editor-in-Chief, holding JS in his gaze said: “John, I believe no one in the Indian Army can hope to command and lead a Division in battle unless he had been an outstanding sportsman in his subaltern days. As you have had both attributes would you report for us on Wimbledon also, henceforth.”

The first article ‘By a Correspondent’ appeared on 03 Feb 1947, followed by two more. As they were well received, the next comprehensive article in The Sunday Times on 14th April 1947 appeared in JS’s own name. And Sunday Times Lawn Tennis writer had arrived! One thing led to another. When the Centre Court chair umpire fell ill, JS was asked to deputise. So he did, and became a permanent presence in this department also!

In 1948, JS was invited to write all articles and the photo captions for the Wimbledon Programme which became so popular that 1,00,000 copies sold each year. The organisers of the Davis and Wightman Cups also contracted him and fared just as well. JS was to suggest a modification to the prevalent ‘foot fault rule’ which was disliked by the players and difficult to impose by the umpires. It was put to test and accepted both in the UK and the USA and remains operative today! He authored two books on the History of Lawn Tennis which became classics.

His proudest moment came when he was nominated to be the founder Chairman of the Victoria Cross Committee by the Patron, Her Majesty the Queen. It would be interesting if the computer savvy, among the readers of the Journal today, were to surf the net, get in touch with the grand and great-grand children of JS to complete the tale of the last years of this grand, Gentleman-Officer.

***Brigadier Sir John Smyth**, Baronet, Victoria Cross, Military Cross and Member of Parliament; was Secretary and Editor of the United Service Institution of India from 1 April 1926 to 31 March 1929.

****Lieutenant General Baljit Singh, AVSM, VSM (Retd)**, was commissioned into the Regiment of Artillery on 03 June 1956. He retired as Chief of Staff, Central Command on 31 July 1992. He is an active promoter of nature and wild life conservation, particularly within and by the Armed Forces. He is also a keen military historian.

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