

JOINTNESS IN THE DEFENCE FORCES: CHALLENGES AND THE WAY AHEAD

Mr Shekar Dutt

This is an extract of the foundation address given by Mr Shekar Dutt, Defence Secretary, at the College of Defence Management Annual Seminar on, "Jointness in the Defence Forces: Challenges and the way Ahead," conducted on 23 and 24 Nov 06.

I consider 'Jointness' to be a very topical issue in the Armed Forces today. I refer to it as 'Topical' because now there is an almost universal acceptance that in the not too distant future, India is destined to be a major global player of consequence, capable of securing for its masses their cherished quality of life and safeguarding its legitimate security

India is poised to join the league of 'Developed Nations'.

interests. With a landmass of about 2.39 million Sq Km and a population of over 100 crores of which close to 40% are in the most versatile and productive age bracket of 18 to 35 years and a rich and vibrant base in science and technology, especially in the field of information and communication technology, India is poised to join the league of 'Developed Nations.'

The desired geopolitical and strategic status of India will require a commensurate national security apparatus that is contemporary in character and responsive in managing security challenges which the future is likely to throw up. India ought to be capable of leveraging its military instrument in pursuit of its legitimate national security interest. Our entire national security establishment and

specially the Armed Forces have to foresee the need of enhancing their effectiveness in the context of emerging technological advances and dynamic threat spectrum. We will need to optimise our strategic decision making process and war fighting concepts to become more efficient as well as cost effective.

This is one of the important facets amongst others where debates assume significance. The concept of 'jointness' is not new to us. The Joint Services Wing for training officer cadets, which later became the National Defence Academy (NDA), was the first of its kind anywhere in the world. Other Joint Services institutions such as the Defence Services Staff College and the National Defence College followed suit. Independent India, has fought and won many wars, which could not have been possible without the requisite degree of synergy, the hallmark of 'jointness', in our security system. Notwithstanding this history, however, there is need to bring changes in our system to adapt to the demands of contemporary and future national security challenges.

But any debate or discussion on 'change' would require clarity of the concept. So what is this concept that we are all talking about?

Institutionally, 'jointness' and synergy are much talked about concepts, though interpreted differently by different people. I will tell you my simple interpretation of it. To my mind, as far as our national security apparatus is concerned, it is about striving for optimal operational and cost effectiveness in the current and envisaged future geopolitical environment. Dissected further, it would mean that the three Services should be able to operate seamlessly with common understanding of the missions and joint strategies to accomplish them. It would imply Joint Operational Doctrines for all Theatres of war, Joint Concepts of Operations to accomplish identified military missions and also procedures that can fructify these concepts and doctrines. It will entail possessing interoperable systems, joint training to develop common understanding and synergizing institutional assets, whose ownership, responsibility and accountability, with respect to managing national security is currently delineated. And all this has to be achieved in a cost effective manner.

I would not like to go into the analysis of why we are at what we are. Most of this is in the public domain. The simple fact is that we need to evolve the ethos of acting jointly, which is a prerequisite for successfully waging a modern day war. All these would entail

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transformation and reforms in the Armed Forces. However, more than anything else, these would involve changes in mindsets which would place national security interests above sectoral interests.

In conclusion, I would like to quote from Guilio Douhet who wrote in 1921, ***“There are experts of land, sea and air warfare, but as yet there are no experts of warfare; and warfare is a single entity, having a common purpose.”***

BLUE TO PURPLE

Air Marshal AV Vaidya, VM

This paper is the author's thoughts on being posted to HQ IDS. It gives a practical perspective on the need for jointness and the problems of not having a CDS.

“Come on friend start thinking Purple now, you are no more Blue”, these words hit me soon after I was recently posted to HQ IDS (Integrated Defence Staff). They came as a shock to me and I wondered how a man like me, who had been a hard core blue blooded creature for nearly 37 years, would be able to think purple !

What do they mean by saying think purple anyway? Do they want me to forget that I am an Air Force officer? Does it mean that I should think more for and from the point of view of Army and Navy and not the Air Force? Perhaps it means that I should be impartial in my thought process when it comes to issues concerning other Services as well. And just because I am from the Air Force and to prove that I am a good purple officer, I should perhaps vote more in favour of the other Services in matters which affect equally to all just to show that I am not partial towards Air Force!

Right from our young days we all are brought up in an environment to strongly believe in our Service and to uphold its

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believe in our religion. To many Air Force officers, Air Power is like a religion – the right path to Nirvana – to total happiness – to victory.

As we grow up in Service, we come across some Mullahs (senior role models) who influence our thought process a great deal. Also, we are made to go through various madrassas (courses run by various schools and colleges of each Service) and we tend to believe that the path of Air Power or Naval Power or Ground Power, depending upon the Service one is in, is the right path to victory. Having grown up in such an environment how is one expected to suddenly go purple and that too at such a late stage in one's Service career? That was my dilemma.

For years I had seen officers who could not do any sort of joint thinking even within their own Service. In each Service we have created divisions (some sort of caste system), for example in the Army, we have the Armoured Corps, Air Force has its fighter pilots and the Navy probably has its submariners or other Executive Officers who think they are the Brahmins of the Force – a class above the others. These people sort of look down upon those who belong to the supporting arms – akin to Brahmins looking down with disdain at those belonging to other castes. Even within a Service we have failed to think from the point of view of the other

arm then how can one expect any kind of purple thinking and jointmanship when it comes to other Services?

When it comes to inter-service thinking, the Army thinks it is the prime Service and that the other two Services have been created to mainly support it in war so all priorities should be given to it. The Navy and the Air Force are obviously not in tune with this thought process. Of late, the Air Forces all over the world feel that the Army is worth only for mopping up operations at the end and that the main job of breaking the enemy is done primarily from the air. The Navy too has its own arguments and talks of protecting our Sea Lines of Communication (SLOC) and their importance to the economic growth of the country and hence wants a bigger chunk of the defence budget and more attention. Thus there is no confluence in the thought process even at very senior levels – so what is all this talk of thinking purple?

So were my initial thoughts when I was posted to the IDS as Deputy Chief Integrated Defence Staff Operations (DCIDS-Ops). It was only after two-three months of exposure to the business being conducted in the IDS that I realised how wrong I was and that it was quite possible to turn purple without much difficulty. There were many issues, small and big, which

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came to my notice on which the three Services could not come to a unanimous decision. Despite protracted correspondence and any number of meetings, the issues had remained

unresolved. Even the Chairman COSC was unable to sort them out which meant that the matter had to be taken to some outside agency to seek resolution and this agency invariably was the bureaucracy of MoD. This meant that the internal matters were being exposed to outsiders who invariably took advantage or could take, if they wanted to.

As some say, “Keep the pot boiling – keep the infighting between the three Services alive so that they will remain subservient to the MoD”, is perhaps the strategy of the Govt and hence this delay in appointing a CDS. The best way to counter this perhaps would be to sort out all the differences amongst ourselves and present a common front to the Government, and IDS I realised was perhaps the best organisation to achieve this. But sorting out the differences is not an easy task. It calls for a lot of give and take. And that is where not just purple thinking but purple “give and take” comes in.

Prior to the creation of IDS, it was with great difficulty that the officers of the three Services got together at different levels for fruitful discussions on various contentious issues (so I am told). They also had no mediator or an umpire to ensure that some decision was taken at the end. Raising ones voice to disproportionate levels during discussions, not letting others express their views, making derogatory and sarcastic remarks about other Services and such other activities were considered as plus points and a pat on the back was often earned by indulging in them. In these meetings, the participants would invariably not arrive at a consensus leaving the issues unresolved.

With the creation of IDS and with very senior officers of all three Services posted in this organisation, when issues with differing opinions or for that matter any issues concerning all three Services, are referred to them, they have enough time to discuss them holistically from the Armed Forces point of view rather than from the point of view of any particular Service (sort of purple discussion). Adequate thought can be given to various aspects like compatibility, inter-operability, commonality, inter-service priority etc. Such purple discussions are particularly very important in issues related to procurement of new equipment, joint exercises, C⁴I² aspects, joint doctrine, SOPs for joint operations, intelligence related issues etc. IDS, thus ensures that proper in-depth study is carried out and necessary recommendations are put up to Vice Chiefs' Committee or to Chairman COSC for taking appropriate decision.

COSC functions on the basis of consensus and the Chairman does not

have the veto power or the power to force a decision on any Chief should he disagree and that is when the need for CDS is acutely felt. In the absence of CDS, if there are any issues on which the three Chiefs do not agree, then these perforce have to be referred to the MoD which finally does give a decision which may not be in favour of one or more Chiefs. So instead of MoD doing this, it would be so much better if Chairman COSC is given the authority to do the needful – till CDS is appointed.

Having come and worked for a while in IDS, I do feel that my good old parochial way of thinking has been replaced to some extent by a more broad minded thought process which would not have been possible had I remained in the confines of Vayu Bhavan and IAF Command HQs. In my opinion, it is very necessary for every officer to have a stint in IDS at some stage or the other – earlier the better. It will certainly help to broaden his horizon.

Air Marshal AV Vaidya was born on 21 Feb 1948. An alumnus of the National Defence Academy and the National Defence College, he was commissioned into the fighter stream of the Indian Air Force in Dec 1968. He has over 3000 hours of accident free fighter flying on various aircraft like the Gnat, Hunter, MiG-21 and Mirage-2000. The officer has commanded a Mirage Squadron, a premier air base and has also been the Director of Air Staff Requirements at Air HQs. He was the Air Defence Commander and subsequently the Senior Air Staff Officer of an Operational Command. Presently he is the Deputy Chief of Integrated Defence Staff (policy, Planning and Force Development) at HQ IDS. Air Marshal AV Vaidya is a recipient of the Vayu Sena Medal.

IMPERATIVES OF SYSTEMATISED FORCE TRANSFORMATION-A DE NOVO APPROACH

Brig Anil Sharma

The paper enumerates multidimensional, integrative and dynamic nature of the force transformation process. It is required to take off from the very top – the articulation of national and defence security strategies. Followed by formulation of strategic defence review, defence planning guidelines, capability strategy/plan, technology development plans and finally, as long term integrated perspective plans. The author pitches for using defence cooperation as an instrument of serving national security interests. Most of the aspects lie in the domain of HQ Integrated Defence Staff.

Introduction

Transformation is metamorphosis. It is neither a usually behind time evolution nor budget busting, reactive and radical force restructuring revolution. It is a calibrated and systemic process with two major objectives. *First*– transforming the military to tackle relevant spectrum of security challenges that India anticipates in the short, mid and long term and the

In India's context HQ Integrated Defence Staff (IDS) is charged with this joint responsibility

Second – applying emerging technologies to counter and pre-empt any potential adversary/competitor.

The key challenge for force transformation to take effect is drafting the long term integrated perspective plan (LTIPP). Based on this, the Armed Forces - force structure, equipment profile, training, logistics etc would develop. In India's context HQ Integrated Defence Staff (IDS) is charged with this joint responsibility. This paper takes into account the experience and process in

vogue in the US and other European countries'. Their Quadrennial Review process has been related to imperatives and lessons in the Indian context. An interesting facet to emerge is that China has very closely structured its national security system on the lines of US. The Chinese government has been bringing out white papers and putting them out in the public domain to shape the international and domestic perceptions.

The *aim* of this paper is to establish a link connecting force transformation with integrated National Security Strategy (NSS) and Strategic Defence Review (SDR) for India's security management system.

Challenges

What are the *constraints* in India's existing defence structure? When HQ IDS was established, it was to be headed by the post of Chief of Defence Staff (CDS), whose tasks would include ensuring intra and inter – service prioritisation of defence plans and providing a system of jointly coordinated, single channel of military advice to the government. Existing

system, on the contrary is a compilation of perspective plans prepared by individual Services and DRDO. Budgetary allocation is a result of individual Service threat and capability assessment. In the absence of an integrated system, the end product is to an extent proportional to the size of the Service. *Major lessons of India's perspective planning are as follows:-*

- The long term perspective planning in the Armed Forces is a complex process. For it to be effective and realistic, it would necessarily have to be collaborative in its approach, as there would invariably be a number of agencies that would contribute towards the final product.
- The LTIPP should aim to build joint force structure and capabilities that would be relevant for the next 15-20 years and not for the present scenario.
- Starting point in the process of formulating an LTIPP is the articulation of a national security strategy (NSS).
- NSS requires to be followed by articulation of defence/military strategy.
- Strategic Defence Review (SDR) will flow out of the above documents. SDR will relate security strategy (national/defence) to the changes underway and their futuristic context.
- *Raksha Mantri's (RMs)* Defence Planning Guidelines should reflect capability, technology, organisational and doctrinal

transformation needed in near, mid and long term time frame.

- The time frame within which a particular capability is required to be developed needs to be clearly spelt out.
- Once missions have been identified, the capabilities needed to accomplish the mission need to be enumerated. These capabilities are then weighed against existing capabilities and capacity 'Gaps' arrived at. Once the gaps in

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capability are known, it needs to be established whether such gaps can be plugged through doctrinal or tactical means. If not, only then should we resort to material acquisition. Answer to this *query* will form the basis of evolving capability and technology plans.

Integrating National and Military Security Systems

Abinitio, a holistic national security system leading to force development parameters would comprise six major steps in integrating national and military security systems.

- *Firstly* - an exploration of geo-strategic environment through net assessments, bringing out strategic and military balance of power in

comparative terms. This would encompass present and future international security setting and conflictive national interests of global, Asian and South Asian players. Simultaneously also a review needs to be done of the internal scene to identify internal contradictions and identify the need, for providing multifaceted security.

- *Secondly* - outline contours of future threats and challenges encompassing all dimensions emanating from the environmental scan.

- *Thirdly* – formulate national security strategy, its perspective and defence military strategy.

- *Fourthly* – providing politico – military interface (HQ IDS), while responding to tackling non war time crises, strategic deterrence/ operations, and competition or irregular war challenges. This would mean implementing the strategy and its operational derivatives through integrated inter agency (IDS/MoD, MHA, MEA, NSC etc) and joint forces functioning mechanism.

- *Fifthly* – articulating SDR. It will attempt to identify changes which have taken place in political, strategic, military and technology in relation to the conclusions and assumptions driving the NSS/ defence strategy and their implications for the future. This would enable the strategic leadership to *determine the direction in which the Armed Forces need to transform* to fulfil their responsibility to the nation. This would also provide broad guiding parameters

as regards: future defence/military strategy, reviewing strategic capacities, capabilities, force structures and reshaping of defence technology enterprise, fully synergized with national technology cum industrial advancement plans.

- *Sixthly* - RM's defence planning objectives and planning guidelines will flow out of the SDR.

Evolving Integrated National Security Strategy

The *foremost need* is to enunciate a **National Security Strategy** (NSS) or a fundamental strategy based on past experience, current realities and future assessments, with a view to shape the environment to achieve the *national security objectives*. Inter-alia, it will lay down guidelines for the development of the military, diplomatic and economic levers of power, and the mechanism to synergise them. It should be developed by the NSC with inputs from MoD (IDS), MEA, MHA, Economic Ministries, departments of Science and Technology (S&T), Atomic Energy (DAE) and Space Research Organisation (ISRO).

An aspect meriting perceptual clarification is to distinguish between *threats and vulnerabilities*, as emerging

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from integrated perspective analysis. Threats should be viewed as distinct from

vulnerabilities. Former are often identifiable, requiring an understandable response, mostly application of force, covert or overt. Vulnerability is only an indicator, often not clearly identifiable. *Challenge of implementing NSS also lies in preventing vulnerabilities transforming into threats by dexterously employing all instruments of national power, as also shaping them in a positive direction or to our relative advantage.*

The sensitive aspects of NSS will need to be classified. These should essentially cover the following:-

- India's political aims/goals in terms of power projection or promoting/securing strategic/security, economic, technology and environment/bio-diversity interests.
- India's interests in other countries and regions extending from South Asia outwards.

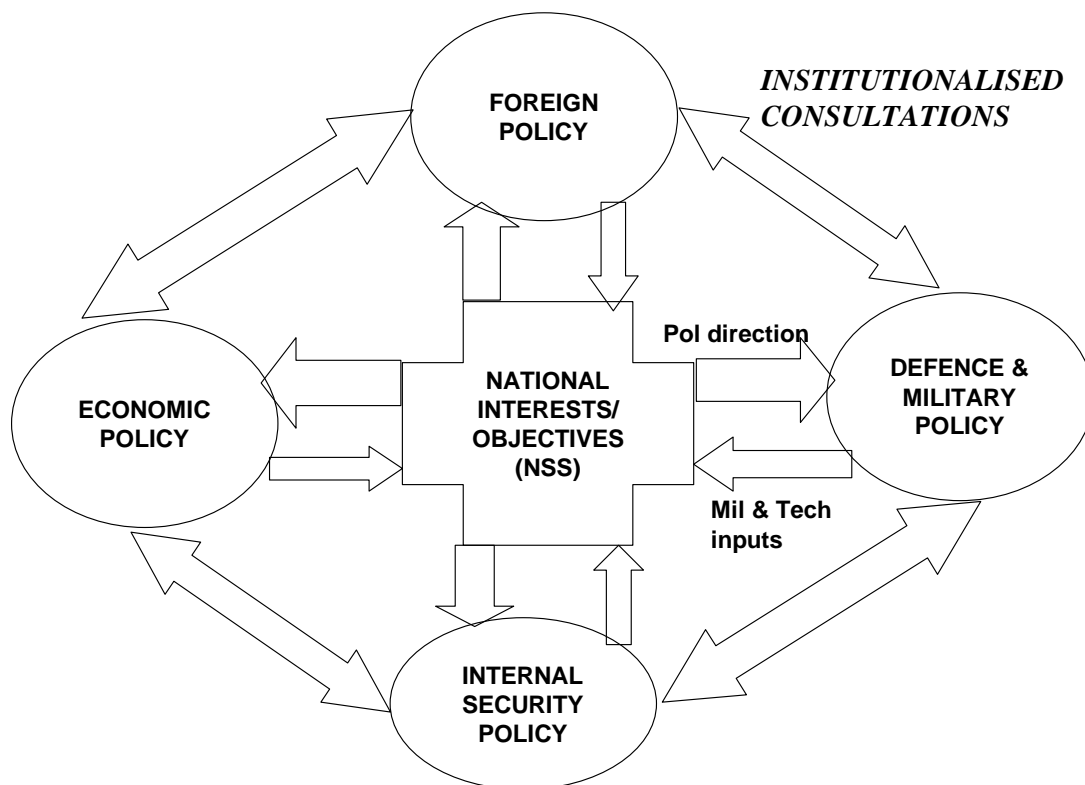


FIGURE 1 INTEGRATED SECURITY MANAGEMENT SYSTEM

- Interests and relationship matrix with major powers and the UN.
- Threats, challenges and competitors to our interests in respect of above paradigms.
- *Winning the competition* – strategy for staying ahead in competition and challenges, by setting time bound *objectives and engagement plans* in diplomatic, economic, technology and defence/

security fields vis-à-vis the competitors.

- Identify *economic, strategic, military* and *technology leverages*. Inter-se priorities of countries will need to be given out.
- Lay down strategic choices for entering strategic/security partnership in short, mid and long term context.
- Review of internal dynamics of India, its linkages with trans-border threats and challenges will be elaborated. Degree of expected involvement of Armed Forces in the internal dynamics will be enunciated as a policy.

An analysis of the aspects covered above brings out the inter-dependence and inter-play of the various organs of the state. An integrated security management system is illustrated in **Figure 1**. It clearly brings out the overlaps of various ministries which need to be understood and synergized through an integrated, inter active, inter agency and joint operating mechanism.

Articulating Defence Strategy

NSS will serve as framework around which diplomatic, military and economic levers of national power would be orchestrated. Defence strategy will postulate various dimensions of military power and its application in sync with overall national power. Goals, objectives and implementation strategy contained in NSS will form the over arching parameters, from which defence strategy guidelines will flow. *The two documents are inter related and inter dependent. Their review will also need to be*

undertaken in tandem.

Defence strategy could be in two parts as follows:-

- **Defence Strategy** - to cover doctrinal precepts, guiding principles, challenges, defence objectives and implementation guidelines for the entire defence/security enterprise of the country.
- **Military Strategy** - to amplify the military facets as a frame work of our strategic focus. It should enable the Armed Forces to support and implement the NSS and defence strategy in *war* as also during *peace time competition*. It would lay down military implications of defence objectives, conceptual issues, broad operational and capability overview, range of military missions, technology and organizational aspects.

Formulating Strategic Defence Review (SDR)

It will flow out of the NSS and the current defence/military strategy, as also the previous SDR (whenever applicable). However, there must be a projection into the future, an innovation or we would indeed always be fighting yesterday's wars. In order to make it broadly relevant up to next 15 or more years, a mechanism for extrapolating (linear and non linear) *present* into the *future*, has to be incorporated. The suggested *sequential process* to arrive at *future* strategy is as follows:-

- Review of changing strategic environment and the future

scenarios.

- An analysis of present defence/military strategy and the changed goals, if any, set in the NSS.
- Relating emerging technologies and consequent Revolution in Military Affairs (RMA).
- Meshing future conflict spectrum and battle space milieu.
- These when compared with the role and responsibilities of each Service would provide a mosaic to develop joint capability of the Armed Forces to meet future military missions.
- Future military perspective (near, mid and long terms) or joint military vision and military missions would lead to RM's Defence Planning Guideline.

The **SDR** should identify *future* parameters in terms of the following:-

- Adversaries/ countries of security competition, cooperation and friends.
- Comparative evaluation of the nature of threats/ competition.
- Threat from competing strategic/ security alliances.
- Goals and objectives of bilateral/ international defence cooperation.
- Policy on role of Armed Forces in asymmetric threats and internal conflict dynamics.
- Strategy for protection of critical infrastructure from cyber attacks.

- Defence related aspects of perception warfare.
- Degree and nature of military assurance that may be needed for ensuring energy, water and food security.
- Any other parameters considered relevant.

Synergising Defence Cooperation with NSS/ Defence Strategy/ SDR. This requires to be reshaped into a focused and result oriented instrument. In this case ***Defence Diplomacy*** would cover all defence related actions undertaken to further our national aims and objectives, its range would extend from unilateral coercive or armed actions to bilateral/ multilateral security cooperation initiatives with mutual consent. Thus the term ***security cooperation*** would provide the overarching umbrella for all security related cooperation. In conjunct with economic and strategic co-operations, *security cooperation* should be used as an instrument of India's NSS to secure and further our national interests by supporting formal agreements, strategically weakening or denying defence related technologies to those confronting us or future competitors. It should also enhance our prospects for extra regional mobility to secure strategic interests. Such activity would include:-

- ***Military Cooperation Activities*** – military to military engagement like joint operations, joint exercises, training, peace keeping/enforcing operations as part of UN or multinational alliance, fleet reviews and expert exchanges.
- Enhance financial viability of own defence industry and R&D

through defence exports, technology transfer, joint R&D and joint production.

- Improve own defence capability in areas of defence equipment through acquisitions, technology transfers and joint industrial production.
- Cooperative R&D, foreign comparative testing, and host nation support.
- Assist friendly foreign countries in developing their defence capability without impinging on India's security.
- *Degree and range of security cooperation with various countries should be in synergy with our security/military strategy.* This should also examine the stratagems for weaning away an important country from our competitors.
- Creation of additional overseas sources of supply to improve offshore logistic responsiveness and the in country mobilization base.
- Defence cooperation should open avenues for more efficient market for trade in defence technologies, goods and services for India.
- Overall our approach must minimize vulnerabilities/threats and maximize opportunities.

Defence Planning Guidelines and LTIPP

The ongoing system based analysis would allow the articulation of an all encompassing **Defence Planning Guidelines (DPG)**. It would emphasize

joint military vision and force development imperatives, to include the required capabilities and broad commitments of financial resources likely to be made available. This would also include technology requirements for the DRDO. Next sequential step will be enunciation of **defence capability strategy** followed by **defence capability plan**.

The **LTIPP** would now emerge from the above multistage inter active process. The LTIPP so formulated will be based on integrated system dynamics and force development imperatives. *The key drivers will be jointness and inter agency – these need to be internalized. In tomorrow's spectrum of conflict/ violence/ destruction, there would be nothing, which will not be joint /interagency.*

Drawing from the LTIPP, respective HQs will formulate programmes, projects and life cycle support required for the emerging, equipment profile.

Way Ahead

A *critical imperative* is to document the NSS:-

- A core group may be formed coordinated by NSCS. Representatives of all major ministries and HQ IDS are to be included. This must be at two layers- staff and deputies.
- Papers available with MEA, MHA, HQ IDS, Service HQs, other government agencies and think tanks could be used to frame a draft NSS. Draft policy guideline assumptions on NSS and Defence Strategy prepared by HQ IDS (Net

Assessment office) could serve as initial draft.

- Initial draft must be circulated to concerned agencies for comments and further updating. However, it should carry authenticity as policy guidelines for all other agencies, so as to avoid delay in applying the concepts into practice.

For preparing **SDR**, it is suggested that :-

- Initial draft is prepared by HQ IDS. It should then be reviewed by a joint working group, along with representatives NSCS, MEA and MHA. The endeavour should be to solicit best ideas from outside MoD, Armed Forces and government agencies.
- Defence policy guidelines for force transformation and technology development capability strategy/ plans to be finalized by HQ IDS.
- DRDO to concurrently develop defence technology plan.
- Defence capability and technology plans should emerge as a function of joint interactive mechanism incorporating HQ IDS, Service HQs, DRDO and civil industry.

The draft **LTIPP** could then be finalised by:-

- HQ IDS in consultation with Service HQs.
- The existing draft to be reconciled with initial draft of NSS and SDR.
- Implementation of macro

policy aspects to commence after due consensus or as authorized by competent authority.

Transformation Continuum

The Quadrennial Defence Review (QDR) examples of nations of consequence and its success so far, bring out the challenges and imperatives for Indian defence planners. No sooner had the cold war ended that the US had within a year or two revised its NSS and QDR, which led to transformational processes in place.

As part of American QDR 2001 process, a concept paper titled *Asymmetric Threats and the Next QDR* was prepared by US National Defence University in year 2000. After the 9/11 experience, required strategy, organizational and equipment changes suggested were incorporated. Reorganized Special Forces were even fielded in operations in Afghanistan and Iraq from 2002 onwards. It was an example of creating capability and applying it in the operational realm, all in real time.

China also has reorganized a large number of its infantry divisions into *counter terrorist formations*, to lead in high intensity counter insurgency contingencies. Such formations are charged with responsibility for various military districts/ regions and are located to provide quick response. Although China's extremist concerns are broadly centred in Xingjian and Tibet. Interspersing the entire country with Special Forces is indeed a preventive/ deterrence driven transformational response.

Clearly, there is a need to realize that transformation is not a one time phenomenon. *It is changing with the 'change' at the pace of 'change'*. It requires mental, physical and process agility at individual and collective levels. The multi-tiered mechanism discussed in the paper needs to be put in place expeditiously. Next step will be the

Transformation is not a one time phenomenon. *It is changing with the 'change' at the pace of 'change'*,

promulgation of output documents and their adoption to user responses. Follow up action will again have to absorb newer changes in geo-political environment and so on. The cycle will continue. Successful transformation therefore, is a resonant/synergized continuum requiring indulgence of entire strategic enterprise.

There is an urgency for security planners to comprehend the need to revamp functioning and organization of the national security apparatus. This is essential for generating effect based response to extremely complex security dynamics of the coming new global order. Our competitors are not going to wait. We have to learn and apply faster. ***The Americans and other evolved major powers believe and practice that countries, Armed Forces and systems, which show a markedly superior learning dominance, move ahead and stay ahead. It is a point meriting deeper reflection.***

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IMPLEMENTING JOINTMANSHIP IN THE INDIAN ARMED FORCES

Maj Gen DS Chauhan

This paper analyzes the reasons why jointness is essential for the future Armed Forces of India. It then goes on to suggest an implementation strategy for the same. The paper emphasizes that jointness needs to be implemented in the creation of a common doctrine, an integrated command structure, integrated logistics, joint intelligence and integrated training. The paper also analyzes the challenges to developing jointness in India.

Introduction

“Jointmanship is a key ingredient for success in war. A nation that utilizes the combined strength of its Armed Forces effectively will prevail over the enemy”

- Air Chief Marshal Tipnis, PVSM, AVSM, VM

Modern war fighting requires a common frame of reference within which operations in air, surface and subsurface must be integrated and synergized. A victory in any future war is possible only with the optimal integration of all the forces committed and their synergized application towards the defence of the nation. The ability of a single Service is not more important than the balance of forces to achieve the desired result. If the balance is not correct, the military force will be operationally ineffective, logistically complex and prohibitively expensive.

The Indian Armed Forces are presently operating as three distinct branches namely the Army, Navy and Air Force. Although at present we do not have a concept of jointmanship amongst the three Services, however, for optimal utilization of all the forces in all the dimensions of warfare, the present concept of operation is not only sub optimal, it also results in poor integration amongst the various resources which in turn leads to wastage of precious national

resources due to frittering of assets amongst the three Services. Technology now dictates the need for fast dissemination of information into implementable action, often simultaneously from several directions and by several forces, and equally fast reassessment and re-ordering of tasks and resources. This is only feasible in a unified command structure in a particular theatre of operations. In view of the above stated factors, the Armed Forces should operate and train as an integrated force rather than as piecemeal forces. Hence, jointmanship in military affairs, planning of operations, logistics, and intelligence is absolutely necessary to pursue our national objectives.

CONCEPT OF JOINTMANSHIP AND IMPLICATIONS FOR THE ARMED FORCES

Basis of Jointmanship in Military Matters

The Concept of Jointmanship. There is

a broad understanding in the Services that no single Service by itself can win a war. The three Services have their own single Service doctrine. However, due to different perspectives and differing Service legacies, they reflect the respective Services' perception on strategy and tactics. These, at times, hinder the application of total force in a synergized manner. The concept of jointmanship basically implies enunciation of ways and means to conduct a joint and integrated battle. This concept envisages the conduct of air land, air maritime and tri-Service operations to achieve military and national security objectives. Even in

The three Services have their own single Service doctrine. However, due to different perspectives and differing Service legacies, they reflect the respective Services' perception on strategy and tactics.

the US Armed Forces, historically, there had been strong impediments to effective joint military action. Prior to 1947, the separation of the three Services was embodied in a cabinet structure with separate War and Navy departments. After the American failure in Vietnam, the disastrous rescue attempt in Iran, problems in Operation Urgent Fury (Grenada) and the executive getting fed up with Services parochialism, the Goldwater – Nicholas Department of Defence Reorganisation Act was enacted in 1986, which brought about inter-services co-operation and jointness. The impact of these changes was evident in the Gulf War of 1991, which is seen as a fully articulated US joint campaign ever mounted since 1945.

Jointmanship in Recent Conflicts.

What has been the experience of the Indian Armed Forces in joint and integrated planning and operations since independence? There have been four wars since independence. A study of these wars indicates that though our strategic and geographical imperatives suggest a mutual and joint action of our Services in any conflict, our experiences have been rather a mixed one. The first conflict with Pakistan in 1947-48 did not offer a scope for large-scale joint operations. It was a limited war and the role of Air Force was restricted to transportation of troops and materials into the Kashmir Valley. The Bangladesh campaign did exhibit certain amount of jointmanship and integration among the three Services. Lt Gen, JFR Jacob writes in his book 'Surrender at Dacca', that '***there is no suitable machinery for direction of war at the highest level. There is no effective Chiefs of Staff Organization, nor a Chief of Defence Staff***'. Air Chief Marshal PC Lal in his book, '***My Years with IAF***' writes '***The three services, the Army, Navy and the Air Force were left to plan their activities as they thought best.***' These remarks are indicative of a lack of an agreed strategy or coordinated control of operations by the Chiefs of Staff. The 1971 operations did teach us, especially in the Eastern theatre, the rewards of close cooperation between the Army, Navy and Air Force. The capture of Sylhet was facilitated by heliborne operations. It has to be emphasized that attainment of air-supremacy by the IAF contributed greatly to the conduct of heliborne operations. The Army, Naval and Air Force Commands in the East did execute their tasks competently. Our Armed Forces have also operated together in peace support and

peace keeping operations like those undertaken in Somalia and Sri Lanka, however, the opportunities for practicing jointness have not been exploited and their tasks, have been confined to their respective Services' classical roles.

Relationship for Jointmanship

Geographical Factors. Not only is the location of India strategic but it also has a vast territory with an option to employ its forces over a wide theatre of operations. It is physically impossible to maintain force levels that could simultaneously operate over multiple theatres. Hence we require a force that can rapidly deploy at short notice in any theatre of operations that is envisaged as per the national objectives.

Strategic Environment. An analysis of the strategic environment of India, reveals the following imperatives:-

- India's land frontiers being in direct contact with neighbouring nations, are inherently sensitive areas from a military point of view.
- The terrain along our land frontiers is diverse.
- The geographical remoteness of the coastal belt in the overall context of the Indian Ocean littoral reduces the probability of direct threat to the main land.
- The Andaman and Nicobar islands, separated by a distance of 800 miles from the main land, are potentially insecure.
- The protection of our island territories is important to control the Malacca straits as well as to retain

control over our Exclusive Economic Zone (EEZ).

Enhancing Effectiveness of the Armed Forces. Through joint operations, with integrated data flowing through networked communication channels, it would be possible to ensure that all components of the joint force get to see the same scenario in real time: what one Service perceives and plans would be available to the whole force. This would engender a paradigm shift in decision making since even minor decisions would be required to be taken at the highest level, in real time, after which it would be possible to transmit them rapidly to the level at which they are to be executed. This would create an immensely powerful joint war fighting synergy by enabling a joint commander to orchestrate ground, naval, air force to achieve effects that complement each other dynamically at the operational and tactical levels of war.

Jointmanship for Coping with Future Requirement. Future wars are expected to be short and intense with enhanced threat to rear areas and greater role of 'non-state' actors as the incidents of 9/11 proved. All out wars would be a rarity: proxy wars and Low Intensity

It would therefore be logical to presume that the method to deal with the new spectrum of conflict would also have to change.

Conflict Operations (LICO) would be the norm. In case of an all out war there would be greater stress on manoeuvre using precision degradation munitions, and attrition would be avoided. As an aim of war, there will be lesser stress on gain in territory, except where the inter state

boundaries are not delineated clearly. It would therefore be logical to presume that the method to deal with the new spectrum of conflict would also have to change. This would necessitate the adoption of a synergetic approach to maximize our fighting potential. While synergy at national level would be achieved through National Security Council (NSC), at the Armed Forces level it would be through CDS/COSC.

Distribution of Air Power Resources. While Air Force subscribes to the theory that air power resources must first be directed to establish control of the air, the Army doctrine states, due to constraints at the strategic level, including the need to achieve objectives in a finite time frame, and limited resources of the Air Force, it may not be operationally feasible to achieve the desired level of favourable air situation before the Army undertakes major land operations. Therefore the air and land battles may perform have to be fought concurrently, with the Air Force ensuring that the bulk of the counter air effort is so utilized that it sanitizes the operational level battle areas and indirectly assists the land forces in progressing the operations. Such diverse view points result in both Services focusing on different aims. The need for jointmanship and harmonizing is self evident. On the contrary, this diversity of thought could also be viewed as an essential ingredient of developing the best strategic approach.

MILITARY JOINTNESS IMPLEMENTATION STRATEGY

Joint Doctrine

A joint doctrine needs to be evolved,

which should be balanced, adaptable and realistic. The first characteristic is that doctrine needs to balance the competing demands for continuity and change. The new doctrine will build on the widely acknowledged strengths of the Indian military strategy of selective and judicious employment of deterrence and dissuasion, and traditional methods of war fighting. However, it must accommodate the changing environment. As the last several years have shown, the Armed Forces can

As the last several years have shown, the Armed Forces can expect to operate across the entire continuum of military operations – from fighting floods to fighting a heavily armed enemy, from building roads to assisting refugees and from conducting peace-keeping operations to conducting counter-insurgencies.

expect to operate across the entire continuum of military operations – from fighting floods to fighting a heavily armed enemy, from building roads to assisting refugees and from conducting peace-keeping operations to conducting counter-insurgencies. The doctrine must take into account this breadth of operations. The shifting security environment also points to the need for a doctrine to cover an operation from quick mobilization and deployment to re-deployment across another theatre.

The second characteristic of the doctrine is that it must be adaptable. Flexibility is crucial in an environment that is still changing. In this era the doctrine must not be focused on a particular region or level of conflict. Not many could have predicted that the Armed Forces would have to conduct tri-service operations as

a third party in Sri Lanka, launch air-landed operations to save the Maldivian government or carry out air-bombing of vertical cliffs from a height of 30,000 feet in Kargil. So, the doctrine must be specific enough to be useful in a particular case, yet adaptable to the wide range of possible operations.

Finally, the new doctrine must be realistic. It must be within the realms of the possible, given the facts that the Armed Forces are getting expensive to maintain against declining budgets and the nation has to increasingly focus on nation-building and economic reconstruction. Doctrine that does not account for these factors would be irrelevant from the outset.

Jointmanship in Command

Proposed Integrated Command Structure. Our joint organization structure should include the integration of all three Services, para-military forces and intelligence agencies under a single theatre commander. The Service background of the theatre commander should be appropriately chosen depending on the intensity of operations in the specific theatre of operations. For example, the northern theatre of operations in India should be headed by an Air Force or an Army officer.

Joint Force HQ. A Joint Force HQ should be set up at the level of the Defence Ministry. All the Services should function independently for the purpose of training. However, the operational training as well as the actual conduct of the operations should be under an able joint commander. Despite the emphasis on more jointness, the three Services should not be amalgamated into a single

amorphous defence force. The continued benefits of three Services would include specialist skills, ethos, morale and commitment. However, they should be placed under a single theatre commander for effective jointmanship between the forces.

Joint Command Systems Initiative. A Joint Command Systems Initiative (JCSI) should be set up to create a framework of cost-effective and efficient integrated global communications and information systems to support military operations, and to provide information from the front line through operational headquarters to the Joint HQ at the Ministry of Defence. In support of the goals set out above, JCSI should be able to:-

- Support combined operations.
- Support joint operations involving two or more Services acting together.
- Provide support to commanders wherever needed.
- Adapt to the size and composition of forces deployed on operations.
- Give commanders better access to intelligence information.
- Enable the rapid passage of information between all levels of command, the Services and Allied Forces.
- Make the best use of modern communications.
- Provide solutions which are affordable and give value-for-money.

Jointmanship in Logistics

The future battlefield will not only involve the land, air and naval forces, but also the rear areas and civilian population. In a hostile environment, a sound logistic system on a national basis is required to cope up with the magnitude and intensity of such warfare. Foreseeable trends suggest that the logistic load will increase in terms of tonnage and complexity of equipment, money and manpower will become scarce and the tendency to 'cut the tail' will continue with added vigour. Therefore, the need to adopt an integrated logistic organization to meet the requirement of all the three Services at the national level is paramount.

It is essential that a common supply language i.e. nomenclature and number code for all the three Services and other agencies connected with material

A separate branch of Directorate of Codification, within the overall organization of integrated defence logistics, can codify the complete defence inventory.

management in Armed Forces be evolved. A separate branch of Directorate of Codification, within the overall organization of integrated defence logistics, can codify the complete defence inventory.

Logistic resources need to be integrated at the highest level and logistics in the field should continue to remain with the respective Service. While integrating logistics, it is imperative to ensure that it does not interfere with the freedom of action of a field commander. In the context of integrated defence logistics, a unified

organization is required to carry out all the functions of various committees. This unified control; will eliminate multiple channels of inter-service committees for joint operations, will promote common doctrines, procedures and standardization in the three Services and will exercise effective management. This unified organization should be permanent in nature with staff drawn from the three Services and the organization should exercise overall control of logistics of the three Services. A Defence Logistics Service (DLS) at the Ministry of Defence level would be a suitable organization to achieve cost-effective management of defence logistics. Creation of a Defence Logistic Service or a Central Logistic Agency would result in better coordination and integration of resources. A humble beginning has been made in the form of the Defence Procurement Board. The experiences of procurement need to be widened and deepened to encompass other facets of the Services. The Army has benefit of the scale of economy whereas the other Services have some of the excellent practices of logistics in the world. Jointness in this field will transform logistics of the Services in total.

Integration of the logistics system is an evolutionary process and cannot be implemented overnight. The following steps are therefore suggested:-

- An apex logistic body at national level to harness resources from the industry, public and private sector, for the national war effort.
- Central integrated command of all logistic agencies at Service headquarters, perhaps under a chief of logistics.

- Integrated concept of logistics to include all aspects of procurement of material, repair maintenance, replenishment and disposal etc.
- Concept of logistic nodes/ grid for units/ formations to latch on to thus making the system of logistics totally transparent.
- A few strategic logistic nodes for reserves.
- A “One step logistic’ concept creating a seamless flow of support from the rear to the forward troops.
- Modern ware houses facilities and flexible procedures.
- Standardized packaging from product source including containerization and effective movement.
- Modern techniques of inventory management viz. Total Quality Management, JIT etc.

Jointmanship in Military Intelligence

As a nation, India has a number of intelligence organizations at the civil and military level. Though these agencies have specific tasks assigned to them, they often fail to meet the envisaged requirements. The divergent functioning of various intelligence organizations has resulted in an intelligence vacuum at the strategic level. There is a requirement to critically examine the possibility of integrating the existing intelligence organizations in India towards a military advantage and suggest a Defence Intelligence Organisation to meet the present and future needs of the nation.

The Intelligence Bureau (IB) is the

oldest intelligence organization in India. IB had been given the task of both external and internal intelligence till RAW (Research and Analysis Wing) was formed in 1967. Military Intelligence has evolved more as a field security service rather than as an external agency. Para-military forces have their own limited intelligence set ups for obtaining information in their area of operations. The intelligence process in India today, is infested with the existence of several agencies with overlapping of functions and no proper control. Consequently, the performance of such organizations is commensurate with the resources and manpower allotted to it and is not of the desired standard.

A review of the assets of the Indian intelligence organizations and their handicaps clearly points to the requirement of an integrated approach to intelligence at the national level. This integrated approach would provide for a mechanism for coordinating the work of producing national intelligence estimates, so that the government would have before it a single reasoned analysis of the factors involved in situations affecting national security. The intelligence estimates submitted would represent the judgment of all the intelligence agencies. The integrated approach would guarantee that properly evaluated and timely information is brought to the attention of the government resulting in better threat perceptions and operational planning.

The role of the Joint Intelligence Committee (JIC) needs to be strengthened and its functioning should be made independent. It needs to be given additional executive powers for forecasting, planning, directing, coordinating, controlling and monitoring

the national intelligence effort. Intelligence set-up in a piece-meal manner does not address national and military intelligence in a comprehensive manner. The business of intelligence needs to be taken seriously with trained and highly motivated professionals posted to intelligence organizations.

Jointmanship in Training

Joint Training will have a major role in tri-service integration. It is envisaged that continuous endeavour towards training for jointmanship will stimulate successive generations of officers to achieve convergence of mind. It is also felt that regular structured and unstructured training/exercises will untimely lead to jointmanship at the operational level. Training will have to move beyond mere affiliation to integrated training. The process commenced at the National Defence Academy needs to be carried forward to its logical end. There should be more inter-services courses and

Training will have to move beyond mere affiliation to integrated training.

training capsules which enable the participants to understand the view points of the other two Services. Trainees from all the Services should be indoctrinated to rise above their turfs towards achieving the larger objective and to realize that jointmanship is central to the optimal application of the force for the achievement of the larger national or military objectives. In addition to planning and running major tri-service or bi-service exercises and war games, it is also required to produce common operational doctrines and actively pursue the setting up of joint training facilities for trades which

are common to all the three Services. Moreover, cross attachment across the Services needs to be broadened from the Service Headquarters level right down to the formation/Ship/Station level in order to facilitate integrated operations.

CHALLENGES TO JOINTMANSHIP

Service Parochialism/Turf Protection. Individual service parochialism is the biggest obstacle to integration. This manifests itself in the form of each Service seeking to enhance its allocation as a percentage of the defence budget which often degenerates into rivalry, turf wars and unseemly dissonance at the higher and functional levels.

Fear of Being Overshadowed. All the three Services oppose change that does not give their core competencies due weightage in defence planning and spending. The smaller Services, i.e. the Navy and the Air Force, are apprehensive that jointness would reduce their importance and curb their individual growth plans if they are placed on the same station as the Army, probably because in the context of India the threat is primarily land based and also because the Army overwhelms them in size and numbers.

Bureaucratic Inertia. Though civilian administrators have a very important say in strategic planning and exercise control over the Services, they have no responsibility towards military failures. Similarly, the Department of Finance also exercises too much authority over defence spending without taking direct responsibility for the consequences of their decision. Because of this, they

perceive any attempt to change the equations as a threat and they defend status quo in the guise of civilian ascendancy over the Armed Forces.

Impediments at the Operational Level. The existing systems of having operational commands have been created by individual Services in isolation based on single Service imperatives. It has therefore led to following anomalies:-

- There is no geographical commonality in terms of responsibilities. In most cases, the operation level commands of one Service overlaps or is linked with two or three commands of the other two Services, thereby complicating coordination.
- None of the commands are co-located leading to a lack of coordination in intelligence sharing, planning and execution.

The above anomalies can be rectified by addressing it along two fronts; firstly by changing organizational structures to joint or unified commands and secondly by providing exposure to high quality officers by way of cross posting / staffing them on the workings of the other services.

Impediments at the Tactical Level. Jointmanship at the tactical level is virtually non-existent but for the representation by a Forward Air Controller of Air Force at the division level. This lack of representation due to non-existence of jointness in organizational structures is exacerbated by the lack of joint training and exercises and non-existence of common procedures. At this level of war, forces must function synergistically and

cover weaknesses of the other Services and compliment each other. All of the differences in culture, equipment and procedures surface to hinder the smooth application of combat power thereby providing precarious situations to the enemy to take advantage. It therefore calls for sustained training, and evolving of joint procedures to minimize friction.

The concept of using joint forces with the three arms of the Services operating together is today more and more important as the traditional distinctions between maritime, land and air operations have been removed. All the three Services combined can provide a more lethal punch than that possible as separate elements. The doubt today is not whether tri-service integration is required or not. The doubt, if any, is how to bring about this change. Probably all the Services understand that jointmanship through integration is an inescapable requirement for fighting the future war yet are unable to achieve it due to inter-service rivalry and turf wars. One perception is that the Army and the Navy generally concede to the concept of jointmanship in principle, but the Air Force is reluctant since it perceives a secondary supporting role for itself, thereby relegating its dominant status. The Services need to shed their prejudices and short sightedness and migrate from individual transformation to joint transformation.

CONCLUSION

Modern weapons and contemporary doctrine of technologically advanced military forces have created a new environment of war at both the tactical and operational levels. The future wars may be unlike anything we have experienced

so far. Death and annihilation will await individuals and units that cannot respond to quickly changing circumstances. Similarly, defeat and subjugation await organizations and nations that will not invest intellectual energy in anticipating future changes and forge strategy and doctrine.

Wars of the 21st century will require all elements of national power, i.e. economic, diplomatic, financial, legal and

intelligence to be welded seamlessly into one whole. Needless to add that in such situations tri-service integration would be a fait accompli. It would be in the interest of the Armed Forces to plan and manage this change so that it creates minimum upheavals and results in optimizing their present and future effectiveness. It is important to build up on the positive aspects of integration, rather than to get retarded by the negative aspects, in order to achieve true and meaningful jointmanship.

Maj Gen DS Chauhan, an alumnus of the National Defence Academy was commissioned in Mar 1972 into the 2nd LANCERS. The officer has held many prestigious command, staff and instructional appointments, including commands of an Armoured Regiment, an Independent Armoured Brigade and an Infantry Division, BM of Infantry Brigade, GSO1 (Ops) of an Armoured Division, Col GS (Planning) of a Corps and Director CAB at Army HQ. He has also been an instructor at IMA, Dehradun and DSSC, Wellington. He is a graduate of DSSC Wellington, CDM Secunderabad and NDC Delhi. Presently he is commanding the Uttar Bharat Area.

JOINTMANSHIP IN TRAINING AND OPERATIONS

Lt Col JS Sidhu

This paper discusses the necessity for developing jointmanship based on political and strategic concerns. It goes on to recommend means of improving jointmanship at both the strategic and operational levels. It highlights the importance of joint training as being an essential prerequisite for improving interpersonal relationships and developing trust and understanding especially at the tactical and operational levels. Finally it discusses the essentials and importance of the joint doctrine in the overall context.

Introduction

“The three Services — the Army, Navy and the Air Force — are the three dimensions of the military strength of a country. The rule of synergism operates — that is that the cooperative action of these agencies is greater than the sum of their effects taken independently. Two plus two is not just four but four plus, maybe five or more. Inter-Service cooperation, when and where it exists, makes each Service stronger and the total result is better than that of each Service taken singly.”

— Air Chief Marshal P C LAL

The future battlefield will be fast paced, fluid, non linear with rapidly changing situations. The battle will be multidimensional with all three Services fighting in different physical dimensions of operation with specialisation of equipment. Yet there is a requirement for all three Services to act jointly to synergise individual energies to achieve success. Joint warfare has come into sharp focus as it has been realised by military planners and thinkers that the future battlefield with its hi-tech weapons and support systems would be best exploited by joint operations. ‘Jointly ‘ entails complementing each others strength and protecting each other’s weak points. It demands joint work starting from the conceptual stage to planning details and executing the plans in synergy. Jointness by no means implies subservience of one

Service to another. For jointness to be implemented in a smooth manner across the spectrum of activities, the concerned equipment and communication must be inter-operable. Understanding the nature of warfare in all the three-dimensions of the sea, the land and aerospace is fundamental to planning joint operations. Each Service must state, as clearly as possible, the effect desired by the actions of other Services. How this effort will be achieved must be left to individual Services for that alone will permit the best employment and consequent results. Each Service has multiple roles and missions. Availability of force levels, prevailing circumstances and most importantly, national war aims will dictate prioritisation.

Military history has seen joint operations being conducted with varying

scope. The challenge of orchestrating air and ground forces to achieve military objectives goes back to World War-I and II and same has been amply demonstrated in Gulf War. In India we had our own share of military operations after independence, the concept of true jointness still appears a long way from being institutionalised and leaves us to evolve broad doctrinal foundation which would set forth concepts that would shape joint action of the Indian Armed Forces at all levels of war. Today, more than ever before, Service capabilities must function as force multipliers for each other to achieve a synergistic effect to defeat the enemy.

Concept of Jointmanship

The concept of joint operations basically implies enunciation of the ways and means of conducting an integrated battle. This concept envisages conduct of an air-land or air- maritime battle in pursuance of the national security objectives. Thus, there is a need for stronger inter-service integration. Integrated battle concept recognises that land, maritime and air forces form vital and

Even an inferior force, which can exploit all four dimensions of space, can overcome a superior force operating in one or two dimensions.

symbiotic elements. No single Service by itself can win any war- only joint effort synergised to an acme of skill will do so. Thus even an inferior force, which can exploit all four dimensions of space (including the electro-magnetic spectrum), can overcome a superior force operating in one or two dimensions. The factor which makes this possible is 'Jointmanship' and used effectively it can

be a major 'Force Enabler'.

Political and Strategic Compulsions for Joint Warfare

The Armed Forces have to continually adapt themselves to changes in the international and domestic political environments. Military technology is developing continuously and the reach of mass media is mushrooming exponentially. These factors will result in greater demands on jointmanship as explained in the succeeding paragraphs.

Economic Reasons. Jointmanship results in reducing expenditure through better integration of forces, thus avoiding duplication and wasteful expenditure. The future Armed Forces performance will have to be lean and mean.

Nuclear Scenario. With both India and Pakistan going overtly nuclear, the chances of a nuclear war cannot be ruled out. There is a requirement of total synergy between the three Services when it comes to utilisation of nuclear weapons. In our case in order to be able to absorb the first strike and still retain second strike capability, it is vital that there is total synergy between the three Services.

International Status. India aspires to play a greater role in the Indian Ocean region and thus would be required to possess capabilities to project forces independently or as part of a coalition. This would result in more frequent use of the Armed Forces in less-than-war situation such as peace keeping and coercive diplomacy. Thus, enhanced jointmanship would be an essential ingredient for success in such operations and logistics.

Multi-layered Threats. Future conflicts are likely to be characterised by a combination of threats to include political, economic and nuclear pressure besides the use of conventional force. An integrated response to these threats would only be possible through increased jointmanship, not just between the Services, but within all branches of the Government.

Technological Development. Developments in missile technology, electronic and information warfare and integral air arms have given each Service the capability to operate against targets on land, at sea or in the air. The resultant overlap requires a tremendous amount of coordination and jointmanship for maximising firepower and minimising fratricide.

Jointmanship in Indian Armed Forces Operations

Since independence, the Indian Armed Forces have seen major operations five times. Despite the fact that strategic and geographic circumstances require mutual and joint action by the three Services in any conflict, India's past performance as far as jointmanship is concerned has been mixed. The country's first experience at combat as an independent nation came in Oct 47. Although these operations were not joint operations in the true sense, they were well coordinated. The 1962 Sino India war was predominantly an Army war with the Air Force not being employed by the Government in spite of having a distinct advantage.

The 1965 war demonstrated in practical terms the deficiencies in the Army

- Air Force link up at virtually every level of command and control. There was no machinery at that time for the joint use of the Armed Forces. This war brought out the necessity of understanding the operational philosophy of both the Army and Air Force by the senior commanders of both Services. The lessons learnt in the 1965 War were well incorporated in the subsequent years. The 1971 Indo - Pak War saw substantial improvement in jointmanship between the three Services. There was close co-operation and understanding between the Army and Air Force and Navy. According to Air Chief Marshal Lal "***The Bangladesh War demonstrated that with the three Services working closely together, our Armed Forces were strong and decisive in their actions.***"

After a long gap of 16 years, the Indian Armed Forces were again committed to battle in Operation PAWAN in Sri Lanka. The operation highlighted service parochialism and doctrinal inadequacies. There was no over reaching strategic vision and there was inadequate and inefficient integration of methods and means. The Kargil conflict again brought out the inadequacies of jointmanship.

Way ahead to Improve Jointmanship

The way ahead to improve jointmanship is to have the Higher Defence Organisations and the Service Headquarters together formulating long term plans and policies for the Armed Forces. Jointmanship must be practised at each level. The leadership at the conceptual and strategic level should lay the foundations for jointmanship both through concepts and as well as practice.

Some of the essential elements for joint operations are adequate training, accurate intelligence, interoperability, equipment interface viable joint doctrine and excellent interpersonal relations. The important aspects are as under:-

- **Threat Perception.** There is a requirement to carry out a joint appreciation of threats to the nation in the long term. The Kargil crisis drives home the point that the nation needs to use all its resources in a co-ordinated manner to perceive its internal and external threats. The Ministries of Home, External Affairs and Defence must coordinate with the intelligence agencies and Service Headquarters to carry out a joint threat analysis which can form the basis for further action at political and military levels.
- **Planning of Force Levels.** A joint appreciation of the threats to the nation could form a national basis for joint planning of force levels and acquisition of equipment.
- **Common Doctrine.** In the long run, the best way to ensure proper jointmanship would be to evolve a common doctrine. But this doctrine itself should be formulated only after adequate groundwork has been carried out to promote jointmanship.
- **Jointmanship during Crisis.** The establishment of a standing Joint Crisis Management Committee, which would formulate options for military action, and initiate preparatory moves by all the Services, will definitely improve our

responsiveness in a crisis. Adequate warning would also help to integrate logistic build-up with operational plans.

- **Joint Directives.** Military commanders need well defined political and military goals to effectively achieve an objective. Future wars are likely to be fought in a joint manner and hence there is a need for the issuance of a joint directive for military operations. The joint directive could go a long way in giving a clear picture to military commanders.
- **Well Defined Organisation.** There is an urgent requirement having a CDS nominated. Although, Indian Armed forces have a fairly well defined organisation on the Army - Air and Maritime - Air framework for joint operations in a conventional scenario, this

Although, Indian Armed forces have a fairly well defined organisation on the Army - Air and Maritime - Air framework for joint operations in a conventional scenario, this organisation however does not cater for overseas developments or less than war situations because it is based on the geographical command system.

organisation however does not cater for overseas developments or less than war situations because it is based on the geographical command system. This organisation should cater for unity of control and cater for support Services as well as operational units

being under the same Headquarters.

- **Improvement of Interpersonal Relations.** At the operational level there is a need to improve the inter personnel relations wherein the commanders and staff are aware of capabilities and limitations of each Service. This should cater for the following:-

- ◆ **Quality of Personnel.** For effective jointmanship, commanders and staff at the operational level must have a basic understanding of the tactical concepts of the other Services.

- ◆ **Command Relationships.** The tendencies of joint commanders to micro manage the affairs or a task of different components creates friction amongst staff and subordinate units as was seen during Operation Desert Shield / Desert Storm. A Joint Task Force Commander, if constituted, needs to understand that with the increasing trend of specialisation and scarcity of resources, operational control would be separate from the overall command. This arrangement allows higher formations to use the force with flexibility, avoiding changes in organisation structure.

- ◆ **Encouragement of Jointmanship.** There should

be a greater interaction at all levels i.e., Commanders at the operational level, field commanders and units.

- **Adaptability.** Armed Forces must continuously train for war. There should be an inbuilt adaptability to suit the other Services requirements in war.

- **Confidence Building Measures.** The ultimate form of Jointmanship would be when one Service is willing to sacrifice its individual interest for the sake of a joint goal. It requires a very high level of leadership qualities amongst operational commanders for this to happen and all actions should be to achieve the ultimate goal. This will build up mutual respect and confidence in the concepts and professionalism of Services.

- **Representation of Different Services at Service Headquarters and Command Headquarters.** The cross attachment of officers and men at different Service Headquarters, Command Headquarters and lower levels would go a long way in contributing towards jointmanship.

- **Priority for Joint Training.** During peace every unit or formation is generally occupied with fulfilling basic training tasks and is hindered by limitations of manpower or resources for carrying out joint training. To enhance jointmanship, there is a requirement of joint training and as a first step, effort should be made to synchronise the

training year of the three Services. The Army training schedule runs from 01 July to 30 June, the Air Force from 01 Apr to 31 Mar and the Navy from 01 Jan to 31 Dec. If full synchronisation cannot be achieved, at least sufficient overlap should be created wherein all the three Services can devote a large part of their training effort towards joint training. By integrating their annual training exercises, valuable lessons could be derived by young officers of the three Services. Operations like Battlefield Air Strikes, amphibious operations, airborne and heliborne operations are some examples, which require extensive training and rehearsals. A dedicated effort in this aspect would contribute immensely to further Jointmanship. Notwithstanding the fact that higher formations would have given due consideration to practicability while recommending equipment or joint operational procedures, it would not be possible to identify all problems unless intensive trials are conducted. Units and formations play a very important role in pointing out the difficulties faced in using new procedures or equipment and this can be done only when the same have been tried out during exercises.

- **Wargames.** Wargames form an important part of training to enhance Jointmanship, by integrating the three Services or at least two Services at a time. This would also result in important lessons being drawn and meaningful discussions subsequently. To make the events more realistic

computerised wargaming should be used and accordingly, valuable lessons can be derived.

- **Joint Training Institutions.**

A large number of joint training institutions have been established starting from pre-commissioning stage to the National Defence College. These joint institutes are the National Defence Academy, National Defence College, Defence Services Staff College and the College of Defence Management. There is a need to make changes in the curriculum to have a major portion dedicated to joint studies. This will go a long way in improving and understanding each service capabilities and limitation.

Ingredients of a Joint Doctrine

The idea of a Joint Doctrine to which all the three Services should adhere to and base their operations is an important requirement. Gen George H Decker of USA has rightly said that *“Doctrine provides a military organisation, with a common philosophy, a common language, a common purpose and unity of effort.”*

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Genera George H Decker

This doctrine will further provide necessary synergy, understanding, promote jointmanship and will have a force multiplier in future conflicts. However, joint doctrine has to flow from the National Security Doctrine, which has still not been formalised. The National Security

Doctrine should clearly state the nation's security threat perceptions and stated security goals. The National Security Doctrine must include the approach to war and the ways to prevent it, the anticipated nature of military threats, politico - military goals, the tasks designed to ensure the security of the country and the direction of military development.

- **Criteria for Joint Doctrine.**

The major aspects that the Joint Doctrine should focus upon are as under:-

- ◆ Defence of the country against external aggression which would include protection of off shore assets.
- ◆ Internal security management.
- ◆ Participation in peace keeping operations.
- ◆ National interests in the Indian Ocean.

- **Principles of Joint Doctrine.**

The principles on which the joint doctrine should be based are as under :-

- ◆ **Objectives.** This should be planned and directed towards clearly defined attainable and decisive objectives so that the entire combat potential and component is exploited to obtain optimum effect.
- ◆ **Initiative.** The aim should be at retaining the freedom of action of each force ensuring that the enemy

conforms or responds to one's initiatives. With the technology available, the side with the initiative can choose the time and place for its attack and can concentrate its force to overwhelm the defender.

- ◆ **Unity of Effort.** This plan guides the integration of effort of the available combat power and their activities in time, space and purpose. Air Cmde Jasjit Singh, Director IDSA, emphasises that **“this coordination must take place first in the mind of the commanders and then in the actual planning and coordination of movements, fire and supporting activities.”** Interoperability supports unity and is enhanced by joint planning, execution, coordination and cooperation. To achieve this, it is essential to have :-

- ❖ Planning under joint direction
- ❖ Delineating clear planning responsibilities
- ❖ Establishing common procedures
- ❖ Suitable decentralisation

- **Flexibility.** To cater for frictions of war, the joint doctrine must provide for flexibility in execution and promote freedom of action.

- **Speed.** The modern mechanised electronic battlefield will be highly time sensitive. The emphasis would be on real time information and response capability. Thus, concentration of forces against enemy vulnerabilities or Centre's of Gravity would make the enemy off balance, enabling even small forces to disorient and fragment much larger opposition.

- **Depth.** Commanders must look beyond the requirements of the moment, jointly seek information of the area and enemy depth and employ every asset available in conjunction with each other to exploit the total military capability by employment of manoeuvre, firepower and special operation.

CONCLUSION

The battlefield of the future is likely to be fast paced, extended and intense, requiring close integration of all three Services. Effectively integrated, joint forces will expose no weak points or seams to enemy action while they rapidly and efficiently find and attack the enemy's "Centre of Gravity". This integration or jointmanship can only be implemented if each Service understands each others' capabilities and limitation, thereby synthesizing the individual Service combat power. There is also requirement of a joint doctrine to enhance jointness. A joint doctrine can only come about after its essentials have been mutually accepted

in principle. This would entail a meticulous review of our Service doctrines, respect to each others thought processes and enmeshing them into a joint one. It will be fitting to conclude with the following quote of the Gulf War, "**We had an unusually strong team, and trust was the key factor. Land, sea, air and space were all sub-elements of the overall campaign; there was no room for prima donnas. You need people schooled in their own type of warfare and then you need trust in each other**".

Lieutenant General Charles A. Horner
USAF, Commander CENTAF

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INTEGRATED MISSILE LIFE CYCLE MANAGEMENT - A SUGGESTED TRANSFORMATION FRAMEWORK

Commodore CP Srivastava

This paper projects a de-novo approach to managing the increasing variety of missile growing in the armory of the Armed Forces. The author examines the concept of life cycle management and the existing system. Based on this analysis he recommends a possible approach to the future.

Introduction

The simplest definition of the task of the Armed Forces would be **“to detonate ordnance in the vicinity of the enemy.”** ‘Ordnance’ could be in the form of lead weighing a few grams to a nuclear warhead of a few megatons and ‘enemy’ could be an individual, a platform or a wide spread complex/town/city. Human endeavour has been to use technology and innovations to increase the delivery range, accuracy and yield of this ordnance. It is therefore no surprise that the mundane V2 rockets of the 1940’s have evolved so far and guided missiles today are the most sought after and most dreaded means of ordnance delivery.

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Our own IMDP, which was integrated across the product range, has been one of the successful capability building weapon programmes.

- ‘integrated’ may have a lot to do with its success. This integrated approach cannot be restricted to the development phase

alone and needs to be extended to all the subsequent phases of the life cycle of missile systems.

The Indian Armed Forces, though a prolific user of missiles, **are yet to put a policy statement and framework for the management of the missiles across their spectrum of application** (strategic, theatre and tactical), and their management for the entire life cycle (development to disposal). The need to articulate and implement an integrated and systems approach to management of the missile through its entire life cycle, across all the three Services, is now an imperative rather than an option.

Aim

The aim of this paper is to evolve a framework for the Life Cycle Management (LCM) of the missile assets of the Indian Armed Forces.

Scope

This approach paper would firstly discuss the concept and advantages of LCM of missiles as applicable to the three Services and thereafter briefly analyse the present system of missile management in the Armed Forces. Finally the framework

for Integrated Missile LCM will be suggested, albeit only as a concept, rather than with details of organisation, scope, and implementation strategies. These, being matter of details, can be studied and worked out by a dedicated multi disciplinary, inter services project team.

Prior to discussing the proposed frame work of Integrated Missile LCM, it may be prudent to discuss concepts such as the life cycle of equipment, the acquisition framework, as it exists today, and the life cycle management concepts. The distribution of life cycle cost across the phases of the acquisition life cycle also merits a closer look.

Life Cycle Management - Concept and Framework

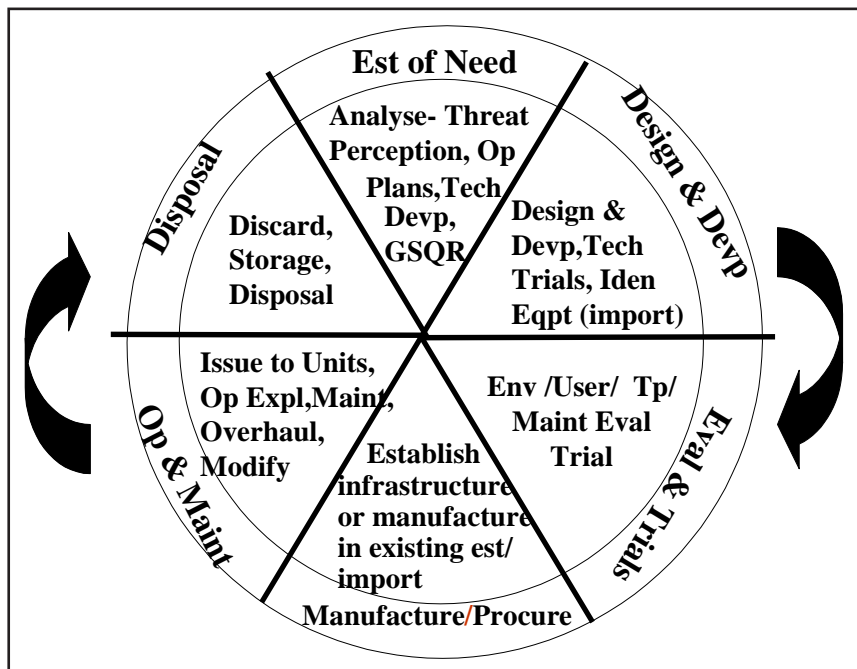


Fig 1: Phases of Life Cycle of an Equipment

Connotation of the Terms Procurement and Acquisition. Presently the term acquisition, as applicable to weapon systems, is generally understood to imply the process/procedures of acquiring equipment/systems. In this paper however the term “**procurement**” is implied to mean, “**Procurement of equipment/ system**” while the term ‘**acquisition**’ is implied to mean “**acquisition of a capability**,” and procurement of the equipment/system is a sub set of the ‘acquisition process.’

Life Cycle of Equipment and Weapon System. The life cycle of equipment in the Armed Forces encompasses the period when the need of the equipment is felt, through the time it is conceived, developed produced/procured, operated, maintained and finally discarded.¹ A simplified model of life cycle of an equipment is shown in Fig.1. If the weapon/ equipment is inducted in stages (with or without modification), the life cycle of the equipment per se may be, 30 years, but the life cycle of the weapon system as

a whole may be much more and this needs to be factored in as the life cycle management of the weapon system.

Acquisition Framework. There are certain subtle yet significant differences between the equipment life cycle and the acquisition process. The acquisition process begins with the identification of a desired capability which cannot be met

through non-material solutions such as change in doctrine or tactics. While the process may encompass activities of design, fabrication, test, manufacture, operation and support (including modification), it can broadly be classified into three distinct functional areas namely R&D, Procurement and Sustainment. These three functions together support the system acquisition and support process.²

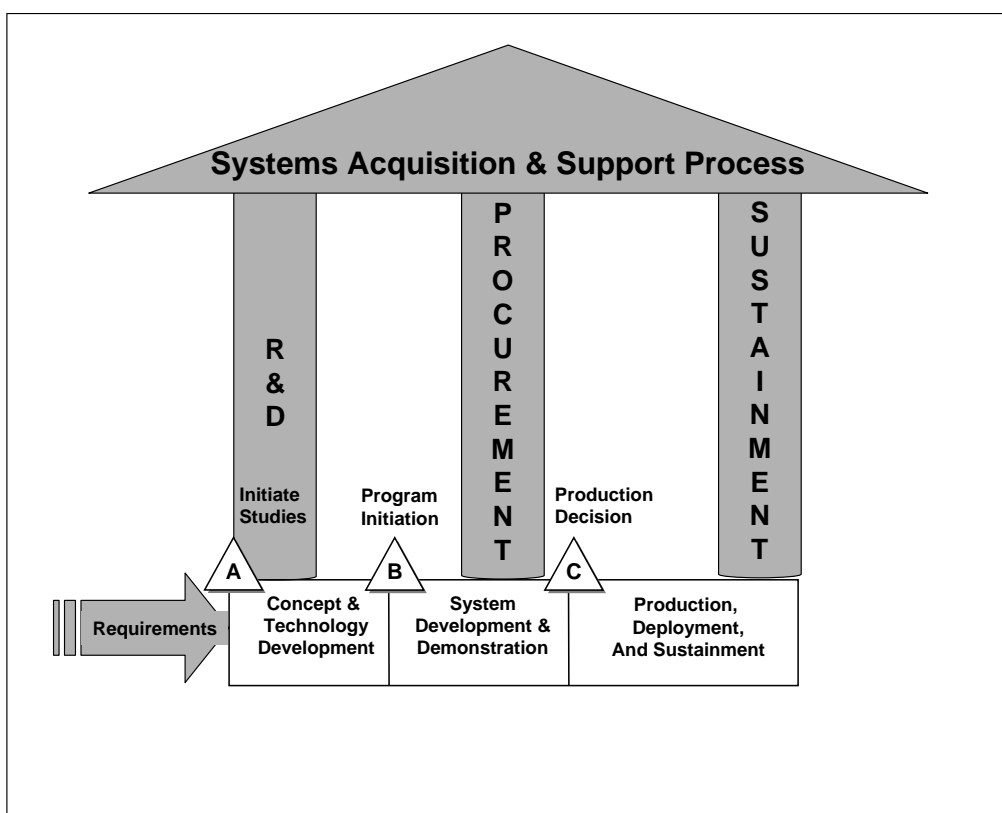


Fig 2: Stove Pipe Approach to Life Cycle Management

Stove Pipe Approach to Acquisition Process Management. The stove pipe approach to acquisition process management is based on the concept of three functional areas and communities which are stand alone and the process is

sequential. This approach is shown in Fig 2 and has the following major disadvantages:-

Limited or no communication between functional communities.