

# **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.