

August 2007

Volume 1, No. 1

*Journal of*  
**Defence Studies**



Institute for Defence Studies and Analyses

JOURNAL OF DEFENCE STUDIES, Volume 1, No.1  
August 2007

© IDSA  
First Published 2007

All Rights Reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, recording or otherwise, without prior permission of the Institute for Defence Studies and Analyses.

The views expressed in this journal are those of the authors and do not reflect the views of IDSA, the Ministry of Defence or any other organization, unless specifically stated as such.

*Design and Printing*

**Purple Communications**

A-25, Pocket-8, Kalkaji Extn.  
New Delhi - 110019  
Tel: 41861342, 41861842

*Published by*

Institute for Defence Studies and Analyses  
No. 1, Development Enclave,  
Rao Tula Ram Marg  
New Delhi-110010

# CONTENTS

From the Editor's Desk – vii

## ESSAYS

1



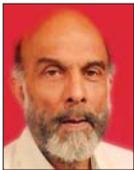
**JOINTNESS IN INDIA'S MILITARY: WHAT IT IS AND WHAT IT MUST BE** *Vice Admiral (Retd.) P.S. Das* was Commander-in-Chief of the Eastern Naval Command in 1998. In 2000, he was nominated as member of the Task Force constituted by the GoM to review Higher Defence Management. Admiral Das is a member of the National Security Advisory Board.

13



**INDIA'S HIGHER DEFENCE ORGANIZATION: IMPLICATIONS FOR NATIONAL SECURITY AND JOINTNESS** *Admiral (Retd.) Arun Prakash* is a former Chairman, COSC and Chief of Naval Staff. In October 2001, he was appointed the first Commander-in-Chief of the newly created Unified Andaman & Nicobar Command.

33



**JOINTNESS IN STRATEGIC CAPABILITIES: CAN WE AVOID IT?** *Rear Admiral (Retd.) Raja Menon* retired from the Indian Navy in 1994. He headed the Naval Headquarters group that wrote the Indian Navy's New Maritime Strategy. He is currently the Chairman of the Task Force on Net Assessment and Simulation in the National Security Council Secretariat.

45



**EXPLOITING THE ELECTROMAGNETIC SPECTRUM IN JOINTMANSHIP** *Lieutenant General (Retd.) S.R.R. Aiyengar* is a former Commandant of National Defence College, New Delhi, Defence Services Staff College, Wellington (Nilgiris) and the Military College of Telecommunication Engineering, Mhow (MP).

71



**JOINTMANSHIP AND ATTITUDINAL ISSUES** *Major General (Retd.) Mrinal Suman* retired from the Indian Army in 2003 and currently heads the Defence Technical Assessment and Advisory Service of Confederation of Indian Industry.

87



**JOINTNESS: AN INDIAN STRATEGIC CULTURE PERSPECTIVE** *Brigadier (Retd.) Rahul K. Bhonsle* is managing a strategic risk and knowledge management consultancy-Security-risks.com focusing on strategic culture and security trends in South Asia, future warfare and human security.

105

JOINTMANSHIP IN THE DEFENCE FORCES: THE WAY AHEAD



*Brigadier B.S. Sachar* is an Infantry officer of the Punjab Regiment and is currently a Senior Fellow at Institute for Defence Studies and Analyses.

113

REVOLUTION IN MILITARY AFFAIRS AND JOINTNESS



*Brigadier (Retd.) Arun Sahgal, PhD,* is Deputy Director Research and Head, Centre for Strategic Studies and Simulation, at the United Service Institution of India. He is a member of National Task Force on Net Assessment and Simulation, under the NSCS, Government of India.



*Brigadier (Retd.) Vinod Anand* is a Senior Fellow at the United Service Institution of India, New Delhi.

133

THE CHIEF OF DEFENCE STAFF  
*Lieutenant General (Retd.)*



*S.K. Sinha* is former Vice Chief of Army Staff is currently Governor of Jammu & Kashmir.

139

NEED AND DESIRABILITY FOR A CDS SYSTEM FOR INDIA



*Vice Admiral (Retd.) K.K. Nayyar* is a former Vice Chief of Naval Staff and is currently Chairman, National Maritime Foundation. He is also Chairman, Forum for Strategic and Security Studies.

**Editor**

N.S. Sisodia

**Managing Editor**

Dr Thomas Mathew

**Associate Editor**

Dr Bhashyam Kasturi

**Editorial Advisory Board**

Vice Admiral Premvir Das (Retd.)

Dr K.V.S.S. Prasad Rao

Shri Rajan Katoch

Lieutenant General (Retd.) S.S. Mehta

Admiral (Retd.) Arun Prakash

Air Chief Marshal (Retd.) S. Krishnaswamy

**IDSA Editorial Committee**

Brigadier B.S. Sachar

Commander Alok Bansal

Wing Commander Ajey Lele

Wing Commander V. Krishnappa

**Assistant Editor**

Vivek Kaushik



## **From the Editor's Desk**

We are happy to place in your hands the inaugural issue of the Journal of Defence Studies. While the Institute for Defence Studies and Analyses (IDSA) was conceived as an institute for defence studies, over the years, its scholars have tended to concentrate on broader issues of security and international relations. In the process, the core issues of defence have received lesser attention. Even scholars from the defence services have sometimes preferred to work on issues of international relations.

This new offering from IDSA represents a modest attempt to encourage research on the core issues of defence. The journal is expected to serve as a platform for sharing research findings and opinions of scholars working on defence-related issues, both within and outside IDSA. In the initial phase the journal will contain a mix of research articles, essays, topical commentaries, opinion pieces and book reviews. At present, the journal is planned only as a bi-annual publication. Our long-term goal, however, is to achieve the highest standards of academic rigour and also increase the frequency of the journal.

It will be our continuing endeavour to give priority to issues concerning defence policy, reforms in defence and defence economics. Given the rapidly changing nature of threats, many of which are transnational, globalisation, growth of increasingly sophisticated technologies and their prohibitive costs, these issues are acquiring ever greater salience.

The present issue has been devoted to the theme of 'Jointmanship'. Modern day wars cannot be fought effectively through conventional structures and for all modern militaries, 'Jointmanship' has become a matter of highest priority. Apart from articles on different facets of 'Jointmanship', this issue also carries a section with opinion pieces on the institution of the Chief of Defence Staff. We believe that these articles will throw light on the imperatives and challenges of Jointmanship adding new perspective to the on-going debate for the establishment of a truly integrated defence structure.

We will strive to make this journal both useful and interesting for our readers. To achieve this objective, we look forward to our readers' feedback and suggestions on the format and contents of the journal.

Happy reading !

N.S. Sisodia



# **Jointness in India's Military –What it is and What it Must Be**

P.S. Das

## THE DYNAMICS OF MODERN WARFARE

Time and Space have collapsed in modern warfare. At one end, nations do not have the luxury of continuing to wage war for long durations. Apart from military, economic and domestic limitations, there is the coercive pressure of the international environment which does not permit much latitude. Therefore, the need to achieve strategic goals in the shortest possible time has become critical. The difference between tactical gains, achieved in a shorter time frame, and strategic benefits which could take longer, has blurred and future conflicts would focus on the latter from the very outset. For this same reason, political involvement in the conduct of military warfare has increased.

On a different plane, long range precision weapons have enabled parties to attack adversaries over great distances. This has nullified, to a great extent, the limitations of slow movement of battle which was the norm in earlier years. Added to these two is the networking of forces which not only enables real time sharing of intelligence and information between widely dispersed forces but also, if harnessed properly, permits the most appropriate and available resources to be brought to bear upon the adversary in the shortest possible time; to minimize the interval between sensing and shooting, ideally to zero, is the requirement. The speed of processing of information, decision making and execution are critical to achieve this objective.

Therefore, old concepts of jointness based on cooperation and coordination between different wings of the military with tri-Service execution are no longer enough; there is need to cement this with structures which are based on integrated planning and operations under one unified authority with responsibility and accountability. Such an institution will, obviously, have components of different wings placed under it but these would be subordinate to it and not to their own Service Chiefs. This is the requirement of modern warfare. The Indian system, in which these things are processed in a triumvirate fashion, is very unsuited to cope with the new environment.

Some naive arguments are projected by those who oppose changes. One of these is that the Americans need the kind of system that they have because their operations are stretched across the globe. This postulation is absurd. Sitting in the Operations Room of the US Central Command in Florida giving directions for operations in Yemen which would result in the neutralization of key Al Qaeda functionaries within ten minutes of their being spotted is no different to sitting in New Delhi and overseeing ongoing operations in the Arabian Sea or on the Western borders. Electronics provide real time data to both sets in the same time frame and the need for quick responses to developing situations is similar. It is not that the Americans must make decisions immediately while Indians have the luxury of time. Both must bring a variety of resources, some from different agencies, into play in the shortest possible time for achieving the best results. Also, networked forces now enable a composite picture to be available at Unified Headquarters instantly, unlike earlier scenarios when every platform reported to its own superior who then shared the information with others if he chose to do so. So, the type of coordinated trilateral operations which were typical of warfare in earlier days, are no longer appropriate or even relevant. The fact that almost all countries have followed the integrated command concept shows that this has nothing to do with global scale of operations.

#### HISTORICAL DIMENSIONS OF INDIAN HIGHER DEFENCE MANAGEMENT

To understand how and why India's armed forces operate the way they do, one needs to go back into history. Until 1947, when India became an independent country, military affairs of the dominion came under the purview of Commander-in-Chief (C-in-C), India, second in authority only to the Viceroy. Following the creation of a Chiefs of Staff Committee (COSC) in Great Britain in 1923, a similar institution was also constituted in India but with a slight difference. Unlike the parent COSC, its Indian counterpart had the Chief of General Staff (CGS) at General Headquarters (later Army Headquarters) as the permanent head, reporting to the C-in-C. While the Chiefs of the Navy and the Air Force could approach the C-in-C and even the Viceroy if they felt this to be necessary, higher direction of all military forces, thus, vested under a single authority.

This picture changed after independence. Major General Lionel Ismay, Chief of Staff to Admiral Louis Mountbatten, the last Viceroy, was asked to suggest suitable mechanisms for higher defence management in the new nation. Ismay proposed a COSC comprising the three Service Chiefs with the position of chairman being held, not by any one service chief, but by the person longest in the chair; in other words, on a rotational basis. He also suggested various other arrangements under the COSC

to facilitate cohesion in the functioning of the three wings. This inter-Service structure was, by and large, a replica of the organization that had existed in Great Britain during the Second World War.

Interestingly, despite their overwhelming victory in that War, and the experience of having conducted several very large-scale tri-service military operations — for some of which they appointed Supreme Commanders, e.g., General Douglas MacArthur in the Pacific theatre and General Dwight D. Eisenhower in Europe — the victors found serious flaws in their higher defence organizations. As a result, in the USA, a new dedicated authority termed Chairman, Joint Chiefs of Staff (CJCS), was constituted over and above the individual Service Chiefs, as the principal military adviser. All operational responsibility was vested in integrated theatre commands which had components from the three military wings subordinated to them. The Chiefs of Services were members of the JCS but had no direct operational involvement in their components. Many more changes have been made in the last six decades, many by legislation, requiring greater integration amongst the three wings of the military and this process is continuing.

In the United Kingdom, which had also seen Admiral Mountbatten as the Supreme Commander in South-East Asia during the Second World War, it took some time for the system to be reviewed. But by 1963, the UK had also abandoned the old system. The headquarters of the Navy, Army and Air Force were integrated with the Ministry of Defence. A dedicated Chief of Defence Staff (CDS) was constituted, over and above the Chiefs of the Army, Navy and Air Force, as the principal military adviser; Mountbatten being the first to fill that position in 1959.

A dedicated and integrated Joint Forces Headquarters (JF HQ) was created under the CDS to exercise command over all operations in which the British armed forces might be involved. In the UK, more changes are progressively being made to further integrate the three wings of the military. Since then, almost all countries which operate credible military forces, e.g., France, Russia, Australia, and Germany have shifted to the integrated pattern of higher defence management with a principal military adviser. Even China, about as old an independent nation as India, follows that system.

#### THE EARLY INDIAN EXPERIENCE

Soon after Independence, India established two military institutions which were tailor made to promote jointness. One was the Joint Services Wing-later to become the National Defence Academy (NDA) at Khadakvasla to train young cadets to become officers in the Armed

Forces and the other, the Defence Services Staff College (DSSC) in Wellington, Tamil Nadu which would bring officers of the three wings together once again after about twelve years of service. To these were added, in due course, the College of Defence Management (CDM) at Secunderabad at a more senior level and, finally, the National Defence College (NDC) at New Delhi at the highest level of Brigadier and equivalent rank. This framework for joint training of officers at different levels and to bring them together again at different stages of their careers was, therefore, well laid and continues till now. It has yielded very good results in bringing about inter-service camaraderie.

Even as the large-scale migration of communities was taking place in the immediate aftermath of the Partition, Pakistan's military forces, masquerading as freedom fighters, invaded Jammu and Kashmir. The ensuing conflict in 1947-48 was essentially an army action with air power used only to transport troops and equipment and to provide limited air support to ground troops. Later, in 1961, the military was again involved in a brief two-day conflict to liberate Goa, but this was without any opposition. Lieutenant General J.N. Chaudhari, then GOC-in-C Southern Command, was placed in charge of the overall operation. But that was the extent of jointness.

In the conflict with China in 1962, the Air Force and the Navy did not come into play at all and watched from the sidelines. Finally, the three wings did come to fight together against Pakistan in 1965 but without any preconceived plan. Marshal of the Air Force Arjan Singh, IAF Chief at that time, has said on many occasions that he came to know that air support was needed only when hostilities had already broken out and the Army was under pressure in the Chammb sector. The Indian Navy went about doing its own thing, and was of no consequence to the war effort.

In short, in all these conflicts, whatever their extent and severity, it was essentially only land power that came into play. The Air Force did participate more meaningfully in the 1965 war but without much synergy with the plans of the Army. No post-conflict enquiries or studies were ordered. India proclaimed itself as the victor, without any supporting evidence; so did Pakistan. Such lessons as were learnt were not publicized and the manner of functioning remained unaltered.

#### THE 1971 WAR

The war with Pakistan in 1971 was the first real military operation since Independence in which all three wings of the Indian Armed Forces were full participants. By April of that year, it had been assessed that military conflict was likely, even inevitable. The Army Chief, General (later Field

Marshal) S.H.F.J. Manekshaw wanted time to complete preparations, for the monsoon season to get over and also for winter to set in so that mountain passes on the India-China border would be rendered impassable. These factors taken together, allowed the Armed Forces about seven months to get their act in order.

In this period, it was expected that the military would formulate a common and synergized plan into which operations of all three wings would be dovetailed. This did not happen. There was no integrated planning of the campaign which resulted in quite a few unplanned and uncoordinated decisions being made. As the war progressed, for example, the sudden decision to launch an assault on Chittagong, was soon changed to Cox Bazaar. The troops chosen, Gurkhas, with their short stature and relative unfamiliarity with water, were singularly unsuited for that purpose. There was no training, and beach survey, a crucial prerequisite, was inadequate. Not surprisingly, the operation was a total fiasco with no aims achieved and some lives lost. In another episode, IAF Gnats attacked Mukti Bahini vessels operating in the waters off Khulna without being aware that these were our own. One of the two boats sank, some of the crew killed, and others wounded and captured.

There is enough evidence in published literature of that conflict, principally from the autobiography of the then Air Force Chief, Air Chief Marshal P.C. Lal and the biography of the then Naval Chief Admiral S.M. Nanda, highlighting the differences in the way in which operations were planned and conducted by their Army counterparts. The attacks carried out on vital installations at Karachi from the air and by sea, were also not part of any combined plan. There are other instances of mismatch between the different wings. Lieutenant General J.F.R. Jacob, who, as Chief of Staff of the Eastern Command was responsible for conduct of operations in the eastern sector, has gone on record to say that the three wings of the military went about doing their own things without any synergy and that he, himself, disregarded the orders of the Army Chief in regard to the conduct of the land battle! No more needs to be said.

Victory in what was then East Pakistan (now Bangladesh) came swiftly, partly due to the demoralization of the adversary, and in the wake of resulting euphoria, few attempts were made to reflect upon and to correct the shortcomings. The argument was simple; the structure was working; it had just proved itself and there was no need for any change. Once again, the war was fought in a tripartite fashion with no unified or accountable military authority in command even though, as might be expected, the Army Chief was *primus inter pares* for the political leadership. Not unexpectedly, this reluctance to boldly institutionalize the ground reality resulted in more discord than harmony.

#### AT ODDS IN SRI LANKA

India's armed forces were called to action in 1987 once again, albeit in a somewhat modified role, when they were asked to proceed as the Indian Peace Keeping Force (IPKF) to Sri Lanka. The government of J.R. Jaywardene was in confrontation with the Liberation Tigers of Tamil Ealam (LTTE). This time a good beginning was made. The Chiefs of Staff Committee (COSC) appointed the GOC-in-C Southern Command, Lieutenant General Depinder Singh as the Overall Force Commander (OFC). Component Commanders from the three wings were subordinated to him with command of operational forces delegated from the Eastern Naval Command and the Southern Air Command respectively. A formal Directive was issued to the OFC to undertake the ordered missions in Sri Lanka. It appeared that the Indian military hierarchy had finally come of age; alas this proved too good to be true. In less than a month from the time that IPKF moved into Sri Lanka, the situation was turned on its head. The Navy and IAF Cs-in-C, responsible for providing forces, declined to delegate command and forced their superiors in New Delhi, i.e., the Chiefs, to get the component commanders designated as Liaison Officers with no role other than to act as go-betweens between the headquarters of the OFC and of the Cs-in-C. Relatively junior officers were appointed to do this work, further diluting the authority and accountability of the OFC. The COSC, with no dedicated head, was, itself, shown up as a weak structure, with its own internal rifts and dissension and incapable of enforcing its will. The IPKF grew from one division in 1987 to four by 1989, but it was never one force under one command, as originally contemplated. The OFC lost credibility and was, in effect, just the commander of the land forces with the other two wings cooperating, but independently. There were numerous other areas of discord which need not be elaborated here. Apart from the political infirmities of the intervention, poor command and control must rate as the most important military failure of Operation Pawan.

#### KARGIL IN 1999

India went to war yet again in 1999, fighting to regain the hill positions in the Kargil sector of Jammu and Kashmir, taken over by Pakistan by subterfuge. It was essentially a land battle in which some air power was used to soften enemy positions. The Navy, somewhat exaggeratedly, decided to concentrate its entire strength on the western seaboard (such deployments do not come without great cost), signaling a degree of belligerence not visible in the political posture. It took two months for the Indian forces to regain the heights after Pakistan was forced to withdraw, partly through American pressure.

The war might have taken much longer had this not happened. There are now enough revelations to show the mismatches between the highest military leadership. The Air Force was not prepared to provide the helicopters that the Indian Army requested. The Army, for its part, was reluctant to share full details of what had actually happened. When the Army sought air strikes, the Air Chief, quite correctly, demurred on the logic that this required political approval. In short, once again we were stumbling into action without a synergized plan. If former IAF Chief A.Y. Tipnis is to be believed, matters had reached such a state that the then Army Chief, General V.P. Malik, angrily walked out of a COSC meeting muttering that he would handle things by himself. While some stress and strain in relationships are inherent in any tense environment, these probably exceeded the norm.

What, however, differentiated this conflict from the others was the fact that for the first time in five decades the government constituted a high powered commission to look at the obvious infirmities in the management of national security. The Kargil Review Committee (KRC) came up with a comprehensive report highlighting numerous weaknesses including an inadequately responsive structure for higher defence management. The government formed a Group of Ministers (GOM) which, in turn, constituted four Task Forces comprising persons of experience and knowledge to examine the areas of weakness identified by the KRC. These groups did their work with alacrity, produced reports within four months and in less than a year from its constitution the GOM had made several far reaching recommendations. Those relating to higher management of defence were the most comprehensive and, all save one, were approved. Unfortunately, the most important of them, crucial to the functioning of the armed forces, viz., creation of a dedicated Chief of Defence Staff (CDS) as the principal military adviser, was held in abeyance and continues to remain so.

#### WHY OUR MILITARY OPERATES THE WAY IT DOES

The historical dimension of the functioning of India's Armed Forces has been discussed above. There are some other factors which have contributed to the military's mindset. First, almost all conflicts that India has fought, have been essentially land wars in which the Army has been the predominant player. The threats faced by the country have been focused across the border. Insurgency and low intensity conflict have also been in its domain. In fact, while the air and naval forces have found it possible to have long periods of peace interspersed with a few weeks of war, the Army has been continuously engaged, either in military conflict or in low intensity operations. There is, therefore, the feeling,

not unreasonable, that it is the main, if not the only, armed force. Second, its size itself creates a feeling of self importance and as a consequence, a defensive mindset in the others. Third, the Air Force, traditionally seen only as a supporting arm, has consistently sought an independent stature, partly by refusing to get conjoined with the others, principally the Army and partly by stressing the strategic role of air power. The Indian Navy has a more fortunate position, operating as it does in a domain in which others can play only supporting roles. Finally, the Armed Forces, themselves, are quite happy with the existing arrangements in which each Chief operates and develops his own Service almost autonomously without any involvement with the others. The political leadership has found it expedient not to disturb this unsatisfactory broth.

At this stage, it might be useful to consider how the Indian military operates. The three Service Chiefs, despite having been converted from Commanders-in-Chief of their respective wings into Chiefs of Staff in 1955, continue to act in their former roles and are, therefore, responsible for conduct of operations. They do this by issuing directives to their respective commanders; for example, in the Navy, these are the Western and Eastern Naval Commands which, in turn, give out orders to their subordinate operational commanders and task forces. Where any assistance is required from another wing, say air support from the Air Force, this has to be arranged through the Maritime Air Operations (MAO) authority in Mumbai, an Air Force institution, acting as the link. The MAO interacts with the appropriate Air Force Command headquarters which, in turn, issues instructions to the IAF station holding the relevant air assets. Often, Air Headquarters itself may have to be approached. The arrangement is about the same as far as the Army is concerned. All operational Army Commands have Air Force elements attached to them, not as subordinates but as advisers. They, in turn, interact with their own superiors to arrange the desired support through Air Force stations. In brief, the inter-Service interaction is through several tiers, both laterally and vertically. The desired air support might not be provided, possibly for good reason and even if it is, may not be in the form and strength requisitioned. Thus, the person responsible for execution of a task does not have control over all the forces that are deployed; on the other hand, the authority providing supporting forces is not responsible for successful achievement of the operation. The shortcomings of this system are readily apparent.

But the situation has begun to change. Most significant to modern day warfare is the recognition of the dominant role that air power must play in any military environment. On land or at sea, control of the air space in the operating area is essential to the successful conduct of battle. Whether provided by shore based aircraft or from those launched

by aircraft carriers at sea, air power has become a determining factor. While it cannot replace boots on ground, its impact on warfare has become overwhelming. This, in turn, has, greatly diminished some of the sensitivities that prevailed earlier. The second major change is in the increasing dimension of concerns at sea. The sustained growth of economy, a key national interest, requires security of overseas trade and energy, both almost entirely seaborne, and safety of sea lanes and offshore assets has, therefore, assumed much more importance even as threats on the land borders are diminishing. The ability of seagoing forces to impact the war on land has also increased. For example, facilities on the coast as well as in the hinterland of the adversary, can, often, be better attacked from the sea than from land or air bases. Cruise missiles of longer range, which could be in our inventory in the next ten years, will further enhance this capability. Finally, no expeditionary or out of area activity can be carried out without the closest possible synergy amongst the three wings of the military.

Along with these operational imperatives, military hardware has also become extremely costly and it is essential that its induction should follow critical analyses of inter se priorities and cost benefit considerations which is possible only under an integrated planning system. For all these reasons, it has become even more important that plans of the three Services are developed and then executed in an integrated fashion and under one common superior. This is not to suggest that there will not be glitches even if changes are made in the way we do things; some of them might even be damaging in their effect, but overall, the likelihood of their occurrence will be much less and the ability of the organization to respond to them effectively, much greater.

#### THE ANDAMAN AND NICOBAR EXPERIENCE

That the need for change has been recognized, albeit slowly, is visible in some recent developments. The transformation in the command structure in the Andaman and Nicobar Islands is an example. This organization started with a miniscule Resident Naval Officer (RNO) from which it grew into that of a Naval Officer in Charge (NOIC) and then into a more elevated and robust Fortress Commander (FORTAN) of the rank of Vice Admiral. The Fortress Command was sought to be given an integrated profile with the positioning of a Brigade Headquarters with two battalions under its direct operational control. However, the Air Force declined to follow suit and its forces at Car Nicobar continued to operate under the orders of the AOC-in-C Southern Air Command stationed in Thiruvananthapuram in Kerala. Under this utterly archaic arrangement not a single sortie of even one helicopter could be ordered

by the FORTAN! Thus, such integration as was there took on a largely cosmetic content with personal relationships being the determining factor; nevertheless, this was still something beyond what obtained on the mainland. This half-baked arrangement continued until 2001 when, based on the GOM recommendations, this structure was finally converted into an integrated theatre command. The C-in-C Andaman and Nicobar, thus, became the first Unified Commander in the Indian Armed Forces with all three wings and the Coast Guard under his direct command. This marked a breakthrough in a system which had not seen any change in the fifty years that had elapsed since Lord Ismay. The integrated structure went through an initial period of acclimatization with occasional hiccups; the fact that it is subordinate to the triumvirate COSC with infirmities of its own and not to one superior adds to the difficulties. Nevertheless, the new integrated command was soon tested in the Tsunami disaster of 2004 when it proved itself by contributing substantially to the efficient conduct of the large scale rescue and relief operations based on synergized planning and execution under a single accountable authority.

#### QUO VADIS

So, where do we go from here? A second unified and integrated military command entity, the Strategic Forces Command, also under the COSC, was instituted at the same time as the structure in the Andaman and Nicobar Islands. It does not, at present, have forces under operational control -- these will come later -- but has responsibility and accountability for the strategic domain. These are positive developments. At present, in addition to these two integrated commands, the Army and the Air Force have seven Commands each, while the Navy has three. The Navy's Western Command, responsible for the entire western seaboard, has to interact with two Commands of the Air Force, Southern and South Western and two of the Army. The same is the case on the eastern seaboard. Similarly, the Southern Command of the Army must interact with the Southern as well as South West Commands of the Air Force.

The structure, as can be easily imagined, is not only cumbersome and inefficient but also wasteful in resources. Training, maintenance and logistics continue to be individual Service functions. Looked at dispassionately, there is just no reason why these functions cannot be combined in dedicated Commands with components covering all three wings. Operationally, there could be four to six theatre commands structured geographically; within them, unified commanders could be appointed for specific operations whenever these become necessary. Other integrated Commands for Space, Special Forces, Logistics, Training and Maintenance can also be put in place. The existing Commands could

then be reduced from 17, as at present (excluding the two new Commands mentioned earlier), to no more than a dozen bringing about significant reduction in manpower while providing greater efficiency and accountability. Various models can be worked out but, in principle, unified and integrated functioning must be their theme. This restructuring will also enable the Indian military to become lean and mean; its present teeth-to-tail ratio is, possibly, the worst amongst all armed forces of substance.

It is not that this kind of restructuring was not examined by the GOM when they made their recommendations for the better management of defence. It considered that integration should be achieved progressively and provided, initially, for two such institutions. At the same time, it recommended the creation of a CDS who would act as the principal military adviser to the government and, apart from acting as the direct superior of the two new integrated commands, would also oversee force development in the armed forces. These arrangements were to be reviewed after five years in 2005 when further changes could be made leading to greater integration in the higher direction of military affairs. Unfortunately, the political leadership of that time accepted the need for an Integrated Defence Staff (IDS) but balked at appointing a CDS, thus leaving the former without a head, and that of today has not found it necessary to order a review. It is necessary that the exercise be updated and more changes made. Sooner rather than later, India must have a CDS and integrated theatre commands and given the existing realities, this CDS, in the next five or six years, must be from the Army. In time, the system will settle allowing higher Commanders from all three Services to be eligible for the post.

There are some who argue that change must come from below. This is a fallacy. In every country where management of defence has undergone change, direction has come from the top, always from the political leadership, and despite great opposition from the military leadership. Of all systems, the armed forces are traditionally the most resistant to change which will, inevitably, impinge upon their established work patterns and turfs. In the USA, changes have been legislatively mandated which gives them greater meaning and provide no latitude for dilution. Some countries have taken the executive route. The former is preferable but given the Indian environment the latter might be more practicable.

## CONCLUSION

Six decades after Lord Ismay put the higher Indian military structure in place, its contours have become frayed and its logic and rationale questionable, given the changed nature of warfare. The needs of today, much less of the future, cannot be met by the lethargic and unwieldy mechanisms that are in place. We are already well behind in adapting to these changes. Cooperation achieved through personal relations and friendship, facilitated by training together in joint colleges and academies, is a good thing but it can never be a substitute for well structured and formal institutions. It will not be able to stand the stresses and strains of modern military conflict. Wisdom lies in recognizing this truth and creating a system which will be better suited to cope with the new environment. It is time for the political leadership to look at the relevant issues critically and boldly. Until now, it has tended to avoid dealing with issues which would ruffle military feathers; consequently, sticking to the status quo has been the preferred approach. There is a sense that this hesitancy might also be due to the fear that a CDS could become too powerful an entity and that a weak COSC, beset by its own parochialism, is less threatening. Such fears, if they are there, are misplaced. India is now too strong a democracy to succumb to military adventurism; even the armed forces will not accept it.

In short, the time has come to take the bull by the horns. For this, it will be necessary to reconvene a fresh GOM, served by a group of experts, and move further down the road already taken. The Indian military of the 21st century must be equipped to cope with the challenges with which it is likely to be confronted, not only with hardware and manpower of the desired quantity and quality but equally with structures which will exploit these capabilities in the most efficient and economical way. Integrated force development along with operations under unified command, is the way forward. That is the real meaning of jointness, not what passes for it today.□

# **India's Higher Defence Organisation: Implications for National Security and Jointness**

Arun Prakash

## INTRODUCTION

In the minds of the average person on the street, one suspects that the phrase "higher defence organization" evokes an intimidating vision of row upon row of be-medalled and be-whiskered Generals, with the dark shadowy figure of a "soldier on horseback" (that mythical usurper of power) looming in the background.

Too complex and dreadful to contemplate, they shut this vision out of their minds, and revert to the mundane, with which they feel far more comfortable. It is for this specific reason that in the title of this paper "National Security" has been added to "Higher Defence Organization." Not that our comprehension of "National Security" is very much better; and in this context, just one example will suffice.

Soon after the July 2006 serial train blasts in Mumbai, which resulted in over 200 dead and over 700 injured, as Chief of Naval Staff (CNS), I attended a very high level inter-agency meeting of functionaries to discuss this issue. After the presentations, discussions and brain-storming lasting a couple of hours, a final question was asked -- what urgent remedial and precautionary measures should we take to prevent recurrence of such incidents?

After a pregnant silence, the sole suggestion that was voiced, shook me to the core, because of the pedestrian and worm's eye perspective that it demonstrated: "We must give the SHOs at the *thana* level more and better quality walkie-talkie sets to ensure faster communications."

And this, after the nation has been experiencing bomb blasts or terrorist attacks with monotonous regularity in the wake of the horrifying 1993 Mumbai carnage; Parliament (2001), Akshardham (2002), Mumbai (2003), Ayodhya (2005), Varanasi (2006), Hyderabad (2007) and many others. The question remained hanging in the air: is buying more walkie-talkie sets the panacea for the tremendous hazards facing India's security today?

## CHALLENGES TO NATIONAL SECURITY

In all our history, perhaps this is the most appropriate juncture for a comprehensive discussion of issues relating to National Security or the Higher Defence Organization(HDO). There are three reasons for this:-

- Firstly, if there is one lesson we should learn from the past, it is that economic and social progress cannot take place in an environment that is not secure. It has to be clearly recognized that economic progress by itself is not viable, unless it has an essential security underpinning.
- Secondly, even if we shun concepts like regional doctrines or spheres of influence, India's emergence as a regional power has its own implications. The need to safeguard not just India's own vital national interests, but also assisting our friends, when required, casts a heavy mantle of responsibility on us.
- And finally, a fortuitous combination of factors (economic, demographic and geo-political) has created a "critical mass" and placed the country on a trajectory which generates its own security compulsions.

Therefore, no matter how non-violent or pacifist India's heritage and inclinations, it behoves on us at this point in time, to reflect on the security challenges that confront India, pinpoint what we have been doing wrong and undertake the necessary reforms, urgently.

## THE ASYMMETRIC WAR

A brief overview of the security situation would help to sensitize the reader to the situation which would alarm the citizens of any other country, but one which Indians have come to accept with customary resignation. Let us first dwell on matters relating to internal security.

Pakistan's Inter Services Intelligence (ISI) obviously plans 10-15 years ahead, and what we have been facing for some years now, and will continue to face, is best termed as "asymmetric war"; waged by a ruthless and imaginative adversary with no holds barred. Its most obvious manifestation has been the cold-blooded orchestration of violence in our urban areas amidst the civilian population. This is done through a complex and well-organized network of agents and surrogates who are trained, equipped and financed to wreak havoc.

This war has many other dimensions, of which we notice only a few. Aiding separatism and insurgency, encouraging demographic invasion, attacking our economy by pumping in fake currency, inciting communal

violence, and undermining the morale and cohesion of the armed forces (often through the instrumentality of the Indian media) are some other facets of this multi-pronged assault on the Indian state. By our benign neglect, and failure to appreciate its full scope and depth, we have probably aided and abetted this offensive.

Most of India's North-East has become a metaphor for mayhem, with the lines between administration and anarchy, and extortion and excise having been totally blurred. It is common knowledge that Central Government funds are continuously siphoned off, and eventually buy the insurgent, bullets which kill the jawans of the Indian Army (IA). But no one seems to worry or care.

The Naxalite movement has manifested itself with renewed vigour in 118 districts running in an almost continuous swathe through 12 states, from Kerala to Bihar (virtually half the country). For forty years this grave menace has been viewed with blasé complacency and handled in a most effete manner. Today the movement has expanded to a point that it obtains support and sustenance from the Nepalese Maoists on its northern flank and the Liberation Tigers of Tamil Eelam (LTTE) on the southern flank.

The most remarkable aspect of the situation is the contrast between thought process of the perpetrators of the asymmetric war, and the Indian State. The calculus and planning of the ISI-Pakistan Army combine runs seamlessly from sub-conventional to conventional warfare, and then on to nuclear conflict; the whole paradigm working in tandem with clever diplomatic posturing.

India, on the other hand, have kept the different aspects of these conflicts strictly compartmentalized, and hence our response to the asymmetric war is disjointed, fragmented and disorganized. The reasons for this are twofold; our national security establishment has encouraged turf distribution and creation of fiefdoms, and thereby deprived itself of the benefits of holistic thinking and synchronized action. And secondly, in a system that must be unique in the world, the Armed Forces are kept on the margins of national security management by a powerful bureaucracy, and rarely consulted or heard – even on issues in which they have exclusive expertise.

#### EXTERNAL SECURITY

In the absence of a coherent long-term security strategy, sixty years of independence have seen the progressive worsening of relations with each one of our immediate neighbours and a consequent deterioration in India's external security environment.

In the security arena, India's intelligence apparatus has earned us the dubious distinction of having been "surprised" over and over again; starting with the Pakistanis a few weeks after Independence in 1947, the Chinese in 1962, by the Pakistanis again in 1965, and yet again in Kargil in 1999. On each occasion, it has been the courage, patriotic spirit and sacrifice of our armed forces which has redeemed national honour.

The one occasion when we were not "surprised" was the 1971 Bangladesh war. But sadly, the tremendous gains of India's well planned campaign, and historic victory in this conflict were frittered away in Shimla by our negotiators. Not only because we entered the conflict, lacking a war-termination or post-war strategy, but mainly because the national leadership and bureaucracy, yet again disdained the idea of consulting the Armed Forces. Vital decisions with serious long-term implications were taken without consulting those whose bread and butter is the nation's security.

So where are we today? Kashmir remains a running sore where we continue to pay for the folly of the hasty and militarily indefensible 1947 ceasefire, followed by the post-1971 Shimla fiasco. The Chinese remain in occupation of Aksai Chin, and belligerently lay claims to 100,000 sq km of Arunachal Pradesh.

Our immediate neighbourhood remains tense and unfriendly. The stubborn and seemingly intractable hostility of Bangladesh can perhaps best be explained by our diplomats who have dealt with this country since its creation with the help of Indian arms 36 years ago.

In the recent turmoil in Nepal, the extent of our influence could be gauged by the fact that it was not an Indian diplomat or official functionary whom the Maoists deigned to consult, but someone outside the Government; a CPI leader. He was invited again recently and presented with a Maoist guard of honour!

In Sri Lanka our policy of extreme caution, has delivered not just rapidly diminishing returns, but has created an unhappy spiral of discord. The more negative and lackadaisical India's response to Sri Lanka's urgent security needs, the more they have approached an obliging China and Pakistan for help, and the more upset South Block has consequently become with the Sri Lankans; and so it goes on. By distancing herself from the developments in Sri Lanka on account of electoral politics, India has lost all leverage in the dispute, and we could be sucked in by a sudden conflagration in the island nation without warning. Now, by pontificating on whom the Sri Lankans should or should not seek help from, we stand to lose further goodwill and influence with them.

Finally, by establishing a nuclear and missile proliferation nexus with North Korea and Pakistan, China has, with one master-stroke, checkmated India's regional ambitions. Any advantages that we may have had in superior nuclear technology or research facilities, have been wiped out by illicit nuclear and missile hardware transfers that have regularly been taking place, between these three nations, right under our nose; mostly by the sea route. All this has put us strategically on the backfoot vis-à-vis Pakistan

#### THE HISTORICAL UNDERPINNING

It may be possible to rationalize India's security dilemmas on the grounds that we are a "young" nation, and relatively inexperienced in such matters. But there are nations, equally young, or even younger, which have managed their affairs differently or perhaps better: Israel, Singapore, and China are just three examples. Besides, we never tire of reminding people that we are the heirs to a wise and ancient civilization.

Be that as it may, in order to examine any problem in a meaningful way in India's context, and to obtain some comprehension of the causal factors and remedies available, it is essential to delve into our eventful history. With this background it may be easier to decide where we should go from here.

#### OUR SHORTCOMINGS

Unless one travels as far back as the Mauryan period (325-200 BC) or the Gupta period (4th and 5th centuries AD), Indian history makes dismal reading. With a few notable exceptions, the same socio-cultural shortcomings stare at us repeatedly.

Only in a very few cases, were foreign invasions stopped or defeated, because when invaders knocked at their gates, Indian rulers considered it far more expedient to gain advantage or settle scores with their neighbours, than to unite and fight a common enemy. Even when the battle was going well for us, invaders had no difficulty in subverting our people. A greedy "qilladar" could always be found to open the fortress gates, or a treacherous subedar would desert his ruler, for a few pieces of gold. But then every nation has its quislings, and the mere perfidy of people like Jai Chand or Mir Jaffar could not, by itself, have laid us open to foreign domination.

In the battles fought by the East India Company against the Mughals, Marathas, Mysore rulers, and the Sikhs, the Indian sepoy played a key role. There were Jats, Purbiyas, Muslims, Marathas, and Avadhis on

both sides, and they must have fought with equal courage. But the depressingly frequent adverse (for us) outcome of battles was decided by the outstanding leadership of the British officers, when pitted against the indolent and spineless Indian rajas, nawabs, and peshwas.

Yet there were many exceptions where Indian arms were victorious against foreign forces; so again, one cannot say that the poor leadership displayed by Indian rulers or generals was a decisive factor in our history.

A dispassionate study of Indian history, however, does clearly bring out that if there is one lesson to be learnt, it is this. It was the complete lack of strategic vision on the part of our rulers and military leaders, and their inability to rise above internecine feuds, petty rivalries and internal squabbles, and to plan for the strategic defence of Indian territory. This is what led, time and time again, to military defeats and thus to humiliating subjugation by a handful of invaders.

Jawaharlal Nehru writes in *The Discovery of India*: "It seems clear that India became a prey to foreign conquest because of the inadequacy of her own people and because, like the British, the invaders represented a higher and advancing social order. The contrast between the leaders on both sides is marked; the Indians for all their ability, functioned in a narrow, limited sphere of thought and action, unaware of what was happening elsewhere... ."

#### QUO VADIS?

So if this is the background where should we go from here? Taking the most obvious lessons of India's history to heart, one of the first acts of our post-Independence leadership should have been to devise and put in place, a sound and coherent national security edifice to safeguard our newly won freedom against all threats.

Regrettably this was far from what actually happened, and according to the American scholar George Tanham, "... the forces of culture and history and the attitude and policies of the independent Indian governments worked against the concept of strategic thinking and planning. As India's need for strategic planning increases, a structure for planning is likely to develop slowly in the future."

It is in this context, that attention is now drawn to post-Independence developments, in the higher management of defence and where we stand in this regard today.

## THE POST-INDEPENDENCE REORGANIZATION OF DEFENCE

In 1947, it so happened that two of the most experienced Allied military leaders, Lord Louis Mountbatten and his Chief of Staff, Lord Lionel Ismay were in India. The Government of India promptly asked them to evolve a system of higher defence management, which would meet the emerging needs of the newly independent nation.

Ismay was deeply conscious of the fact that no radical measures could be contemplated at that delicate juncture, when the sub-continent was about to be carved up into two nations, and the armed forces split asunder. He therefore came up with a solution which called for the least amount of turbulence and readjustment, and would serve admirably for the interim, till a proper system could be developed to suit Indian conditions.

He recommended a pragmatic system which was based on a Commander-in-Chief (C-in-C) for the operational management and administration of each Service, and a Chiefs of Staff Committee (COSC) for central coordination. The COSC was to be supported by a series of other committees to address details of coordination between the Services, and between the Services and the Ministry of Defence (MoD), and to provide for quick decision making with a minimum of red tape. All the committees were to have civil servants as members, and therefore, their decisions were not to be subject to detailed scrutiny by the MoD.

## A FLAWED INHERITANCE

The system of higher defence management recommended by Lord Ismay was a very practical and workable one. It had the potential to evolve, so that the three Service Headquarters (SHQ) could have, with time and further experience, become separate Departments of the MoD (like the Departments of Defence Production or Defence Finance). Alternatively, the three SHQs could have integrated themselves completely with the Department of Defence within the MoD.

However, not only did this not happen, but within a short period of its implementation, the senior civil servants of the time intervened to completely distort the concept of "civilian supremacy" to give it their own interpretation of "bureaucratic control" over the armed forces. This was done by the simple expedient of designating the three SHQs as "Attached Offices" of the Department of Defence, giving them (as per the GoI Rules of Business) a status exactly on par with organizations such as the Salt Commissioner, Commissioner for Handicrafts, CRPF, and CISF, etc.

The SHQs, in keeping with their status of Attached Offices, found that they were reduced to adjuncts of MoD, and also placed completely outside the Ministry, which they could approach only through the medium of files. Having submitted a case on file, all that the SHQ could do was to wait like a supplicant for the wheels of MoD to grind at their leisurely pace, while targets and deadlines slipped, steadily but surely.

The administrative effectiveness of the Service Chiefs steadily eroded, to the point where their recommendations to the Defence Minister began to be routinely sent for scrutiny and comment to the Director level, and would then slowly work their way upwards, open to comment (or even rejection) at every level of bureaucracy!

For fifty years the armed forces lived with this iniquitous and dysfunctional system, and it took the near disaster of Kargil to trigger some change.

#### POST-KARGIL DEVELOPMENTS

##### THE GROUP OF MINISTERS REPORT

The findings of the Kargil Review Committee (KRC) contained a scathing indictment of the national security system, and pointed out glaring deficiencies in our intelligence services, border management and higher defence organization.

The KRC led to the formation of a Group of Ministers (GoM) to examine reforms in the national security system, which in turn commissioned four Task Forces in April 2000, for the examination of different components of the system.

The one relevant to the present discussion was the Task Force on Management of Defence, headed by former Minister of State for Defence Arun Singh, and of which this writer was a member. It was charged with, essentially, a critical examination of existing structures for management of defence.

##### THE ARUN SINGH TASK FORCE

Against the backdrop of the KRC, the Task Force was to take into account, inter alia, the Revolution in Military Affairs (RMA) and our status as a nuclear weapon state, and to suggest changes for improving the management of defence, as well as ways of bringing about closer integration between Services and, between the MoD and the Services.

Arun Singh not only had a great deal of administrative experience, but also intimate knowledge of the armed forces, coupled with a deep

concern about the extant national security situation. The Task Force therefore, cast its net far and wide, and sought views on the full spectrum of problems and issues relating to defence in all its aspects, from experts as well as from laymen.

As far as Higher Defence Management was concerned, the Task Force faced a dilemma. If the Task Force overbid its hand, it was quite possible that we would frighten the politicians, and the recommendations would be consigned to gather dust in a musty cupboard. On the other hand, this was the first opportunity in half a century to rectify much that was wrong with the nation's security edifice, and it would be a great shame if this rare and precious window of opportunity was wasted by underbidding.

#### THE ISSUES OF CONTENTION

The dialogue and discussion that took place within the Task Force was comprehensive and freewheeling. But if one had read about the intense public debate which raged in the US, prior to passing of the Goldwater-Nichols National Security Act of Congress 1986, one could not help being struck by a remarkable sense of *déjà vu*. Virtually all the arguments were the same, and more or less everything that was said in the US was repeated in India, with local variations. I highlight some of the more prominent issues.

- The underlying root of contention was a sense of insecurity in the Indian Air Force (IAF), possibly engendered by the fear that some of their roles, or even assets were coveted by the Army (IA) and the Navy(IN). The Air Force viewed with deep suspicion and unease, any proposal which would subject its acquisition or deployment plans to scrutiny by an officer from the other two Services. It was thus against any alterations in the status quo in the context of both integration and command and control, and was determined to fight them tooth and nail.
- Historically, the apprehensions of the IAF were not unfounded; the IN had wrested control of Maritime Reconnaissance, and the IA had taken away AOP or Air Observation Post (re-named Army Aviation Corps). Close air support vs counter-air operations continued to be a hotly debated issue. They were naturally worried about the future, and their concern was aggravated by the fact that aviation assets had been proliferating not only in all three Services, but also the para-military organizations.
- Possibly to pre-empt further attempts at "poaching", the IAF

insisted that unless the "Roles and Missions" of each Service were clearly delineated (and frozen), it would be pointless to discuss any changes in management structures. This was, however, a difficult proposition, and the IAF objection remained outstanding.

- The IAF also took the stand that the Services were already sufficiently integrated, and any further attempts at enhancing Jointness should only follow the integration of the Services with the MoD.
- The civil services too, felt threatened by grant of any autonomy to the Armed Forces. They stoutly maintained that the status of Attached Offices for the SHQs was appropriate, and that there was already more than adequate consultation between the MoD and SHQs. Any further integration was therefore neither necessary nor desirable.
- Thus, a common cause emerged, and a view shared by more than one member of the Task Force, was that that the COSC system had functioned quite well for over 50 years and had seen us through many conflicts. It required no change, and therefore a Chief of Defence Staff (CDS) was not necessary in the Indian environment.
- While the IA expressed support for the proposed reforms, there were perceptible murmurs that a "million-plus strong force" must receive its proper due vis-à-vis the smaller Services, if there was going to be any reorganization of the higher defence management system.
- The IN's leadership had decided (not without considerable internal discussion) to offer the "Far Eastern Naval Command" as a token of their support to the cause of Jointness. There was little debate therefore, in the Task Force, over the Joint Andaman & Nicobar Command (ANC) ; because it came virtually as a gift from the IN, and was a net gain for the other two Services.
- In the context of the Strategic Forces Command(SFC), there were serious differences. Whether it should be the preserve of a single Service or placed under a Joint Command, but the issue was eventually resolved by consensus.

#### RECOMMENDATIONS OF THE GOM

After five months of deliberations, the Task Force on Management of Defence cobbled together a consensus, and submitted its report in end

September 2000 to the GoM, which after a quick consideration issued their recommendations on 'Reforming the National Security System' in February 2001.

The KRC report having been submitted in December 1999, it was probably an unprecedented achievement for the Indian system to have undertaken such a comprehensive review of national security, and produced an actionable set of recommendations within a period of 14 months. This is all the more reason for regret that we should have faltered in the implementation of the most critical ones.

Of the Task Force recommendations, the salient ones which were accepted in toto, or with minor modifications are listed below, as stated in the GoM report:

- In order to remove the impression that they did not participate in policy formation and were outside the Government apex structure, SHQ be designated as "Integrated Headquarters" instead of Attached Offices.
- In order to expedite decision making and enhance efficiency, financial and administrative powers be delegated to Service HQs and lower formations.
- Since the COSC has not been effective in fulfilling its mandate, it be strengthened by the addition of a CDS and a Vice Chief of Defence Staff (VCDS).
- The CDS is required to be established to fulfill the following functions:-
  - ❖ To provide single point military advice to the Government.
  - ❖ To administer the Strategic Forces.
  - ❖ To enhance the efficiency and effectiveness of the planning process through intra and inter-Service prioritization.
  - ❖ To ensure the required "Jointness" in the armed forces.
- The CDS may be a four-star officer from one of the three Services in rotation, and will function as the permanent Chairman of the COSC.
- The details relating to the precise role and function of the CDS and his relationship with the other key actors in the defence setup, particularly the Service Chiefs would need to be worked out.
- Two joint formations; the SFC and the ANC were established, with their Commanders reporting to the CDS.

In addition to the above, the GoM made numerous other recommendations in respect of restructuring of MoD, planning and budgeting, procurement procedures, Defence Research and Development Organization (DRDO) and National Defence University, etc. An Implementation Cell was set up to monitor implementation of the GoM recommendations.

#### THE AFTERMATH

For those of us serving in respective Service HQs, mid-2001 was a heady period. It seemed that the right set of circumstances and personalities had fortuitously combined to finally provide an opportunity to dust the cobwebs off India's national security system, and bring it into the 21st century. But high drama was enacted alongside low farce, as our unfortunate historical-cultural traits emerged once again, and narrow parochial ends were allowed to prevail over the larger national interests, in an extremely short-sighted manner.

Behind the scenes political lobbying by senior retired service officers, accompanied by dire predictions emanating from the Services themselves, confirmed the worst fears of the political establishment. The appointment of a CDS was scuttled at the last moment, and this ripped the heart out of the GoM recommendations for "Reforming the National Security System."

However, the Implementation Cell proceeded to implement the remaining GoM recommendations, and by the end of 2001, many changes had been wrought in the realm of higher defence organization, including the creation of an Integrated Defence Staff (IDS), two new Integrated Commands, and considerable devolution of financial and administrative powers.

The IDS, (under a VCDS), had originally been meant to provide support to the CDS, and to function as his HQ. However since there was neither a CDS nor a VCDS, the convoluted title of "Chief of Integrated Defence Staff to the Chiefs of Staff Committee" (CISC), was created for a three-star officer to run the IDS.

Having got thus far, both the political establishment and the bureaucracy felt that they had done a good job, and could now rest on their oars. There is no doubt that the national security system did benefit from the heuristic scrutiny that it was subjected to, for the first time since Independence. Many overdue reforms and changes were brought about, which enhanced operational and administrative efficiency.

However, at the macro level, the fact remained that we had travelled to what was merely, a "half-way house", and this had in many ways made things worse for the Armed Forces. The most glaring lacunae were represented by the failure to promote integration and to reform the COSC system.

#### INADEQUACIES IN THE CURRENT SYSTEM

In every Western democracy (the US, UK, France, Germany, Italy), as well as in every Asia-Pacific nation of consequence (China, Japan, Indonesia, Malaysia, Singapore, Thailand, and Sri Lanka) there is a duly appointed CDS who enjoys the full confidence and trust of the head of state or head of government, to whom he directly reports. There can be no better way of ensuring supremacy and control of civil authority over the military.

In India on the other hand, successive governments have found it difficult to forge a consensus on the appointment of a CDS. Whatever the facts of the matter are, it is a sad commentary, on the prevailing mindsets that India is unable to reach a consensus on an issue of such importance to national security.

Prior to embarking on a discussion on the inadequacies of the current system, two quotations are given below; one from the KRC Report and another from the GoM Report, in the hope that they will provide an objective background, and support the arguments that subsequently follow.

In a significant comment on India's national security management, the KRC Report had this to say:

"India is perhaps the only major democracy where the Armed Forces Headquarters are outside the apex governmental structure....The present obsolete system has perpetuated the culture of the British Imperial theatre system of an India Command, whereas what we need is a National Defence HQ...The status quo is often mistakenly defended as embodying civilian ascendancy over the armed forces., which is not the real issue. In fact, locating the SHQ in the Government will further enhance civilian supremacy."

A year later, in a slightly different context, the GoM had placed their finger squarely on the spot when they stated in the opening paragraphs of the chapter, on Management of Defence:

"The functioning of the COSC has, to date, revealed serious weaknesses in its ability to provide single point military advice to the government, and resolve substantive inter-Service doctrinal, planning, policy and operational issues adequately. This institution needs to be appropriately revamped..."

### THE MOD-SERVICE HQ EQUATION

The Arun Singh Task Force debated on two alternatives for the integration of the Services with the MoD. One was to convert the Service HQs into Departments of the GoI within the MoD, with the respective Vice Chiefs duly empowered to function as the Secretary-equivalent. The other was to integrate the SHQ with MoD by cross-posting Service officers and civil servants against selected posts allowing them to serve three to five year tenures. Both the propositions were perceived to have flaws, and were rejected.

The GoM obviously felt that having upgraded the SHQ from "Attached Offices" to "Integrated Headquarters", and ordered the devolution of various powers, they had resolved the half a century old problem of integration. Regrettably, all that actually happened on the ground was that the Navy (alone of the three Services) changed the designation of Naval Headquarters to "Integrated HQ of MoD", but otherwise no change took place in either the MoD-SHQ equation, or in the functioning of the MoD.

Under the present system, each department of the MoD forms a separate layer of bureaucracy; so a case emanating from the Service HQ, will receive independent scrutiny by the Department of Defence, and the Department of Defence Finance (and often the Ministry of Finance), and the queries are often sequential and repetitive. With many queries to be answered on file, and each file movement taking many weeks, it is no surprise that cases take years to fructify.

Even in the most routine of cases, the main role of MoD seems to merely pose repeated queries and objections on file, and then await a response. The responsibility and accountability for missed deadlines, slipped targets and unspent budget rests entirely on the SHQ. The processing time of cases could be cut down to 1/10th by the simple expedient of all concerned functionaries sitting around a table to discuss all issues threadbare, and then recording comments/decisions on file. But for some reason, the adoption of such a system is unacceptable to the bureaucracy in India.

### THE CHAIRMAN COSC

When this writer became the Chairman COSC in February 2005, he was the fourth successive incumbent in a mere six months. Similarly, when he handed over the baton, twenty months later, it was on the cards that as per existing rules, there would be three more changes of Chairman COSC in the following ten months!

Given the range and scale of the responsibilities and the time required to familiarise himself with them, a two or three month tenure for a Chairman is an absurdity. But this is just a symptom of the deeper malaise, which is that we are persisting with an anachronistic and dysfunctional system; an aspect that does not seem to be of concern to our national security managers.

In this day and age, such are the demands of being the operational and administrative head of an armed force, that no Service Chief can devote more than five to ten per cent of his time to the responsibilities of Chairman COSC (which now include the ANC and SFC) without neglecting his own Service. To fulfill a charter such as this, the Chairman COSC (by whatever name he is known) has to be a full-time incumbent, or we can be sure that important national security issues will lie neglected.

#### FUNCTIONING OF THE COSC

Praising the COSC, and saying that "it has met all the challenges in the past, including many conflicts" is now a favourite theme of those who wish to confuse the issue, and provide an "escape route" to the political establishment. It conveys, by implication, that all is well with India's higher defence organization and that no change is necessary. Nothing could be further from the truth.

Since the Chairman of the COSC is a rotational, part-time functionary, and only the "first amongst equals", the power that he wields in the Committee, is nominal. Moreover, there is an unwritten convention that disagreement between members of the COSC will not be displayed in public. Both these factors combine to ensure that very few issues of substance are ever discussed in the COSC meetings, and much of its agenda consists of trivialities.

Depending on the advice of the Defence Secretary and inclination of the incumbent Defence Minister, issues with inter-Service implications may or may not be referred to the COSC. Similarly, the views and recommendations of the Chairman COSC may or may not be given the weightage and recognition which is rightly due to the head of the highest inter-Service body.

There is more form than substance in the COSC today, and it merely provides a fig leaf for those who wish the status quo to prevail.

#### STATUS OF JOINTMANSHIP

Jointness is viewed with great enthusiasm by middle and junior ranking officers of the three services. It also receives a great deal of lip service, and

cosmetic praise in all public functions or ceremonies, because it has become a catch-phrase which is indicative of a "progressive" military outlook.

But at senior levels, especially in the SHQ, there is little evidence of Jointmanship, and information regarding plans, acquisitions and especially new raisings, is carefully kept away from sister Services. Two examples will illustrate this.

- The IN and the IAF were caught by surprise in end-2005, to find that a Cadre Review (as a result of the Ajai Vikram Singh Report) had been implemented exclusively for the Indian Army. Months later, they had to fight a furious rear-guard action with MoD, to obtain the same benefits for their personnel. The current, unseemingly public display of differences between the services over part two of this report further highlights the inadequacies of the COSC.
- The first information about the impending establishment of the new South-Western Army Command in early 2005, came to the IN and IAF only from media reports. Neither the proposal, nor its approval came via the COSC.

#### THE FORCE PLANNING PROCESS

The most adverse impact of the failure of the Indian Armed forces to coalesce, is felt in the arena of force planning. With budgets shrinking in real terms, there is a dire need for prioritizing the hardware requirements projected by SHQ, so that funds can be channelized in the right direction at the right time. This prioritization has to be based on an objective evaluation of the need that a particular weapon system is meant to satisfy, in the prevailing threat scenario, against fund availability for that year. Currently, a modality for such an exercise does not exist because no Service Chief will brook any curtailment of his requirement list by the HQ IDS (which compiles annual and five-year plans).

The force planning process therefore consists of merely adding up the "wish lists" of the three Services and forwarding them to the MoD. It is here that the pruning and prioritization is undertaken; often arbitrarily. It is just a matter of good fortune that our cumbersome procedures rarely permit any Service to expend its full budgetary allocation otherwise there could be serious fiscal shortfalls, because each Service would insist on having all its requirements fulfilled.

Whether it is a self-propelled artillery system, an aircraft carrier or a combat aircraft, there is rarely a meaningful debate amongst the informed professionals (the Armed Forces) because of the unstated understanding

amongst the Chiefs that "if you don't interfere with my plans, I'll not comment on yours." Intra and inter-Service prioritization of acquisitions was a function that the GoM had specifically mandated the CDS to perform.

#### CDS AND THEATRE COMMANDS

In India, the Service Chiefs have since Independence, continued to wear two hats; a "staff hat" as the Chief of Staff and an "operational hat" as the Commander-in-Chief of his force. This is an anachronism, and in all modern military organizations, the operational war-fighting responsibilities are delegated to designated Theatre Commanders, while the Service Chiefs are responsible only for recruitment, training and logistics of the armed forces. This issue was not addressed by the GoM, but is linked very closely to the CDS format. One would like to emphasize the fact that since no Chief would like to preside over his own divestment, it is unrealistic to expect a favourable recommendation for the CDS system from the Services.

The IN, by virtue of its medium of operation, has always seen itself as a "trans-national" force, and planned its structure and doctrines accordingly. The theatre concept is therefore eminently suitable to the operational template being developed by the IN. The stance of the other two Services has, however, remained ambivalent.

Having rendered sterling support to jointness and related concepts, right up to the GoM Report implementation stage, the Indian Army appears to have undergone a change of heart thereafter. The view that has been expressed of late says the theatre concept is meant only for countries which envisage "expeditionary operations". It is further affirmed that the Indian Army is so engrossed in internal security (IS) and low intensity conflict operations (LICO) that such concepts have no place in their vision. An interesting question has been posed in the context of a CDS; how will a non-Army CDS function effectively if he cannot "appreciate the terrain"?

This view seems to ignore recent history wherein the Army has intervened in Bangladesh, Sri Lanka and Maldives, and the possibility that in future, it may have to defend our own island territories. Even the most pessimistic observer will not give more than a few years for the resolution of our IS and LIC problems. As a regional power, should we then not be looking at the creation of a Rapid Deployment Force, theatre commands, and even at expeditionary operations?

The IAF's stance is even more interesting. On one hand, it has maintained its rigid stance that no change in the Higher Defence Organization is necessary since the current system is doing so well. At the same time, the

Service, by virtue of its newly acquired reach and punch is stridently projecting itself as a "trans-oceanic" force. It has even staked a claim (to the IN's consternation) to protect India's shipping lanes! There is no doubt, that the acquisition of the Su-30 and the in-flight refuellers (to be joined shortly by the AWACS and the new multi-role combat aircraft) has invested the IAF with a strategic status it did not earlier possess. However, the IAF cannot exploit this new strategic capability with an archaic and dysfunctional system of higher defence management.

There is obviously a need for some serious soul-searching at the higher levels of our Armed Forces.

#### OUR CREDIBLE NUCLEAR DETERRENT

As has been brought out earlier, there are heavy demands on a Service Chief's time which prevent him from doing full justice to the rotational appointment of Chairman COSC. With the constitution of HQ IDS many routine COSC issues are now dealt with by the CISC or the PSOs.

However, this is not applicable to matters relating to the nuclear deterrent, where the Chairman must devote his full personal attention and time to deal with SFC, DAE and DRDO on issues of vital national interest. However, I would just state that if for no other reason, but to ensure the "credibility" of our nuclear deterrent, it is vital for us to have a full-time Chairman COSC or a CDS in place.

#### THE WAY AHEAD

In conclusion, it needs to be clearly understood that matters like the reorganization of our higher defence organization, jointness, and even deterrence impinge not just on the Armed Forces, but have a much wider impact on the nation's security. These are not issues which will go away if you ignore them, but on the contrary the more we delay vital decisions, the more we stand to lose in the long run, in terms of national security.

It is now time that all the actors involved; the Armed Forces, the Civil Service and the politicians rose above petty, parochial considerations and did what is right and necessary for the nation's safety and security. Therefore, it is incumbent on the national leadership to initiate an agonizing re-appraisal of certain key security issues, with a view to bringing about long overdue change. The sum and substance of what has been said above is summarized here:

- Jointmanship in our context is currently skin deep and cosmetic. When it comes to what they perceived as their "core interests", the three Services will compete with each other fiercely, often making external mediation necessary.
- Like their counterparts everywhere, our armed forces, are inherently conservative and "status-quoist", by nature, and will not be able to bring about any change in the higher defence organization on their own. Any changes that are considered necessary in the larger interest will have to be imposed by political diktat.
- In order to engender a sense of mutual confidence amongst the Armed Forces, the Chiefs could consider signing Memoranda of Understanding clarifying roles, missions and other areas of ambiguity. Such a practice is followed in the US military.
- By trying to "muddle through" with a defence management system which is clearly outdated and largely dysfunctional, we are hazarding India's security and vital interests. Reform is an urgent necessity.
- In this context, we needed to learn from the experience of other nations (especially the Nuclear Weapon States) who have, in the past fifty-sixty years gone through exercises relating to reorganization of higher defence organization and learn from their mistakes.
- However, the Indian polity, for the foreseeable future is going to be completely preoccupied with issues of social, regional and electoral significance. It is therefore unlikely that the political establishment will be able to devote the time and attention that is essential, to national security issues.
- For this reason, it is necessary in the national interest, for the GoI to constitute a bi-partisan (or multi-party) Parliamentary Committee, assisted by experts, for a wide ranging and comprehensive review and re-examination of national security issues (including reorganization of the higher defence organization).

The findings and recommendations of this Committee should be tabled in Parliament, and if we are really serious about the nation's security, any reforms or changes contemplated in the national security framework and structures, or in the defence organization must be eventually incorporated and enforced as an Act of Parliament. □



## **Jointness in Strategic Capabilities: Can we avoid it?**

Raja Menon

Jointness has so far eluded the Indian Armed Forces. All thinking officers in the services are aware that much more jointness cannot be avoided if the Indian Armed Forces are to retain their excellent reputation. But this thinking community often comes up abruptly against many senior officers who dissuade them from being idealistic, on the grounds that under the cloak of jointness, their individual services would suffer losses in men, responsibilities and budgeting.

The anti-jointness lobby pride themselves on being hard-headed realists who understand the inevitable in-fighting in Delhi and pride themselves on their mastery of this vicious process. At the same time there have been intermittent periods of jointness which have often pulled the Indian strategic chestnuts out of the fire, with relative ease. But these events are sporadic and were never converted into a process.<sup>1</sup> The airlift of the Sikhs and Kumaonis to save Srinagar in 1947, and the paradrop at Tangail in 1971 are often quoted as fine examples of jointness. But those who bring up these examples do a great disservice to the debate, by permitting the status-quoists to re-assure themselves that all is therefore well and no reform is necessary.<sup>2</sup>

Most commentators on the subject of jointness at the top will begin their presentation with Lord Ismay's recommendations for the higher defence set up in India. They will also remark how the Ismay committee recommendations must have been comprehensive, since even the Americans asked for his services after World War II. Ismay, it is true made sensible recommendations to the Government of India on the higher defence set-up for a parliamentary form of government, with no integration of the three services, as was the practice in 1945, in the UK. The Ismay set-up was in any case destroyed by V.K. Krishna Menon during his tenure as Defence Minister. So the excellent joint institutions, like the Defence Committee of the Cabinet (DCC) which brilliantly handled the Revolt of the Ranas in Nepal in 1949/50, ceased to function effectively after Krishna Menon finished his tenure.<sup>3</sup> Today,

the DCC is still an effective institution in the UK, whereas in India it has been overtaken by the Cabinet Committee on Political Affairs (CCPA) and Cabinet Committee on Security (CCS).

The Americans in the meanwhile passed the Act creating the National Security Council (NSC) and created the post of the National Security Adviser (NSA) in 1947, so any merit ascribed to Ismay in creating the American system was short lived and ephemeral. In the sixties, the UK, faced with the complexities of fielding nuclear weapons, were forced to create a Chief of Defence Staff (CDS), and integrate the services headquarters (SHQ) and the Ministry of Defence (MoD) into one Headquarters. <sup>4</sup>The Ismay committee recommendations were therefore overtaken by events and time in both the USA and the UK. In July 2007, the UK also switched over to the National Security Council system after being shaken by the Glasgow bombing scare. The outlines of the UK's NSC are yet to emerge but Prime Minister Gordon Brown has ascribed the need for greater coordination, as the reason for the UK's belated shift to the NSC system.

The UK had occasion to rely on the CDS system in a non-nuclear war in 1982 when Prime Minister Margaret Thatcher took the decision to fight for the Falklands Islands and an extremely coordinated joint operations plan was evolved by the CDS. The Falklands war is an important case study, of a Commonwealth country with a parliamentary system, fighting an overseas war, without allies, in a joint manner. The structure, ethos and training of the British forces had been forcibly oriented towards fighting the USSR, as part of NATO and no-one else. The decision making process, higher command organization and conduct of the Falklands war are therefore a valuable lesson in how a joint organisation can cope with an unexpected strategic surprise. The Falklands operation fought under a CDS, is in stark contrast to an Indian operation undertaken less than five years later in Sri Lanka.

Many books that have come out of the Indian experience in operation Pawan and Lieutenant General Depinder Singh's lament<sup>5</sup> of the inadequacies of the command set-up are poignant. The results of the Pawan fiasco are there for all to see. Within a year of its start, the Air Force (IAF) and Indian Navy (IN) had been reduced to transport services. The IN failed to isolate Sri Lanka, an island. The Research and Analysis Wing (RAW) failed to provide any intelligence of the departure of Sri Lankan ships from their armaments purchase bases in South-East Asia,<sup>6</sup> the Joint Intelligence Committee (JIC) contributed virtually nothing and the force commander did a magnificent job in coordination with the Indian Ambassador in Sri Lanka. These two authorities eventually enabled India to put up a respectable performance

in North East Sri Lanka, assisted by the excellent spirit of the common soldier and officer. The higher command organization failed the country.

The most distinguished soldier to make out a case for jointness was Field Marshal S.H.F.J. Manekshaw, who brought up this subject immediately after his famous victory of 1971. Speaking at the staff college in Wellington, Manekshaw made the telling comment that the area commands in India were dysfunctional, needed to be reduced to joint commands and which would operate under a CDS. Manekshaw's thrust at the time was that the existing service commands had grown organically and historically and were unreal in every other sense.<sup>7</sup> He was referring to the way in which India would fight its wars in the future. But by the late eighties and early nineties it had become clear that the absence of jointness had begun to cripple national security even in peacetime. The prime factor was technology, with which India was beginning to catch up and which required a common approach by the services and the MoD.

Before going into the current state of affairs, it would be useful to look at the two occasions on which India had to fight, in one case in the immediate neighbourhood, and one in the West Asia. To take the latter case first -- the establishment of the state of Iraq with the help of the Indian Army, in the period between 1915 and 1924, makes a good case study.

It is true that oil had been discovered in Iraq, Lord Jellicoe had converted the Royal (RA) from coal burning to ships with oil fired furnaces. Apart from the unreliable oil from Baku and the long Atlantic route to American oil, here was a rich source, which was made available to the RN's fuel offtake at Haifa from a pipeline running through Syria. Iraq had therefore to become a nation and the forces put together by Whitehall show a level of integration, yet to be achieved in modern India. Under the C-in-C in Iraq, was a political adviser reporting directly to Whitehall, the Royal Air Force and Royal Indian Air Force contingent, a Royal Indian Navy lift capability, and representatives from the Indian Civil Service, Posts and Telegraph, Railways, Education, veterinary and agricultural sciences, judiciary, religious affairs, prisons and the Public Works Department.<sup>8</sup>

The second example is the re-conquest of Burma. With General Joseph Stilwell operating in North Burma, Lieutenant General Claire Lee Chennault running an independent air force in Southern China, and the need to project British Indian power into Burma, the British were forced to accept, what was until then, an American idea – joint command. Although derided as a princeling by the Americans, Lord Mountbatten's South-East Asia Command had an independent land,

sea and air force commander. Of these only the land force commander – Field Marshal William Slim, made an impact upon history. But the command structure set up by India to reconquer Burma – arguably the best land campaign against the Japanese in World War II is another example of a brilliantly successful war, fought in a joint way. Post independence wars offer a poor comparison to the Burma model, and that includes all our wars, including the unfortunate debate that surfaced about the use of the air force in Kargil.<sup>9</sup> The tragedy about this last controversy is that there is very little to distinguish it from the deathly silence in 1962 on why India did not use air power in a superior tactical situation against the advancing Chinese.

These historical examples are only the necessary background to what must form the core of this paper -- why the absence of jointness is crippling modern India's security strategy? To understand this one must go back to the end-eighties when the Soviets were in Afghanistan, the Cold War was about to end, and Pakistan had become a nuclear power (1987) according to the now infamous A.Q. Khan press interview. With the commencement of the 'Azaadi' campaign of terrorism in Jammu & Kashmir came the Indian decision to weaponise its latent nuclear capability. Pakistan was building ballistic missiles, the secret deal with the Chinese had already been signed by Islamabad and the Soviet colossus was about to collapse, freeing the Central Asian Republics to go their own way. India was on the look out for long-range aircraft, for the first time in the history of the Indian Air Force, the Army was seriously into satellite communications and the Defence Research and Development Organization (DRDO) had just put together a ballistic missile -- the Prithvi, the worst surface- to- surface missile which did not meet the requirements of India's nuclear deterrent.<sup>10</sup>

A decade later the strategic world around India had changed forever. The Chinese juggernaut was running full speed, the Soviet Union had collapsed and the Americans had just demonstrated the power of littoral warfare and 'dominance of the battlespace'. It was in this ambience that India became a nuclear weapon power and was confronted with the choices that all nuclear powers have to make - - the crafting of the necessary command and control apparatus. Having spent the Cold War years, whining and complaining about nuclear weapons, the nuclear arms race, nuclear Apartheid and the imminent risk of nuclear war, the Indian strategic community was ill prepared to become a competently managed nuclear weapons power, in its own right. The first hurdle to get over was the route and method to be adopted to bring the armed forces into the picture. Until 1998, their only role had been to dig the holes in Pokhran to receive the weapons to be tested. The second task before the nation was to

define the human and technical aspects of the command and control system.

Upto 1998, the only organization that had any idea of a command and control system were the three Services. The Director General of Military Operations (DGMO's) operations room had been used on many occasions as a national command post, most notably at the meeting to launch Operation Cactus – the brilliant recapture of Male, in the Maldives. The Indian Navy was the most familiar with the technical aspects of creating a cohesive tactical picture, and the air force lived and fought with the Air Defence Ground Environment System (ADGES). But the services were as yet out of the loop, and the bureaucracy, most notably the Cabinet Secretariat was not going to give up without a fight. A Special Secretary was appointed to convene a group to decide on the parameters of a National Command Post and at the first meeting the Chairman made it clear that he had not the faintest idea of what he had been tasked with.<sup>11</sup> A few years later, an NSA had been appointed and combined with the post of the Personal Secretary to the Prime Minister. He became the supreme functionary in the land. At this stage, the NSA's office had all the powers and advice to have installed a well crafted command and control system, but over a period of four years, every opportunity presented was allowed to lapse, unexploited.

During these years the services began to slowly grow apart until pulled together by what must be regarded as the best reforms of the post-independence national security apparatus – the Arun Singh committee's work on higher decision making. The other aspect of the first decade was the fact that the pace of institutionalizing the C2 system was not driven by any internal initiative, but the anxiety created by the speed at which Pakistan was putting its act together, and the mounting threat of nuclear collusion between China and Pakistan. The external stimulus forced the NSA to create the Strategic Force Commander (SFC), but to this day, his reporting chain remains as ambiguous as when the post was created. The reason for this was two fold – firstly the post of the CDS was not approved, before the Arun Singh committee was dissolved, and George Fernandes re-entered the Defence Ministry, having survived the Tehelka scandal. Hence the SFC has no senior officer between him and 'civilian control'. The second was that the NSA, who was authorized to have a staff, when first created, put together a secretariat – which still functions as such. The latter failure stems from the civil and foreign office bureaucracy's inability to understand the difference between a staff and a secretariat. Had the first NSA run a genuine staff, including a nuclear staff, the SFC could have legitimately been fitted in under the NSA, at least for its

operational functions. However, the failure of the MOD to create a CDS, and the failure to create a nuclear staff under the NSA, left the SFC, dangling like a puppet on a chain, held by two or three people at the same time.

Behind all these institutional lapses, there is the looming failure of Human Resource Development (HRD). At every level of the government, people who had never read or studied nuclear weapons or nuclear deterrence, suddenly found themselves occupying responsible posts charged with executing a nuclear staff role. The failure affected all levels. Nuclear weapons and nuclear policy, must for instance be conducted with a certain level of transparency, because unlike conventional weapons, they are not meant to 'surprise' the enemy and 'defeat' him. These are common sense conclusions, which an average government officer should comprehend. Yet, to this day there is no commitment to any degree of transparency at any level of government. No responsible nuclear signalling takes place and determine whether deterrence exists or not. The Armed Forces which has custody of nuclear weapons has begun to conduct ad-hoc courses for officers appointed to the SFC. While this is a step forward, what the services actually need is a specialization in nuclear warfare, just like artillery, signals or engineering. This is yet to be discussed. Worse, higher policy is being run by bureaucrats with not even the minimal exposure to nuclear strategy that armed forces officers are given.<sup>12</sup>

There is little doubt however, that the biggest failure to achieve the kind of cohesion that the Pakistan Strategic Planning Directorate (SPD) gives the Pakistani government, comes from a failure of jointness among the Indian Armed Forces. The outer edges of this failure began to emerge in the mid-nineties, when the Army began to seriously look at internal security as its bread and butter. The excessively infantry heavy Indian Army, began to see that power in New Delhi could only come from dealing with what irked the political leadership on a daily basis – insurgency and internal security. Therefore, despite the presence of almost one million para-military troops, and both international and Indian advice that internal security duties would destroy the Army, a certain section of the Indian Army seems wedded to the idea of fighting insurgency as a primary role.

This immediately separates the Army from the Navy and Air Force, neither of which sees any future in fighting Indians as their primary purpose. This also has other deleterious down stream effects. The insurgency fighting section of the Army is cynical about high technology, electronic sensors, data fusion, air power, computers and networking. There is clearly another forward thinking section of the

army that believes in creating a hi-tech army like the one that China is creating – 40 divisions of combat power, but they are in a minority. The Navy sees no future without satellites, networking, electronic warfare dominance and situational awareness and all of it, extra-territorial. The Air Force has long been in a cleft stick. Unable and unwilling to use airpower in fighting insurgents, despite the lapse of eighteen years of the nation's life having been spent on counter insurgency, the Air Force is now committed to winning the pure air war, as a prelude to any other operations -- and they are right in making that choice. But where the Navy and Air Force begin to fall out is the severe territorial limitations of Indian airpower – a condition the Navy is unwilling to accept.

Command, as everyone knows, is a non-starter without communications and in the nineties all the services realized the need to place their primary circuits on satellites. But the Army, first off the mark took the only transponder then available, in the C band while putting in an option for a C+ band later. The IAF was slowest off the mark since a troposcatter system already existed, and territorial static air defence could be managed on land lines. Hence they missed out on the challenges faced by the USAF, which is essentially an expeditionary air force, not having to defend the continental US in any conventional war. The Navy found no satellites with the footprint required of an aspiring Blue water navy. It's only choice was a dedicated satellite with a large foot print,<sup>13</sup> since its strategic vision was distinctly different from that of the Army and Air Force. The vision of all the three services is now coming to pass in 2007/08, fifteen years after the discussions first began. A tri-service satellite communication system could easily run of the IA's system, which has now opted for a much higher frequency and smaller mobile aerals.

The strategic command's and in a way, the nation's priorities of having a three-tier strategic command communication system has taken a relatively lower priority for the standard reason – that it is driven by officers not nearly as powerful as those driving the communications systems of the individual services. Much of this lacuna should have been ironed out with the formation of the Chief of Integrated Staff to the Chairman Chiefs of Staff Committee (CISC), the staff support to the joint office functioning under the CDS. The absence of a CDS has unfortunately cut the CISC off at the knees. This needs some amplification.

The CISC was supposed to integrate three important functions, which individual services were prone to do in their own way, namely, strategic assessment, budgeting and procurement. These were the

same functions that had been centralised in the UK, when that country created the CDS. In addition, the CISC had under him a nuclear staff under a junior three star officer. The first incumbent did a great job, representing the strategic interests of the nation in a tri-command pulling match with the DRDO (makers of missiles) and the Atomic Energy Commission (AEC). The nuclear staff functions of the CISC has now been given up, owing to the lack of authority of the CISC in dealing with authorities 'outside' the services. In the absence of the CDS, this function should have been performed by the chairman, COSC, but clearly some chairmen have shown considerably more commitment in performing their nuclear functions than others.

The consequences are serious for India's nuclear strategy. It is one thing to create a nuclear arsenal, single-mindedly and blindly, on the grounds that that arsenal fulfils the requirements of minimum credible deterrence stipulated in the country's nuclear doctrine. But how does one know whether there is deterrence or not? Most importantly who is this body that makes this calculation for the nation? The doctrine says that the arsenal is under civilian control. But what does that mean? Which civilian authority, institution or officer has the time, expertise and knowledge to conduct an Operations Research study to at least remove the subjective biases in arriving at what constitutes deterrence?<sup>14</sup> Offers were made during the tenure of the first NSA and NSCS to institute such an Operations Analysis body, but were declined.<sup>15</sup>

In the meanwhile, there are the disturbing instabilities created by the DRDO and the AEC being part of the strategic decision making group when in fact they operate both as government staff and as defence contractors. The acquisition of the ballistic missile Prithvi should be made into a case study of how the staff requirements system of the services were by-passed into acquiring a missile which did not fully meet the services' essential requirements for effective nuclear deterrence. There was an obvious conflict of interest in DRDO's role as a defence contractor and advisor to the government advocating acceptance of a system produced by it. This is totally unacceptable and has been repeated in the case of the Brahmos. The acceptance of the Brahmos has occurred owing to huge technological backwardness of the services in foreseeing, demanding, specifying staff requirements and overseeing the development and manufacture of strategic systems like ballistic missiles, strategic cruise missiles, satellites for communications, surveillance and map making and the communication and hardware for the National Command Post. Criticism on all these deficiencies bring the constant refrain 'we are getting there'.<sup>16</sup>

The services have been extremely competent in demanding specifying and overseeing the development of guns, ships, tanks, radars, sonars and Electronic Warfare (EW) systems, because all these subjects are taught to military officers and there are specialists dealing with such equipment and weapons. Since nuclear weapons, ballistic missiles, satellites and advanced systems belong to no single service, there is a frightening ad-hocism in their development and acquisition resulting from the absence of jointness and a CDS. It would not be an exaggeration to say that after 1995, when India became a strategic player, every strategic level acquisition that had joint capability has been a mess, while each service has meticulously managed its own single service acquisition programmes, be it tanks, submarines or aircraft. This neglect has to change.

Change can only come when strategic systems acquire an owner, in the same way that tanks are owned by the armoured corps and submarines are owned by the submarine arm of the navy. Nuclear weapons, ballistic missiles and tri-service systems have no owners today, when in fact the chief owner should be the CDS, the most powerful of all owners. The Indian Army of all the three services, seem to have backtracked on the CDS concept, an idea that all previous army chiefs had fought for. In many ways the disarray in the higher defence set-up is as disappointing as it was in the US when the Goldwater–Nichols Act <sup>17</sup> was passed and jointness thrust forcibly on the services. But where are the Indian Goldwaters and Nicholse?

The country needs a joint tri-service national security strategy, a requirement that the integrated staff realized and accepts. To write the strategy, a strategic background has to be first written. This has been done. However, the National Security Strategy is currently being attempted by a number of Track two outfits in Delhi, with varying degree of success. In the nuclear arena, the problem is unambiguous and there should be no serious dissension. China has a strategy of tying India down south of the Himalayas, using Pakistan as a proxy. Therefore, unless India acts with determination and urgency, we could end up with a nuclear arms race, the outlines of which are already discernible. The latest act of perfidy and duplicity is in arming Pakistan with a cruise missile (Babur) with a strategic capability (range of 1,000 km), unlike the Brahmos. The Babur harkens back to the Chinese Hong-Niao, which goes back to the Ukranian AS-15/kh-54 which goes back to the American Tomahawk. The Babur will inevitably form the backbone of a first-strike capability, with the Chinese factory made Shaheen II as the long range first strike. The Shaheen I will probably be relegated to a second strike role. China's nuclear strategy is therefore Paksitan's nuclear strategy and we are the victims.

The Indian answer to this carefully crafted collusive strategy is yet to be worked out. The question is, who will do it? Without jointness, the Indian reply has so far been disjointed and haphazard. The earlier technological failings in the joint arena has manifested itself once again in partial acceptance of the Brahmos, a great technology feat, but utterly irrelevant to India's strategic needs. The problem is really that there is no joint strategic input to the political leadership. This is a tragic case of national security mismanagement, and there will be a price to pay.

#### CONCLUSION

The IA, as the biggest service, turning its back on the CDS and jointness deals a fatal blow to an integrated national security strategy.<sup>18</sup> The matter must therefore, in the national interest, be taken to a higher level – a level above that of inter-service rivalries and squabbles. A good place to begin is where the Arun Singh Committee finished off. Another committee or commission headed by a national level thinker, like K. Subrahmanyam or Arun Singh, or Naresh Chandra needs to be appointed to look into creating the mechanisms for evolving joint national security strategies using the existing framework. This committee, should preferably have Parliament's or the Parliamentary Committee on Defence's backing and support. It should be tasked to look into creating the mechanisms that will pull the services together, institute a strong supportive HRD process to kill single service domination, and identify the accountability for crafting all levels of strategy. □

#### Notes

1. There is no open literature on these bureaucratic skirmishes but those posted in services headquarters in Delhi would be more than aware of the history of this internal conflict.
2. For a detailed account of the Indian recapture of Srinagar and the Valley, see *Operations in Jammu and Kashmir 1947-48*, Ministry of Defence, Government of India, Thomson Press (India) Ltd., New Delhi 1987, as also Maj. Gen. L.P. Sen, *Slender was the Thread*, (New Delhi, Orient Longmans). For a record of the Tangail paradrop see General J.F.R. Jacob, *surrender at dhaka*, Maohar Publishers and Distributers limited, new delhi, 1997, pp.125-127
3. For a history of the earlier Rana revolt, see Werner Levi, *Government and Politics in Nepal*, *Far Eastern Survey*, Vol. 21, No. 18 (17 Dec 1952). For a readable record of the run up to the disastrous Chinese war, read Maj. Gen. D. K. Palit, *War in the High Himalayas* (London: St. Martin's Press and C-Jurst & Co, New York & London).
4. The UK's organization, suited to a Parliamentary form of government is contained in the MoD homepage at [www.armedforces.co.uk/mod](http://www.armedforces.co.uk/mod).

5. Depinder Singh, Indian Peacekeeping Force in Sri Lanka, 1987-89 (Natraj – Dehra Dun).
6. Author's own experiences as the Assistant of Chief of Naval Operations in Naval Headquarters, 1991-93. On one occasion, intelligence passed by the Navy to RAW came back to Navy, a week later as original RAW intelligence.
7. Lecture by General (later Field Marshal) Manekshaw at the DSSC, Wellington, Summer 1989.
8. Soldiers and Statesmen 1914-1918. v.2, Robertson, William, Bart, William London: Cassell, 1926, ix, 327p
9. Bisheshwar Prasad (Ed.), The Reconquest of Burma; Vol-1 (Official history of the Indian Forces in the Second World War 1939-45) Official History. Combined Inter Services Historical Section, India and Pakistan, 1958.
10. A volumetric calculation and hence the size of the Prithvi, compared to the range it achieves places it at near or at the bottom of the surface-to-surface missiles of the world. The large size relative to the range forces the user to carry the extra weight and volume for the entire life of the missile.
11. The author attended that meeting in 1993 as the representative of the NHQ and was appalled at the farce into which it degenerated into. The absence of any kind of a central NCP surfaced again during the Kandahar hijacking when the criminals managed to remain comfortably ahead of the Indian government.
12. Since 2002, ad-hoc courses to armed forces officers have been given by USI of India, by the Centre for Policy Research, New Delhi and the Centre for Air Power Studies, New Delhi. The author conducted the first such course on behalf of the USI. No similar courses exist for the civilian bureaucracy.
13. The services requirements of satellite communications are provided by the Army's Signal Corps, which uses a civilian transponder suited to the footprint of civilian use. The Navy's Blue water aspirations requires a much larger foot print and hence the Navy's dedicated communications satellite is currently being built separately.
14. Many analyses show that Pakistan's strategic missile programme is running ahead of India's and hence Pakistan nuclear arsenal may be at a higher level of maturity.
15. A The author offered to run a mathematically based analysis project for the old NSA for quantifiable problems like deterrence, but the offer was declined.
16. There is little doubt that 'we are getting there', but in the absence of jointness there are no mechanisms or organisations to manage the new systems.
17. Attempts to reorganize the US DOD through Congress resulted in Bills that were put up in 1982 and 1982, but were defeated. The reorganization attempt sponsored by Senators Goldwater and Nichols was passed in 1986. Further amendments to strengthen the position of the chairman, Joint Chiefs of Staff were made in 1987 and 1989. The final changes resulted in the promotion of all officers in the four services being subject to fulfilling criteria joint service appointments.
18. After having pushed the idea of a CDS for over two and a half decades, the Army Chief in 2006/07, turned his back on the idea, while the Navy chief was the Chairman of the Chiefs of Staff Committee. The Air Force held all along that 'cooperation' between the three services was adequate.



# **Exploiting The Electro-magnetic Spectrum In Jointmanship**

S.R.R. Aiyengar

## INTRODUCTION

Military Operations are executed in an increasingly complex Electro-Magnetic (EM) environment. Electronic Warfare (EW) is a military capability that must be integrated into a given military operation as it supports all phases and aspects of the campaign. This is equally applicable in the planning and conduct of joint operations. It has become the principal means waging and winning a war. The vast array of capabilities, skills, techniques and organizations of war is a recipe for chaos without thoughtful planning to assure interoperability, synchronizing and synergy. To retain the freedom of action required to apply maximum combat power at a chosen point in the battle it is vital that a Commander must be able influence the Electro Magnetic Spectrum (EMS). This influence either by dominance or control can only be achieved through holistic EMS planning in conjunction with commander's operational plans.

The EMS is an inexhaustible national asset and it can be used without depletion, but it is limited in capacity. These principles equally apply in the conduct of Joint operations. A Joint force commander in the operational theatre plans and fights the campaign while component commanders exercise tactical control of land, sea and air forces. The integrated battle concept recognizes the symbiotic relationships of land, maritime and air forces and underscores the fact that no single service can win war by itself. Effective command and control of EW assets in Joint operations would comprise of direction at the highest level to achieve unity of purpose, combined with delegation of authority for achieving objectives to the lowest level appropriate for the most effective use of various assets available for the accomplishment of the mission. To fully comprehend the conduct of Joint EW operations in the Indian context, it is necessary to have a comprehensive overview of systems, procedures, and organizations in place as on date and identify future courses of action.

## SCOPE AND PURPOSE OF THE STUDY

This study aims to analyse the current status of exploiting the EMS in jointmanship in the Indian context. After a brief overview of the concept of EW per-se and as a sub-set of Information Operations/Warfare (IO/IW), the analysis examines the individual services EW perspectives. As the services provide most of India's EW assets, a basic understanding of each service's perspective would greatly facilitate the planning and coordination of EW at the joint level. Thereafter, all the connected issues relevant to the planning, coordination and integration of EW for joint operations are looked at.

Doctrinal support for joint EW operations would be examined to highlight the training aspects as also the institutional support to be in place for an effective EW at all levels of operations to include strategic, operational and tactical keeping in mind the scope of joint operations in the Indian context. Management Challenges as also certain EW aspects very specific to the existing tri-service commands, i.e., Andaman and Nicobar Command (ANC), and Strategic Forces Command (SFC) as also the proposed Aerospace Command will be examined. These represent arenas for major joint operations in the future. The study will culminate with a few suggestions for necessary action and deliberation. Experiences/Lessons learnt from some of the joint operations conducted by Indian Armed Forces in the past have also been incorporated. As always, in a study of such a nature, it is never the intent to restrict the judgment of a commander in executing the mission in a manner he deems most appropriate, but to ensure unity of effort in the accomplishment of the overall mission of the joint operations.

## CONCEPT OF ELECTRONIC WARFARE (EW)

EW aims at controlling the EMS by attacking an adversary's ability to effectively use the spectrum, while protecting the friendly use of it. A thorough knowledge of the adversary's use of the spectrum is required to effectively employ EW. It pervades all aspects of the modern battlefield and has the potential to have an impact on all elements of the Command and Control (C2) cycle. EW resources are used to monitor the adversary's activities in the EMS, indicate adversary's strength and dispositions, give warning of adversary's intentions, deceive and disrupt sensors and C2 processes, and safeguard the friendly use of the EMS. The integrated use of EW throughout the battlefield supports the synergy needed to locate, identify, damage and destroy enemy forces and C2 structures.

The activities of EW are applicable across the whole spectrum of military operations and are not confined to warfare, conventional or

otherwise. In peacetime, armies attempt to intercept, locate and identify the source of a potential adversary's electronic emissions. Analysis may reveal details of capabilities as well as vulnerabilities that can be used to gain an advantage in times of conflict. Although EW is targeted against the technology, the ultimate effect is on the commander's ability to move through the C2 cycle. The human element of the command system is both the strongest and weakest link, and can be fairly enshrouded in the fog of war if supporting communications and information systems are disrupted, degraded or deceived. EW often provides commanders with substantial capabilities to electronically influence and control the battlefield. EW is also an area of considerable innovation. Inevitably, and often very rapidly, advantages gained by technological or procedural changes are met with equally effective countermeasures.

EW is an overarching term that includes three distinct components namely:

- Electronic Support Measures (ESM);
- Electronic Counter Measures (ECM);
- Electronic Counter Counter Measures (ECCM).

Electro-Optical (EO) systems are finding their way into nearly all military applications in the battlefield, such as day and night surveillance and observation, weapon targeting, fire control, tracking, ranging, missile guidance and communication. The side with capability to degrade the opponent's EO systems will have the winning edge and this adds yet another dimension to EW — Electro Optical Counter Measures (EOCM). Directed Energy Weapons (DEW) are the weapons of the future. The EOCM mentioned earlier would fall in the in the ambit of 'Low Power Lasers (LSL)'. 'High Power Microwave (HPM)' and 'Charged Particle Beam (CPB)' are presently in the advanced stages of application research.

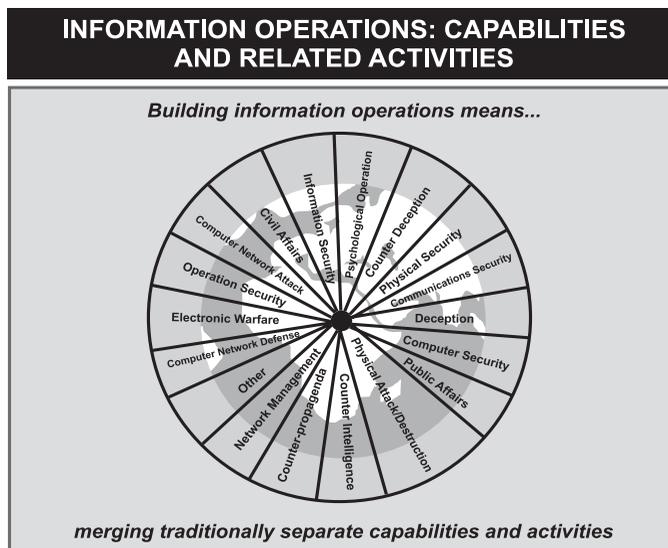
#### EW AS A PART OF IO/IW

EW is an important part of Information Operations(IO). Information Warfare (IW) is IO conducted during the time of crisis or conflict. EM energy is the means by which modern information systems process and store information. EM energy is also used for sensing, measuring, analyzing, and communicating information. This dependence on EM energy and use of the EMS by the systems that sense, process, store, measure, analyze, and communicate information create IO/IW opportunities and vulnerabilities that EW can address. ECM tactics, techniques and procedures from a variety of EW platforms can offer a range of lethal and non-lethal options to affect adversary information and information

systems. ECCM tactics, techniques, and procedures are essential to protecting friendly information and information systems. ESM is a primary means for gathering information during joint operations.

All EW activities conducted as part of or in support of joint operations should be coordinated through the IO/IW cell of the joint staff in order to realize the potential synergistic benefit of synchronizing the efforts of all the capabilities and related activities of IO/IW in a coordinated manner (see Figure 1). Specific activities and concerns that must be coordinated across IO elements and activities include Psychological Operations(PSYOP), Operations Security (OPSEC), military deception, physical destruction and computer network warfare. The deconfliction and coordination of EW activities in an operation is a continuous process for the IO/IW cell and EW staff personnel.

Figure 1. Information Operations and Related Activities



Source: Joint pub 3-13--Joint Doctrine for Information Operations

### SERVICE PERSPECTIVES OF EW

Planning and execution of Joint EW is affected by the different viewpoints on EW held by the three Services. Although formal definitions are standardized, different operational environments and tactical objectives lead to variations in perspective among the three services.

**Indian Army:** The focus of Indian Army(IA) EW operations is based on the need to synchronize lethal and non-lethal attacks against adversary Command,Control and Communications(C3) targets. Army EW systems disrupts,delays, diverts, and denies the adversary while protecting friendly use of communications and non-communications systems. The perspective of Army is directly associated with the combined arms structure of adversarial forces and the manner in which both friendly and adversary combatants conduct combat operations. The high mobility of opposing combat forces and the speed, range, precision accuracy, and lethality of their weapons systems place stringent demands on the C2 systems of both friendly and adversary ground force commanders. Organic EW resources available to support IA operations are limited. Mission requirements usually exceed operational capability.

Cross-service EW support, synchronized with Army combat operations, is essential to the success of joint military operations. Joint planning and continuous, effective coordination are critical to synchronizing joint EW capabilities and generating joint combat power at the critical time and place in battle. The Army has its dedicated EW systems to support Low Intensity Conflicts Operations (LICO) or when engaged in Counter-Insurgency (CI) operations. An integrated EW system for exclusive employment in mountains is also under active consideration.

**Indian Navy:** Naval task forces use all aspects of maritime environment and EW in performing their naval warfare tasks. Emphasis is given to surveillance, the neutralization or destruction of adversary targets, and the enhancement of friendly force battle management through the integrated employment and exploitation of the EMS. Naval battle groups employ a variety of organic ship borne EW systems, primarily for self protection. Naval aviation forces with dedicated EW systems on board (if and when made available) are the primary means by which naval forces take the EW fights to the adversary at extended ranges. Naval task force use of the EMS encompasses measures that are employed to:

- Coordinate, correlate, fuse, and employ aggregate communication, surveillance, reconnaissance, data correlation, classification, targeting, and EM attack capabilities;
- Deny, deceive, disrupt, destroy, or exploit the adversary's capability to communicate, monitor, reconnoiter, classify, target, and attack;
- Facilitate anti-ship missile defense; and
- Direct and control employment of friendly forces.

**Indian Air Force:** The Indian Air Force (IAF) conducts a variety of EW operations, including ECM, ECCM, and ESM. In addition, EW supports

Suppression of Air Defences (SEAD) and IO. The object of these operations is to increase aircraft survivability, enhance the effectiveness of military operations, and increase the probability of mission success. The IAF's EW system development and deployment focus on this task. The Air Force uses an integrated mix of disruptive and destructive EW systems to defeat hostile integrated air defenses. Disruptive EW systems, (e.g., self-protection jamming) provide an immediate but temporary solution. Destructive systems provide a more permanent solution, but may take longer to fully achieve the desired results. The integrated use of destructive and disruptive systems offsets their individual disadvantages and results in a synergistic effect. Successful EW operations emphasize risk reduction while still maintaining mission effectiveness. The military significance of EW is directly related to the increase in mission effectiveness and to the reduction of risk associated with attaining air superiority. The Air Force employs a variety of ground, air based assets to accomplish these tasks. Space based assets when made available can further these efforts.

#### PLANNING, COORDINATING AND INTEGRATING EW FOR JOINT OPERATIONS

EW is a complex aspect of modern military operations that must be fully integrated with other aspects of joint operations. This is necessary if one is to achieve EW's full potential for contributing to an operation's objectives. Such integration requires careful planning. EW planners must be concerned with coordinating their planned activities with other aspects of military operations which use the EMS as well as third party users of the spectrum that EW does not wish to disrupt. Coordination of military use of the spectrum is largely a matter of coordinating with other staff functions as well as the other elements of IO, such as 'Psychological Operations' (PSYOPS) planners and components which rely on the EMS to accomplish their mission. Coordination of EW activities in the context of third party use of the EMS is largely a matter of spectrum management and adherence to established frequency usage regimens and protocols.

Like other aspects of joint operations, joint EW is centrally planned and decentrally executed. Since the Armed Forces provide most of the country's EW assets available in joint operations, Service component EW planners must be integrated into the joint planning process. The role of EW in Joint operations must be viewed in the larger context of 'Command and Control Warfare (C2W).

C2W is the approach to military operations which employs all measures (including but not limited to Operations Security, Military Deception, Psychological Warfare, EW and Physical Destruction), in a deliberate manner, mutually supported by intelligence and information systems, to

disrupt, or inhibit an adversary's ability to command and control his forces while protecting and enhancing our own. These five elements must be used in varying degrees and the critical aspect of C2W is the synergism gained by planning and conducting all the five elements in a coordinated manner. Traditionally the planning responsibilities for these elements have resided in separate elements of any headquarter.

There is now a need to make them function under a single entity namely the Joint EW Control Centre (JEWCC) to be set up in each Joint Headquarters as part of the 'Operations and Planning' branch of the controlling headquarters. In this way, each of the five elements is employed to accomplish its intended mission without adversely affecting any other contributing component. Once the Joint EW plan has been formulated, EW planners must monitor its execution and be prepared to carry out any modification to the original plan as the dynamics of the operation plan dictates. A suggested charter of responsibilities of the proposed JEWCC is attached at Appendix 'A'.

**EMS Management:** Since EW activity takes place in the EMS, joint EW planners must closely coordinate their efforts with those members of the joint staff who are concerned with managing military use of the EMS. Joint EW planners should establish and maintain a close working relationship with the frequency management personnel. An integrated set up called the Joint Frequency Management Centre (JFMC) is a necessity for identifying the requirements for friendly communication nets, EM navigation systems, and radar. These requirements should be considered with respect to anticipated operations, tactical threat expected, and EM interference considerations. Once identified, these should be compiled as 'Joint Restricted Frequency List (JRFL) under appropriate categories like 'Prohibited/Taboo/Guarded' functions, nets and frequencies. JFRL is a critical management tool in the effective use of EMS during military operations.

A JFMC must be established at each of the Corps and Joint Headquarters (when established) whose responsibility is to prepare the JFRL and assist the EW staff in the planning process of EW operations being conducted jointly or by earmarked service EW assets. Automated frequency management tools can be a great help. Assessment of EM environment (EME) conducted during the planning phase constitutes a best guess based on information available at that time. Following deployment and buildup, and during the actual employment of the joint force, the operational area EMS will create a new, and somewhat different, set of parameters. Further, this environment will constantly change as forces redeploy and as C2, surveillance, weapons systems, and other spectrum-use applications realign. Since EW is concerned with disruption

(ECM), protection (ECCM), and monitoring (ESM) of the EMS, EW staff personnel have a major role to perform in the dynamic management of the spectrum during operations. A comprehensive and well thought out JRFL and 'Emission Control (EMCON) plan are normally the two tools that permit flexibility of EW actions during an operation without compromising friendly use of the EMS. EMCON is the selective and controlled use of EM, Acoustic or other emitters to optimize C2 capabilities while minimizing operational security viz. detection by enemy sensors minimize mutual interference among friendly systems and/or execute military deception plan. A suggested charter of responsibilities to be assigned to the proposed JFMC is at Appendix 'B' attached.

#### DOCTRINAL GUIDANCE FOR JOINT EW

Principles that guide the conduct of EW operations in individual services would continue to remain valid and continue to guide the conduct of EW in joint operations. However, the importance of planning and coordination of EW, dictates that the planning for such operations at the joint level must flow from the highest coordinating headquarters to avoid any duplication of effort.

The release of India's first Joint Doctrine on May 2006 marks a major step towards military integration and interoperability among the three services. Intended to complement existing individual service doctrines, the Joint Doctrine outlines the guiding principles for future joint operations by synergizing their operational capabilities. The new doctrine purportedly exhorts the services on the need for joint planning and resource sharing.

A beginning has also been made in the jointness in IW by the issue of a Joint doctrine on IW. However both these doctrines are classified documents and hence a critical appraisal cannot be made though it is believed that these are only of generic nature and do not address many existing inter-service doctrinal disconnects. A joint EW doctrine is essential for success because organizational synergies to be gained from joint efforts are as important as new military technologies which we may use for future operations. A well conceived and articulated doctrine reflects the collective will and intent and being a shared view ensures the much needed unity of effort. Acting as a guide it would need judgment in its application. Its value will lie in it being relevant, achievable, acceptable and adaptable. While evolving such a doctrine it has to be seen that it dovetails in the overall concepts of joint operations. A joint EW doctrine does not imply that it is advocating a separate phase of war but it is a strategy that would merge into the overall concept of joint operations. A joint EW doctrine would ensure a more focused effort towards a unified purpose

by a set of inherently inter-operable and synergistic joint capabilities. Such a doctrine would further the much needed 'joint mind-set' from the highest level of planning to the lowest tactical level.

#### ISSUES OF INTEROPERABILITY

Interoperability is essential in order to use EW effectively as an element of joint military power. Increased interoperability is a key prerequisite for enhancing jointness. The major requirements of interoperability are:

- To establish standards and practice procedures that allow for integrated planning and execution of EW operations (including joint EW); and
- To exchange EW information in a timely and routine fashion.

This exchange may be conducted in either non-real time or in near real time via common, secure, jam-resistant radios and data links. The ability to exchange near real time data (such as targeting information) enhances situational awareness and combat coordination between various force elements, including EW assets, is a critical combat requirement. This exchange of data relates to ESM, ECM, and ECCM, including friendly and adversary forces data. Routine exchange of data among joint force components, the joint force and supporting commands and organizations greatly facilitates all types of EW planning.

It is suggested that at the Headquarters Integrated Defence Staff (HQ IDS), a separate functional entity be set-up to initiate and oversee joint interoperability and integration initiatives and to suggest material and non-materiel solutions to interoperability challenges. This can be best done by working closely with the three services, DRDO and other government/public/private production agencies. This special entity could enlarge its scope of jurisdiction to include Command, Control, Communications and Intelligence (C3I) and other combat support systems thereby increasing combat effectiveness through interoperability.

#### MAINTENANCE OF EW DATA BASES

Automated EW databases can assist EW planners by providing easy access to a wide variety of platform-specific technical data used in assessing the EW threat and planning appropriate friendly responses to that threat. However, planners should keep several considerations in mind when relying on automated data. There are a large number of databases available to military planners. Some of these databases are maintained by the Services, others by various intelligence community

agencies or other Ministry of Defence (MOD) organizations, and allied organizations. Still other databases may be maintained by academic or private (profit or non-profit) organizations. "Threat" data is compiled by intelligence organizations. Compilation of accurate technical data in one place is a lucrative target for hostile intelligence collection. For this reason, access to friendly forces data must be highly restricted and harder for planners to obtain than threat data which can be accessed through normal intelligence channels. The level of detail, specific fields, and frequency of update may vary widely across different databases dealing with the same data. The way that data is organized into fields in a database and the level of detail are functions of what the data is used for and the cost associated with compiling and maintaining each database.

The sources of data being used for planning should be a topic of coordination among EW planners. If necessary, joint planners should provide guidance about what sources of automated data should be used for specific EW planning purposes. Planners should request that organizations that maintain important sources of EW data update their databases (or specific parts of them) more frequently than normal when planning specific operations. Planners should be cautioned about using unofficial sources of data, especially those available through the Internet which may be subject to manipulation by organizations hostile to national policies and objectives. However, open source intelligence remains a viable and important source of valuable information. Continuous maintenance of data bases during peacetime permits rapid identification of voids, which then becomes the priority areas during a crisis. Two technologies have been central in improving the qualitative and quantitative value of the knowledge available to decision makers: Data mining techniques and Knowledge management technologies. Adoption of these techniques and technologies will help in taking advantage of all available information both internal and external to the EW systems.

#### EW IN JOINT EXERCISES

The practical meaning of jointness is derived essentially from promoting joint exercises, and will emerge as operational forces work out the myriad aspects of what joint operations entail. Joint exercises are a unique opportunity to exercise component EW capabilities in mutually supportive operations. Identification EW exercise objectives must be consistent with the overall exercise objectives in scope, purpose, and the level of effort. Such exercises must ensure that the development of EW concept of operations is integrated into the larger concept of IO/IW. Missions, organizational procedures, structures and coordination channels must be designed and tried out to meet war time requirements. While

conducting joint exercise(s), it is expected that each service would share their experience and problems faced so that weaknesses can be addressed jointly if need be. Also the strengths of each can be optimized to its maximum effect especially if there are voids in a particular field or application. Peacetime training and operations stress the development of procedures for employment during war.

For training purposes the EW environment in an exercise should be as realistic as possible. However, the need for realism to support training must be weighed against the concern for safety and avoiding disruption of the EM spectrum used by third parties, both civilian and military, outside the scope of the exercise. When planning joint exercises with foreign armed forces, we need to address difficulties that may crop up because of ill-defined security issues, different crypto equipment, differences in the level of training of involved forces and language barriers. We also need to develop a clear and easily understood policy on the disclosure of EW information.

Many important technologies in the area of networking, simulation, virtual reality, and artificial intelligence have moved from behind the walls of military secrecy into the commercial sector. There is an urgent need to develop a "Joint Electronic Combat EW Simulator" to depict force-on-force simulations. Such an initiative would provide enhanced capability to train battle staffs in the planning, execution and evaluation of EW for a wide range of battlefield scenarios. This will also ensure avoiding excessive wear and tear of operationally deployed EW assets. There are also several automated aids and software tools available for war gaming and other allied planning processes. Use of automated tools to integrate different elements of IO/IW would also very useful to EW planning staff. The variables that affect the propagation of EM energy are known and subject to mathematical predictability. The use of automated analysis tools that graphically display transmission paths of such energy can be a useful aid in EW planning.

#### DEVELOPMENT/PROCUREMENT OF EW EQUIPMENT

Reliable, effective and affordable equipment that exploits high technology is essential to provide the battle winning edge. Long term development period of much modern EW equipment require the decision of procurement based on an informed assessment of how the EW threat scenarios likely to emerge over the next ten to twenty years. However this is notoriously difficult to predict. This necessitates procurement priority to be given to systems, which have the inherent flexibility, or can be easily modified or adapted to the changing circumstances. It is hence important to identify those critical disruptive technologies which are likely to have a major

influence on EW capability. It is an acknowledged fact that the present pace of development and productionisation of indigenous EW systems hardly inspires the users. The inordinate delay and huge cost and time overruns are a cause of concern.

There is a need for the apex decision making body of the nation to ensure that EW equipment procurement program integrate the needs of the timely introduction of replacement items, funded and managed on whole life basis with due allowance for planned updates during their life time. Ensuring commonalty of equipment where feasible will not only reduce costs but also ensure greater degree of inter-operability leading to better coordination. Robustness and innate capabilities of domestic defence industries making strategic electronic equipment or under license arrangements is vital. Critical voids need to be made up by procuring minimum operationally inescapable EW assets ex import if need be on priority. Budgetary support for such acquisitions must be ensured. HQ, Integrated Defence Staff (IDS) could prioritize such acquisitions. As EW is technology intensive and thus expensive, there is a case for coordinating the procurement of EW equipment as well as standardization. Certain features like interception of High Frequency signals and Radar surveillance could also be coordinated between the three services. There is also scope for identifying spares of indigenous variety meeting all the essential technical specifications to replace items bought ex import. The present practice of buying 'two years and five years' spares along with the imported main systems needs a relook, especially when indigenous near equivalents are available.

#### MANAGEMENT CHALLENGES

**National Information Board (NIB) :** The Kargil conflict led to a very comprehensive review of our security apparatus and higher defence management. On recommendations of the Kargil Review Committee, the Prime Minister appointed a Group of Ministers (GoM) to examine the national security system and to make appropriate recommendations. Among the many recommendations made by the GoM, setting up of a 'National Information Board (NIB)' was recommended. The NIB was approved by the Prime Minister in May 2002. The National Security Adviser (NSA) was to be the Chairman of NIB with the Cabinet Secretary, the three Service chiefs, Secretaries of all important ministries and heads of intelligence and research organizations co-opted as members. The main charter of such an apex organization would obviously be to develop policies and ensure its implementation by creation of appropriate institutions dealing with IW and Information Security. In doing so, NIB would ensure that the country develops a holistic approach in developing specific IW capabilities.

While the deliberations of NIB would be classified, it is hoped that this body meets regularly and monitors the progress on acquisition of the requisite IW capability keeping in mind the threat posed by our adversaries in the near and long terms. It is a sad commentary that while we are good at setting up such bodies, the follow-up and periodic meetings of such organizations are very unsatisfactory. In addition to the setting up of NIB, it is felt that there is a need for a full time working group on this issue. This group should be well represented by Services, DRDO, academicians, and experts, from legal, finance, industry and other sectors. This group would give inputs, which can supplement requirements and inputs given by Service headquarters. This group must be able to contribute to synergize the efforts at the national level. This group could be named as 'Information Warfare Advisory Group (IWAG).

Based on the national perspective plans, defence services should formulate a five year action plan including setting-up of appropriate institutional structures. Joint perspectives must be borne in mind while formulating service specific plans. To coordinate such efforts at the joint services level, it is recommended that a "Defence Information Operations Agency (DIOA)" be established at the HQ, IDS. As scope of IO extends across a time continuum from 'Peace, Crisis, Conflict and Return to Peace', DIOA could oversee all the related capabilities which includes, Computer Network attack, Deception, Destruction, EW, OPSEC, PSYOPS and related activities of Public affairs and Civil affairs. Such a set-up would help in understanding the environment, assess its interests and the adversary's pressure points and then use whichever capability or related activity that will best affect the adversary. A suggested organization of DIOA is at Appendix 'C'.

**Joint Electronic Warfare Board (JEWB):** Good precedence exists in that we already have a single point joint forum within the Ministry of Defence (MOD) with a charter to synergize the efforts of the three services in enhancing the Jointmanship in Electronic Warfare field, besides monitoring the EW projects implementation of the three services. It is presently chaired by Chief of Integrated Staff to Chairman Chief of Staff Committee (CISC) with members drawn from all the three services as also representatives from all concerned Production agencies and Defence research establishments. Over the years this forum has been actively utilized by the Services, industry's representatives and DRDO to project their views on matters pertaining to production and fielding of EW systems. With no executive authority and financial powers, JEWB is often relegated to an advisory and status monitoring roles only. While the issue of the appointment of a Chief of Defence Staff (CDS) continues to be wide open, the Services need to re-engineer themselves to fit into a mould of

jointness to make the JEWB to play a more pro-active role. Some areas of concern that needs immediate attention include:

- Fielding of Integrated Non-Communications EW systems for the Indian Army.
- Dedicated EW systems for LICO in both Northern and North-Eastern sectors.
- Elevated EW platforms for enhanced range and area coverage.
- Track based EW platforms to support to fast moving and highly mobile mechanized forces.
- Development of Directed Energy (DE) weapons system to damage or destroy adversary equipment, facilities and personnel by a beam of concentrated EM energy or atomic or subatomic particles. Possible applications include lasers, radio frequency weapons and particle beam weapons.
- Satellite Communications and Cellular Communications monitoring systems at the field level.
- Acquisitions of systems to take on enhanced frequency coverage, use of 'frequency hopping' 'communication equipments, induction of 'Software Defined Radio' sets and growing sophistication of anti-jam propagation techniques.
- Qualitative technological improvement of Direction Finding (DF) sub-systems to achieve greater accuracy and flexibility in its deployment.
- With increasing use of secrecy devices as also use of 'frequency hopping sets', detection and interception of signals/messages have become more challenging. Technology forecasting must be an ongoing exercise in the design and configuration of EW systems, integrated or discrete.

### Joint Services EW Group for ANC

Flowing from the Task Force recommendations, ANC was established in 2001 as part of a larger plan to enhance inter-service integration and promote 'jointmanship'. ANC has no dedicated EW set-up in its ORBAT, as on date. It is for consideration that a dedicated 'Joint Services EW Group' be raised to provide the EW support to ANC for its strategic and operational missions. This would form the basis for other such integrated commands that may be set up later. In carrying out their assigned tasks, their responsibilities would include some of the following;

## *Exploiting the Electro-Magnetic Spectrum in Jointmanship*

- Coordinate EW operations with other strategic/operational/tactical operations.
- Joint EW planning efforts and preparation EW appendices to Operation plans.
- Supervise the implementation of EW policies and instructions within the ANC Commander's operational area and supervising the adaptation of those plans to meet operational contingencies.
- Preparation of the JFRL for specific operations and exercises within the operational area.
- Monitor the number, type and status of EW assets within the operational area or involved in specific operations or exercises.
- Supervising the analysis of EW plans and activities during operations and exercises within the operational in order to derive lessons learned.

The exact composition and structure of the proposed Joint Services EW Group could be worked out by a team of EW experts from each Service and the Coast Guard and based on the availability of EW assets and participating force levels. In fact this exercise could be a good test bed for future guidance as and when more Unified Theatre Commands are raised from within the existing resources.

### LANGUAGE SPECIALISTS/TRANSLATORS AND INTERPRETERS

This is a weak area which needs to be tackled on a priority. Both operations, namely Pawan (in Sri Lanka) and Vijay (Kargil) highlighted the reality that the MOD/Service HQ needs a significantly improved organic capability in languages and dialects of our neighbourhood region and a greater competence and regional area skills, especially in view of the 'out-of-area' contingencies. MOD needs to evolve a comprehensive road map to achieve this competency and keeping in mind a surge capacity to rapidly expand this capability at short notice.

### EW SUPPORT TO SPACE BASED OPERATIONS

Space is inexorably becoming the new high ground and Star Wars are no longer in the realm of science fiction. Physical destruction, laser blinding and electronic warfare are all likely to be employed to deny the enemy the use of his satellites and to safeguard the use of one's own satellites for their force multiplier value. India is on the threshold of entering a new era in space exploitation. There is a need to deliberate on how best the space assets could be integrated into our military operations. To this end

it is learnt that the IAF has established a Space sub-branch at Air Headquarters. It has also recommended the setting up of an "Independent Aerospace Group" to liaise with the Department of Space as the next 'logical step'. On the sidelines of an international seminar on Aerospace the former Air Chief, Air Chief Marshal SP Tyagi went on to say that the Government is seriously considering the creation of a tri-service Aerospace Command. The Defence Space Vision --2020 which outlines the road map for the Armed forces in the realm of space includes intelligence, reconnaissance, surveillance and navigation as the thrust areas in its first phase (2007-2012).

The ability to restrict or deny freedom of access to and operations in space is no longer limited to global military powers. Knowledge of space systems and the means to counter them is increasingly available on the international market. Nations if they wish can possess or acquire the means to disrupt or destroy an adversary's space systems by attacking the satellites in space, their communication nodes on the ground and in space, or ground nodes that command the satellites. The reality is that there are many extant capabilities, such as Anti-Satellite Weapons, Denial and Deception measures, Jamming, use of micro satellites, hacking and nuclear detonation that can deny, disrupt or physically destroy space systems and the ground facilities that use and control them.

More and sophisticated technologies for jamming satellite signals are becoming available. For example, it is learnt that Russia is marketing a handheld GPS jamming system. A one watt version of such a system, the size of a cigarette pack is able to deny access to GPS out to 80km; a slightly larger version can deny access upto 192 km. Both are compact and powerful enough to jam an aircraft's GPS receiver signal, which could disrupt military missions or create havoc at an airport. Such indicators of the potency of EW needs to be taken cognizance of and appropriate defensive steps initiated.

#### EW SUPPORT TO NATIONAL STRATEGIC ASSETS

India maintains a "no-first-use" "minimum nuclear deterrent," nuclear policy in the event of war as enunciated in its Nuclear Doctrine, released in 1999. India's Strategic Forces Command (SFC) was formally established in 2003. The joint services SFC is the custodian of all of India's nuclear weapons, missiles and assets. It is also responsible for executing all aspects of India's nuclear policy. However, the civil leadership, in the form of the Cabinet Committee on Security (CCS) is the only body authorized to order a nuclear strike against another offending strike. In effect, it is the Prime Minister who has his finger "on the button".

A Nuclear Weapon State (NWS) would normally need to have the following nuclear weapons infrastructure in place to ensure that it has a functionally effective nuclear force to meet its national security objectives:

- Research and development laboratories and testing facilities, including for computer simulation-based testing.
- Weapons manufacturing complex to produce fissionable material for warheads and to manufacture nuclear warheads.
- The nuclear arsenal, which would include ready warheads and the delivery systems necessary for delivering them on the selected targets—SSMs, ICBMs, IRBMs, fighter-bomber aircraft and SLBMs—and the base required for the storage and maintenance of nuclear weapons, along with the training and supply of nuclear forces.
- An integrated satellite, aerial and ground-based surveillance system to provide information and intelligence about the activities of inimical countries and to gather data for 'targeting'.
- An early warning and attack assessment system of radars, other sensors and processing stations to detect and provide inputs of warning and categorize attacks.
- A C2 structure to analyze data, make decisions, plan, direct and control the targeting and employment of nuclear weapons, should it ever become necessary.
- A fail-safe communication system with built-in redundancy to link the surveillance, early warning and command and control systems with the nuclear forces so as to distribute warning data and ensure the timely passage of execution commands.
- And, a well-conceived and rehearsed civil-defence system to minimize damage, treat casualties and to assist the civil population to recover from the ravages of nuclear explosions.

It is obvious that effective C2 of nuclear forces cannot be organized without appropriate communications, credible intelligence capabilities, survivable surveillance and reconnaissance means and computer networks to process the voluminous inputs and present suitable options for targeting and attack. In short, what is now called a C4SR system. Such systems would require a sound ECCM in place to ensure that the response that is visualized is executed with certainty and speed. The EW support must ensure that a viable C2 system fulfilling the following conditions exist:-

- It should be able to absorb a first strike and continue to function effectively.
- It should have real-time reconnaissance capability for the National

Command Authority (NCA) to assess the damage sustained, take stock of nuclear forces still available and their deployment areas to assist in the formulation of a plan of retaliation.

- It should have adequate computer processing facilities to permit rapid re-targeting of missiles and other nuclear forces prior to launch.
- There should be continuous, fail-safe two-way communications between the NCA and the nuclear forces for an appropriate response.
- And, a channel of communication with the adversary must remain available to permit negotiations for escalation control and conflict termination. (Strategic Analysis- IDSA, January 2000, Vol. XXIII, no. 10).

#### CONCLUSION

The current 'Revolution in Military Affairs (RMA) is based around the proliferation of information aids, electronic target acquisitions, and rapid decision-making to seize fleeting opportunities in the battlefield. Without doubt, the current RMA is one of information: what is it, who has it and how it is transmitted?

IW will dominate 21st century conflict. Those, whose detection instruments sequentially gather, interpret and disseminate faster than their opponents will make the most appropriate decisions and therefore execute the most effective operation. It is likely that the operational environment will be characterized by greater lethality, dispersion, increased volume and precision of fire. Better integrative technology leading to increased efficiency and effectiveness will be another feature of modern warfare. One will also witness a paradox of greater invisibility and increased delectability. Such a battlefield scenario will call for joint application of force and fighting as an integrated whole.

It also follows that future battlefields will be shaped by the deliberate targeting of an adversary's C2 systems, thereby limiting his capability for re-organization, redeployment and logistic reinforcement. The ability for the commander to 'see' the adversary's organization and interpret its moves provides him with the opportunity to attack in such a manner that he can destroy the adversary's ability to reorganize his combat power. The US experience in the recent Gulf wars highlighted the worth of this type of targeting; within hours of the 'air war' commencing, the Iraqi C2 system was significantly degraded.

However, friendly C3 systems, data networks and communication nodes will be increasingly threatened by an array of 'technology based,

EW 'soft-kill' systems focusing on the selective destruction of these assets. It is imperative that the commander implements a structured, deliberate procedure to ensure that his decision process and tools are protected. To achieve this level of security to our own assets and threat to the adversary, the EW capability of the deployed force must be organic to the organization. Such an arrangement will offer the commander a heightened degree of accurate and timely target detection, identification and response. A holistic approach to EMS management is vital to ensure unity of effort and efficiency of provision of the spectrum so as to maximize available combat power and retain the freedom of action on the battlefield.

The integration required for successful application of EW in joint operations means that planning must be conducted at the highest level. A dedicated organization for this purpose is a must at the Joint Force Headquarters wherein EW operations are dovetailed into the operations plan. Planning and conduct of Joint EW operations must be conducted based on a sound EW joint doctrine in accordance with advances in technology and place the personnel with the most responsibility for the conduct of EW at the forefront of the planning process. Dedicated staff of EW set-up must ensure that EW planning starts in the early stages of Joint operations planning and are coordinated with other aspects of operations plan every step of the way. Planning guidance for EW should be included in an operations plan. The review of lessons learned from previous, similar joint operations, exercises is an important and cost effective way to avoid documented mistakes committed earlier. Effective EW starts with well trained and qualified people and sound guiding doctrine backed by well established and practiced procedures.

#### **BIBLIOGRAPHY**

1. 'From Surprise to Reckoning,' Kargil Review Committee, SAGE Publications, 2000.
2. Major General Yashwant Deva, Sky is the Limit—Signals in Operation Pawan, Chapter 17, 'War of Frequencies', pp. 197-212.
3. General V.P. Malik, From Surprise to Victory, Harper Collins, 2006.
4. Lt Gen Depinder Singh, IPKF in SRI LANKA, Trishul Publications.
5. Air Commodore Jasjit Singh, Aerospace Power and India's Defence, Knowledge World, India.
6. Joint Publication 3-13, "Joint Doctrine for Information Operations", October 9, 1998, United States of America.
7. Brigadier Gurmeet Kanwal, 'Command and Control of Nuclear Weapons in India', Strategic Analysis, January 2000.

Appendix 'A'

(REFERS TO PARAGRAPH 12)

CHARTER OF RESPONSIBILITIES JEWCC

1. Coordination with tactical operations and other members of the Operations and Planning Staff.
2. Drafting and Supervision of the implementation of EW policies and instructions within the commander's operational area.
3. Serve as the command's principal delegate to EW planning and coordination meetings within the operational area.
4. Supervision of EW planning efforts and the preparation of EW appendices to operation plans.
5. Coordination of the planning for and preparation of EW in joint exercises within the commander's operational area.
6. Monitor the number, type, and status of EW assets within the operational area or involved in specific operations or exercises.
7. Represent EW interests in the preparation of the JRFL for specific operations and exercises within the operational area.
8. Monitor the execution of the EW plans in current operations and exercises within the operational area and supervising the adaptation of those plans to meet operational contingencies.
9. Coordinate and supervising the analysis of EW plans and activities during operations and exercises within the operational area in order to derive lessons learned.
10. Supervise the preparation and submission of EW lessons learned in accordance with After-action reports.

Appendix 'B'

(REFERS TO PARAGRAPH 13)

CHARTER OF RESPONSIBILITIES-JFMC

1. Develop and distribute spectrum use plans that include frequency re-use and sharing schemes for specific frequency bands as appropriate.
2. Periodically update and distribute JFRL as necessitated by changes in operation plans/tasking and phases of operations.

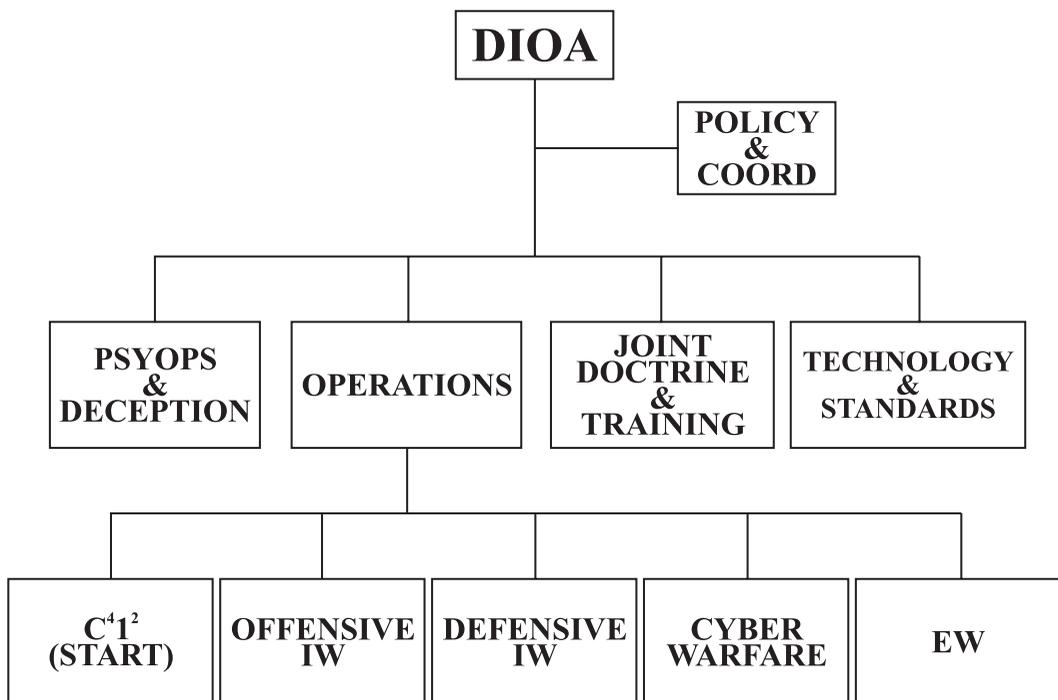
*Exploiting the Electro-Magnetic Spectrum in Jointmanship*

3. Provide administrative and technical support for military spectrum use.
4. Exercise frequency allotment and assignment authority allowing maximum latitude and flexibility in support of combat operations.
5. Establish and maintain common data base necessary for planning, coordinating and controlling spectrum use. This data base should contain spectrum use information on all emitters and receivers, military, civil available as appropriate for the area of responsibility involved.
6. Analyze and evaluate potential spectrum –use conflicts.
7. Receive, report on, analyze and attempt to resolve incidents of unacceptable electro-magnetic interference and refer incidents that cannot be resolved to the next higher spectrum management authority.

Appendix 'C'

(REFERS TO PARAGRAPH 22)

DEFENCE INFORMATION OPERATIONS AGENCY (DIOA) – HQ IDS



Appendix 'D'

(REFERS TO PARAGRAPH 28)

SUMMARY OF RECOMMENDATIONS

**Establishment of a Joint EW Control Centre (JEWCC):** (para 12). Like other aspects of joint operations, joint EW planning necessitates the setting up of a JEWCC. Such an entity will ensure that EW planning starts in the early stages of operational planning and coordinated with all aspects of operational planning in every step of the way. Suggested charter of responsibilities of JEWCC is at Appendix A.

**Setting up of Joint Frequency Management Centre (JFMC):** (Para 13). Most of the elements and activities of IO depend on, use or exploit the EMS for at least some of their functions. The deconfliction and coordination of EW activities is a continuous process and is best performed by the proposed JFMC. Suggested charter of responsibilities is at Appendix B.

**Compilation of Joint Restricted Frequency List (JRFL):** (Para 13). The preparation of JRFL—a time and geographically oriented list of frequencies to include Protected/Guarded/Taboo functions, nets and frequencies is an important prerequisite for the conduct of joint EW operations. JRFL is a critical management tool in the effective use of EMS during military operations. Care must be taken to ensure that it is limited to minimum number of frequencies.

**Formulation of EMCON plan:** (Para 13). EMCON very briefly is the selective and controlled use of EM, Acoustic or other emitters to optimize C2 capabilities while minimizing operational security, viz., detection by enemy sensors minimize mutual interference among friendly systems and/or execute military deception plan.

**Formulation of a 'Joint EW Doctrine':** (Para 14). Doctrine is a codification of professional norms and practice. While some beginning has been made in the form of the issue of a 'Joint IW doctrine', it should logically lead to the next step of the formulation of a 'Joint EW Doctrine'. Such a publication will ensure that all functional element of EW are guided in the support of joint operational objectives. A suggested scope of such a publication has also been indicated in the paper.

**Interoperability issues:** (Para 15). It is suggested that at the HQ, IDS, a separate functional entity be set-up to initiate and oversee joint interoperability and integration initiatives and to suggest materiel and non-materiel solutions to interoperability challenges. This can be best done by working closely with the three services, DRDO and other

government/public/private production agencies. This special entity could enlarge its scope of jurisdiction to include C3I and other combat support systems thereby increasing combat effectiveness through interoperability.

**Maintenance of EW Data Bases:** (Para 17). Automated Databases assist EW planners in providing an easy access to a wide variety of platform –centric technical data useful in assessing the EW threat and planning appropriate response to that threat.

**EW in Joint Exercises.** (Para 19). Joint exercises provide a unique opportunity to exercise component EW capabilities in mutually supportive operations. EW exercise activities must be well planned in order to balance EW training objectives with other training objectives. Because of the complexity of good EW planning and the impact that EW has on many other areas of joint operations, EW should be included in joint exercises. Post exercise and Evaluation prior to the conclusion of the exercise will help in compiling and documenting lessons learned.

**The Use of Simulators, Planning Process Aids and Graphic Analysis Tools:** (Para 20 refers). Many important technologies in the area of networking, simulation, virtual reality, and artificial intelligence have moved from behind the walls of military secrecy into the commercial sector. There is an urgent need to develop a “Joint Electronic Combat EW Simulator” to depict force–on–force simulations. Distributed interactive simulation, and networked virtual reality features offer tremendous opportunities for EW planning in a network centric environment. Incorporation of models of EM propagation will serve as a useful guide in the graphic display of transmission paths of EM energy. Such aids combined with operational experience would result in greater refinement of the art and science of application of EW in the new emerging ways of warfare.

**Development/Procurement of EW Equipment:** (Para 21). Though some new initiatives have been set in motion in the recent past to streamline procurement procedures, the in-ordinate delays in the development of indigenous EW systems are a cause of concern. Indigenous project “SAMYUKTA” is a case in point and could provide some useful lessons for the future. Critical voids that exist in our inventory need to be made-up, even if need be by importing systems. Budgetary support for such acquisitions must be assured. HQ IDS could prioritize such requirements. Technology forecasting must be an ongoing and concurrent activity in the design and configuration of future EW systems. Standardization and spares management would be a welcome step in enhancing Jointmanship.

**Functioning of National Information Board (NIB):** (Para 22). An apex organization NIB at the national level has been tasked to formulate National level IW policy in consonance with the overall national security perspective, direction, control and funding. It needs to be appreciated that the issues involved are of unprecedented complexities and inter-woven dependence at the levels of individual functionaries, organizations at the political, economic and social domains, more often with tremendous clash of interests. Periodic monitoring of various institutions and dedicated establishments towards acquisition of requisite IW capabilities must be done. At the national level a 'think tank' in the form of an 'Information Warfare Advisory Group (IWAG)' has been suggested in the paper. Defence Services in turn should formulate long term plans to begin with a 'five year' plan along with appropriate institutional structures. Joint perspective must not be lost sight off. To coordinate such efforts in conjunction with DRDO, a dedicated agency to be called as '**Defence Information Operations Agency (DIOA)**' has also been suggested. Its main task would be monitor and allocate resources to various institutions/specific IO capabilities being developed across the entire time continuum extending from peace to crisis to conflict and back to the restoration of peace. A suggested organization of DIOA is given at Appendix 'C'.

12. **Functioning of Joint Electronic Warfare Board(JEWB).** (Paragraph 23 refers). This forum has been functioning for some years. Efforts must be made to make this forum to play a more pro-active role in giving an increased sense of urgency for timely execution of EW projects. Areas of concern requiring more focused attention have been identified in the study.

13. **Fielding/Raising of a Dedicated Joint Services EW Group for the Andaman and Nicobar Command (ANC).** (Paragraph 24 refers). There is an operational requirement to have dedicated '**Joint Services EW Group**' for the ANC in view of the strategic role(s) assigned to it. The exact composition and structure of the proposed EW Group can be worked out by a study group comprising of members from all the three Services and Coast Guard and based on the availability of EW assets and the levels of participating forces. Such an initiative would also serve as a test bed for refining our doctrine/concepts of Joint EW operations. Suggested tasks that could be assigned to this EW group have also been stated.

14. **Availability of Language Specialists/Translators and Interpreters.** (Paragraph 26 refers). MOD needs to evolve a comprehensive road map to achieve adequacy and competency of personnel in languages and dialects of our neighborhood region especially

in view of the 'out-of-area' contingencies. We also need to keep in mind a surge capacity to rapidly expand this capability at short notice.

**15. Institutional Support for Development of IW Expertise.**

(Paragraph 27 refers) An '**Institute of Information Warfare (IIW)**' has been recommended to be set up either as an independent entity or to begin with an enlarged faculty at one of the existing premier training establishments under the proposed Indian National Defence University (INDU), with experts drawn from the Services, DRDO scientists, IT professionals and experts from political, legal and financial fields. Combat specific institutional support should be extended from service specific/ joint training institutions.

**16. EW support to SFC and Proposed Aerospace Command.**

(Paragraph 28-30 refers) These are emerging arenas for joint working in the future and would need some deliberation to identify dedicated EW support. Aspects which merit attention have been identified in the study.□



# **Jointmanship And Attitudinal Issues**

Mrinal Suman

## INTRODUCTION

Most leaders are professedly staunch proponents of the concept of jointmanship. They acknowledge the criticality of jointmanship to national security. In other words, jointmanship has no opponents. Yet, the reality on ground is diametrically opposite. Every step towards jointmanship is fought fiercely by many. This dichotomy, though perplexing, has been entirely due to incompatible attitudes. Attitude is an attribute of human behaviour and defies cogent reasoning.

This paper attempts to identify and analyze the underlying attitudinal reasons for dissonance and tardy implementation of jointmanship in the Indian Armed Forces, thereby imperiling national interests. Finally, major corrective steps have been recommended to manage attitudes and force the pace of reforms.

This paper is not about benefits that accrue from jointmanship in the armed forces. They are too well known to be recounted and re-emphasised. For decades military strategists of all countries have been writing about the criticality of jointmanship. It is also undisputedly agreed that the Revolution in Military Affairs (RMA) precludes segregated service-wise operations. It is common knowledge that in contemporary RMA-oriented warfare, joint operations constitute the key to battlefield dominance and military superiority.<sup>1</sup> RMA pre-supposes total tri-service integration in thought and action.

Jointmanship means conducting integrated military operations with a common strategy, methodology and conduct.<sup>2</sup> A country is said to have attained jointmanship of its armed forces, if it institutionalises the following:

- Joint planning, development of doctrine and policy-making.
- Joint operational commands and staff structures.

- Evolution of joint equipment policy and procurement organization.
- Integrated preparation of budget and monitoring of expenditure – both capital and revenue.
- Joint training.

According to the famous dictum of Field Marshal Sir Philip Chetwode, "The safety, honour and welfare of your country come first, always and every time." If that be so, there should never be any opposition to jointmanship, as all military leaders recognize that jointmanship is central to national security. True jointmanship entails assigning supremacy to national interests, above every other consideration.

India fares dismally when judged against the standard parameters of jointmanship. It will not be incorrect to state that jointmanship in India is non-existent. The former Naval Chief Admiral J. G. Nadkarni put it candidly when he said: "Jointmanship in India exists to the extent of the three Chiefs routinely being photographed backslapping each other, but not much more beyond that."<sup>3</sup>

Implementation of jointmanship on ground has been excruciatingly difficult and slow. All jointmanship proposals get opposed fiercely on specious grounds. How can measures which are considered indispensable to national security concerns be opposed by the very military leaders entrusted with ensuring national security? It is a highly intriguing and paradoxical situation.

#### ATTITUDES, RESPONSES AND REACTIONS

Whenever jointmanship is talked about in India, the National Defence Academy (NDA) is cited as an example. There is no denying the fact that a three year course at NDA is exceedingly useful especially during the formative years. However, its value is limited in the long run as service prejudices tend to overwhelm the camaraderie of cadet days. Most of the senior appointments in the armed forces are held by ex-NDA officers. Yet they fail to rise above service bias and pay only lip service to jointmanship. Admiral Nadkarni acknowledges, "Jointmanship is not backslapping in public, playing golf together and stating that they all belong to one course in the NDA."<sup>4</sup>

Besides the NDA, a number of other inter-services courses are also conducted. They have also done little to generate genuine jointmanship except promoting social interaction during the course. Likewise, the

affiliation of a few naval warships with army regiments can at best be termed as a display of ceremonial interfacing.

Although the importance and need for jointmanship remain undisputed, the concept evokes wide-ranging reaction amongst Indian military leaders. On one side, we have fervent proponents of jointmanship whereas on the other, there is a small minority which is intransigently opposed. The majority lies somewhere between the two extremes.

Table 1 shows broad categorization of reactions. The percentages are approximate estimates, based on informal interaction with a large and varied cross-section of defence officers. The sampling is indicative in nature. The table has been compiled to highlight the fact that most military leaders do not oppose jointmanship. Only a small minority (about 10 per cent) resists introduction of all jointmanship measures.

True jointmanship assigns absolute importance to national interests. Therefore, there have to be very compelling reasons for dissonance. In order to understand why something there is dissonance, it is essential to understand how it came about. Response to jointmanship is an attribute of underlying attitudes and to appreciate the reasons for opposition to jointmanship, it is essential to identify attitudinal traits of the military leadership. It is only through the modulation of attitudes that willing acceptance of jointmanship can be facilitated.

Attitude is defined as a disposition or inclination in respect of something or someone. Attitudes are affected both by implicit and explicit influences. Attitudes can be positive, negative, neutral and even ambivalent (possessing both positive and negative hues at the same time). Even the degree or severity can vary.

Attitudes are formed by observational learning from the environment, individual judgment, personal beliefs and peer influences. The military is the most hierarchy-based organization where attitudes and behaviour are influenced by precedents as well. Attitudes do change with experience but it is normally a slow, unpredictable and spasmodic process.

What makes some segments of the Indian military leadership wary of jointmanship and adopt a negative attitude towards it? Major attitudinal reasons are discussed in Table 1.

**Table 1: Jointmanship and Reactions**

<b>Reaction-wise Categorisation of Military Leaders</b>	<b>Attitudinal Traits</b>	<b>Resultant Attributes</b>	<b>Estimated Percentage</b>
Initiators	<ul style="list-style-type: none"> <li>&gt; Strong &amp; pro-active advocacy</li> <li>&gt; Seek speedy implementation at all costs</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Accord primacy to national interests by willingly relinquishing all other claims</li> </ul>	15
Encouragers	<ul style="list-style-type: none"> <li>&gt; Pro-jointmanship disposition</li> <li>&gt; Promote jointmanship enthusiastically</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Willing to subordinate service and own interests to national interest</li> </ul>	30
Compromisers	<ul style="list-style-type: none"> <li>&gt; Appreciate criticality of jointmanship</li> <li>&gt; Accept need for re-prioritisation of issues in national interests</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Inclined to compromise their service and own interests for national security.</li> </ul>	25
Neutralists	<ul style="list-style-type: none"> <li>&gt; Fence-sitters with no pre-disposition</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Need convincing</li> <li>&gt; Need assurance of security of their interests</li> </ul>	20
Obstructionists	<ul style="list-style-type: none"> <li>&gt; Do not question need for total jointmanship as such</li> <li>&gt; Give untenable reasons for their opposition</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Highly skeptic of uncertainties of reforms</li> <li>&gt; Concerned about safeguarding their service and personal interests</li> </ul>	10

#### LACK OF EFFECTIVE INTER-SERVICES COMMUNICATION

Despite all the public bonhomie, there is limited interaction, dialogue and communication between the three services. This results in non-development of mutual trust, which is essential for joint functioning. This lack of trust can be gauged from the fact that the Indian Army prepared General Staff Qualitative Requirements (GSQR) for helicopters without consulting the Indian Air Force (IAF).<sup>5</sup> Similarly, it prepared GSQR for deep sea diving equipment without seeking inputs from the Indian Navy IN.<sup>6</sup>

Even the Comptroller and Auditor General of India has criticized the three services for separately buying the same equipment from the same source at different cost, thereby losing benefits of economies of scale.<sup>7</sup> It found that items (like Unmanned Aerial Vehicles, Sniper Rifles and Underwater Diving Equipment), which were common to the three services, were procured independently, without reference to each other. It resulted in failure to obtain best value for money for the country.

#### REGIMENTAL AFFILIATIONS PROMOTE CLOSE-MINDEDNESS

The services accord immense importance to the concept of 'Regimental/Corps/branch affiliations'. Undoubtedly, regimental spirit acts as a force multiplier at unit/battalion level but becomes counter-productive at higher levels. The psychology and mental outlook of senior leaders become insular, resulting in three major harmful fallouts.

First, some senior commanders tend to develop unhealthy prejudices and partisan attitudes. Many find it prudent to display their predisposition for their affiliations openly. Secondly, it damages organizational cohesion and gives rise to factionalism. Strong regimental loyalties result in social stratification and dissensions.<sup>8</sup> And finally, affiliations encourage a 'protégé syndrome' and displace merit as the primary measure of competence in the organization.

Excessive adherence to affiliations inhibits the development of broadmindedness. If some military leaders fail to rise above petty regimental level thinking, they can hardly be expected to have an attitude necessary for promoting inter-services integration.

#### THE 'OUTSIDER' SYNDROME

Over-cohesiveness has both positive and negative effects. It may knit a group together but it also generates inter-group friction as highly cohesive groups tend to become inward-looking and dogmatic in their beliefs.

All the three services are affected by the 'outsider' syndrome. Decisions and responses are weighed on a 'we versus them' scale. 'We' implies a group owing allegiance to a Regiment or a branch and all others are branded as 'outsiders'. Merit becomes irrelevant. A few years ago some armoured corps officers were transferred to infantry battalions as there were no command vacancies in the armoured corps at that time. They were highly competent officers and yet were treated with brazen hostility. Almost all infantry battalions resented being commanded by the 'outsiders'.

The same is true of higher formations. Command of infantry brigades and divisions by artillery and engineers officers is considered a sacrilege by most infantry officers.<sup>9</sup> According to them, only the infantry officers should command these formations. If there is opposition to the command of infantry formations by non-infantry army officers, will putting them under Naval or Air Force officers be readily accepted?

Such an attitude is not limited to the infantry alone. 'Outsiders' are considered a threat by all. A similar attitude was on display when questions were raised about allowing a helicopter pilot, an 'outsider'; occupy the top post in the IAF which was considered to be the exclusive domain of fighter pilots.

#### FEAR OF LOSS OF DOMAIN AND INDEPENDENT IDENTITY

Services guard their turf with fierce fanaticism. Every proposal that affects a service's span of command faces strident resistance. The services want jointmanship but with an assurance of protection of their domain, whereas jointness has to result in a reduction of the domain of each service to prevent duplication/triplication. Conservation of resources and effort is one of the primary objectives of jointmanship.

The degree of apprehension regarding jointmanship can be gauged from Air Marshal B.D. Jayal's views. He writes: "The army's case for transferring medium and attack helicopters to it has merely given us a sneak preview of the old mindsets that still prevail in all service headquarters beneath the veneer of jointmanship and bonhomie."<sup>10</sup> According to Major General Ashok Mehta, the greatest fear of the Air Force is that it will be marginalized under the new dispensation.<sup>11</sup>

Admiral J.G. Nadkarni frankly admits: "The Army is 20 times the size of the Indian Navy and 10 times the size of the Air Force. The first priority of the Air Force and Navy and their Chiefs in India is to maintain their identities." He further acknowledged that the two smaller services were wary of too much jointmanship lest they and their achievements got swallowed up by the bigger service.<sup>12</sup>

#### LACK OF EXPOSURE DURING FORMATIVE YEARS

Human beings are products of their environment. Their ethos, attitudes and disposition are tempered by the environment in which they operate and what they imbibe in their formative years. Many officers never get an opportunity in their formative years to serve in an open environment. Some remain cosseted in highly sheltered appointments throughout their careers, either within their Corps or under their regimental superiors.

Due to lack of adequate exposure, they fail to acquire a broader vision with advancement in career and remain encumbered with local issues. To them, national or inter-service matters are far too remote to be of immediate concern. Their apathetic attitude towards jointmanship is a result of their inability to grasp and fully appreciate the criticality.

#### CONCERN FOR PERSONAL INTERESTS

According to Morris Janowitz, in the civilian image, military officers are the personification of Max Weber's ideal bureaucrat. They resist change, prefer status-quo. They are also acutely aware of their personal status – both formal and informal, as status provides a sense of fulfillment in the highly hierarchy-conscious services. To them, jointmanship portends uncertainty and role ambiguity; whereas they want to be assured that their status will not be adversely affected. They dread loss of exclusivity and privileged standing. It is only human to be concerned about individual interests. Promotions are an important aspect of an officer's aspirations. Vacancies at higher levels are extremely limited.

The tri-services environment after the implementation of jointmanship is bound to be highly competitive and challenging. Overall merit and not corps/regimental seniority will determine higher military leadership. Apprehensions about the likely curtailment of promotional avenues and reduction in vacancies under the proposed dispensation weigh heavily on many. This sense of insecurity manifests itself by their being wary of jointmanship.

#### THE WAY FORWARD

A two-track approach needs to be followed. First, concerted efforts should be made to change the attitude of the military leadership to pave the way for smooth introduction of measures of jointmanship. And secondly, the Government should adopt a more pro-active stance and intervene effectively to force the pace of reforms.

Acceptance of jointmanship is contingent to the progressive development of a broader vision in the military leadership. Military commanders have to be groomed to rise above narrow issues to think big. There is, thus an urgent need for a thorough transformation of mindsets and attitudes. But it is not going to be an easy task.

As seen earlier, attitudes in the services are formed by regimental environment (traditions, precedents, norms and conventions), personal beliefs and experience. The manipulation of these seminal factors can facilitate management of attitudes (See Figure 1) Some of the suggested measures have been discussed below.

#### COMMON UNIFORM WITHOUT REGIMENTAL ENTRAPMENTS

All visually differentiating entrapments should be abolished. Regimental identity should be limited up to the rank of Colonel. For all senior ranks, there should be a common uniform with no regimental badges.

The three services could even have a common rank structure. This is one single step that shall alter the mindset of officers and act as a unifying factor. They will start identifying themselves as Indian defence officers rather than be always reminded of their own service and regimental affiliations.

#### ABOLISH THE INSTITUTION OF COLONEL COMMANDANT

To start with, a Colonel Commandant was like a father figure who acted as a 'conscious keeper' of the Regiment and a guardian of regimental traditions. His basic duty was to foster esprit-de-corps. However, in the last few decades this concept has got totally distorted as some over-zealous Colonel Commandants take it upon themselves to obtain undue advantages for their Regiments, apparently at the cost of the more deserving. Presently, it has degenerated into an anachronistic institution that inhibits progressive thinking and restricts the focus of senior leadership to petty issues. While heading the 'whole' they identify themselves with a 'part' and fail to rise to a higher plane.

#### CROSS-FUNCTIONAL TRAINING IN INTEGRATED SET-UP

All one star (Brigadier and equivalent) and higher officers must serve alternate tenures in an inter-services environment. This should be a mandatory requirement. Future promotions must take due cognizance of their performance under officers of the other services. Senior officers must also be imparted transformational skills. They should be competent to lead integrated set-ups and mould their subordinates into cohesive

functional teams. They must understand the psyche of officers drawn from different services and interact with them with empathy.

#### EVOLUTION OF TRANSPARENT POLICIES

Members identify themselves with an organization only when rules are applied in an impartial, non-arbitrary and transparent manner. No individual is going to subordinate his personal interests to organizational interests unless there are strong merit-performance ethical linkages in place. Transparency in policies, selection criteria and selection process will go a long way in generating confidence in the fairness of the system.

Frequent changes in policies breed uncertainty and uncertainty gives rise to apprehensions. For willing acceptance of jointmanship by all, it is essential that an environment of continuity and permanence is assured. There should be an institutionalised arrangement for collegiate decision making for long term policy preparation. Decisions must not be inconsistent or capricious.

#### JUST AND IMPARTIAL ENVIRONMENT

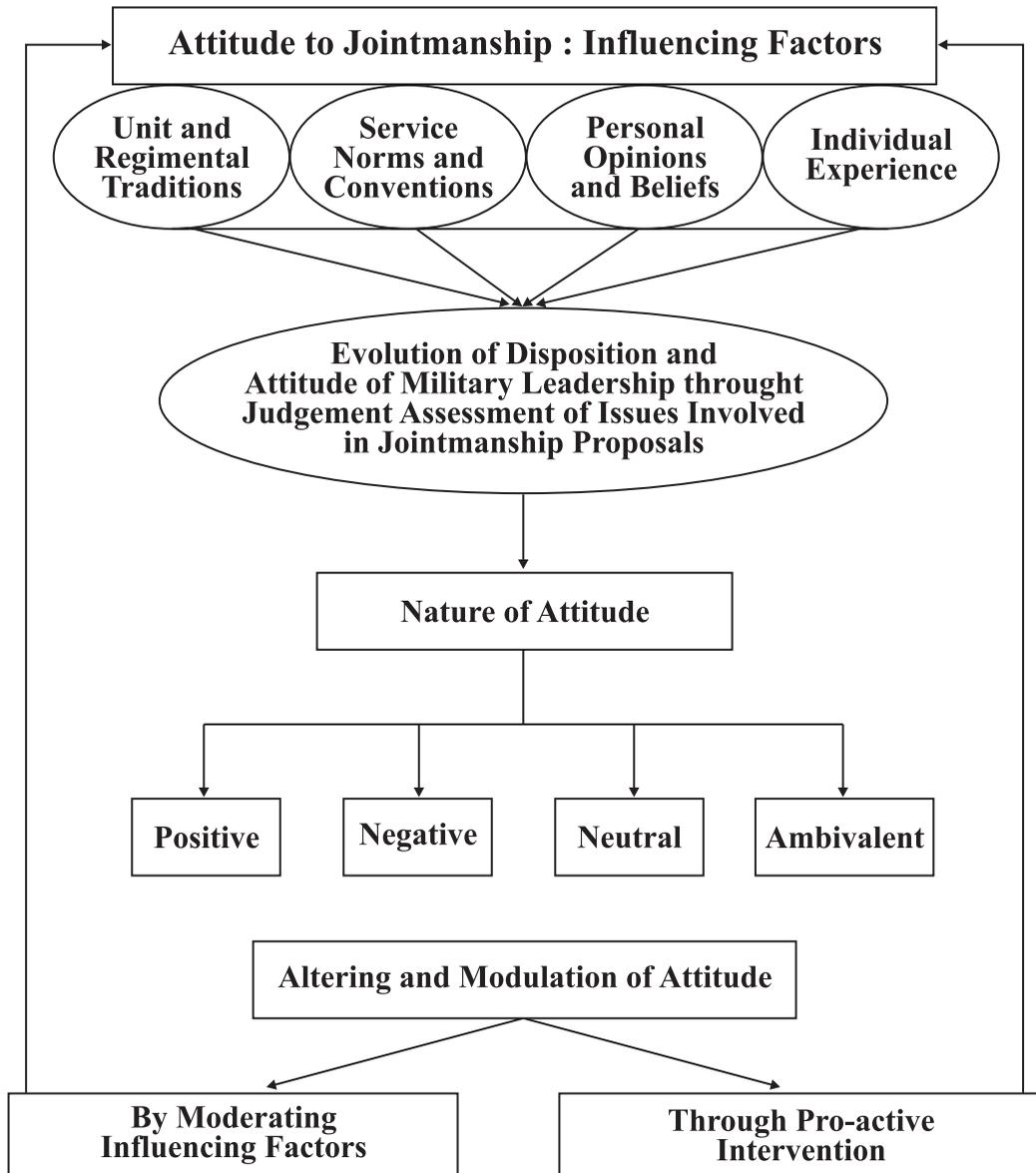
For leaders, impartiality is an ethical requirement and an essential component of their functioning. Trust is the expectancy that the followers can rely on a leader's impartial and just approach. Trust is valuable, visceral, complex and intuitive. It is an incredibly potent force and virtually non-substitutable. It flourishes on credibility that a leader enjoys in his command.

Jointmanship can thrive only if the environment has implicit faith in the fairness of the system. Impartiality means treating everyone as equal and rewarding them purely on their merit – free of service or regimental bias. Stringent standards for non-partisan conduct have to be laid down with suitable monitoring mechanisms to rectify aberrations. The armed forces lay a lot of stress on 'integrity'. Of late, integrity has come to be identified solely with financial propriety, whereas integrity also entails just and impartial conduct.

#### EVOLVE HEALTHY NORMS

Social scientists consider the military as a highly structured and dynamic society which needs to follow well laid down norms for its continued sustenance. Norms are unwritten rules. Norms can be descriptive and prescriptive. Norms get evolved due to precedents and conventions set over a period of time.

**Fig 1: Evolution and Modulation of Attitude towards Jointmanship**



Organizational researchers have concluded that precedents and organizational norms have profound effect on moulding attitude. Jointmanship is characterised by trust and confidence, mutual respect for each other’s capability and cooperation, rather than competition.<sup>13</sup> A culture of synergistic relationships and mutually accommodative demeanor will contribute immensely towards jointmanship.

**RESPONSIBILITY OF GOVERNMENT**

If the services continue their quibbling and jointmanship remains stalled, it is time the Government intervenes to fulfill its mandated duty. It cannot let the drift continue and force introduction of jointmanship in a time-bound schedule. The role of the Government could be in three incremental stages, as shown in Table 2.

**Table 2: Government’s Role in Jointmanship**

<b>Stage</b>	<b>Objective</b>	<b>Methodology</b>	<b>Time Period (months)</b>
<b>Facilitative</b>	Allow the services to sort out all dissonance amongst themselves and reach consensus	<ul style="list-style-type: none"> <li>• Apprise the services of Government’s determination to introduce joint-manship</li> <li>• Prompt the services to adopt collaborative approach to resolve differences</li> </ul>	9-15
<b>Persuasive</b>	Adopt a pro-active approach and coax the services to evolve joint plans for time bound implementation	<ul style="list-style-type: none"> <li>• Identify areas of dissonance and the personalities involved</li> <li>• Provide clarification of issues, if required</li> <li>• Persuade skeptics to accept jointmanship with credible persuasive reasoning</li> </ul>	9-15
<b>Decree</b>	Issue unambiguous directive and accept no disagreement or dithering thereafter. Military leadership should be given option to accept or quit	<ul style="list-style-type: none"> <li>• Directive must be all-encompassing and well-reasoned.</li> <li>• Piecemeal orders should be avoided as they create uncertainty</li> <li>• Implementation must be monitored closely</li> </ul>	6-12

Notes:

- (a) The stages are neither exclusive in terms of time frame nor necessarily sequential in nature. They may and should overlap. It is for the Government to initiate simultaneous measures to keep the process on track.
- (b) The time mentioned for each stage is indicative in nature and is based on the normal tenures of senior military leaders.

- **Facilitative Stage**

Decision by consensus is always the preferred option as it creates synergy in an organization and facilitates smooth implementation. All conflicts of interest – real or perceived – must be resolved in a spirit of mutual accommodation.

As the term indicates, initially the Government should act a facilitator. However, it should make its determination to introduce jointmanship in a time-bound schedule be known to the three services in no uncertain terms. The services should be prompted to adopt collaborative conflict resolution methodology and reach a consensus.

- **Persuasive Stage**

The Government should adopt a more pro-active approach if the facilitative approach fails to yield the desired consensus. The services must be told in categorical terms that the Government would intervene compellingly in case the services fail to respond positively.

Generally, consensus building gets stalled due to the apprehensions in the minds of a few dominant personalities. When some leaders get rooted in a denial mode, they fail to acknowledge the existence of any logic. It is also a well established fact that changing attitudes through persuasion is considerably difficult if the target group is intelligent and possesses high self-esteem.

It is for the Government to handle the skeptics in a more persuasive manner to put their reservations at rest and convince them of the criticality of jointmanship. If handled with firmness, finesse and empathy, all military leaders will come on board as their commitment to the cause of national security remains unquestionable.

- **Decree Stage**

In case even persuasion fails, the Government should fulfill its obligation to the nation by issuing clear-cut orders to enforce

jointmanship. No disagreement thereafter should be tolerated. Even the US Congress had to enact Goldwater-Nichols Act to force the implementation of jointmanship.<sup>14</sup> National interests cannot be permitted to be held hostage to the intransigence of a few dissenting military leaders.

#### CONCLUSION

Most military commanders are professedly staunch proponents of the concept of jointmanship. In other words, jointmanship has few opponents.<sup>15</sup> Additionally, jointmanship has been universally accepted as the engine that drives RMA. Yet, the reality on ground is diametrically opposite. All rhetoric in favour of jointmanship does not get translated into ground action. Every step towards jointmanship has been painstaking and protracted. This dichotomy has been the bane of the Indian Armed Forces.

The search for recognition is one of the pursuits which all human beings indulge in and continuously strive for. As regards military leaders, their affiliation to their regiments and services generates a sense of brotherhood and intense group loyalty, thereby fulfilling their need for identity. However, it adversely affects their growth as leaders who need to articulate a much broader vision.

All soldiers are sworn to be prepared to make supreme sacrifice for national security. For them, national interests remain absolute and all other considerations become non-existent. If that be so, there should never be any opposition to jointmanship from any quarter whatsoever. But soldiers are also human. They have aspirations and apprehensions. An endeavour should be made to provide assurance to the environment that the new dispensation will be fair, just and equitable to all.

Attitudes are moulded by environment. Acceptance or resistance of any change is totally dependent on the attitudinal approach of the target group. Attitudes can, however, be changed by changing environmental influences and persuasion. As seen earlier, this can be achieved through implicit and explicit measures. But it requires mature and concerted effort.

There are times in the life of every nation when hard decisions are required to be taken by the leadership. Delay or wavering can cause irreparable damage to national security imperatives. As regards jointmanship, enough time has already been lost for specious reasons. Immediate and resolute implementation is absolutely inescapable.

National security is too serious a matter to be permitted to drift. Regimental and service loyalties cannot be permitted to take precedence over national interests. If the Government and the military leadership are convinced that jointmanship is central to India's defence preparedness, a decision must be taken and implemented accordingly. Genuine concerns of all must be addressed but unjustified obduracy should not be tolerated. □

### Notes

1. Vinod A. Kumar, "Will the Joint Doctrine Result in Synergy on the Ground," *IDSA Strategic Comment*, New Delhi, June 08, 2006.
2. According to Vinod Anand, the essence is inter-service cooperation for synchronisation of all components of military power to achieve a common military aim. See Vinod Anand, "Future Battlespace and Need for Jointmanship," *Strategic Analysis*, New Delhi, January 2000.
3. J.G. Nadkarni, "India's Forces Must Join or Perish," Rediff on theNet, June 8, 2000, at <http://ia.rediff.com/news/1999/feb/09nad.htm> (Accessed on May 16, 2007)
4. J.G. Nadkarni, "A Lean Mean Fighting Machine," Rediff on the Net, February 9, 1999, <http://ia.rediff.com/news/2000/jun/08nad.htm> (Accessed on May 16, 2007).
5. The army had put up a case for procuring helicopters to replace its aging fleet of Cheetah's and Chetaks in 2002-2007
6. General Staff Qualitative Requirements (GSQR) were prepared in isolation without availing expertise available with the Air Force. Needless to say that GSQR were highly flawed necessitating abortion of the case and fresh initiation, resulting in time and cost overruns.
7. The Army needed deep sea diving equipment for its special forces. GSQR were prepared without availing the benefit of Navy's expertise. GSQR were so ambitious that at the time of field trials, the Army found it to be beyond their operational requirement and capability.
8. See Comptroller and Auditor General of India, "Report for the year ending March 2006: Union Government (Defence Services)," No. 4 of 2007, pp. 9-10.
9. There has been an exponential increase in the number of court cases being filed by service personnel to seek justice. Seeking justice through courts shows soldiers' lack of faith in the fairness of the system. Soldiers knock at courts' doors only when driven to it as a last resort. They feel aggrieved and deprived of their rightful dues. Partisanship caused by affiliations is considered by many to be one of the main contributory causes.
9. Other arms officers (artillery, engineers and signals) can command infantry formations if selected for the General Cadre. There are no permanent rules in place. It depends entirely on a Chief's views. There is an interesting case which occurred a few years ago. A non-infantry Chief inducted a large number of artillery and other arms officers into the General Cadre. The next Chief who was from the infantry reversed the policy. Such instances only go to prove that the top leadership that fails to free itself of biases at service level can hardly be expected to have a national perspective of jointmanship issues.
10. Brijesh D. Jayal, "Chinks in the Armour – How were Actual Operations Conducted in the Kargil War," *The Telegraph*, Calcutta, August 4, 2004.

## *Jointmanship and Attitudinal Issues*

11. Ashok K. Mehta, "Three Chiefs in Search of a Chair," *The Pioneer*, New Delhi, August 29, 2001.
12. Nadkarni, no. 3. Admiral Nadkarni laments that Indians are only aware of India's Army and the soldier. "Most have never heard of the other two services; leave alone their contribution in any conflict. In Punjab, for example, there are Jarnail (General) Singhs and Karnail (Colonel) Singhs. But one has not come across an Admiral Singh or an Air Marshal Singh," he adds.
13. Vinod Anand, no 2.
14. The Goldwater-Nichols Department of Defence Reorganisation Act of 1986 (GNA) is generally considered to be the first step of the currently ongoing Revolution in Military Affairs (RMA). After the US failures in the Iran hostage rescue attempt and Grenada operations, a need was felt to re-organise the US forces through an act of legislation. Under GNA, Chairman of the Joint Chiefs was designated as the principal military advisor to the President, National Security Council and Secretary of Defence. The restructuring provided unity of command, unity of effort, integrated planning, shared procurement and a reduction/elimination in inter-services rivalry.
15. All the three services have laid down doctrine that support jointmanship. The stress is on cooperation, mutual trust and partnership. According to the Army Doctrine issued in October 2004, future wars are likely to be characterised by added emphasis on the all-arms concept and need for increased jointmanship between the land, naval and air forces.



# **Jointness: An Indian Strategic Culture Perspective**

Rahul K. Bhonsle

## INTRODUCTION

Integration of battlefield assets, be it man or machine, has been a time worn cliché in warfare. The orchestration of forces with dissimilar characteristics such as the infantry, charioteers, elephants and cavalry was considered as the spark of a military genius. A few like Alexander or Hannibal distinguished themselves in the art of the set-piece battles, replicated on the modern conventional battlefield. As warfare extends in five dimensions of land, sea, air, space and cyber, challenges of integration have greatly increased. At the same time there is a need to maintain the identity of each component based on differential in employment, training, equipping, maintenance and logistics.

This dichotomy is resolved through creation of joint forces, the US Armed forces being the foremost model, evolved through the Goldwater-Nichols DoD Reorganization Act 1986. Their success in operations during the Gulf War in 1991, in Operation Enduring Freedom 2001 and Iraqi Freedom 2003 led to acceptance of jointness in other armed forces.

The debate over jointness in India commenced post-Kargil 1999. Historically, however, the issue has been evolving for the last four decades or so. In the initial years this was focused on appointment of a Chief of the Defence Staff (CDS) which first came up for discussion post 1965 and sadly enough continues to this day. Joint or theatre commands and integration of Service HQs with Ministry of Defence (MoD) are other strands of this debate. At the functional level the hierarchical ladder of jointness envisages cooperation, coordination, integration and jointness (CCIJ). While there is a general agreement on the need for implementation of first three steps, CCI – the final J - jointness continues to remain elusive. The debate on jointness is also singularly lacking in perspective from the point of view of India's strategic culture and security environment. Moreover glitches in existing models of jointness need to be taken into account before adaptation. It is therefore necessary to apply the stimulus of national strategic culture to the jointness debate in India and evoke possible responses.

## AIM AND SCOPE

The aim of this paper is to explore implementation of jointness from the Indian strategic culture perspective. The paper is structured in three parts as follows:-

- (a) **Part I** – Review of Indian strategic culture and the security environment.
- (b) **Part II** – Impact on various strands of the current jointness debate.
- (c) **Part III** – Recommendations for implementation.

## PART I – REVIEW OF INDIAN STRATEGIC CULTURE

### INDIAN STRATEGIC CULTURE

The application of a theoretical precept like strategic culture to the all important issue of jointness in the Indian armed forces could possibly lack the desired degree of rigour. No single theory is adequate to explain the nuances of a concept which has a doctrinal as well as organizational impact. Strategic culture is however considered most utilitarian as it touches on the core issues that drive jointness in the armed forces. It is a factor which impacts all aspects of national security without being overtly demonstrative. Simplistically, it can be defined as a world view of the strategic community of a particular country. Strategic culture provides answers to the black holes of decisions taken by the armed forces.

India's strategic culture has evolved over the country's millennial history with myriad influences dating back to periods of great triumph as well as distress. The key strands of India's security culture are strategic sovereignty, military force as one of the many components of power; non-time bound goals and a nuanced approach to resolution of problems.

From the definitional point of view, strategic culture has been variously denoted. A working definition provided by Rodney Jones in a recent study on Indian strategic culture states it to be: "a set of shared beliefs, assumptions, and modes of behaviour, derived from common experiences and accepted narratives (both oral and written), that shape collective identity and relationships to other groups, and which determine appropriate ends and means for achieving security objectives."<sup>1</sup> The use of strategic culture for understanding the complexities of military doctrine was first made in the 1970's to dissect the dialectics of nuclear deterrence between the United States

and the Soviet Union.<sup>2</sup> Subsequently this has also been applied to international relations in the context of neo-culturalism in two forms, as it connects domestic politics and the moral or cultural norms which affect security decision making.<sup>3</sup>

In terms of domestic politics and strategic culture, it is seen that while making decisions, civilian leaders tend to maximize domestic political interests rather than national security. Thus maintenance of the status quo may assume greater importance.<sup>4</sup> The other issue of historical experiences and legacies shaping culture is also significant. Domestic political interests, traditions of decision making, historical experiences and the myths of war making are considered primary cultural influences which impact a military command and control system.<sup>5</sup> It is therefore proposed to extrapolate these to the contours of strategic culture as applicable to the issue under consideration.

Exploring Indian strategic culture by applying these norms is however problematic. The limited literature on the subject from the Indian point of view mars true appreciation of the issue. While a number of essays and larger works on Indian strategic thought do exist and represent the rigour with which western scholars approach such issues through the application of designated research tools, these seem to miss the distilled vision of the strategic community of the country. Joel Larus (1979) was one of the first to research on the subject. This was followed by George Tanham in 1995 and Stephen Rosen in 1997. Another recent essay is by Rodney Jones published in 2006. All these writers have acknowledged the complexity in determining India's strategic culture and then gone on to survey the significant points in India's ancient to modern history.

Some have been outright dismissive of existence of a strategic culture in India though Jones has acknowledges that, "Discerning the underlying traits of India's strategic culture, its distinctiveness, and its resonance in India's contemporary actions may take some effort. But it can be done" and goes on to describe it as, "*omniscient patrician type*" as opposed to others such as, "theocratic, mercantilist, frontier expansionist, imperial bureaucratic, revolutionary technocratic, and marauding or predatory."<sup>6</sup> Perhaps the lack of Indian articulation of contemporary strategic culture has led to varied conclusions by these scholars of repute.

Indian writers while not accepting these hypotheses by rote have failed to provide alternative summations or easily definable characteristics of the same. Sumit Ganguly in a paper presented at the Association of Asian Studies (AAS )Annual Meeting from 11 - 14 March 1999 at Boston had argued that India does have a strategic

culture but it is "implicit and inchoate."<sup>7</sup> In a series of commentaries on Tanham's work on Indian strategic thoughts in 1996, Indian scholars to include Amitabh Mattoo, Kanti Bajpai, Varun Sahni and others contest claims that India lacks strategic culture and have offered alternative understanding of the same through a review of interplay of factors in Indian history.<sup>8</sup> The next phase of probes into Indian strategic culture appeared immediately after the nuclear tests in 1998. These were prescriptive given the focus during the period on review rather than understanding the system. In the absence of clearly defined definitions of Indian strategic culture, a tentative elaboration of the same derived from snippets offered by many of the authors quoted above is attempted in the succeeding paragraphs.

**Significance of Timing:** Indian strategic culture is defined by timing decisions. Western scholars have viewed this as, "timeless" or lack of sense of urgency in decision making.<sup>9</sup> The difference between the two will be evident in the foregoing discussion. Timing implies resolution at the most appropriate time when all factors governing an issue are perfectly aligned. The strategic effort is directed at positioning forces towards a solution rather than at the end which is seen as a natural outcome of the maneuvering.

Control of the level of a conflict is essential to timing, thus all efforts are made to ensure that it does not escalate. This approach has led to adoption of the strategic defensive as the most preferred option by the Indian military, be it in the conventional or the low intensity conflict spectrum. The overall aim is to control escalation at a level where it can be easily absorbed by the system. Deterrence in the nuclear field is another strand of the culture driven by timing. Long-term results at least in counter insurgency operations from adoption of such a strategy appear to be favorable.

**Actively Shaping the Future:** Linked with timing is the acceptance of the limits of power thereby devoting energy on evolving the future rather than actively shaping it. This is innately at variance with Western focus on defining an end state and working towards it.<sup>10</sup> Thus planning and working towards a goal has been difficult for Indians the most significant impact on security being the interminable delays in research and development projects of the Defence Research and Development Organization (DRDO). The focus may many times appear to be on the means rather than the ends and comes from a misplaced understanding of factors such as civilizational longevity and assimilative culture.<sup>11,12</sup>

**Cultivated Ambiguity:** In the absence of a clearly defined time-bound plan for achieving objectives, a perception of ambiguity in

strategic thought is evident. This ambiguity is cultivated in some cases but proffers ignorance in others. Non articulation of strategic concepts and doctrines is one reason for this perception. However that the ambiguity is finely nuanced will be evident from a survey of the strategic elite of the country over the years. India's policy, both internal and external, is essentially controlled by a clutch of ministers formed in two committees of the Cabinet, Political Affairs and Security. The principal decision makers are, apart from the Prime Minister, the Home, Defence, External Affairs and Finance ministers. These ministries over the years have always been held by men of high strategic repute some exceptions not withstanding. Not many of them could be faulted for lack of understanding of grand strategy, yet very few have been articulate about the same. Sensitivity to their own domestic constituency, is more important than being seen by others as a militarist is not endearing. This may be one possible reason for this dichotomy.

***Crisis as a Tipping Point:*** Another corollary to timing is crisis acting as the tipping point for action. The post-Kargil review of defence and security structure in the country is an example of this syndrome. However once the crisis passes, interest in the solution dries up leading to stagnation of important issues as CDS. The lack of existential threat, be it from external or internal forces also supports this surmise. Apart from the ides of 1962, India has not faced an external challenge of existential magnitude, on the other hand confidence of the leadership to survive internal torments has added to sanguinity as well as strategic torpor.

***Skepticism of Force as the Ultimate Arbitrator:*** Force is not considered the ultimate arbitrator of a conflict by Indians. India's deep rooted understanding of history leading back to 230 BC when the Mauryan Empire extended across the far reaches of the plains of Punjab to the present day ignominies faced by equally powerful nations in overtures in Vietnam, Afghanistan and Sri Lanka has embedded this perception even deeper. This has also led to evolution of alternate strategies as non-violence with Emperor Asoka being the most powerful role model. Mahatma Gandhi, the leading light of the Indian freedom struggle, however, had a more nuanced approach to use of violence. A sum total of these beliefs is relegation of the military to a secondary role in the hierarchy of national power structure over the years. Military force does have its place but is not to be used for perpetuating state power unless in a crisis. The role of the armed forces is to maintain the status quo rather than transforming the strategic equation in the neighbourhood.

***Episodic view of History:*** Indian view of history is episodic rather analytical.<sup>13</sup> The lack of a documented historical perspective with reliance on word of mouth passage of information with anticipated

distortions, debate and discussions all being unrecorded do not promote accountability. Lack of articulation of strategic thought has been a natural corollary flowing out of the same.

**Feudalism:** Human societies graduate from the individual-family-feudal-state-nation to the Union paradigm. The Indian nation state has been in existence for just over sixty years; it has yet to emerge from the vestiges of feudalism which was hyphenated during the British Raj. The feudal outlook has to be viewed not negatively but realistically as a paradigm of an era. The military which is relatively more westernized than other segments of Indian society also exhibits traits of a feudal outlook in the form of over attachment to assets, reluctance to share power and petty internal politicking. This also contributes to lack of perception of national interest as a concept, thus Indians are more able to relate to the self, the clan or the family rather than the nation state, thereby preventing emergence of security strategies which maximize national gains. Another consequence of feudalism is resistance to institutional growth.

**The Realist School:** The dichotomy of Indian strategic culture is highlighted in writings of Chanakya, who as a true realist advised rulers to maximize power through political rather than military means.<sup>14</sup> Ruse, deceit, cunning and subterfuge were the weapons of choice proposed by the wily king maker. The impact of Chanakya in the Indian security establishment is well set. Maximizing self-gain is thus one of the key attributes of security planners in the country. The inherent conflict of the realist school is also reflected in the strategic culture.

**Continental Power:** There is a congenital linkage between the military and army in India. As Admiral J.G. Nadkarni aptly summed it up: "In Punjab...there are Jarnail (General) Singhs and Karnail (Colonel) Singhs. But one has not come across an Admiral Singh or an Air Marshal Singh."<sup>15</sup> India's continental focus emerges from manifestation of primary threats including the post independence ones from across the land frontiers. Thus the Army is the primary service, the Navy is neglected and the Air Force has not been able to make an impact due to its rather insular approach by not participating in sub-conventional operations. The result is limited development of an inter services culture. It is but natural that militaries have parochial interests in protecting their organizational strength and prestige.<sup>16</sup> This has contributed to service rivalries some times deliberately fostered. The Army in some ways has fallen into this trap which some say was the unstated agenda of Pakistan in engaging India in multi-pronged militancy across the board.

**RMA and Champions of Jointness:** Over the past decade or so, the Revolution in Military Affairs (RMA), a new form of war and jointness has received impetus in the armed forces. There is a small school which is championing jointness, principal amongst whom is the former IN Chief, Admiral Arun Prakash. Creation of the Headquarters of the Integrated Defence Staff (HQ IDS) has provided a forum for the jointness school through which it can propagate its ideas. This body however has not attained critical mass. The nay sayers consider them as utopian and have been constantly chafing at their ideas. However, this does denote a streak of modernization which is not driven by crisis but with a desire to avoid a future catastrophe.

#### ARMED FORCES CULTURE

The armed forces culture of the country is an intermesh of the legacy of professionalism, exclusiveness, apoliticalness and submissive approach to the political-bureaucratic hierarchy. When these attributes mesh with factors indicated above a number of distinct trends are evident. On the positive side is professionalism in the context of armed forces of developing countries, the Indian military will surely be counted amongst the top three. However, when compared with forces of developed states there are glaring shortcomings one of which is lack of jointness. The submissive approach to the political-bureaucratic class is a manipulated manifestation. Thus be it humiliation of Field Marshal K.M. Cariappa and General K.S. Thimayya, two of India's most respected Chiefs, the sacking of Admiral Vishnu Bhagwat or systematically lowering the services in order of precedence it has now become inbuilt in the system.

The legacy of Field Marshal Cariappa also meant that the armed forces remained apolitical. The armed forces chain of command is thus not a part of the inner circle of politicking in the power elite lacking formal as well as informal ear of the ruling hierarchy. Denial of access to the political hierarchy has worked to the detriment of both sides. Professionalism has been strained by the narrow streak of insularity, thereby preventing cooperation between the services at higher levels.

The biggest problem however is the sabre-fighter-bayonet approach of the military which is incongruous to a 21st century military force which needs innate macro as well as micro management capabilities for defence preparedness.

The pyramidal structure of the armed forces, reality of stove piped promotions and limited competencies to operate outside the narrow professional spectrum have led to acquiescence to the chain of command.

Dissent is much talked about but dangerous to practice. The development of alternate views is thus slow, tempered with tact and frequently duplicity. This has concomitantly bred parochialism in the services where constituents do not go beyond the simplistic relationship build at a nascent stage in the National Defence Academy (NDA).

#### JOINTNESS – AN EFFECTIVENESS PERSPECTIVE

Jointness as a concept has been accepted in all major militaries the world over. Some 60 plus armed forces have adopted the integrated model. The Chinese Peoples Liberation Army (PLA )practices the same through the War Zone Campaign (WZC) doctrine which envisages joint campaigning at the theatre level. The US Armed Forces are indeed the most integrated and also have adequate operational experience to provide empirical feedback of the effectiveness of integration.

The American successes in Operation Enduring Freedom and Operation Iraqi Freedom were spectacular, leading to what came to be known as the, "American Way of War." The subsequent embroilment in sub-conventional operations in both the countries have now led to many questions on the effectiveness of the system to address the security challenges faced by modern states. The Rumsfield–Shinseki debate, the removal of Donald Rumsfield as the Secretary of Defence and emerging controversy over, "resignation" of Chairman, Joint Chiefs of Staff, General Peter Pace has raised serious questions about the efficiency and effectiveness of the US integrated system.

A cursory examination devoid of a deeper perspective leads one to conclude that joint structures have militated against dissent based on sound professional reasoning reaching the political hierarchy. This in no way militates against the idea of jointness, but only implies the need for caution. The perils of single point advice are two-fold and are inter-related – one is autonomy and the other is fidelity. Selecting the right man for the right task is another issue.

The US Central Command, embroiled in counter-insurgency and anti-terrorism operations, is headed by two naval admirals, who despite their otherwise outstanding professional credentials, may not have the insight needed to evolve norms for success in the battles in Iraq and Afghanistan.<sup>17</sup>

#### SALIENT CONCLUSIONS

The main conclusions that arise from the discussion above indicate the contrasts between Western and Indian strategic culture. The complexity

of Indian strategic traditions and its nuances are well highlighted to include lack of articulation, significance of timing, evolutionary approach to security issues, cultivated ambiguity, crisis as tipping point, non reliance on force as the ultimate arbitrator, weak historical perspective, feudal outlook, Kautilyan realism clashing with Gandhian liberalism, continental focus and armed forces culture. It is also evident that efficacy of the integrated model adapted by other forces particularly the United States needs to be examined critically before adaptation.

## PART II – IMPACT OF FACTORS

### STRANDS IN JOINTNESS

While evaluating the impact of strategic culture and its manifestations on jointness, there is a need to highlight the proposed strands of jointness. These could be envisaged as follows:

- (a) **Organization:** In the organizational perspective the CDS as a single point military adviser to the political executive, creation of a Joint Integrated Defence Staff HQ with suitable structures to deal with perspective planning, procurement, intelligence and defence education, integration of service HQ with the MoD and creation of theatre commands appear as the most relevant issues.
- (b) **Functional:** In functional jointness, operational issues to include operational planning and conduct, fire support, engineering, communications and administration of forces, training for war, manpower planning, morale and motivation and logistics are some of the key facets.
- (c) **Doctrinal:** In doctrinal issues, evolution, dissemination, revision, re-evaluation and review are critical factors.
- (d) **Capability Building:** In capability building, constant predation through generation of long range requirements, research and development, acquisition and subsequent sustenance are the major issues.

The impact of strategic culture on each of these strands of jointness is tabulated as given below in two columns, those having positive impact and those having negative impact. Only those factors which are relevant have been discussed subsequently in the narrative. Some factors may find place both as positive and negative components which is being elaborated appropriately.

Strand of Jointness	Impact of Strategic Culture	
	Positive	Negative
<b>Organisation</b> <ul style="list-style-type: none"> <li>CDS</li> </ul>	<ul style="list-style-type: none"> <li>RMA and Champions of Jointness.</li> <li>The Realist School.</li> <li>Military Professionalism.</li> </ul>	<ul style="list-style-type: none"> <li>Armed Forces organizational culture.</li> <li>Resistance to Institutional growth.</li> <li>Non Reliance on Force as the Ultimate Arbitrator.</li> <li>Review of effectiveness</li> </ul>
<ul style="list-style-type: none"> <li>Joint HQ IDS</li> </ul>	<ul style="list-style-type: none"> <li>RMA and Champions of Jointness.</li> </ul>	<ul style="list-style-type: none"> <li>Armed Forces Culture.</li> <li>Resistance to Institutional growth.</li> </ul>
<ul style="list-style-type: none"> <li>Integration of service HQ with the MOD</li> </ul>	<ul style="list-style-type: none"> <li>RMA and Champions of Jointness</li> </ul>	<ul style="list-style-type: none"> <li>Cultivated Ambiguity</li> <li>Resistance to Institutional growth.</li> <li>Feudal Outlook.</li> </ul>
<ul style="list-style-type: none"> <li>Theatre Commands</li> </ul>	<ul style="list-style-type: none"> <li>RMA and Champions of Jointness.</li> </ul>	<ul style="list-style-type: none"> <li>Feudal Outlook.</li> <li>Armed Forces Culture.</li> <li>Feudal Outlook.</li> </ul>
<b>Functional Jointness</b> <ul style="list-style-type: none"> <li>Operational planning</li> </ul>	<ul style="list-style-type: none"> <li>RMA and Champions of Jointness.</li> </ul>	<ul style="list-style-type: none"> <li>Resistance to Institutional growth.</li> <li>Armed Forces Culture.</li> </ul>

*Jointness: An Indian Strategic Culture Perspective*

<ul style="list-style-type: none"> <li>• Training</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• RMA and Champions of Jointness.</li> <li>• Armed Forces Culture.</li> </ul>	<ul style="list-style-type: none"> <li>• Armed Forces Culture.</li> <li>• Weak Historical Perspective.</li> <li>• Crisis as Tipping Point.</li> </ul>
<ul style="list-style-type: none"> <li>• Man power planning</li> <li>• Morale and motivation</li> </ul>	<ul style="list-style-type: none"> <li>• RMA and Champions of Jointness.</li> <li>• RMA and Champions of Jointness.</li> <li>• Armed Forces Culture.</li> </ul>	<ul style="list-style-type: none"> <li>• Armed Forces Culture.</li> <li>• Feudal Outlook.</li> <li>• Feudal Outlook.</li> <li>• Crisis as Tipping Point.</li> <li>• Non Reliance on Force as the Ultimate Arbitrator.</li> </ul>
<ul style="list-style-type: none"> <li>• Logistics</li> </ul>	<ul style="list-style-type: none"> <li>• RMA and Champions of Jointness.</li> </ul>	<ul style="list-style-type: none"> <li>• Armed Forces Culture.</li> <li>• Feudal Outlook.</li> </ul>
<ul style="list-style-type: none"> <li>• Doctrinal</li> </ul>	<ul style="list-style-type: none"> <li>• The Realist School.</li> <li>• RMA and Champions of Jointness.</li> <li>• Armed Forces Culture.</li> </ul>	<ul style="list-style-type: none"> <li>• Cultivated Ambiguity.</li> <li>• Non Reliance on Force as the Ultimate Arbitrator.</li> <li>• Weak Historical Perspective.</li> </ul>
<ul style="list-style-type: none"> <li>• Capability Building.</li> </ul>	<ul style="list-style-type: none"> <li>• The Realist School.</li> <li>• RMA and Champions of Jointness.</li> </ul>	<ul style="list-style-type: none"> <li>• Significance of Timing.</li> <li>• Non Reliance on Force as the Ultimate Arbitrator</li> <li>• Cultivated Ambiguity.</li> </ul>

In the organizational strand, taking the issue of CDS first, it would be evident that the champions of jointness and the realist school recognize the necessity to build institutions for modern war fighting and thus have been fostering this cause. On the other hand, the vestiges of armed forces culture with divisive proclivities which are service as well as personality driven, resistance to growth of stable institutions and a recognition that force cannot be designated as the

ultimate arbitrator has led to resistance. Moreover, a review of effectiveness of CDS from the US experience as well as claimed efficiencies of the present system to successfully consummate 1971 operations has also led some critics to negate its value.<sup>18</sup>

While a Joint HQ, IDS has been created, its overall status in the pecking order is not fully acknowledged. The commitment of the Service HQs has not been institutionalized and is dependent on the personality and service of the Chairman Chiefs of Staff Committee (COSC). Since this is a rotatory appointment, armed forces culture and resistance for institutional growth has a major impact on sustenance which the RMA enthusiasts will find hard to resist.

The Integration of the Service HQ with the MoD is the most contentious issue. The Armed Forces as it appears are not likely to be satisfied until they assume control of the MoD, a notion which is precisely leading to fears in the bureaucracy to keep the uniform at an arms length. Thus cultivated ambiguity, resistance to growth of institutions and learning environment, proscribe greater integration.

The formation of Theatre Commands has not progressed beyond the recommendations of the Group of Ministers. A logical outcome should have been integration of other single service regional commands in a graduated manner. What is existing at present is lamented upon by Admiral Nadkarni who states: "If we have a war in the west, for example, the Army Commander will be in Pune, the Naval Commander in Mumbai and Air Force Commander in Ahmedabad."<sup>19</sup> Though the geographical locations may vary today, the key issue is that these are not congruent. Looking into the cultural factors, a feudal approach, the lack of synergy and resistance to growth of new institutions appears to be the main hindrance towards emergence of theatre commands. Moreover, politically the timing of such a move will never be auspicious as there will be resistance from a large number of agencies which have been well entrenched in existing locations of HQs such as Shillong or Pune.

Perceptive senior leaders as General K.V. Krishna Rao indicated the need for theatre commands most lucidly in *Prepare or Perish* way back in 1991.<sup>20</sup> But relocating has been a perennial problem which is now supported by development of communication and video conferencing which is said to mitigate distance. Ownership is a major issue with senior commanders, who feel that service assets should be under corresponding colour of the uniform rather than operational needs. Given the complexity, the Task Force on Higher Defence Management did not go beyond recommendations for one functional (Strategic Forces) and one theatre (Andaman and Nicobar) command which are grossly inadequate to develop integration, much less jointness.

In functional integration, joint operational planning has been facilitated during times of crisis and has now been achieved in the sphere of disaster management. In other areas operational staffs of service retain their right of way and the trend is hampered by armed forces culture and resistance to institutional growth. There is also reason to believe that for specific type of operations such as counter insurgency or sea rescue, the Army or the Navy with assistance from the IAF could be the best service to achieve the desired objectives, thereby leading to lack of progress in this sphere.

The armed forces culture of professionalism has led to large amount of time being spent on training but this is a double edged factor. Training is a strength leading to greater professionalism but a weakness when it acts as resistance to extrinsic learning. Culture similarly affects manpower planning as an insular approach combined with feudalism is not conducive to evolution of a standardized system of recruitment, promotion and career planning.

Morale and motivation is another facet where a joint approach could have been helpful. With progressive welfare policies followed by the Armed forces, there is cultural sustenance from the organizational perspective as well, however a feudal approach prevents generation of a common paradigm of pay, discipline, welfare and other concomitant issues. Logistics again is held hostage to culture. There is lack of sense of sharing of best practices and satiation with the present processes thereby leading to stagnation within services in siloed structures. This is creating inefficiencies and economic encumbrances.

The resistance to doctrinal development is evident with no congruent joint doctrine encompassing the multi-spectrality of operations in the contemporary environment having been issued so far. Two primary concepts on which developed armed forces are based are network centric warfare(NCW) and effect based operations (EBO). The available literature on the subject indicates that there are in-service differences on these issues leading to lack of doctrinal clarity.

A culture of cultivated ambiguity where there is resistance to putting firm directions in writing for fear of debate is one of the major factors. Similarly no clear doctrinal enunciations are emerging from the Cabinet Committee on Security. Service HQs are finding it difficult to translate the ambiguous instructions to tasking at the strategic level. A weak documented historical perspective is also contributing to lack of joint doctrinal development.

Joint capability building through force accretion, training, doctrine and envisaged operational concepts is the sum total of military

proficiency which when projected would either deter a potential enemy or suggest a weakness for exploitation through employment of force. Given that force is not considered as the ultimate arbitrator and ambiguity is employed as deterrence there is a need to overcome these cultural barriers before a perspective of development of joint capabilities can emerge.

#### RECOMMENDATIONS

India's national aim is to develop the state into a modern, secular democracy overcoming poverty and deprivation. This calls for exclusiveness and relative isolation of the military which is regarded as impinging on resources for development. This central paradigm of national thought has been supported by an assimilative rather than a confrontationist approach to security. Faced with problems of varied magnitude, Indian policy is to seek solutions which do not involve preemptive employment and limit rather than extend conflict. The military has thus been the weapon of last resort both in the internal and external dynamics which has led to neglect of understanding as well as nuanced employment.

The emerging security paradigm is hopefully changing and was articulated by the Defence Minister during the Unified Commanders Conference in New Delhi on June 18, 2007 as, "a mix of security cooperation, developing strategic partnerships and deterrence."<sup>21</sup> The need for jointness is exemplified for all three purposes and thus overcoming cultural barriers would be of significance.

Taking the issue of the CDS, it should be recounted that for political leaders, domestic politics supersede national security.<sup>22</sup> The CDS as, "principal military adviser" to the government impinges on the primacy of the bureaucracy as this would imply that he would be Secretary of the Cabinet Committee on Security. This is obviously unacceptable to the bureaucratic hierarchy. The proposal has thus been stymied by dividing the services to maximize self interest.<sup>23</sup> The present state of the proposal is a typical bureaucratic merry go round of seeking opinions of all national level political parties. Four parties have so far responded to the MoD letter initiated in March 2006.<sup>24</sup> Apparently domestic issues carry more weight.

The need is therefore to expand the debate to dwell on the relationship between the CDS and the government, the CDS and the service chiefs, the CDS and the theatre commanders and so on to provide a deeper understanding of the issues involved in the context

of India's strategic decision making process. The CDS should be an integrative rather than a directional appointment and a carrier of single point advice to the government with dissenters in tow. Thus the Shinseki's of India will have adequate recompense. This will build consensus amongst political parties. For such purposes the taboo of political interaction by representatives of the services in uniform may have to be removed. This does not impinge on political neutrality of the armed forces per se and would contribute to overall national interest by building transparency and overcoming false apprehensions.

The service chiefs need to be made ex-officio heads of the HQ IDS). This will ensure better commitment than at present. Nurturing this institution is also essential. Full scale manning by the crème of the services is necessary. A time bound programme for reducing quadruplicating of functions now conducted by the HQ, IDS along with each of the Service HQs needs to be prepared and organizational resistance overcome. IDS should not be seen as another power centre but a joint forum for inter-service issues.

A systemic exercise to eliminate duplication between the Services, the HQ IDS and the Ministry should also be carried out to ensure that the Defence Minister is provided with a considered input in all respects and the opinion of the service HQs along with corresponding inputs of the IDS and the bureaucracy directly reach him. A single file system may overcome many of the lacunae of integration.

The most contentious issue is likely to be creation of theatre commands. The recommendations of the Task Force has not gone beyond two joint formations but the need for joint theatre commands need not be overemphasized. Here again breaking the feudal approach, service loyalties and resistance to change are likely to be major barriers which are considered so strong that a ministerial directive appears to be the only impetus to set the process in motion. While physical integration could be undertaken in the second stage, functional mixing with better communications available at present could be attempted initially taking one theatre at a time as a pilot project within the paradigm of a networked enabled force. An assurance that there will be no reduction of the total number of commanders in chief would make the senior hierarchy more amenable to change. Given the needs for more functional commands such as Special Forces, Logistics and so on, accommodating a number of C-in-Cs should be feasible.

Thus, creation of theatre commands and placing them under the HQ, IDS in a graduated manner would lead to functional operational integration. With adequate expertise available to cater for service specific operations in theatre HQs, apprehensions of lack of specialization

in tackling crisis situations will be overcome. There will be no doubt some disruption in this process of transformation and hence an operational period of slack of one to two years may be needed to make the shift.

The establishment of a National Defence University (NDU) is seen as a panacea to higher defence learning. By taking the process of training online, greater integration may be achieved while at the same time resulting in economy. This can also start with conversion of all institutions of learning beyond that of a battalion and equivalent in the army to joint courses of instruction. Here a parallel track may have to be accepted and resistance to extrinsic learning has to be overcome by providing additional incentives, both monetary and promotional.

The starting point to manpower planning appears to be joint recruiting, induction training and career planning. The Navy of late has been more open to the idea given that sea faring concepts are assimilative in nature, however the Air Force was seen to consistently oppose the idea of jointness.<sup>25</sup> A common confidential report form is one small but important measure to kick start the process, followed by joint selection boards for greater integration. Today the MoD is the only leveler in the career paths of the service officer -- that power should flow down to the services which will enable overcoming the barriers of feudalism. The Sixth Pay Commission is considered an ideal forum to evolve a joint pay structure for the armed forces, much work has been done in this sphere which needs to be carried forward. Joint policies on welfare and discipline will go a long way in integrating the services through inputs on morale and motivation.

Economy is a principle of administration and logistics, which can be achieved only through a common logistics architecture. The United States Defence Logistics Agency provides a proven and tested model for adaptation of logistics integration. The inefficiencies of following parallel tracks in logistics are a national waste and ruthless integration through budgetary interventions if required is the way ahead.

From conceptual ambiguity to a documented perspective to the pedagogic is the road for joint doctrinal development. This is an extremely rigorous field as it does not remove the need for parallel in service doctrines. Formation of joint doctrinal development teams in various fields should be the start point. A key necessity is the ability to transform general directives issued by cabinet committees into more specific directions to the services. This may appear quite confounding but is a common complaint with the services. For instance, General D.D. Eisenhower as chief of the largest force mustered by Western allies in Europe got very cryptic directions, "You will enter the

Continent of Europe and in conjunction with the other Allied Nations undertake operations aimed at the heart of Germany and the destruction of her Armed Forces."<sup>26</sup> Translating this into operational directions for multiplicity of task forces under the gigantic army that invaded North West Europe needed thorough doctrinal grounding.

One final joint process which is perhaps the ultimate test is that of capability building. Joint capabilities are force multipliers in their own rights. These will sustain true Effects Based Operations (EBO) through networking of assets. The approach to this appears to be in terms of acquisition of weapons and systems, while these are essential, this has to be sustained through links with training, doctrines and developing systems architecture for plug in and out as new systems are developed and capability accretion takes place. Joint capability development programmes are thus the capstone of jointness.

#### CONCLUSION

This paper attempts to place, Indian strategic culture and jointness in perspective and attempts to intertwine the two to achieve better integration of the services. Strategic culture may be just one of the view points from which jointness is examined; there are many others such as legacy, organizational theory and so on. Some suggestions to overcome cultural barriers have been provided. An act of parliament may be the ultimate weapon which can bring about services jointness, as it happened in the United States. Given the slow process of legislation, even this may go on interminably in India. Thus reviewing cultural proclivities to resistance to transformation may be an alternate option. □

#### Notes

1. Rodney Jones, India's Strategic Culture. Accessed at: [http://www.dtra.mil/documents/asco/publications/comparitive\\_strategic\\_cultures\\_curriculum/case%20studies/India%20\(Jones\)%20final%2031%20Oct.pdf](http://www.dtra.mil/documents/asco/publications/comparitive_strategic_cultures_curriculum/case%20studies/India%20(Jones)%20final%2031%20Oct.pdf) on 23 June 2007.
2. Scott Sagan, The Origins of Military Doctrine and Command and Control, in Peter Lavoy, et al, *Planning the Unthinkable*, Cornell University Press, Ithaca and London, p. 30.
3. Ibid. N. 2.
4. Elizabeth Kier, *Imagining War*, quoted in Scott Sagan, n. 2, p. 30.
5. Scott, n. 2, p. 42.
6. Jones, n. 1.

7. Sumit Ganguly, 'Indian Strategic Culture'. Abstracts of Paper presented at the AAS Annual Meeting, March 11-14, 1999, Boston, MA. At <http://www.aasianst.org/absts/1999abst/inter/i-toc.htm> accessed on June 1, 2007.
8. Kanti P. Bajpai, and Amitabh Mattoo, (Eds.), *Securing India: Strategic Thought and Practice*, Manohar Publishers and Distributors, New Delhi. 1996.
9. Jones, n 1.
10. George K. Tanham, *Indian Strategic Thought: An Interpretive Essay*, Rand: Santa Monica, 1992, p. 18.
11. Jones, n.1.
12. Tanham, n. 10.
13. Ibid.
14. R. Shamastry, (transl.), *Kautilya's Arthashastra*, Mysore Printing and Publishing. Mysore, 1967.
15. J.G. Nadkarni, 'India's forces must join or perish'. Accessed at <http://www.rediff.com/news/2000/jun/08nadkar.htm>, on June 16, 2007.
16. Scott Sagan, n 2, p. 18.
17. Commander Central Command Admiral William J Fallon and Deputy Commander Vice Admiral David C Nichols. Accessed at <http://www.centcom.mil/sites/uscentcom2/default.aspx> on 21 June 2007.
18. Rahul Singh, Hindustan Times interview with former Chief of Air Staff, Air Chief Marshal S. Krishnaswamy.
19. Nadkarni, n. 15.
20. General K. V. Krishna Rao, *Prepare or Perish: A Study of National Security*, Lancer Publishers, New Delhi, 1991.
21. Ministry of Defence Press Release. Accessed at [www.mod.nic.in](http://www.mod.nic.in) on June 18, 2007.
22. Kier. N 4. P 31.
23. Arun Prakash, Evolution of the Joint Andaman and Nicobar Command (ANC) and Defence of Our Island Territories (Part I). *USI JOURNAL*, VOLUME CXXXII 2002. Accessed at <http://www.usiofindia.org/frame.htm> on 16 June
24. Defence Minister's Statement on the Implementation of the Reports of The Standing Committee on Defence, accessed at [www.mod.nic.in](http://www.mod.nic.in) in May 2007.
25. Prakash, n. 23.
26. D.D. Eisenhower, *Crusade in Europe*, William Heinemann: London, 1949, p 247.

# **Jointmanship in the Defence Forces : The Way Ahead**

B.S.Sachar

## INTRODUCTION

The experience of our Armed Forces during various conflicts has not been a happy one in terms of jointmanship. Each Service has viewed warfighting from its own perspective thus lacking a holistic approach to problems of defence and security. The Kargil crisis of 1999 provided the required political consensus to initiate the desired restructuring of the higher defence organisation and raising of joint structures. Based on the Group of Ministers report, a Headquarters Integrated Defence Staff (HQ IDS) was set up in 2001 to provide a single point, tri-Service, military advice to the government. This was followed by the setting up of two integrated commands -- Andaman and Nicobar Command (ANC) and Strategic Forces Command (SFC) -- which were to serve as test-beds for raising more such joint structures. These tri-Service organizations have taken root and are endeavouring to bring about emotional integration and purple thinking in the Defence Forces.

A modest beginning has thus been made but the road to focused jointmanship is a long one. The three Services continue to remain engaged in turf battles and are unable to shed their individualistic white, green and blue mind-set, and go 'purple'. They compete with each other fiercely for what they perceive as their core interests; be it creation of new formations, increase in higher ranks, or their share of the budgetary cake. This stems from apparent fear and mistrust, particularly amongst the smaller Services, that a unified structure may hamper their individual Service growth plans and shrink budgetary allocations. Their rivalry prevents them from having a clout in important security forums and in taking a unified position on key policy issues affecting the Defence Forces.<sup>2</sup>

An enhanced level of jointness amongst the three services is a prerequisite for the future. Modern warfare necessitates waging battles in an integrated manner with structures created to support such a strategy. The creation of Chief of Defence Staff (CDS) seems unlikely in the near future. In the interim HQ IDS which is now well entrenched, should be allowed to chart and steer the course to true jointmanship with the three Services remaining on board.

#### APPROACH TO JOINTNESS

There is consensus of opinion in the higher ranks of the military that desired level of integration may perhaps be unachievable in the absence of an overarching entity like the CDS. The CDS system has been implemented in 64 countries, including China, and India too will eventually have to adopt it. In the meanwhile, lateral integration should be continued and necessary joint structures created, to affect economy and efficiency. The debate on the extent to which jointness is to be achieved and in what manner is unending. The Indian mindset is not given to radical changes, therefore no drastic transformation as ushered in by the Goldwater-Nichols Act in the US Armed Forces can ever be implemented. Instead, a phased implementation of a carefully thought-out strategy of jointness, with a well articulated vision and time lines, is the need of the hour.

To achieve jointness, a 'Top Down' or a 'Bottoms Up' approach should be adopted. It would however, be preferable in a force as large as ours to execute both the approaches simultaneously. This will not only accelerate the process, but also change attitudinal biases that are a major barrier in the way of jointmanship. It would be useful to identify areas which need integration and then work out a methodology for implementation. The wholehearted support of the Services, particularly the Service heads would be essential, as integration would entail sacrificing resources presently within the respective fold of each Service, for the common goal.

#### RECOMMENDED AREAS FOR INTEGRATION

There are a number of areas where the three Services can pool their resources and share assets instead of individually spending vast amount on duplicating each others' facilities. The budgetary savings thus achieved can be used to acquire more quantities of modern and sophisticated resources.<sup>2</sup> Some of the important areas which lend themselves for integration are highlighted in succeeding paragraphs.

***Integrated Logistics System:*** This is one area where a lot of progress can be made towards effective integration. Presently, medical, postal, works services, movement control, quality assurance, defence land, military farms and CSD are already integrated and functioning well. However, the prospect of bringing many more such areas under joint fold exists. An integrated joint logistics system would reduce the requirement of holding large single Service inventories of common items. A common logistic nomenclature and number code for the inventory of all the three Services and other agencies connected with material management should be evolved. Bringing about a joint approach

towards development and acquisition of common equipment and weapon platforms like helicopters, communication equipment, radars, missile and electronic warfare systems would lead to optimisation in terms of budgetary support and R&D effort. It would also ensure interoperability and commonality of training and logistics. The three Services have separate logistic facilities in a number of stations which can be easily combined. For example, the staff cars and other vehicles of the three Service headquarters and HQ IDS in Delhi can be placed under one organization with a common repair facility.

**Joint Training:** It is envisioned that joint training will play a major role in tri-Service integration and convergence of mind. Emphasis on jointness must start early and continue to be stressed throughout the career span of officers. The end state of joint training should be that senior commanders and staff officers comprehend the capabilities and limitations of each Service. This will enable them to effectively employ the resources of all the Services jointly, to achieve the desired aim. Some recommendations for joint training are as under:

- (a) The training year of the three Services must be synchronized. The Army training schedule runs from 1 July to 30 June, the Air Force from 1 April to 31 March and the Navy from 1 January to 31 December. If full synchronization cannot be achieved sufficient overlap should be created to enable joint training to be conducted.<sup>3</sup>
- (b) It is recommended that once in three years, a major joint exercise should be conducted involving all the three Services. This will provide appointments at various levels in the three Services the required expertise of planning and conducting joint operations
- (c) HQIDS should work towards the early establishment of the Indian National Defence University (NDU) which can advance jointmanship. It should also issue annual joint training directive and joint training doctrines and concepts to synergize effectiveness of the three Services at the tactical, operational and strategic levels.
- (d) Joint training facilities should be set up for common weapon systems, vehicles and equipment to reduce duplication of effort, bring in standardization of training and expose personnel to each others' Service culture and professionalism. Joint training institutions should also be set up for imparting training on common subjects like Electronic Warfare and Nuclear, Biological and Chemical Warfare.

**Air Defence and Air Space Management:** Air space no longer remains the exclusive domain of the Air Force. Air defence and air space management have in essence become very intricate. There has been an unprecedented proliferation in the number of users with the introduction of unarmed aerial vehicles, helicopters and aircraft of the three services, long range artillery, missiles and aircraft of various civil airlines. It is therefore, vital that an integrated joint Service organization be put in place to control and monitor the air space. This would necessitate commonality in the Command, Control, Communications, Computers, Intelligence and Inter-operability (C4 I2) systems of all the three Services.

**Operational and Functional Commands:** The geographical zones of responsibilities of various operational Commands of the three Services have no perceptible commonality. In most cases, the Command of one service overlaps or is linked with two or three Commands of the other two Services. None of the Commands are co-located, leading to lack of coordination in intelligence sharing, planning and conduct of operations. If we have a war in the West for example, the Army Commander will be in Pune, the Naval Commander in Mumbai and Air Force Commander in Ahmedabad. The establishment of the two tri-Service Commands should ideally have generated a debate on the requirement of Integrated Theatre Commands and Integrated Functional Commands. All single Service Commands should gradually evolve into either Integrated Theatre Commands on the lines of ANC or Integrated Functional Commands on the lines of the SFC.

**Communications:** Keeping in mind the challenges of the envisaged security environment it is imperative for the Services to be interoperable. This can be possible only through a secure, reliable and robust defence communication network interconnecting the three Services at various functional levels. A viable communication system promoting interaction at all levels and synergizing efforts towards a common goal is the backbone for jointness. The work on a common media and interoperable communication system has commenced and when fully in place, will augment decision making and compatibility.

**International Military Cooperation (IMC):** There is today a gradual recognition of the importance and value of international defence and military cooperation as a foreign policy tool. At present, each Service HQ has got a separate foreign cooperation cell/directorate with an International Affairs Division at HQ IDS for planning and conducting IMC. There is very little interaction and coordination between them and the Ministry of Defence (MoD) and Ministry of External Affairs (MEA). This leads to bottlenecks in planning IMC activities and the projection of a common face to foreign delegations. The military establishments of

most countries of the world follow an integrated approach to boost cooperation. There is therefore, a requirement to give more teeth to HQ IDS by posting of additional staff and delegating appropriate powers from the MoD to enable a better response from the Services. A JS (International Affairs) from the MEA and an official from the MoD should be posted to HQ IDS to create a single window for IMC. A separate fund for IMC should also be instituted under the defence budget and HQ IDS should be empowered to spend it within laid down parameters. The reorganised International Affairs Division at HQ IDS will then be able to plan and conduct IMC in a coordinated and effective manner.

#### JOINT STAFF FUNCTIONING

Personnel policy is based on the individual requirement of each Service. Joint staff appointments and duties do not play a significant role in the career profile of an officer.<sup>4</sup> This at times, results in under manning as well as posting of unsuitable officers at key posts in HQ IDS, ANC and the SFC. There is also inhibition amongst officers to serve in a joint Services environment due to the disparity in the appraisal system of each Service. It is essential that these tri-Service organisations be given full support by posting officers with a good career profile. It should gradually be made obligatory for all officers to have held at least one joint appointment in a tri-Service HQ before being considered eligible for consideration for promotion to the one star rank and above, as is the practice in the US. A common appraisal system should be adopted for officers serving in joint Services organisations/institutions to protect their career interests. A separate category of Honours & Awards for distinguished service in tri-Service institutions/establishments should also be instituted. It is essential that HQ IDS approves postings of critical appointments in the tri-Service organisations to ensure that the laid down career profile is not diluted.

#### GREATER ROLE FOR HQ IDS AND CHIEFS OF STAFF COMMITTEE (COSC)

In the absence of the CDS, the Chief of Integrated Defence Staff to the Chairman (COSC) (CISC) should be the prime mover in implementing functional jointness within the Services. HQ IDS is striving to coordinate the activities of the three Services and put up a joint face at important forums. Those who have been in the organisation are convinced that it has a lot of potential. The resistance of the three Services to part with resources and functions is however, proving to be a major bottleneck. Planning, budgeting and operations continue to largely remain single Service roles. HQ IDS needs to play a key role in formulating joint doctrines and concepts, long term integrated

perspective plan, progressively reduce duplication in training, logistics and maintenance and implement joint staffing in all three Services. It also needs to set inter-Service prioritisation of capital schemes, make up critical deficiencies in force capabilities and seek resources for joint exploitation of space. HQ IDS should also formulate Joint doctrines for Special Forces and amphibious operations and coordinate joint response for out of area contingencies.

The COSC is the apex forum where the Services come together and the Chairman COSC acts as the 'rotational CDS' to some extent. Despite marginal strengthening of the COSC since September 2001, by giving it a few enhanced roles and functions, it continues to be plagued by ills which are inherent in a committee. The consensus driven 'committee system' is antiquated and unsuited for quick and decisive action. As decisions and recommendations are sought to be based on 'consensus', in the interest of tri-service camaraderie, there is an inevitable temptation to shelve contentious issues. It is usual for a Chairman to get tenure of about a year or so. This is too short a period to allow meaningful formulation, initiation and direction of any long term policy. Till the time the CDS is sanctioned, there is a need to enhance the effectiveness of COSC. This can be done by having a fixed tenure for the Chairman and giving him veto powers so as to be able to take important decisions in the overall interests of the Defence Forces. He should also have direct access to the Defence Minister and represent the Services in joint forums within and outside the country.

#### INTEGRATION OF ARMED FORCES WITH MOD

Integration of SHQ with MoD should transcend nomenclatures, cut out duplication, decentralize decision making and devolve financial powers. Joint staffing throughout MoD by Service and civilian officers should be the norm. Financial advisers must work under SHQ and act as advisers not controllers.<sup>5</sup> Cross-posting of Service officers to MEA, Ministry of Home Affairs(MHA) and National Security Council Secretariat (NSCS) which has already commenced, should be reciprocated by posting of civilian officers to Service HQ and HQ IDS and subsequently even to the Theatre/Functional Commands, when raised. In addition, there is a need for the MoD to respect proposals moved by the three Services that have been analysed in great detail, at different levels and are an organizational necessity.

#### CONCLUSION

The nature of modern and future wars makes it imperative to fight in an integrated manner. True jointmanship would lead to synergized

military effectiveness and maximisation of combat power. Major spin offs like taking advantage of the opportunities afforded by RMA and out of area intervention capabilities will automatically accrue. The day may not be far when India may have to use its Defence Forces as part of a joint coalition to deal with emerging regional security threats. This will only be possible if the three Services are sufficiently integrated.

While acknowledging the separate identity of each Service and respecting the divergence of views, it is essential to remain careful that for short term parochial gains, the long-term interests of the defence forces and the nation are not sacrificed. Loyalty to the Service should not surpass the common interests at large. The three Services must work in a decidedly cohesive manner and exhibit a unified approach. A beginning has been made by projecting a joint requirement to the Sixth Central Pay Commission unlike separate projections in the past. The joint response to disaster management during Tsunami was also creditable. The release of India's first Joint Doctrine in May 2006 marks a major step towards integration and interoperability among the three Services.

CISC and HQ IDS have an important role to play in bringing about a greater degree of jointmanship till the time the CDS is sanctioned by the government. Lateral integration to reduce duplicity of organisations and establishments must be continued. Tangible goals should be kept to ensure that the required pace of restructuring and transformation is maintained. There must also be a positive attitudinal change amongst the Service HQ to make the joint structures truly and fully functional. The three Services must appreciate that success in future wars will go to the military which is best able to synergize the application of combat potential of all resources of the land, sea and aerospace. □

### **Notes**

1. Arun Prakash, *Inaugural Address*, College of Defence Management Seminar on Jointness in the Armed Forces, November 2006.
2. P.S. Joshi, *Implications of Jointness in Synergistic Management Of War*, College of Defence Management Seminar on Jointness in the Armed Forces, November 2006.
3. R.C. Tiwari, *Concept of Jointness and its Relevance in Achieving Synergy for National Security Management*, College of Defence Management Seminar on Jointness in the Armed Forces, November 2006.
4. Satish Uniyal, *Military Jointness Implementation Strategy*, College of Defence Management Seminar on Jointness in the Armed Forces, November 2006.
5. George Mathai, *Military Jointness: Implementation Strategy*, College of Defence Management Seminar on Jointness in the Armed Forces, November 2006.



# **Revolution in Military Affairs and Jointness**

Arun Sahgal and Vinod Anand

## OVERVIEW

Militaries of major states in the international system have been responding to the Revolution in Military Affairs (RMA) debate, mainly to the technological and operational concepts propounded by the US, even though most of them particularly in Asia continue to grapple with its full import. First off the blocks in Asia has been China. Given the salience of the American threat perspective in any Taiwan-centric conflict scenario, it has identified rapid development in high technology with Information Technology(IT) at its core as the means to bring about revolutionary changes in the military field as a strategic and operational necessity to meet the challenge.

There is growing understanding among the military planners that human warfare is entering the stage of Information Warfare(IW) following the stage of mechanised warfare. The essence of this shift is provided by the revolution in information technology in the field of warfare. RMA has five distinctive features. First, weapons and equipment have become more intelligent oriented, where in precision guided long distance attacks are increasingly playing a critical role in operations, and are increasingly becoming the main form of attack. The second perspective is that the RMA has allowed force structures and systems to become more streamlined. This has been possible through rightsizing and readjusting force structures leading to force optimization, but with stronger combat capabilities. Third, a consequent result of above has been automation of command and control(C2) systems, which have incrementally moved from Command,Control, Communication and Intelligence(C3I), to Command, Control, Communications, Computers and Intelligence (c4I), Command, Control, Communication and Computers, Intelligence, Surveillance and Reconnaissance(C4 ISR) and now Command, Control, Communication and Computers, Intelligence, Information, Surveillance and Reconnaissance (C4I2SR) in order to meet the demand for real time, robust, reliable and efficient command and control systems. Fourth this has led to spatial expansion of warfare, from traditional three dimensions, i.e., land, sea, and air, to five dimensional that includes in addition, the spatial and electromagnetic

dimensions. Implication of above is that anybody who controls the information will gain the initiative in high tech battlefield. Finally, and most importantly, operations are becoming more system-oriented requiring not only a high degree of system integration but the integrated application of power in all five dimensions leading to warfare being transformed into completed operations of system versus systems. This is increasingly impacting on the need for integration and jointness.

It is in this fast changing and emerging technological environment that India has to come up with reasonable response to the latest RMA. The underlying perception in India is that response of necessity to the RMA debate will be structured taking into account not only the changing global military trends but also its regional security environment. However the debate is mired at two levels. At one level given the continuing boundary dispute and the ongoing proxy war the dominating perception is to look at national defence in a purely territorial construct, largely from the attrition mindset. Consequently force modernisation and force development models too are looked from single service capability development requirement with joint perspective always being at best a minimum essential. This has created in force development strategies a mindset of force multiplication effect that is essentially weapon system centric. No wonder the entire modernisation philosophy of the services is centred on weapons system procurement (hardware) rather than system integration, in system of system approach.

Second, and more important, is the overall perspective of force development. Our model continues to be based on force modernisation essentially to deal with obsolescence factor more as an attempt to maintain notional conventional edge against Pakistan, rather than part of well thought out force transformation strategy that takes into account changing nature of war. In fact, we continue to persist with old doctrines and thinking which look at force application models based on limited to full spectrum wars while talking about full spectrum capability. Lack of jointness and system integration is creating another serious problem that is of capability enhancement and synergising our capabilities. This is leading to duplication in capabilities; independent force development models that have no common threat perspective. The result, despite sending huge sums on force modernisation and induction of weapon systems, there is limited or marginal accretion to overall capabilities.

In relation to India, the fact is that China has not only grasped the import of RMA, but is well on the way to becoming an informationalised force having decided to narrow the time gap between developed countries and developing countries. The Chinese believe that the tidal

wave of worldwide RMA poses severe challenges to China. Its leadership believes that having missed the industrial revolution which resulted in tragedy for China; it cannot afford to lose another chance of development. Hence they look at RMA in strategic terms and look to boost RMA with Chinese characteristics as the central plank of China's national defence modernisation.<sup>1</sup> The import of the above lies in the fact that increasingly in our security calculations we have to factor in the technologically and doctrinally advanced Chinese armed forces, adept at fighting informationalised high tech warfare.

Second, and even more important, is the fact that given close collusive relationship with China we will have to incrementally deal with technologically advanced military Pakistani military with improved information, surveillance, reconnaissance (ISR) capabilities, networked command and control elements with long range precision fires and greater degree of system integration. In such a milieu, jointmanship and integration among the Indian Armed Forces and other defence support agencies would be the two major leitmotifs of RMA under Indian conditions to meet the challenges to our security.

#### SCOPE

This paper will examine the incentives or motives for India to adopt new practices associated with the latest RMA. The factors that might enable and constrain the Indian armed forces in adapting to the new military technological and operational requirements will be identified. It has also been said that unlike the 'single system RMA' which nuclear weapons produced the ongoing information revolution is an 'integrated systems RMA' driven by new information technologies. Thus the organisational and doctrinal concepts of jointness and integration along with elements of RMA that predicate the use and practice of these concepts would also be examined.

#### RELEVANCE OF RMA

RMA is not only an important military, but also a political and strategic tool for global and regional security policies of the future. It is a metaphor for the politico-military establishments of the countries to prepare in advance for likely wars and conflicts of the future. Political, economic, technological and strategic factors influence to a very large extent the quality and speed of occurrence of RMA.

Dramatic advances in technology and their impact on warfare has resulted in what is being generally referred to as RMA. But for real RMA

to occur, it is not only the technological edge which is needed but also the doctrinal innovation, refining of concepts and precepts and accompanying organizational changes which are essential components. Three principles of war, namely, inter-Service cooperation, economy of effort and unity in command and control(C2) would continue to be key imperatives of knowledge age warfare. A study of recent campaigns of Gulf War I and II has indicated that greater degree of jointness and integration achieved by the American and coalition forces was a key battle winning factor.

Further, improved ISR capabilities, networked command and control elements with long-range precision strikes are best exploited by a joint and integrated effort of the three Services. Whether it is network-centric warfare (NCW), effect-based operations (EBO) or information warfare (IW), the synergies at operational level are best obtained by a unified effort. Admiral Bill Owens of the US Navy had visualized a system of systems connecting myriad war fighting entities that would respond in real time to the threats and challenges posed to it by the adversaries. Needless to emphasise that RMA cannot occur substantively unless it is accompanied by a joint and integrated approach.

In this regard the Chinese concept of RMA is an apt example. The twin goals of Chinese RMA are to develop informationalised force capable of winning what the Chinese term "information based local wars". Within the above construct the focus is on overall transformation from a mechanized to informationalised force. With the information being the driving force, the Chinese impetus is on developing information technologies, weapons and equipments, combat theories and associated concepts and doctrines, with the aim of fighting future wars as integrated air-land-sea-space warfare in an integrated operations of system versus system.<sup>2</sup>

Not only has China included the chiefs of the Peoples Liberation Army (PLA) Navy and Air Force in its Central Military Commission in 2004, the PRC has also introduced joint military logistics units in at the Military Region level. This signifies a coordinated development of all the components of a military force. Further, the PLA has been practicing the concept of 'War Zone' which revolves around somewhat like our precept of an integrated theatre command. The efficacy of War Zone concept is further sought to be enhanced by RMA enabling technologies.

#### FACTORS INFLUENCING INDIA'S RMA

Political, economic, technological and strategic factors influence to a very large extent the quality and speed of occurrence of RMA. The

Indian approach to RMA is, therefore, shaped by geo-political and geo-strategic contexts and security concerns arising from these:

- Fiscal pressures
- Technology imperatives
- Social and cultural context

Political purpose or policy in Clausewitzian parlance dictates the objectives to be achieved at the national level. Military strategy would only be a sub set of the overall national strategy to achieve national goals. The security challenge facing India is diverse, complex and evolving. Instability in our neighbourhood and extended neighbourhood sharpens the threat to our security. Our strategic thinking is influenced by what happens in the Indian Ocean, West Asia, Central Asia and South-East Asia.

Prime Minister Manmohan Singh, during his address to Combined Commanders' Conference in October 2005, observed: "To meet national security challenge, our strategy has to be based on three broad pillars. First, is to strengthen ourselves economically and technologically; second, to acquire adequate defence capability to counter and rebut threats to our security, and third, to seek partnerships both on the strategic front and on the economic and technological front to widen our policy and developmental options."

Thus introduction of cutting edge technologies both in the field of defence and civil becomes equally important. Even though preference to economic development over military development is given, it is possible to proceed simultaneously in both the areas once a certain level in economic development and capabilities has been reached. RMA, which is a priority for the armed forces, need not be a priority at the national level because of competing needs of other more important civil sectors which need funds for development. But what is inescapable is joint and integrated development of military capabilities.

India's core defence policy goals are protecting and safeguarding India's territorial integrity and sovereignty. Ensuring the security of sea lanes and other means of securing energy supplies becomes vital for our national security energy. Our defence and security policy is, therefore, dovetailed with the larger national mission of rapid economic and social development and to ensure a peaceful internal and external environment, in which such development can be pursued. As for social and cultural context, India has generally emphasized on soft power and non-military means to pursue conflict resolution because non-military measures are invariably needed to evolve durable solutions.

Further, development of human resources in terms of education and improved health also contributes to improved quality of manpower available for both civil and military purposes.

Yet, at the military level, India's situation is unique in that it faces threats along the entire spectrum of conflict ranging from sub conventional warfare at the lower end, to a high end threat of a nuclear conflagration. Therefore, the Indian Armed Forces have to be prepared to meet challenges along the entire range of conflict in a unified and integrated manner. This adds to the complexity of moving towards building a RMA enabled military.

The drivers or motivators for RMA in China and India can generally be perceived to have some common denominators like, keeping up with the peer competitors, reducing the technological gaps with modern militaries besides national security and strategic concerns. A National Intelligence Council (NIC) Report of the US (in 1999) had observed that among the countries considered, India, China, Russia and Australia have the greatest potential to achieve RMA. This is a conference report titled "Blue Rogers or Rock Towers".

#### ESSENTIAL COMPONENTS OF RMA

According to the Indian Army Doctrine of October 2004, RMA is termed as a major change in the nature of warfare brought about by innovative application of new technologies which combined with dramatic changes in military doctrine, operational concepts and operations, fundamentally alters the character and conduct of military operations. Therefore, major constituents of RMA are doctrine, technology, training and evolving suitable organizations to meet the challenges of new nature of warfare. Thus, components of RMA which have been focus of attention in the Indian Armed forces are:-

- Innovative doctrine and operational concepts;
- Achieving information superiority and improving information warfare capabilities across the services;
- Achieving capabilities in long-range precision strikes, sensors and Unmanned Aerial Vehicles (UAVs);
- Adopting concepts of Network Centric Warfare, strengthening C4I2SR systems and EBO approach;
- Sharpening the strike capabilities of Special Forces;
- Strengthening space support for force multiplication of air and surface forces and enhancing the strategic reach of air and surface forces through improved power projection capabilities;

- Evolving joint and integrated structures and organizations and enhancing jointness;
- Attracting knowledgeable personnel and training them for knowledge age wars;
- Spurring R&D and strengthening self-reliance in defence industry;

All the above elements of RMA which is moving at a leisurely pace in India tend to be best exploited in a joint and integrated manner both at the higher direction of war level and at the operational and tactical levels.

#### DOCTRINAL INNOVATION, JOINTNESS AND RMA

In May 2006 a joint doctrine was promulgated to synergize the efforts of the three services. Essence of the joint doctrine was to harmonize the existing single service doctrines in the environs of knowledge age warfare and in the context of the ongoing RMA. It is too early to say as to what is its efficacy of joint doctrine in advancing significantly the goals of RMA since it remains a classified document. Yet, the evolution of the joint doctrine could not have been but influenced by the fundamental elements of RMA. All the three single service doctrines devote a considerable portion of their length on nature of warfare, RMA and emphasize the need for jointness even though in practice the required levels of jointness are lacking. Further, comparatively speaking, RMA seems to have advanced in technology intensive services like Indian Air Force (IAF) and Indian Navy (IN) as compared to the Indian Army (IA).

Before the joint doctrine was unveiled the Indian Army had come out with what is referred to as the new 'cold start' war doctrine. It envisages a number of task oriented integrated battle groups (IBG) penetrating into enemy territory from a cold start and executing their assigned tasks within a limited period of a week or so. These groups would have varying composition of different arms including combat air support so as to form well integrated combined arms groups. In certain contingencies these groups are likely to be based on tri-service components. In order to be successful these battle groups would need a favourable air situation in the envisaged areas of operations and at the same time they would also need close air support along with a preponderance of tools of RMA. The new doctrine also mandates that we move towards induction of RMA elements into all the components of combat power at a faster rate. These groups would need to be strengthened with capabilities of long-range precision attacks, a robust C4ISR network, enhanced abilities in the fields of information warfare and network centric warfare. All surveillance and operational resources

would need to be better integrated to reduce mobilization and force generation time.

Doctrinally, air forces all over the world tend to emphasize their strategic role: the importance of Counter Air Operations over Offensive Air Support and greater desirability of Battlefield Air Interdiction as compared to Close Air Support (CAS). On the other hand, land warfare doctrine usually assumes the ultimate need to exert some degree of control on the ground and consider air power as a useful and necessary mean to achieve their ultimate mission. It has also been generally recognized that providing CAS is always a challenge due to safety of own troops, difficulties of target identification and acquisition and exposing increasingly expensive aircrafts to highly dense ant air environment. Advantages of new RMA technologies like blue force tracking devices, use of PGM and stand-off weapon systems and improved means of suppression of enemy air defences would reduce the effects such threats.

The US forces achieved remarkable success in Operation Iraqi Freedom (OIF) using new technologies and weapon systems. They also used a wide variety of airframes like Apache helicopters, A-10 Warthog, F-16, F-18, and even bombers like B-1, B-2, B-52 for CAS even though the A-10 is the one which is dedicated for CAS.<sup>3</sup> These aircraft were enabled to undertake CAS because of PGMs, new technologies fielded and a very high degree of interoperability. However, what we need to study is the joint procedures and mechanisms instituted by the US armed forces for CAS. The US forces had Joint Terminal Attack Controllers who are trained personnel from various Services with suitable equipment and communication to guide the air strikes. This was besides the traditional presence of airborne and ground based Forward Air Controllers. General T. M. Moseley Combined Air Forces Air Component Commander, considered this to be "another wonderful testimony of joint training, joint doctrine and joint Close Air Support and being able to work together to get the aeroplanes up there."<sup>4</sup>

Our armed forces need to move forward to streamline procedures and mechanisms for CAS and need to focus on improvement in the areas of training, equipment and interoperability across the Services. The gradual dawn of RMA (which includes advances in technology, doctrinal innovation and organizational improvements) in armed forces seems to be bypassing the components of CAS which is an essential element of Air Land battle.

JOINT EFFORT NEEDED

Gaining of information and converting it into intelligence is fundamental to good planning and success in operations. The long- range precision firepower of modern weapon platforms would be of no use without information and intelligence. In fact instruments of military power derive their power from their ISR assets; without these eyes and ears they would be powerless.

Attaining information superiority has become one of the most important objectives to be achieved in the era of knowledge age warfare. The concept of information superiority is somewhat analogous to similar concepts of air superiority, superiority at sea or in space. This is because proper use of information is as lethal as other kinds of power. Further, concept of information superiority leads us to attainment of decision superiority. Information operations are increasingly be considered as important as sea, land and air operations. The Information Operations (IO) could vary from physical destruction to psychological operations to computer net work defence. Well conducted joint information operations with new RMA technologies, improved organizations and doctrine would greatly contribute to a successful and decisive outcome.

The importance placed by the US forces during OIF on information operations has highlighted the need for synergistic response in this sphere. The Americans tom-tommed the awesome power of their arsenal and the overwhelming superiority of their forces, and thus inevitability of the Iraqi defeat. As part of continuing psychological operations the US Air Force dropped over 31 million leaflets and also broadcast messages for surrender of Iraqi troops.<sup>5</sup> Based on good intelligence and targeting and in concert with surface forces they also struck the fiber optic cable network with repeater stations of Iraqi command and control structure to degrade its functioning.<sup>6</sup> The American IW appeared to have achieved a considerable degree of success since, eventually, Iraqi troops including the elite Republican Guard did not put up a worthwhile fight as expected. The PLA has carried out a number of cyber warfare exercises, which according to media reports, included India as one of the target countries.<sup>7</sup>

During the month of August 2005, in a joint and combined exercise titled 'Peace Mission' comprising sea, land and air operations the Chinese military practiced psychological operations including dropping of leaflets, carried out C2W and EW as part of giving practical expression to its concepts of IW for the benefit of visiting dignitaries. The overall aim was to emphasize the progress the PLA has made in jointness and in the field of IW as a subset of its overarching objectives to achieve RMA with Chinese characteristics.<sup>8</sup> In the case of Pakistan their expertise in hackers'

field is well known. In our case it is at operational levels where weakness in our IW efforts exists. There is a need for joint linkages and joint planning to synchronize our response to all elements of IW.

#### APPLICATION OF DISCRIMINATE FORCE THROUGH PRECISION ATTACKS

If force has to be used selectively, keeping in mind the sensitivities of the global community and the inevitable pressures on the warring states, then force will have to be wielded in a manner so as to achieve political aims through short, swift and precise military operations. This would imply greater proclivity for pre-emptive operations, enhancement in ISR capability and creating the legitimacy for military action based upon just and well-articulated causes, combined with distinctive and refined means available for conducting the operation to avoid collateral damage to civilians and non-combatants. This does not mean that punishment will be less severe. It only implies that the method and means will vary. Long distance precision attack through the use of precision guided munitions (PGM) would provide a capability to RMA enabled forces to apply force discriminately.

#### PGMS: ESSENTIAL FOR JOINT CAPABILITIES IN RMA ERA

The use of precision munitions has been following an upward trajectory since Operation Desert Storm. The percentage of PGMs used in Gulf War I was 7.5, thereafter its percentage increased in Kosovo and Afghanistan. In OIF it climbed to 68 per cent versus 32 per cent of dumb bombs.<sup>9</sup> The precision weapons substitute mass for effects. They enable concentration of effects from geographically widely dispersed forces and also contribute to reduced logistics tail. The conventional munitions of industrial age type are required to be fired in large numbers to achieve desired effects at the target and which could be either destruction of the target or its neutralization. Similar effects could be achieved by firing a few rounds of precision munitions. Therefore, as a corollary a small number of precision weapon platforms would be required to achieve the desired effects. Thus in air land operations or tri-service operations these benefits of PGMs can be jointly exploited to reinforce and complement the unique characteristics of each Service. The increasing inventory of precision weapons in IAF and surface forces (i.e., both Navy and the Army) would enhance the force multiplier effect of the existing weapon platforms. This would be very relevant in the short duration conflicts when speed, shock action and accurate long-range fires become essential to achieve worthwhile objectives in a reasonable timeframe.

A larger inventory of PGMs with IAF, for instance, would enhance its strategic agility, reduce the size of aircraft packages and decrease logistics requirements. This in turn would release additional air effort which would become available to be exploited for other strategic, operational and tactical tasks.<sup>10</sup> For instance, in OIF, F-16, F-18, B-1, B-2 and B-52 aircrafts were armed with multiple Joint Direct Attack Munitions (JDAM) which enabled these aircrafts to strike multiple targets during a single sortie. This economy of effort provides the joint forces an opportunity to engage a wider spectrum of target systems and an increased capability to fight close, rear and battle in depth simultaneously. It would also be possible to engage multiple targets with new PGM from stand off distances. Precision attacks from stand off distances would enable the air support to be provided in close vicinity of land forces. With suitable percentage of PGM in IAF inventory, it may be possible to commence counter air and counter surface campaigns almost simultaneously.

Similarly increased inventory with integrated battle groups would add additional punch to its arsenal and may reduce its requirement of air support. Armed helicopters with fourth generation missiles, cannon launched guided projectiles and missiles of various types including air defence missiles, all cutting edge instruments of current RMA, would enhance the joint and integrated effort required for attaining goals in short and intense conflict.

In August 1998 a US aircraft carrier fired Tomahawk cruise missiles against terrorist camps of the al-Qaeda at Khost in Afghanistan. This signified firing of a PGM purchased from the budget of the Navy which travelled through the medium of air and after having been provided space support it struck land targets. There cannot be a better example of jointness and integration in the era of RMA.

In the second Gulf War, by adding inexpensive cheap strap on kits for GPS guidance, the US armed forces' weapons and weapon platforms achieved precision capabilities. The US Air Force used a wide variety of PGM: over 6,000 of JDAM, 1,000 Wind Corrected Munitions Dispenser (including Sensor Fused Munitions) and a variety of laser guided bombs. The Army used Sense and Destroy Armour (SADARM) along with long range acquisition system and Hellfire missiles besides many other kinds of PGM.<sup>11</sup> In our own case, some of the smart munitions like the laser guided bombs were used by the IAF in the Kargil conflict with a telling effect.

The use of PGM by their very nature would involve joint planning and joint targeting in most of the cases and especially so in tactical battle area. There would also be a need for formulation of joint

procedures for enabling cross-Services sensors and target designators to effectively utilize the precision platforms and weapon systems of the other Services.

#### NETWORK CENTRIC WARFARE: THE DEFINING FEATURE OF INTEGRATED SYSTEMS RMA

A networked joint force is able to maintain a more accurate presentation of the battle space built on the ability to integrate intelligence, surveillance, reconnaissance, and information and total asset visibility. This integrated picture allows the joint force commander to employ right capabilities at the right place and at the right time. Fully networked forces are better able to conduct distributed operations.<sup>12</sup> Network Centric Warfare (NCW) has many connotations but essentially its main purpose is to exploit the information technologies for efficient and effective conduct of warfare in the information age.

A joint, integrated and responsive network would enable the air and surface forces to work together through more effective sharing of information. It links widely spread sensors, decision makers and a wide variety of weapon systems into one composite whole. This common grid increases the speed of command and response and provides a shared common operational picture. It is possible to synchronize and coordinate complex activities of a joint force in the battlefield leading to attainment of unity of effects and efforts across the various components of the force. The decision makers through timely and relevant support can achieve decision superiority because of the network.

A jointly networked force generates increased combat power and enhances the ability of the force to transform into a seamless and well oiled military machine. It is increasingly being recognized that smaller joint force packages suitably networked can possess more flexibility and agility and are able to yield greater combat power at the points of decision. NCW generates higher levels of operational efficiency and both new and traditional capabilities can be used with speed and precision.

The three Services recognize the benefits of a networked force and NCW and have introduced a number of systems and architectures to improve connectivity with sensors, decision makers and shooters. The IAF is setting up a high speed wide area network with adequate bandwidth and redundancies for effective command and control.<sup>13</sup> It is also ensuring that latest UAV imagery and satellite pictures are available for real time response. The aim is to connect all the IAF

entities involved in a manner that air power<sup>14</sup> assets are employed with optimal efficiency and effect. Similarly, the IA has been implementing a wide variety of programmes like Command and Information Decision Support System (CIDSS) named Project Samvahak, Battlefield Surveillance System named Project Sanjay and Project Sathi, i.e., Situational Awareness and Tactical Handheld Information besides certain other projects.<sup>15</sup>

The IN has also been working on such systems. It has identified two key thrust areas in field of IT - networking and e-enabled solutions. But there is a glacial movement towards setting up of a joint network that will bring relevant entities of the three Services on a one common high speed network. A joint Services network appears to have been planned with adequate bandwidth to cover real time voice/data/imagery along with adequate protection to handle classified data.<sup>16</sup>

However, what is needed in addition is a vastly improved joint network architecture of sensors, decision makers and weapons platform at the operational and tactical levels of war. It is axiomatic that a suitably networked joint force with adequate ISR capabilities but with fewer weapons platform can achieve much better battlefield effects compared to a poorly networked force with superior quality and quantity of weapons platform.

#### RMA ENABLED SPECIAL FORCES OPERATIONS AND JOINTNESS

Special Forces (SF) operations invariably would be joint operations with involvement of more than one Service along with intelligence agencies other than those of the armed forces. SFs offer a suitable military response to situations that require a tailored, precisely focused use of force. They can operate independently or in connection with other forces. They are suitable for employment during conventional war, in low intensity conflict operations and also during peace for anti-terrorist operations, hostage rescue and for assistance to friendly foreign governments, like it was done during the successful joint Operation Cactus in Maldives in 1988.

SF can perform a wide variety of missions at strategic, operational and tactical levels to achieve political and military objectives. SF are trained for insertion and extraction by air, land or sea. Importance of air power in supporting SF operations and at times even naval support cannot be over emphasized. Whether SF are heli-dropped or are para-dropped the insertion of forces into hostile territory requires a very high degree of coordination and joint training. They would also be networked with ISR sensors, target designators and long range

precision systems of various Services and especially so for calling in of air strikes when required.

The success of US Special Operations in OIF has had an important impact on the Indian Army which has embarked on raising SF on the lines US SF. In December 2002, the Cabinet Committee on Security had approved the raising of four battalions of SF but only for counter insurgency tasks. After observing the US assault on Iraq in OIF; it was decided to raise four more battalions for out of area capability.<sup>17</sup> Further, even IAF and Navy have their own Special Forces for tasks as visualised by them and there is an obvious need to practice the concepts of jointmanship and integration in this sphere also.

Coming back to OIF, it was a campaign supported by the largest Special Operations Forces since the Vietnam War. They were employed in North Iraq along with Kurdish fighters and helped to bring in the 173 Airborne Brigade by para-drop. They called for air strikes against Iraqi regime targets and were also responsible for attacking a number of specific targets like airfields, weapons of mass destruction sights, command and control HQ and securing of oilfields. In addition, they were inserted in Western Iraq for search and destroy missions against Iraqi missile launchers. They also did some specialized work to help Shia elements.<sup>18</sup>

It must also be remembered that US Special Forces had failed during Operation Eagle Claw of 1980, i.e., Iran hostage rescue attempt because of lack of synchronization between the various components of the force. In fact, this failure has been cited by many US analysts as one of the major drivers to move towards unification of armed forces through Goldwater-Nichols Act of 1986. This was also instrumental in establishing a US Special Operations Command (USSOCOM). In OIF, there was a Theatre Special Operation Command and included, from the Army, special operations aviation, Special Forces, Rangers, civil affairs and psychological operation forces; from the Air Force, special operations aviators and special tactics squadron; and from the Navy, sea, air, land (SEAL) teams, SEAL delivery vehicle teams and special boat teams.

The nature of special operations was such that SF efforts had to be joint and integrated. The US Air Force provided 12.5 per cent of the total air effort for SF operations in OIF. Earlier in Afghanistan, SF elements had destroyed al-Qaeda terrorists traveling in a vehicle by calling for support from a Predator UAV, which fired a Hellfire missile on the vehicle.<sup>19</sup> This effort symbolized the joint efforts of the US armed forces and the effectiveness of a unified military machine. In the Indian context, whether joint organizations or structures for command

are evolved or not, joint planning and training for envisaged SF operations, interoperability, unity of effort, good command and control arrangements and suitable fire support from diverse sources would continue to be important to ensure success.

SPACE SUPPORT, KNOWLEDGE AGE WARFARE AND  
NEED FOR JOINT EFFORT

Space has been often referred to as ultimate high ground, a position from where one can have commanding view of all other media. Advances in technology have enabled space platforms to view every object and activity taking place in air, on land or at sea. The use of space for military applications has seen an exponential growth since last decade or so and it has become an essential component of the ongoing transformation among the modern militaries of the world. Space is increasingly been seen as a medium which can impart tremendous force multiplication effects to military assets in the air or with the surface forces. The characteristics of the present RMA point towards an increased use of space assets for varied missions like ISR, C2 Warfare, Information Warfare (IW), battlefield management and for imparting improved lethality and precision to weapon systems. The nascent space capabilities and the evolving space capabilities would have an essential role to play in strategic, operational and tactical tasks of Army, Navy and Air Force. Space assets would also provide capabilities for improving joint networking among the forces and help in establishment of robust C4ISR links for joint and integrated operations.

The proposed Indian Aerospace Command is a step towards harnessing the national space capabilities for military uses. The space infrastructure would not only cater for demand of all the Services but it would also have tri-Service clients like Strategic Forces Command (SFC) and Defence Imagery and Photo Analyses Centre (DIPAC) functioning under COSC/CDS. Therefore, necessarily, the organization for exploiting the space assets would have to have elements from other Services to exploit the space capabilities optimally.

For instance, in OIF, a component of the US Air Force Component Command was placed at Prince Sultan air base in Saudi Arabia as part of Air Operation Centre under Unified Central Command. The Aerospace Command also had officers from the surface forces so that requirement of all Services could be jointly organized and coordinated. The US forces had the benefit of over 50 satellites providing communication, intelligence, battlefield surveillance, missile warning, weapon guidance and meteorological data support to them.<sup>20</sup> The US forces also fielded a new robust and more accurate Global Positioning System (GPS). The

GPS was also used to programme Cruise missiles, for certain PGM like JDAM, for Army Tactical Missile Systems and for positioning, movement and timings. In the words of one American officer, "GPS is like water, our combat forces do not go anywhere without it." The US Army considers itself to be the largest user of space assets. Its Tactical Exploitation of National Capabilities (TENCAPS) is a project to leverage the national space and technological capabilities. The army had fielded a Tactical Environment System which provides commanders with a near real time correlated imagery and SIGINT from national and theatre resources. TES was earlier used in Afghanistan and it was effective in merging many different pieces of the picture together.<sup>21</sup>

A former IAF Chief had cautioned that, "Military application in space has lagged behind. We strongly feel that primary reason for this is lack of central organization to coordinate and manage space issues. This void would be filled if an aerospace command is formed — the command is not about ownership of the assets, it is about utilization of the assets, training, etc."<sup>22</sup> It is also evident that some dedicated and specialized cells for dealing with specific tactical and operational tasks for respective Services as well as for joint bi-Service or tri-Service operational tasks would be necessary for exploiting scarce space assets synergistically. These assets would require a very high degree of joint networking to provide real time service to all its users -- from the army formations and units and sub-units in the battlefield to aircraft in the air, missiles in flight and to ships and other naval platforms at sea.

Therefore, an organization to coordinate the space efforts would be more of a tri-Service organization rather than a single Service structure in outlook. It also needs to be remembered that our regional competitor China is far advanced in the development of its space capabilities with ambitious plans outlined for the mid-term to long term period. For example it has plans of putting 100 to 200 satellites in the orbit during the next 10 to 15 years time span. Its military and civil efforts are well integrated because of historical legacy while we have assiduously kept development of civil and military space effort apart with little attention being paid to acquiring military capabilities.

#### POWER PROJECTION OPERATIONS AND INTEROPERABILITY

Amphibious and airborne capabilities are essential lynchpins for achieving power projection competencies. Together with RMA enabled land forces, amphibious and airborne forces serve as powerful threats in being. The mere presence of power projection in the theatre of joint operations

deters the adversary and during active hostilities causes him to divide his effort to protect himself against such a threat.

Amphibious operations are an acid test of tri-Service jointness. It is the most complex operation of war requiring close cooperation and coordination among the participating components of all the Services. The precepts of flexibility, mobility, and concentration of forces at the most opportune moment and the most advantageous point become the essential considerations for successful conclusion of amphibious operations. This can only be achieved through finely honed joint skills and RMA enabling technologies. The Air Force supplements the air support from carrier-based aircraft by extending its power projection capabilities through air to air refuelling for its aircrafts. The ISR assets of all the Services and national capabilities would have to be used in a coordinated fashion to support the objectives of ATF. Amphibious operations would, in fact, involve exploiting all the traditional roles and tasks of the different Services in a conjoint manner, both sequentially as well as simultaneously. Needless to say that organizational structure for amphibious tasks would require unity of effort, joint training, joint staffing, smooth command and control and interoperability of a very high degree.

Interoperability has been defined as the ability of systems, units or forces to provide services from other systems, units or forces and to use the services so exchanged to operate effectively together.<sup>23</sup> Do our interoperability standards enable us to acquire imagery and other information from UAV's and intelligence, reconnaissance and surveillance assets of Air Force or other agencies so that real time strikes could be carried out against time sensitive targets surfacing in Tactical Battle Area or for that matter in any joint tri-service or bi-service war fighting environment? Considerable improvements need to be done in the field of interoperability among the three services. Further, cross-services shooter to sensor links, command, control and communication links, seamless joint structures and effective joint procedures and training become very important to exploit fleeting opportunities in the battlefield of knowledge age.

Further, it is not only hard power projection capabilities but it would also be soft power projection capabilities like managing a disaster due to tsunami which would require across the Service effort with considerable support from air. For instance, Tsunami relief operations, i.e., 'Operation Sea wave' undertaken by joint efforts of the three Services contributed to enhancing of the image of India as a net contributor to security in the region even though the operation was in the realm of non-traditional area of security. The IAF provided seven

IL-76/78, 15 AN-32s, four Avros and 16 helicopters and 3,000 personnel. The IAF carried out 1,834 sorties within India and 1,063 sorties in support of relief operations for other countries like Sri Lanka (Operation Rainbow), Maldives (Operation Castor) and Indonesia (Operation Ghambir). The Indian Navy supported the operations with ships, aircraft, helicopters and personnel. The Indian Army contributed with 8,300 personnel.<sup>24</sup> It was a well coordinated tri-Service effort between the three Services and the Coast Guard under the aegis of IDS and ANC. Such situations further reinforce the need for JFHQ in the area of operations to coordinate the activities of all forces and different agencies which need to be suitably networked into a common organisational and communication architecture.

#### SPURRING R & D AND STRENGTHENING SELF-RELIANCE

For RMA to occur in a substantial manner a world-class defence manufacturing industry that would be self-reliant and sufficient, is a necessary pre-condition. Our defence procurement procedures have been streamlined and policies changed to encourage private and foreign participation in defence industrial sector. The objectives are to achieve synergies of both civil and government sectors by integrating their capabilities. Technological and science skills, management capabilities and ability of civil sectors to raise resources need to be combined with the R&D capabilities of government labs and institutions to produce state-of-the art defence equipment. Further, direct offsets in defence industrial against procurement from foreign sources have been introduced for the first time to encourage transfer of technology and investments from abroad. This would help our armed forces to advance on the RMA scale.

Strengths of our civil IT sector need to be further harnessed to augment our command, control and communication networks. This would be somewhat similar to what is being done in China where a structure for funding their military-related IT needs has been evolved. Private industries including joint ventures with foreign partners are provided with partial funding by the government for R&D and products are used for both military and civil applications. Some analysts have termed this as a Digital Triangle model.

CONCLUSION

India's armed forces have been given the mission of responding to full spectrum of threats which is a complex task. There is a symbiotic relationship between RMA and jointness. Jointness and integration are conceptual tools while elements of current knowledge-based RMA are technological tools to attenuate the adverse effects of Clausewitzian elements of 'fog, friction and chance' in the battlefield. The unique capabilities of each Service can be best exploited when they fight as an integrated whole. It is also evident that a meaningful RMA cannot occur without practicing the precepts and concepts of jointmanship and integration.

Economy of effort is fundamental to the art of war and without economy there is no art in warfare. With increasing costs, and consciousness in the society about the wasteful destructive nature of warfare, need to devise ways by which age-old principles of warfare are applied more dynamically. Hence joint (or is it jointed in the current context!) operations must give way to Integrated Operations of the three services. With technology showing the way, India must learn to win wars with the least human cost. We need to integrate technologies with the type of forces, which help us fight with greater precision and flexibility. Information technologies are the DNA of current information based RMA and they add to the versatility, agility and strategic reach of our joint military capabilities.

Further, each and every constituent of India's ongoing RMA is amenable to a joint and integrated approach. Even though future direction and pace of progress of RMA under Indian conditions would be impacted upon by a number of contextual factors yet, evolving a joint and integrated response to the challenges of achieving knowledge age capabilities would be the dominant paradigm of the ongoing RMA.□

**Notes**

1. Briefing by Lt. Gen. Michael Moseley, Coalition Forces Air Component Commander, on April 5, 2003, available on line [www.dod.mil/transcripts/2003/tr20030405](http://www.dod.mil/transcripts/2003/tr20030405)
2. Ibid.
3. Ibid.
4. Operation Iraqi Freedom briefing by Lt. Gen. David McKiernan, Commander Third US Army, April 23, 2003. See his remarks on Network Centric Warfare available on [www.dod.mil/transcripts/2003](http://www.dod.mil/transcripts/2003).
5. Ravi Visvesvaraya Prasad, "Cyber Menace - Integrated Defensive Policy Needed", *Times of India*, May 20, 2003.

6. Arun Sahgal and Vinod Anand, "Russia and China: The New Shooting Stars", *Asia Times*, September 8, 2005.
7. Briefing by General Moseley, op.cit.
8. For instance see the views of Air Marshal T.M. Asthana (Retd.), former C-in-C, Strategic Forces Command in "Communication is the Key", *Force*, June 2005. He discusses the importance of the air force in limited wars and the need to increase inventory of PGM in the air force and its consequential benefits.
9. See N.1 and Maj. Gen. Buford C. Blount III, "Live briefing from Iraq by 3rd Infantry Division Commander", available at [www.dod.mil/transcripts/2003/tr20030515-0184htm](http://www.dod.mil/transcripts/2003/tr20030515-0184htm)
10. Department of Defence publication, Joint Operations Concepts, November 2003, p.16, available at [www.dtic.mil/jointvision/secdef\\_approved\\_jopsc.doc](http://www.dtic.mil/jointvision/secdef_approved_jopsc.doc)
11. Air Chief Marshal S.P. Tyagi, in an interview to *Force*, published in June 2005 and titled "Formation of CDS will enhance the Synergy for Joint Operations."
12. Ibid.
13. Ministry of Defence Annual Report for 2004-2005 available at [www.mod.nic.in/reports/report/05.htm](http://www.mod.nic.in/reports/report/05.htm), pp.36-37, p. 53 and 56. As per the report no steps seem to have been taken in 2004-2005 to develop joint services network while individual Services are going ahead with establishing their own networks.
14. See Air Chief's remarks *Force*, June 2005, op.cit.
15. Aditya Sinha, "Indian Army to Raise US-Type Special Forces", *The Hindustan Times*, April 20, 2003.
16. Jim Grammone, "Iraqi Freedom Largest Special Ops Effort since Vietnam", American Forces Press Service, April 14, 2003, [www.defenselink.mil/news/dod/news.html](http://www.defenselink.mil/news/dod/news.html)
17. Doug Sample, "Pentagon Plans Heavy Investments in UAV Development", April 28, 2003, [www.defenselink.mil/news/dodnews.html](http://www.defenselink.mil/news/dodnews.html)
18. Michael Krepon and Christopher Clary, "Space Assets and War in Iraq", available at Stimson Centre website [www.stimson.org](http://www.stimson.org)
19. Air Force briefing on "Space: The War fighter's perspective" March 12, 2003; joint briefing by Air Force Maj. Gen. Franklin Blaisdell and army Col. Steven Fox, Director Army Space Support Program."
20. *Force*, June 2005, op.cit.
21. For definition of Interoperability, see "Joint Vision 2020: America's Military preparing for Tomorrow", Joint Force Quarterly, also available at [www.dtic.mil/doctrine/jv2020](http://www.dtic.mil/doctrine/jv2020).
22. Vice Admiral Raman Puri, "Tsunami Relief Operations by Indian Armed Forces," *USI Journal*, July-September 2006.

# **The Chief of Defence Staff**

S.K.Sinha

India as a nation went through a very traumatic experience in 1962. Our faith in the impregnability of the Himalayas, the infallibility of our foreign policy and the invincibility of our Army, got shattered. I was then an Instructor at Staff College. I was assigned the task of preparing a Telephone Battle exercise for Staff College on mountain warfare, based on our experience in the Himalayas. I toured the battle zone in the North-East to study the terrain and the course of operations that had recently taken place there. This also enabled me to interact with some of the officers who had taken part in those operations.

The tour of the battlefield and research at Staff College, led one to conclude that there were three main reasons for our debacle in the Himalayas. First, a total mismatch between Indian foreign and defence policies. Second, the loss of élan amongst the officer corps in the Indian Army. Third, an irrational higher defence organization in which the Defence Services were increasingly isolated from the process of decision making in defence matters.

Vital issues of war and peace, concerning the nation were being dealt with in a casual manner. For instance, in September 1962, on his way to Colombo, the Prime Minister had issued a statement to the Press at Chennai, that he had ordered the Army to evict the Chinese from the Himalayas. The Army Chief then at Tezpur, wanted written orders to that effect. A Joint Secretary in the Ministry of Defence present at Tezpur gave him those orders. This sequence of events showed the extent to which the Army had been marginalized in the process of decision-making on vital defence matters. What followed is a very painful chapter of our history.

It is worth recalling that after the reverses suffered by them in Boer War, the British carried out extensive reforms in their War Office. At Gallipoli, during the First World War, General Sir Ian Hamilton, commanding the Royal Army, was desperately wanting naval gun fire support but this was not available as the Admiral commanding the Fleet had ordered his warships to clean their boilers!

The Gallipoli disaster taught the British the need for ensuring proper coordination between the Services in battle. The need for this, got further underscored with the emergence of the Air Force as a major partner in battle, whether on land or at sea. There was now need for close professional co-ordination between the three Defence Services. After the First World War, the British introduced a Chiefs of Staff Committee (COSC), comprising the three Service Chiefs in their Defence High Command. This arrangement was also adopted by other countries. During the Second World War, the concept of a Supreme Commander in all theatres of war was evolved. Within a few years after that War, the appointment of Chief of Defence Staff (CDS) was made at the national level in all countries, except India. Some countries use different nomenclature for this appointment but the functions assigned are the same.

In India the first recorded instance of higher defence organization flourishing was in the empire of Chandragupta Maurya. According to Megasthenes, the Greek Ambassador in Chandragupta's court, the Mauryan War Office in the fourth century BC was a combined headquarters for both the Army and the Navy. The Mauryan War Office functioning under the Commander-in-Chief had six boards, each of five officers. These were Infantry, Cavalry, Elephants, Chariots, Admiralty and Commissariat. The War Office looked after a standing Army of nearly three quarters of a million -- 600,000 infantry, 30,000 cavalry, 9,000 elephants and 8,000 chariots plus an unspecified number of warships. The Mauryan Empire extended from Kashmir to Karnataka and Kamarup to Kabul.

During the British era, India was perhaps the only country in the world which had a single Commander-in-Chief for all the three Services. In 1947, this arrangement was discarded and each Service came to have its own Commander-in-Chief, independent of each other. The nomenclature of the three Chiefs was changed in 1955 from Commanders-in-Chief to Chiefs of Staff. This re-designation has been both meaningless and misleading. In our set up, the Chiefs of Staff are not part of the Ministry. They are not authorized to take any decision on behalf of the Government nor issue any Government orders. These functions are performed by civil officials in the Ministry of Defence (MoD). The Service Chiefs continue to function as Commanders-in-Chief of their Service. Thus, it is a misnomer to call our Service Chiefs, Chiefs of Staff.

The debacle of 1962 had failed to motivate us to rationalize our higher defence organization. Like the Bourbon rulers of France, we had learnt nothing nor forgotten anything. The status quo remained.

However, after the Kargil War a Task Force under Arun Singh, a former Minister of State in the Defence Ministry, was set up to examine India's higher defence organization. I was the Governor of Assam at that time. Arun Singh asked me for my views on the subject. In my written submission to the Task Force I suggested the appointment of a CDS and for integration of Services Headquarters (SHQ) with the MoD.

While the recommendations of the Task Force on the Management of Defence were accepted by the Group of Ministers, its implementation has been tardy. We have integrated the Services Headquarters with MoD and even re-designated the three SHQs as Integrated Headquarters, Ministry of Defence(Army/ Navy/Air Force).Like the designation of Chiefs of Staff, this re-designation hardly means anything. Authority in regard to subjects of little consequence, have been delegated to Service Headquarters for integrated functioning but all issues of any consequence are dealt with by the civil officials of MoD. In other words the old arrangement of the civilian bureaucracy exercising authority without expertise or responsibility has continued. Even the suggestion that civil servants in Ministry of Defence should be from the Indian Foreign Service rather than Indian Administrative Service has not been accepted. Defence Policy and Foreign Policy being two sides of the same coin, an officer from IFS is far better suited to serve in Ministry of Defence than an IAS officer. I have been of the view that it will be as illogical to have an IFS officer serving as Home Secretary as it is to have an IAS officer serving as Defence Secretary.

In so far as CDS was concerned, a similar attempt has been made to derail the recommendation of the Task Force, accepted by the Group of Ministers and approved by the Cabinet. A large headless Integrated Defence Staff (IDS) has been provided which serves little purpose. Without a CDS, the required professional co-ordination and unified approach is lacking.

It is worthwhile to examine the arguments used by many, for not having a Chief of Defence Staff in India. Before doing so, it is necessary to take note of the considerations that have been militating against the introduction of this appointment. First, is the political leadership's fear, of the man on the horse back. It is apprehended that the Defence Services will become too powerful and subvert civilian control over the military, a military coup will occur. Second, the opposition of the civilian bureaucracy to any arrangement in which their dominance and stranglehold over the higher defence set up is diminished. Third, the feeling among the smaller Services, particularly the Air Force, of Army dominance in defence policy formulation. Some fear that a CDS may

lead to a situation like the one that prevailed before 1947, when the Army was the dominant Service. Fourth, is the inhibitions of serving Service Chiefs that their position would get undermined if the CDS were to be appointed. In a light hearted vein, it is often said that serving Service Chiefs are not enthusiastic about having a CDS but as their retirement approaches, they get converted to the idea of this appointment.

The fear that a CDS will erode the supremacy of the civil over the military is unfounded. The CDS will not be a Supreme Commander. He will only be an Inter-Service professional coordinator with individual Service Chiefs having the right of direct access to the Head of the Government. It also needs to be mentioned that Army Chiefs in different countries have staged military coups but no CDS has ever done so. India's Defence Services are fully committed to upholding democratic values and in a well established democracy like ours with such diversity, and of continental dimension, the question of a military coup does not arise. In the absence of a Chief of Defence Staff, his functions are virtually being performed, less efficiently by other functionaries.

It is said that adequate coordination is being carried out by the existing Chiefs of Staff Committee (COSC) and this has successfully met our Defence requirements for the last sixty years. Therefore, the present arrangement should not be disturbed. The annually changing part time Chairman of the COSC is in no position to provide effective professional coordination and render unbiased military advice to the Government, without any bias for a particular service. In the present arrangement, controversial issues between the Services get swept under the carpet and differences tend to remain unresolved.

Some people maintain that a CDS may be necessary for nations having global commitments and required to be prepared to fight a global war. The requirement for this appointment arises from the fact that modern war cannot be fought by any Service on its own and has to be a multi-service operation. It has little to do with global or regional nature of a war. Moreover, the huge expenditure on military hardware for the three Services has to be put under the scanner to ensure that wasteful expenditure or duplication in the Services is avoided. All countries in the world and not only the global players have a CDS.

India should not remain the only country in the world without a CDS. Furthermore, the fact that India is now emerging as a global power should not be ignored. The fears of the Navy or the Air Force getting swamped by the Army, which is a much larger Service, are

unjustified. The imbalance in the strength of the Services in many countries like Russia, China, Egypt and so, on have not come in the way of their having a CDS. No matter which Service a Chief of Defence Staff may be from, the question of a bias should not arise when he is not encumbered with the responsibility for looking after his Service. After all even in an individual Service, officers from different streams reaching the top position in their Service have always shown due consideration for other streams. Moreover, a CDS, as in most countries, should be a rotating appointment between the three Services. To put such unfounded fears completely at rest, the first two Chief's of Defence Staff in India should be from the Navy and the Air Force and only thereafter from the Army.

At one stage it was argued that unless there was unanimity among the three Services on having a Chief of Defence Staff, this appointment could not be introduced. After the 1971 war, Air Chief Marshal P. C. Lal had threatened to resign if it was decided to have a Chief of Defence Staff in India. The three Services are said to be now in agreement on this issue. Another hurdle is the requirement that both the ruling party and the Opposition should be in agreement on this issue. Hopefully, even this hurdle will also be crossed one of these days.

None of the arguments against having a CDS are valid. It is high time we in India introduce this appointment and also in due course have integrated field commands. This is imperative for efficient, economical and effective functioning of our higher defence organization in both peace and war. National interests should not be allowed to be held hostage to vested interests.□



# **Need and Desirability for Establishment of a CDS System in India**

K.K. Nayyar

There is no doubt that India requires a Chief of Defence Staff (CDS) system for its higher defence management. Those who argue otherwise should revisit the Indian experience and realize that the world over militaries are getting to understand the inevitable necessity in today's environment of having a CDS-like system.

Success in a modern war depends on the formulation of a joint military strategy based on the politico-military aim and its joint and integrated execution. At present, under the system that India inherited from the British, the three Services draw up their individual operational plans based on the Defence Minister's Operational Directive. Only limited coordination is carried out at the operational level and the tactical level.

Given the ever-changing nature of the battlefield, it is necessary to adapt the Indian military system accordingly. Additionally, in a nuclearized environment it will not be possible to fight single service wars in future. It will be necessary to have joint structures for fighting future wars. For this purpose, it is felt that India must take up the challenge thrown up by the experience of other countries, like the US and UK and find the best way to move forward to the creation of an institution that will ensure jointness and rapid reaction capabilities.

This does not mean that a CDS is the panacea for all of India's problems in the military sphere. But the point is that such a system will solve many a problem faced by the military today. Be it planning, budgeting or force structuring, the present set-up does not cater for cohesive advice to the Government from the military based on a coherent strategic vision.

Those in favour of persisting with the current status quo claim that the Chiefs of Staff Committee (COSC) system, has worked quite well and therefore there is no need for either a CDS, or integration with Ministry of Defence (MoD), or any further inter-service integration. However, the inadequacies of the present system was clearly demonstrated during the kargil conflict in 1999.

In the wake of this conflict, the Government of India set up a committee under Arun Singh, former Minister of State for Defence, to recommend changes to the existing defence organisation. The committee proposed far-reaching changes to the existing higher defence organization.

The main recommendations of the Arun Singh committee are:

- That the existing COSC should be enlarged by the addition of a CDS who would be the permanent chairman, and a Vice Chief of Defence Staff (VCDS) who would be the Member Secretary.
- The CDS was to be the Principal Military Adviser to the Government of India. He would not exercise command over any of the Chiefs or Forces other than those placed specifically under his command.

The Kargil war also led the Government to institute a comprehensive review of the National Security system in its entirety for the first time in the history of independent India. A Group of Ministers (GoM) constituted on April 17, 2000 carried out a review of the recommendations of the four task forces set up to examine, management of defence, the intelligence apparatus, border management and internal security.

The GoM made several recommendation regarding reforms in Defence Management. The processes of implementation of the recommendations were initiated in 2001. While the GoM accepted the recommendations of the Arun Singh Committee, the process of implementation of the top order, namely creation of the CDS became embroiled in controversy. This was both in the political sphere as well as within and amongst the Services.

To ensure a higher degree of jointness amongst the Services and to attempt inter-service and intra-service prioritization, the Government set up the Headquarters, Integrated Defence Staff (HQIDS), headed by the Chief of Integrated Staff to Chairman, Chiefs of Staff Committee (CISC), to support the COSC and its Chairman.

The CISC supervises the IDS, chairs all multi service bodies and the Defence Crisis Management Group (DCMG) and is also responsible for the coordination of long-range perspectives plans, five year plans and annual budgetary proposals of the three services in consultation and coordination with the Integrated Services Headquarters, through the COSC.

## *Need and Desirability for Establishment of a CDS System in India*

Its envisaged functions include:

- Giving advice to the Government on prioritization for developing force levels and capabilities through restructuring proposals;
- Undertaking net assessment comprising the totality of the national capability;
- Formulating joint doctrines in consultation with Service Headquarters (SHQ);
- Conceptualizing policies and programmes on joint planning and military education for personnel of defence services;
- Rendering advice for evolving responses to non-traditional and unconventional threats to national security;
- Proposing measures to be taken for ensuring the required jointness amongst the armed forces;
- And enhancing the efficiency and effectiveness of the planning process through intra and inter-service prioritization.

In practice, this has not worked because the CISC has to go through the COSC for all matters and this arrangement is ineffective. The most important point to bear in mind is that there is little use of having a system in place without having the leader, namely, the CDS.

It is contended that while the GoM accepted the need for the CDS, they did not take into account that such a post would only solve problems in peacetime. The purpose of having armed forces is to prepare for a war. And future wars are going to be such as to force coordinated and very quick action from the armed forces of the country. Waging such wars will require theatre commands. The practical way to ensure proper command and control would be for the theatre commanders to report to the National Command Authority through the CDS. The point that needs to be emphasized is that it is necessary to have the CDS and theatre commands, if the system is to be successful in war.

The CDS would enhance the efficiency and effectiveness of the planning process through intra and inter-Service prioritization. And he should ensure the required "Jointness" in the Armed Forces. The CDS has to be viewed as the 'Head' of the Indian Armed Forces in terms of providing strategic control, strategic direction and strategic vision.

Such a situation will allow the Indian armed forces to react quickly and with reduced teeth-to-tail ratios. With jointness it will become possible to bring together and analyse overlapping service aims, both in terms of acquisitions and operational deployment. And finally, there is a need to find means of coordination between nuclear and conventional forces.

The most urgent requirement for the Indian Armed forces is to create the capabilities to be able to apply maximum force in the shortest possible time, in a conflict. This means that the following aspects have to be kept in mind when preparing for the future.

- There is no alternative to transformational strategies. Because of strong institutional biases, experience elsewhere indicates that many of the areas needing reform will need political will and legislative mandate.
- The armed forces have to restructure at the earliest, through the establishment of the CDS and theatre commands. This must be done and we must ensure jointness.
- Force acquisitions need to be made on the requirements of the theatre commands and not on the needs of individual services.
- More effective approaches to jointness, combined arms and combined operations leading to concepts and tactics towards truly integrated operations or even inter dependent operations is the need of the hour. The sensitivity of each Service should be kept in mind while planning integration and jointness. It is suggested that areas of agreement be worked out first.
- Resource constraints tend to make the armed forces focus on force modernization in terms of traditional weapons. Greater attention needs to be paid to doctrines, equipment and forces to respond to unproven and asymmetric threats. Innovation and 'out of the box' thinking is needed.
- The answer is to consolidate and rationalize tri-service roles, missions and assets based on scientific and operational analysis criteria. With this approach it should be possible to afford and operationalize the kind of capabilities and forces needed within national resource limitations.

In the present era of strategic uncertainty and rapidly changing threats, military professionals are aware of the necessity of a joint planning staff for the planning and conduct of joint operations so that these can be planned "top down". The establishment of HQIDS in India is no doubt, a first step. But if the organization remains headless, its functioning will remain disjointed. Also it will never carry the clout necessary to ensure that difficult and sometimes unpalatable decisions are accepted by the three Services without questioning. And finally, it needs to be emphasised that theatre commanders, vital for wartime operations, will only follow a CDS. If global trends are any indication, this is the direction in which India should be headed. □

## **Guidelines For Contributors**

*The Journal of Defence Studies* welcomes scholars to submit original papers, which have not been submitted for consideration by any other publication. An important criteria for the Editorial Committee is that contributions should have some policy relevance.

The Journal has three types of contributions :

*Research papers* – Research papers of length 5,000-7,000 words with annotation; **excessive footnoting is discouraged** but those pertaining to the issue at hand may be given as per the house style.

*Commentary* – Shorter essays of 2,000-3,000 words on strategic issues.

*Debate* – This will contain articles of 2,000 words in length. These will be on topical issues and will generate a debate on various matters relating to defence policy, defence budgets, higher defence organization and so on.

### **Submission of Typescripts**

Contributors are requested to follow the guidelines given below :

The paper should be composed using MS Word 6.0 and above. Author may mail copy to Director, IDSA. But a hard copy (A-4 size) should be sent to Director, IDSA along with soft copy on a CD.

An Abstract of about 250 words should be included to describe the main argument and the conclusions of the paper.

The author should send a brief resume of about 100 words, institutional affiliation, and mailing address.

All diagrams, charts and graphs should be referred to as Figures and consecutively numbered (Fig.1, Fig.2, and so on). Tables should carry only essential data and should complement the text rather than repeat what has already been said. They should carry a short title, be numbered (Table 1) and carry the source at the bottom. Each table must be referenced in the text.

Author's acknowledgement(s) may be included at the end of the paper and before References/Endnotes begin.

The Journal discourages excessive footnoting. But we encourage those authors who are writing research papers to reinforce their main arguments with references even by way of endnotes or a listing refence.

Sub-headings are welomed as they make the paper more reader-friendly.

Hyphens should never appear in typescript at the end of lines.

## *Guidelines for Contributors*

### **Style Sheet**

Use British spelling (colour, organisation, etc.)

Write dates by beginning with the month, followed by the date and the year (e.g., September 11, 2001).

In the text, write numbers in words till the number nine and then in numerals (e.g.: two, four, nine; then 10, 11, 12 and so on).

Write 'per cent' and not % or percent.

Acronyms should carry the full form at the first mention with the acronym in bracket; and thereafter, the abbreviated version.

Use lower case while referring to establishments like the government, the army, and so on. Use upper case if these are accompanied by the name of the country (e.g : the Indian Government or the Chinese Army). The president or prime minister stays lower, unless they are accompanied by the name (eg : Prime Minister Tony Blair or External Affairs Minister Natwar Singh).

### **References/Endnotes**

References/Endnotes should be sequentially numbered. Authors are responsible for accuracy of the referances given in the text of their papers.

While referring to a book, follow the example below:

Padmaja Murthy, *Managing Suspicions: Understanding India's Relations with Bangladesh, Bhutan, Nepal, Sri Lanka*, Knowledge World: New Delhi, 2000, pp. 59-67.

While referring to a chapter in a book:

Meena Singh Roy, 'Building a Peaceful Asia,' in Jasjit Singh (ed.), *Reshaping Asian Security*, Knowledge World, New Delhi, 2001, pp. 348-361.

While referring to a paper in a journal/magazine:

P.R. Rajeshwari, 'Bill Richardson's Visit to South Asia: A New Phase in US-South Asia Relations,' *Mainstream*, 36 (19), May 2, 1998, pp. 23-26.

While referring to a paper presented at a conference:

R.V. Phadke, 'Security of Energy', Paper presented at the International Conference on Oil and Gas in India's Security, New Delhi, 2001, Institute for Defence Studies and Analyses, New Delhi, 2001, pp. 82-86.

While referring to an article in a newspaper:

Kulbir Krishan, 'The Pearl Abduction: Who and Why?' *The Pioneer*, New Delhi, February 12, 2002, p. 7.

While referring to a website:-

'Excerpts to remarks of Prime Minister Nawaz Sharif on Nuclear Policies at the CTBT', at [www.clw.org/pub/clw/coalition/sharif052099.htm](http://www.clw.org/pub/clw/coalition/sharif052099.htm) (Accessed February 2, 2005).

If two successive citations/references refer to the same source, use *Ibid.*

If the same reference is to be cited after a few other references.citations, write the name of the author followed by *op.cit.*: Srikanth Kondapalli, *op.cit.* If there are more than one reference to the same author, the name of the author may be followed by brief summary of reference: Srikanth Kondapalli, 'India's China Policy'.

Any full-length research article not conforming to the above requirements is incomplete and will not be considered.

Copyright resides with the Institute for Defence Studies and Analyses.