MANAGING CHANGE IN THE ARMED FORCES

Victory smiles on those who anticipate the changes in the character of war, not upon those who want to adapt themselves after the changes occur.

Guilo Douhet

INTRODUCTION

There has been profound changes in the last two decades of the 20th century which have altered our perceptions of the nature of future conflict and the mechanics of its resolution. There has also been a sea change in the way nations perceive themselves and each other in the international system. The military will continue to be an important and critical element of national power. However, Indian Military Establishment requires creative adaptation, fundamental changes and determinism to be able to respond effectively to the nation's need in the future.

In today's information age the revolution in information technology is also causing revolutionary changes in how warfare will be fought. The ability to integrate weapons, sensors and other military systems such as networks depend upon rugged Command, Control, Communications, Computing, Intelligence, Surveillance and Reconnaissance (C4ISR) systems. Military establishments achieve a Revolution in Military Affairs (RMA) when they successfully exploit technology, organization, training and leadership to attain qualitatively superior fighting power, as well as dramatic positional advantages in time and space which the opponent's countermeasure cannot defeat.

To meet the challenges of changing the Armed Forces, senior leaders and other agents of change must break the long tethers that bind the Armed Forces to the past and move it forward. To do so they must not only compel those within the services to alter the way they think about their traditional roles and branch missions, but also win support for their efforts to change the Armed Force from the people and the nation's political leaders. One of the key factors for change is the level of popular and political support given to the military represented by the nation's willing men to pay for its armed forces. These are derived from a complex set of related determinants that includes geography, threat perceptions, history, ideology, culture and economics. However, factors like previous historical experience, a naturally conservative outlook towards change, inability to evaluate new ideas adequately, an awareness of tremendous cost of defeat, and a desire by some within the organization to preserve the status quo for fear of losing either personal or professional power and prestige within the organization may prevent meaningful changes to occur.

HISTORICAL BACKGROUND

I am all for using aeroplanes and tanks, but they are only accessories to the men and horse, and I feel sure that as

time goes on, you will find just as much use for the horse - the well bred horse - as you have ever done in the past.

The machine gun is a much overrated weapon; two per battalion is more than sufficient.

- Field Marshal Sir Douglas Haig

History showed that one who recognizes the advent of a military revolution and employs it to fullest extent enjoys a significant advantage, perhaps overwhelming in some cases, over an adversary who has failed to do so. In all past revolutions, technological innovation combined with new doctrine and organization resulted in a significant leverage in conducting wars. In the 1930s Mao Ze Dong developed the strategy of peoples war by fusing age-old guerrilla tactics with revolutionary political organization to impose protracted war on better armed opponents. Vo Ngyen Giap, with his brand of Guerilla Warfare evicted the mighty superpower USA from Vietnam.

The relative importance of war against an enemy command, control and communications increased with the advent of mechanized warfare. In World War II, the German Blitzkrieg doctrine in some ways a forerunner of cyberwar made the disruption of enemy communications and control an explicit goal at both the tactical and strategic levels. For example, the availability of radios in all of its tanks provided Germany with a tactical force multiplier in its long war with the Soviet Union whose tanks though more numerous and better built provided radios only for commanders. When the Blitzkrieg was used in France in 1940, German tanks were superior neither in numbers nor in quality to those of the British and French. The key factors in German victory were superior organization and better doctrine. Blindly altering doctrine or force structure for the sake of technological change invites disaster. In the 1950s the US Army attempted reequipping and reorganizing the army to meet the perceived needs of the nuclear battlefield. They called it Pentomic Army. General George H Deeker, US Army Chief of Staff from 1960 to 1962 called this army as "a jack of all trades and master of none". The experiment failed miserably.

CONCEPT AND DOCTRINE

Throughout history military doctrine, organization and strategy have continuously undergone profound changes due to technological breakthroughs. Today's information revolution reflects the advance of computerized information and communication technologies and related innovation in organizations and management theory. Sea changes are occurring in how information is collected, stored, processed, communicated and presented and in how organizations are designed to take advantage of increased information. Advanced information and communication systems can improve the efficiency of many kinds of activities. But improved efficiency is not the only or even the best possible effect. The new technology is also having a transforming effect, for it disrupts old ways of thinking and operating, provides capabilities to do things differently and suggests how certain things may be done better, if done differently.

The world has entered a dramatically different era of warfare. The momentum of technological progress, especially the rapid spread of computer based information

system has sparked a Revolution in Military Affairs (RMA). An RMA is a major change in the nature of warfare brought about by the innovative application of technologies, which, when combined with dramatic changes in military doctrine and operational concepts, fundamentally alters the character and conduct of operations.

This form of warfare may involve diverse technologies - notably for C³I for intelligence collection, processing and distribution for tactical communication, positioning and identification friend or foe (IFF) and smart weapon systems. It may also involve electronically blinding, jamming, deceiving, overloading and intruding into an adversary's information and communication systems.

Information Technology (IT) will play the major role in shaping the conduct of future land combat. Speed and knowledge are the fundamental features of Information Age War. On the non linear battlefields of the future, more modular combined arms team will employ precision munitions at greater ranges with exacting accuracy. Information Superiority will enable friendly forces to reduce their vulnerability through dispersion, make decisions more rapidly than enemy and operate at faster tempo. Precision strike, rapid maneuver and simultaneous assault will overwhelm opponents before they can react.

The information revolution calls for organizational innovation so that different parts of an institution function like inter-connected networks rather than separate hierarchies. Moving to networked structure may require some decentralization of command and control. This may well be resisted in light of the view that the new technology will provide greater central control of military operations. Information Technology (IT) will allow better information sharing at all level. This sharing should obviate the need for some of the levels of control that exists. It is not likely that the ability of human beings to command a greater number of elements simultaneously will increase. Indeed, given the greater complexity of the future environments and the demand on human commanders it may be necessary to reduce span of control. Though the size of staff may decline at levels of division and above, the leader to lead ratio in company and below may actually increase. Units should be organized in modular basis. Smaller self-contained units will require higher leader ratios.

In view of the advancements in communication technologies, new doctrines are to be developed about what kind of forces are needed, where and how to deploy them and what and how to strike on the enemy's side. How and where to position what kind of computers and related sensors, networks, databases etc, may become as important as the deployment of say, air force and their support functions.

ORGANIZATIONAL CHANGE AND INFLUENCE FROM WORLD BUSINESS ORGANIZATIONS

The Romans said, "If you would have peace, you must be prepared for war." And while we pray for peace, we can never forget that organization, no less than a bayonet or an aircraft carrier, is a weapon of war. We owe it to our soldiers, our sailors, our airmen and our marines to ensure that this weapon is lean enough, flexible enough and tough enough to help them win if, God forbid, that ever becomes necessary.

From the opening statement by Congressman Nicholas House Armed Services Committee Hearing on the Reorganization of Department the of Defense, USA, Feb 19, 1986

The existing organizations in the Armed Forces are the product of World War II. No major changes have taken place since then. What was needed 50 years ago does not fulfill today's information age requirements. Today this organization limits the growing potential of smart soldiers and new technology. The existing organization has the following characteristics:

- Command relationships are numerous, redundant and vertical.
- Voice communications drive nodal connectivity; example: Commanders need two to five radio nets to monitor battle and issue orders.
- Structure for information exchange requirements is signal service in character, minimal command and control integration with other services.
- Systems architecture is overly complex and dependent on legacy system technology; current organization restricts flow and exploitation of information.
- Information capabilities are centralized at the highest level.
- Lack of joint fighting capability.

Why Reorganize the Armed Forces? Information age compels change in organization. New technology empowers subordinates, decentralizes control and globalizes information. This creates the opportunity to exploit technology at lower levels of command. The application of new technology to old organizational structures is a design for failure. This was tried during the 1930s by the British and French armies with disastrous results in World War II. A new organization for combat with a new joint operational architecture is vital for today's warfare. Reorganization will produce significant savings. Estimates vary, but internal reorganization of the old World War II war army structure could produce substantial annual savings that could be used for programmes for modernization and change.

Influence of Business World. This information revolution is favouring and strengthening network forms of organizations having great advantages over hierarchical forms. Though the business world has changed its organizational forms, the armed forces has yet not done much though not without reason. If one looks at organizations of say General Motors and Tata Industries and armed forces during World War II there was not much of difference as both followed a rigid hierarchical pattern. However, if one looks at Today's Microsoft or Infosys, the organization at corporate world has vastly changed over to networked types whereas organization of Armed Forces have hardly changed. The Information Age military needs the shared information-gathering advantages of a networked organization with the decentralized

decision making advantages of a flattened hierarchical organization. There is a requirement to adopt to new organizational orientation.

HIERARCHICAL VS NETWORKED ORGANIZATION

Our existing hierarchical structure, created long before IT started making Its impact, is unable to cope with our current and future requirements. We will be at a great disadvantage if we do not realize the value of networking as we move towards the next millennium.

General V P Malik, 1

In a hierarchical organization; as the size grows organizational structures become more complex with greater layers. The organizations tend to be unresponsive, bureaucratic and top heavy. With the introduction of modern communication means organizations all over the world are getting restructured and redundant. Management layers are being removed. The case of restructuring our defence forces organizations in view of the advances in information technology to provide more responsive organizations need to be looked into. For example, can we remove corps headquarters and have only divisional headquarters or have only divisional headquarters under a theatre command? Today French Army does not have division in its organization. Toefflers stated "until recently 10000 - 18000 man division was thought to be the smallest combat unit capable on operating on its own for a sustained period. It would typically include three or four brigades, each with two to five battalions staff. But the day is approaching when a capital intensive third wave brigade of 4000 - 5000 troops may be able to do what it took a full size division to do in the past." ⁵

In the future, advanced armies are likely to field modular and task force oriented formation with smaller high tempo, lethal and agile units able to attack from many directions. Under modular organization, formations may become more self contained. Smaller force headquarters may assume many of the responsibilities of Corps and Divisions. Freed from close control and not tied to an artillery fire plan the attacking infantry could literally run circles around a defending force.

RELUCTANCE TO ACCEPT CHANGE

New conditions require new and imaginative methods. Wars are never won in the past.

General Douglas Mac Arthur

Modern armies have succeeded by following the mechanical, bureaucratic model, specialization, unambiguous chain of command and enforcement of established routine. This same dedication to uniform, established and centralized procedures also makes them highly resistant to change. The rigid hierarchical organizational structure impedes the progress of new ideas. Because of formal rank and hierarchy informal

access to senior leaders is cut off almost entirely. Those in a position to support innovation within the organization only hear or read a small portion of the new ideas that exist at any moment. Because rank and seniority are the dominant characteristics of military organization, the military has great difficulty accepting outstanding original thinkers, particularly when these thinkers are young and have not "earned their spur".

However there are valid reasons why military as an institution tilts towards conservatism. The dangerous nature of military profession counsels against incorporating unverified innovations into the organization. The cost of failure to the Armed Forces and the nation is so great that it warrants a conservative approach to new ideas. In the corporate world people may get fired when managers fail. In the military world, people may lose their lives when officers fail. Field Marshal Sir William Slim once pointed out, "organizational management is a science that consists of accurate calculations, statistics, methods and timetables. Military leadership, on the other hand emanates from the human spirit. It is compounded of personality and vision and its practice is an art." Commanding a military formation in the field is not the same as managing the local Microsoft branch. For this reason, eliminating entire echelons in military organizations in the name of flattening hierarchies may destroy an entire training ground for officers. Flatter hierarchies are not well suited to fighting structures and operational command. In military terms, flatter organization is probably most relevant in the areas of procurement, logistics and combat service - areas in which the move from mass to precision favours such structures. In armed forces responsibilities have to be clearly defined. In a networked organization fixing responsibility for a debacle would be difficult.

The military is naturally reluctant to discard historically reliable equipment and doctrine. A soldier's faith in his weapons and doctrine is essential to the maintenance of Espirit-de-Corps and morale. As a result soldiers are reluctant to exchange proven battlefield equipment and techniques for innovative replacement unless they are convinced of their worth. Whether a man rides a horse, plane or a battleship into war, he cannot be expected to operate without faith in this weapon system. But faith breeds distrust of change.

Norman Dixon on the Psychology of Military Incompetence attributes the failure of senior leaders to innovate to "extremely weak egos" which result in schizophrenic behaviour typified by an insatiable desire for admiration and the avoidance of criticism on the one hand and equally devouring urge for power and positions of dominance on the other. British Field Marshal Archibald Montgomery - Massingbred, Chief of Imperial General Staff from 1927 to 1933 is a case in point. He ridiculed JFC Fuller's works on tank warfare while simultaneously admitting that he had never actually read any of them.

WHO CAN BRING FORTH CHANGE

The highest inventive genius must be sought not so much amongst those who treat new weapons as among those who devise new fighting organizations.

Mavericks as Agents of Change.

During the period between World Wars one and two three well known mavericks sought to modernize their militaries and alter the status quo. In England BH Liddel Hart and JFC Fuller argued that mechanized warfare and combined arms formation would restore mobility in the battlefield and return the offensive to the dominant place in warfare. In America Billy Mitchel rooted for an independent air service to replace the Navy as the nation's first line of defence. While all began their efforts as mavericks criticising against the established vision of their services, only Liddel Hart softened his stance to work within the system to achieve the changes he believed necessary. Fuller retired in disgust and joined the Britain's Fascist Party , while Mitchel was court martialled for insubordination and left the US Army in 1926.

In reality these mavericks do more harm than good to the cause of innovation. By going outside the military the mavericks alienate those within the organization who subsequently dig in their heels. Insulted and seething with indignation, the orthodox military becomes intransigent, defying or retarding civilian efforts to force innovation on the military.⁷

In Contrast military officers are not always incapable of fostering military change. In the 1920s, General Hans Von Seeckt laid the intellectual roots for the Blitzkrieg - a process of reform that was one of the most impressive and significant military accomplishments of the twentieth century. In 1920's Von Seeckt established no less than 57 committees involving over 400 officers to try to deduce lessons of the First World War. He succeeded in leaving behind him an officer corps dedicated to the study of future warfare. Generals Ludwig Beck, Warnes Von Fritsch and Oswalad Lutz were all Seeckt protégés and ensured the centrality of maneuver warfare in the army's doctrine.

Continuity and Protection for Agents of Change. The reform of any military organization requires multiple paternity, a coalition of senior and junior officers who share a common vision of both past and the future. Because of professional advancement in careers key people will get turned over rapidly. Moreover, these officers must possess the intellectual and political staying power to see the innovation through to implementation. Military innovations take a long time to complete. It is essential that senior leaders establish continuity along the agents of change.

Another important issue is that current leaders advocating change should ensure the succession of like minded officers into senior leadership positions within the military. Without a patron to shield the innovation from attack and shepherd both it and the innovators through hard times, the effort will collapse. Modernization would require a spokesman to sell the innovative ideas to the Armed Forces at large, preferably an individual with credibility both inside and outside the Armed Forces. This also can be done through institutions like Defense Services Staff College, National Defense College or organizations like ARTRAC. These organizations can carry the innovation forward from within the bureaucracy. Quality officers may have to be sent to joint organizations, when their future may not be as secure as in the parent service. In the micro level, issues like ACR has to be taken care of. In three services ACR patterns

are different. A particular grading in Air Force may be very high in Air Force but the same grading in Army would be a sure formula for supersession. In a joint organization career profile of officers has to be safeguarded.

HOW TO ACHIEVE CHANGE IN MILITARY

Improvement of weapons are due to the energy of one or two men, while changes in tactics or in the case of the entire process of transformation have to overcome the inertia of a conservative class.

A T Mahan

Several senior military officers and noted scholars have offered their views on how to achieve changes in military. General Donn A Starry, former commander of the United States Army Training and Doctrine Command lists seven general requirements for successful military innovation. ^{8,9} They are:-

- An institution or mechanism to identify the need for change, draw up parameters for change, describe what must be done and how it differs from past practice.
- Rigorous educational background for officers responsible for change to produce a common cultural bias towards solving problems.
- Spokesman for change it can be an institution or an individual.
- Building of consensus and gaining of converts.
- Continuity among the architects of change.
- Support at or near the top of the organization.
- Conducting field trials to test the validity of the proposed change.

Rules for Guiding Change

General Gordon R Sullivan, former Chief of Staff of US Army and Colonel Michael V Harper, former director of the Army Chief of Staff's Staff group list eleven rules for guiding change in their book, Hope is not a Method. ¹⁰ These rules are:

- * Change is hard work. Leading change requires leaders to do two jobs at one time. They must conduct today's operations while leading the organization into tomorrow.
- * Leadership begins with values. The leader uses values to signal what will not change within an organization and in so doing provides stability and direction during the uncertain times.

- * The intellectual leads the physical. First step in transformation is intellectual. The leader and his team must expend a great deal of mental effort to build a solid intellectual framework for the future.
- * Real change takes real change, the leader must alter the critical process within the organization, if he wishes to effect true change.
- * Leadership is a team sport. Effective leaders build teams and forge alliances as teamwork is critical to transformation.
- * Surprise is an inherent part of change in the real world.
- * Today competes with tomorrow. Transformation leaders must strike a balance between resources, people, funds, time and energy to meet today's requirement and those of tomorrow.
- * "Better is better," better quality, reduced cycle time, shared information.
- * Focus on future.
- * Learn from doing. A learning organization is critical to transformation. These actions will spark a spirit of innovation and growth within the organization.
- * Grow people, creative people are what enables organizations to transform.

INDIAN CONTEXT

He who can modify his weapons, organizations and tactics in relation to his opponents and thereby succeed, may be called a heaven-born captain.

Sun Tzu

The Indian Armed Force, the fourth largest in the world are in the middle of what the Chinese say, "Interesting Time". Proxy War at Kashmir, Low Intensity Conflict Operation in North Eastern States, potential situation for Low Intensity Conflict Operation in many other states like People's War Group (PWG) activities, overflow of LTTE activities in Tamil Nadu, disaster management and Aid to Civil Authorities are some of the major activities, that are causes of concern for the Army. These operations are extremely manpower intensive. Army is also deployed in all types of terrain that can be imagined starting from the highest battlefield of the world, the Siachen Glacier, to extremely inhospitable and mountainous terrains of J&K, UP, Sikkim and North Eastern States, the deserts of Rajasthan and Gujrat and extremely humid conditions of tropical rain forests of North East. In addition to the Low Intensity Conflict Operations, the Army has also to train for operations like Kargil, conventional operations with NBCW backdrop, amphibious operations and air borne ops (though on a small scale). We have two potential enemies in Pakistan and China as our Western

and Northern neighbours, who are in league with each other and who have nuclear weapons with missile capabilities to hit strategic targets in India. No Armed Forces in the world has to operate in such varied geographical conditions and prepare and train for such diverse types of operations. The organization, training and doctrine or concept of operations are different for each operation. Outbreak of high intensity conflict is a real possibility. What is the primary form of conflict we should prepare for ? It has got an enormous bearing on the nature of our military operations, their armaments patterns, tactics and training.

The basic block for fighting in the Army remains the same - The unit be it Infantry, Artillery, Armour, Engineers, Signals and other arms and services with minor modifications in organization for mountain, desert or other operations. Is there a requirement to generate force structure and doctrines based more on a bag of capabilities than on specific threat perceptions in a strategic environment where the nature of the threat itself is diffuse and ambiguous? The state of Air Force and Navy is similar in nature.

WEAKNESSES OF INDIAN ARMED FORCES

Recently a study was carried out by RAND Corporation, a professional think tank in USA on Indian Armed Forces and some of the weaknesses were identified.¹¹ The author seems to be misinformed about the quality of our Armed Forces in the light of their acknowledged proficiency. However, some of his assertions merit discussion. They are :-

Indian Army.

- (a) Army not adept at combined-arms maneuver warfare.
- (b) Lacks technology and logistics for fluid maneuver and deep penetration.
- (c) Has ineffective independent aviation assets.
- (d) Command and Control is rigid and individual initiative is low.
- (e) Organizational structure not geared for large-scale offensives.
- (f) Large-scale multicorps-level field exercises infrequent.
- (g) Experience in theater-level joint operations is inadequate.

Indian Air Force (IAF).

- (a) IAF does not contribute operationally.
- (b) IAF has larger numbers and aircraft quality is relatively high, but readiness rates and training levels are mixed
- (c) Focuses on air superiority, neglects close air support.

- (d) Lacks precision munitions and critical support capabilities: trainers, tankers, AWACS, SEAD(Suppression of Enemy Air Defence), EW aircraft.
- (e) Still learning to conduct integrated air campaign. **Indian Navy**.
- (a) Carriers are not power-projection forces.
- (b) Surface and subsurface combatants lack land attack capability.
- (c) Amphibious forces are not capable of forcible entry.
- (d) Sustainability at sea is poor.

After the deployment of our Armed Forces post December 13 attack on parliament questions are being raised in informed circles about the armed forces failing to reform and to cope with change. In a scathing criticism Rear Admiral Raja Menon (Retd)¹² has pointed out that mobilization is the act of outdated armed force without any offensive plan for hot pursuit. He has brought out that capabilities have not been developed against non state actor enemies of the country and the new weapon systems acquired have few relevance to the new war. He has given a clarion call for urgent reform of our armed forces.

LICO

We are fighting cross border terrorism in J&K for years. We do not have an overreaching national warfighting doctrine, though we have an inadequate "Army only" doctrine for conduct of LICO. Today militants have better and more secure communications, better weapons and better intelligence of the Security Forces due to use of STD/ISD phones, Internet and tapping of our non secure military communication traffic. They use IT driven munitions as delay setting on fuzes, radio operated IEDs and disinformation campaign. We are always reacting to these situations. How can we use available COTS technology in our fight against terrorism using portable Direction Finding and Electronic Warfare Equipment, real time UAV surveillance with local down link facility, nightfighting capability, precision ammunition, intelligence, attack helicopter, air and synergise all these in a joint operation with PMF, police, media even NGOs in unit level operation?

DICHOTOMIES

Number of dichotomies exist which are required to be resolved and hard decisions taken in case we have to take significant action to undertake changes in Indian Army. The issues are :-

Operational Level Issues.

(a) In view of the possible extension of integrated data and communication links to lower levels in the chain of command, is there a need to reshape the hierarchy of our force structure by increasing the span of control either at Corps

- or Divisional level and thus eliminate either the divisional headquarters or the brigade headquarters?
- (b) What restructuring would be required for efficient and cost effective joint planning at the theatre and subordinate levels?
- (c) Centralized Command is more efficient for achieving concentration and synchronization. The requirements of delegation and directive style of command arose from the inability of commanders to "see" the entire battlefield. As the battlefield expanded in time and space is there a case for shifting back to centralized command styles, as commanders are able to view the entire battlefield, albeit electronically, with greater clarity and unifying focus than subordinates commanders in their cellular engagements and battles?
- (d) At present we have general purpose forces who, with minor equipment modifications are used for combat across the entire spectrum of conflict. What conceptual changes in the force structure and appropriate doctrine can be envisioned for future battle in varying conflict scenarios?
- (e) The survivality of command and control nodes and elements will be critical to warfighting in the 21st century. What changes in command and staff structures and procedures will be required for efficient command and control in the highly lethal, precision-kill environment of the future?

Tactical Level Issues.

- (a) Our present ethos for combined arms warfare develops around 'affiliation' born of peace time functioning including joint participation in exercises. Since integration and not affiliation will be the demand of the future high intensity battle, is there a case for smaller, more mobile, self sufficient, truly combined arms units?
- (b) The people of the future warrior should have a substantial and sophisticated technical acumen. Is there a requirement of change in our existing recruitment and training of units and subunits?
- (c) The application of military force in dealing with terrorist violence runs the serious risk of causing collateral damage to innocent civilians and bystanders. This is leading to the development of Non Lethal Weapons. Should our armed forces adopt this Non Lethal approach while dealing with terrorist violence and urban insurgency situations? ¹³

Bureaucracy. India's labyrinthine bureaucracy offers additional barriers to innovation and change. The civilian side has always dominated civil-military relations in India. The Ministry of Defence and Ministry of Finance composed largely of career bureaucrats have dominated procurement and budget decisions. The role of the military in determining policy and procurement has been deliberately minimized. Even the institution of National Security Council (NSC) was held up for years and proceeded very slowly under the present Government. Without fundamental changes

in the Indian defense bureaucracy any rapid change in the Armed Forces is difficult to come through. ¹⁴

Another set of problem lies with the three services themselves. India has little in the way of a tradition of joint operations. A good example of the fierceness of this rivalry can be seen in the aftermath of the Kargil conflict. Even the Navy claimed critical role in the defeat of Pakistan.¹⁵ The recent controversy for institution of Chief of Defence Staff is a case in point.

Recent Example of Change. A recent example of management of change in the Armed Forces can be the Transformation Plan of US Army. After its poor showing during the Kosovo crisis the US Army developed a plan to transform itself into a more relevant force. The Army Transformation Plan attempts to balance the near, mid and long term needs through a three pronged campaign. Firstly it plans to maintain and upgrade current forces called Legacy Force to retain Army's readiness. Secondly the US Army will rapidly develop Interim Brigade Combat Team (IBCT) which will address the critical need for rapid deployment. Thirdly develop Objective Force that will be in existence at least through the first half of the century. It will be a force radically different from the Legacy Force in all aspects of Doctrine, Training, Organisation, Leader Development, Material and Soldiers. This force will be fielded completely by 2032.

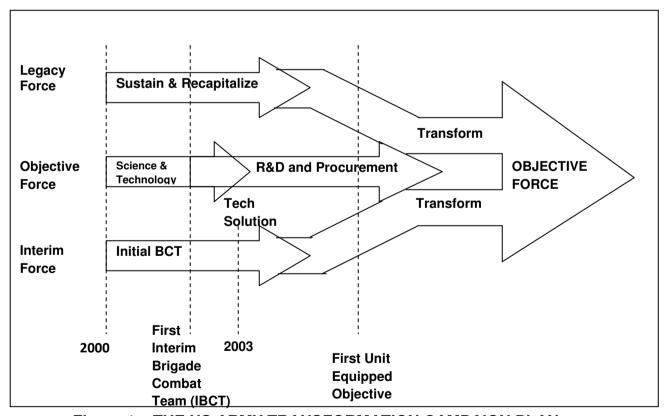


Figure 1. THE US ARMY TRANSFORMATION CAMPAIGN PLAN

<u>Example of Change in India</u>. One example which can be given for attempting some radical changes in the Indian Armed Forces is what was done during General K Sundarji's time as Chief of the Army Staff. The changes were incorporated in the following stages:-

- (a) **Speculation.** This was done with the publication of concept papers, journal articles, studies, formation of groups to study lessons of recent wars etc. General K Sundarji while as Commandant, College of Combat initiated these and himself wrote an influential series of papers laying out theoretical doctrine and deployment plans for Indian Nuclear Weapons in 1980 81. He had a grand vision of change.
- (b) **Experimentation.** Establishment of experimental organizations and testing grounds, field training exercises to explore new warfare concepts and war gaming at field formations and Category 'A' Establishments were carried out.
- (c) <u>Implementation.</u> Establishment of new units, revision of concepts, establishment of new branches and changes in curriculum of professional military educational institutions were carried out. As a result of which we have the Mechanized Infantry. Large scale modernization took place in Armoured Corps, Artillery, Engineer, Signals and AD Arty. Army Aviation came into being. He had the vision, influence both within the Army and the ministry and bureaucracy and leadership to carry out the changes. He had a comparatively long tenure and he could cultivate the subordinate leadership and followed up the changes.

CONCLUSION

"Yesterday we had time but no money. Today we have money but no time."

Testimony before Congress by General George C Marshall

"Changing any military's doctrine, however, is like trying to stop a tank armour by throwing marshmallows at it. The military, like any huge modern bureaucracy, resists innovation - especially if the change implies the downgrading of certain units and the need to learn new skills and to transcend service rivalries. To define a new doctrine to win support for it both in the armed forces and among politicians, and then to actually implement it with trained troops and appropriate technologies is a tremendous task. It would take a campaign - one in which ideas would be the bullets." ¹⁶

We are facing one of the most difficult times today. Our Armed Forces are ready to wage a conventional war. At the same time we are continuing our warfare against proxy war. There is a requirement of change and adapt to changing situation. But changing huge organization like Army is not easy. To design and successfully implement change it is essential to understand the nature of change, its processes and implications.

Unless one is willing to risk failure we are not likely to get anything but small incremental changes. A useful way to deal with future is to transform a small part of the armed forces to see if the results work instead of a full blown transformation effort.

That would mean taking some part of the force and beginning to experiment with new concepts of operations and new kinds of weapon systems. ¹⁷

Technology is not a panacea for successful change. In Afghanistan the US special forces equipped with the most sophisticated equipment rode horses atop saddles that had been fashioned from wood and saddle bags that had been crafted from Afghan carpets. All the high tech weapons in the world cannot transform an Armed Force unless the thinking, training, and the way we fight are not changed. War in 21st Century will require all elements of national power i.e. economic, diplomatic, financial, legal, law enforcement, intelligence as well as overt and covert military operations.

Last but not the least we must never forget that in spite of all the shortcomings it is the magnificent men and junior officers of our great Army who have won the war for us always and every time. Let us not send them on a mission like national offensive with instructions to cross obstacles with improvised means like Naga ladder, ghee tins, rubber tubes etc. Improvisation is a great strength of our units, but let us not bank upon them ab initio. When operating against militants in Valley these men overcome every shortfall with sheer raw courage and is buying unacceptable casualty everyday. Whatever changes we do our men should be the central theme to everything. Institutions don't transform, weapon platforms and organizations don't defend the nation. Unit don't train and stay ready, grow, develop leadership, sacrifice and take risks. It is the people who do all these and much more.

The needs and benefits of innovation and change have to be clearly demonstrated to the military organization. Liddel Hart once noted "Soldiers are sentimentalists, not scientists". The organizational changes may threaten traditions and methods dear to the heart of military personnel. Their hearts and minds need to be won over for a successful change in the Armed Forces. ¹⁹

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