

Staff System in the Indian Army Time for Change

PK Mallick



Centre for Land Warfare Studies
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Copy Editor : Ms Ruchi Bothra



Centre for Land Warfare Studies

RPSO Complex, Parade Road, Delhi Cantt, New Delhi 110010

Phone: +91.11.25691308 Fax: +91.11.25692347

email: landwarfare@gmail.com website: www.claws.in

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Staff System in the Indian Army

Time for Change

Introduction

When some unknown warrior chief asked for help or advice from one of his co-belligerents, military history saw the first functioning of the military staff.¹

Staffs exist to assist military leaders in commanding and controlling their units. Staffs generally achieve this through planning, information collection and analysis, coordination and supervision of plans and orders. As war became more complex, a single man's capacity to command and control increasingly large forces proved inadequate. Staffs, initially, were created to compensate for the commander's shortfalls. They serve to ease the commander's workload and furnish basic information and technical advice by which he may arrive at decisions.

Military staff is one of the most basic methods for command and control, both as an organisation embodying the personality of the commander and as an extension of the means by which his forces are to be controlled. Such staffs' responsibilities have grown exponentially since the end of the Second World War. What was initially as straightforward as command and control only a few decades ago, must now include elements of "communications," "computers," "intelligence," and most recently "interoperability" (thus becoming C4I2). Psychological operations or perception management, coordination, especially at the Corps level, and interagency cooperation have also emerged as key functions. Although the complexity of the modern military environment continues to increase, the staff structure that operates in such burgeoning diversity has remained fundamentally the same for the last 200 years.

It is time to have a holistic review of the existing staff system in the Indian Army, analyse whether there is a requirement for change in view of

the paradigm shift in warfare and the use of technology by all concerned and recommend a viable alternate staff system.

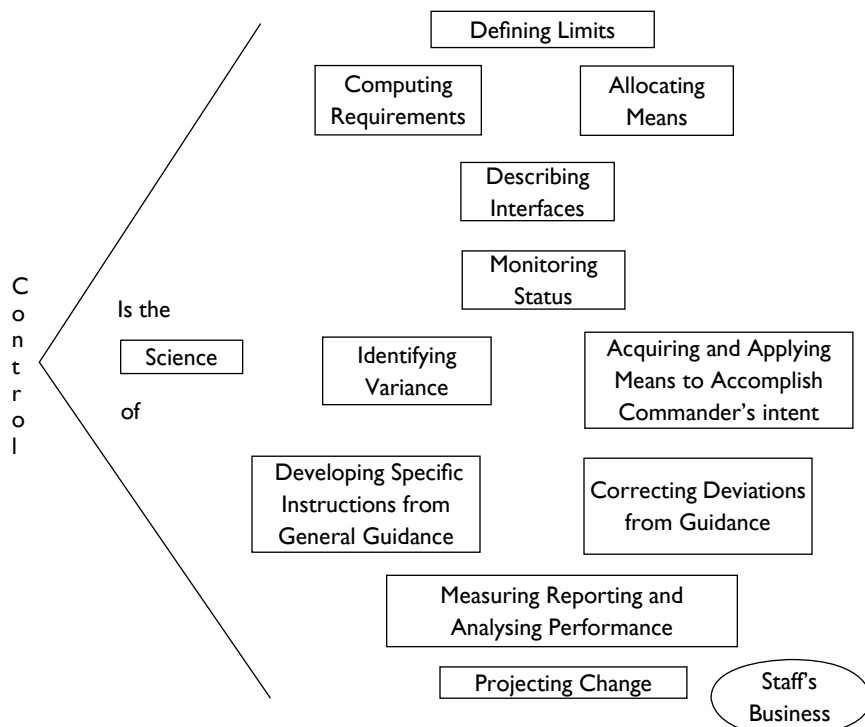
Evolution

For the very purpose of permitting the general-in-chief to give his whole attention to the supreme direction of the operations, that he ought to be provided with staff officers competent to relieve him of details of execution.

— Jomini, *The Art of War*

Military staffs have taken many forms over the years. However, the basic functions of a military staff have remained the same even when the structure has changed. These functions have included: obtaining information for the commander, preparing operational plans, translating the commander's decisions/plans into orders, transmitting orders to subordinate units, bringing important issues to the commander's attention, conducting estimates of current situations, making plans for future action and supervising the execution of plans in order to carry out the commander's intent. Traditionally, the size and shape of staffs have been a function of the complexity of the military operations being conducted. When armies were small and manoeuvred as single formations, there was little need for large, specialised staffs. As military organisations grew, both in physical size and in sophistication, their headquarters staffs increased proportionately. The single precipitating factor in the development of dedicated military staffs seemed to be the logistical realities of maintaining a standing army for a prolonged period of time. Martin van Creveld noted this factor as, "the principal problem facing [military commanders] for the greatest part of a campaign was not how to fight the enemy but how to exist in the field. It was in order to deal with this problem that staffs and staff work were first invented."² However, armies fighting like guerillas, like Shivaji, always had minimum administrative tail and staff.

Command and control are interrelated. Command resides with commanders. It consists of authority, decision-making and leadership. Control is how commanders execute command. Control is largely within the purview of staffs. Unlike command, control is more of an empirical process.

Fig 1: Control is a Science

Source: US Army Field Manual FM 7-30, Chapter 3, "Battle Command," <http://www.globalsecurity.org/military/library/policy/army/fm/7-30/Ch3.htm>, accessed on 23 April 2010.

In recent times, we have seen a proliferation of staff divisions to cater to expanding information dimensions relevant to operations. The ambit within which commanders will conduct operations is expanding rapidly. This expansion is compounding the decision-making problem of a commander in all three domains of time, space and information. It is, however, in the information domain that the expansion is most remarkable. Since the expansion of the information domain is exponential, we must ask ourselves if the current staff structure is archaic, and if so, whether it is time for commanders to redefine the method by which command support is provided by the staffs.

The staff organisation of Alexander the Great bears a similarity to the structure of modern staffs. It was developed by his father, Philip, in response to the widening expanse of his campaigns. As his span of control grew, his need for assistance in managing the breadth, depth and complexity of the

battlefield resulted in the assignment of staff officers, who were specialists in areas such as engineering, transport, commissary and siege operations.

Technological advances in weaponry and changes in the political environment continued to alter warfare. The organisation of staffs evolved parallel to these changes. The efforts of the Germans in the development of the staff are well known. Scharnhorst, Gneisenau, Schellendorff and Moltke are often credited with the creation of the general staff. However, they were not alone in their efforts to refine the processes of administering, supplying, planning and conducting war. It was the French who evolved a system of staff organisation that would eventually serve as the basis for the headquarters of the American Expeditionary Force in the First World War.

Case Studies

France

France was the dominant laboratory for staff development early in the modern era. Towards the middle of the century, Bernard of Saxe-Weimar, a former Lieutenant of Gustavus, exposed Cardinal Richelieu (1585-1642), the French prime minister, to a new staff thought. Prior to the French Revolution, significant advances took place in the French staff organisation as well as in the refinement of staff procedures. Pierre de Bourcett (1700-1780) became a key figure in France's military development. Besides being a leading proponent for military education and intellectual development, de Bourcett can be credited with developing the staff "estimate of the situation." In 1766, he developed the format for the French general staff that would be the model for later Prussian developments. As director of the Grenoble Staff College, his experiences during the war and dissatisfaction with the professional knowledge of the officers resulted in his efforts, to develop instructional activities to train French officers on the "whole art of generalship." He later organised a general staff known as the *service d'etat-major des logis des armies*, a precursor to the typical modern general staff. It was said that he was, "the greatest staff officer of the French Army of the 18th century."³

Napoleon Bonaparte rode the tide of the French Revolution into command of the French Army. Although it may be said that Napoleon did nothing revolutionary to the French staff structure (nor did his genius require

the assistance of a complete staff) he did cause “the basic French doctrine [to be] readjusted, amplified and utilised.” The true author of Napoleon’s staff structure was his chief of staff in the army of Italy, Pierre Alexandre Berthier. Berthier did set the pattern for dividing staff duties. Most importantly, he understood the strict requirement for staffs not to inhibit operational tempo. His 1796 directive stressed, “Speed is the most important thing in general staff work.”

Paul Theibault, Adjutant General in the French Army, formalised Berthier’s developments in a seminal work entitled *Manuel des Adjutants Generaux et des Adjoints Employes dans les États-Majors Divisionnaires des Armées*. This manual would go on to inspire staff transformation in the Prussian Army. General Antoine Henri Jomini, Marshal Ney’s Chief of Staff, would take the staff principles espoused in Theibault’s work and integrate them to refine his own staff. Jomini’s later departure from French service (to serve in and shape Russia’s military) allowed him to spread the French staff theories via his writings, which would become military classics.

Germany

After the catastrophic defeat at the hands of Napoleon at Jena, the greatest Prussian thinkers of the era (Stein, Scharnhorst, Gneisenau and Clausewitz) began to examine how France had organised itself to defeat their army. The product of their intellectual labours became the widely regarded “Great General Staff.” The Prussian staff system in 1828 possessed all of the essential elements of a modern staff system.⁴

The Great General Staff (GGS) was an institution whose rise and development gave the German military a decided advantage over its adversaries. The staff amounted to its best “weapon” for nearly two centuries. Though other European powers eventually created their own general staffs, the Prussian General Staff was distinguished by the formal selection of its officers by intelligence and proven merit rather than patronage or wealth and the exhaustive and rigorously structured training which staff officers undertook. This training was designed not only to weed out the less motivated or able candidates, but also to produce a body of professional military experts with common methods and outlook and an almost monastic dedication to their profession. The qualified officers would alternate between line and staff

duties but would remain life-long members of this special organisation. As staff officers, their uniform trousers featured distinctive double-wide crimson stripes.

The Chief of Staff of a Prussian formation in the field had the right to disagree, in writing, with the plans or orders of the commander of the formation and appeal to the commander of the next highest formation. This served as a check on incompetence and also served for the objecting officer to officially disassociate himself with a flawed plan. Only the most stubborn commanders would not give way before this threat.

After the defeat at the hands of Napoleon, the General Staff was formally established. Entry to the General Staff was through the completion of a course at the Preubische Kriegsakademie (the Prussian War Academy - an early Staff college). One of the early directors of the Kriegsakademie was Carl von Clausewitz, a reformer of the Military Reorganisation Commission. From his studies of the Napoleonic wars, he provided a syllabus which became the central doctrine for the staff. This standardisation of doctrine (which itself was a philosophy, rather than a narrow prescribed set of rules such as those laid down by Henri Jomini) was one of the distinguishing features of the Prussian General Staff model.

Although Moltke attended the Berlin War College in 1823, while Clausewitz was serving as its director (a purely administrative position which involved no teaching), the two had little, if any, contact. Nonetheless, in an interview in 1890, Moltke listed *Homer's* works, the *Bible* and *On War* among the five books that influenced him the most. Many of Moltke's writings were paraphrased or were drawn from the great military philosopher. Rudolf von Caemmerer, the well-known military author and Clausewitz's biographer, described the great Chief of the GGS as the "most gifted pupil of Clausewitz," and stated that reading the master strategist's work had taught Moltke how, not what, to think.

Field Marshal Helmuth Carl Bernard Graf von Moltke (1800-1891), Chief of Staff of the Prussian General Staff from 1857 to 1871 and then of the Great General Staff (GGS) from 1871 to 1888 and architect of Germany's brilliant Wars of Unification (1864-71), remains the historical figure most responsible for shaping modern German military thought. His nephew, General Helmuth von Moltke (generally referred to as "the younger"), by way of contrast,

exhibited indecisiveness and lack of resolve during the critical battle of the Marne in 1914, and consequently, has suffered only ignominy in the hands of history. By the end of his long career, the elder Moltke had significantly increased the capabilities, influence and prestige of the GGS, developing and refining the staff-ride system, demanding the highest standards of professionalism from GGS officers, gaining “direct access” (*Immediatvortrag*) to the Kaiser in 1871 and obtaining direct control over the training programme at the War Academy in 1872. In fact, the Prussian Army and its general staff system had become the envy and model for other armed forces. Moltke’s military philosophy and strategic approach have survived to inspire successive generations of soldiers. While arguably Germany’s most important soldier, Moltke spent only a few years with troops and never commanded a unit before assuming overall direction of the campaign against Austria at the age of 65. The General Staff of Moltke’s was first and foremost, a staff of military scholars, who were not seeking to seize more and more new functions. At its zenith, it never had more than 58 officers. When Moltke was made Chief of the General Staff (at age 58), it had only 12 officers. It was a staff whose members were not afraid to learn from one another. Moltke himself knew six foreign languages. He translated Gibbon’s 12-volume *History of the Decline and Fall of the Roman Empire*. Moltke’s own translation of original documents served as the basis for the preparation and publication of a history of the Russo-Turkish War of 1828. His general staff, using a centralised procedure, distributed the troops, abstracts of foreign military newspapers, journals and the proceedings of foreign parliamentary discussions on military and political issues. General staff officers were regularly dispatched abroad to study and learn from foreign experience.⁵

Moltke (the Elder) continued the innovation of the German staff through the end of the 19th century. Von Schlieffen succeeded him in elevating the members of the German General Staff to the highest level of authority during the First World War. The second noteworthy period was the inter-world wars period from 1918 to 1939, specifically the time of the Weimar Republic, from 1919 to 1930. The General Staff around General von Seeckt was able to analyse the events of the First World War, learn the lessons and develop solutions, which were, at that time, outside of the mainstream of thought and prevalent theories. This was only possible due to the tradition of open

discussions, tolerance for views outside the mainstream and the respect owed to junior general staff officers, who were already in responsible positions and were assured critical attention of their viewpoints at the highest levels.

The command structure of the armed forces was changed by Hitler, with an Armed Forces HQ (the *Oberkommando der Wehrmacht*, usually contracted to OKW) placed over the army command (*Oberkommando des Heeres* or OKH) and the other service commands. While a joint headquarter to coordinate the work of all the services was desirable in theory, OKW was increasingly used as an alternate army planning staff by Hitler. At the same time, OKW failed in its task of overseeing the overall war effort, resulting in wasteful diversion of resources by several competing and unregulated bodies responsible to themselves or Hitler alone. While the traditional German staff administration and planning was to contribute greatly to the early German successes, many of these triumphs were presented as the result of Hitler's personal intervention and the initiative of comparatively junior officers who were opposed to the restraint of the General Staff. After 1941, OKH was largely responsible for operations on the Eastern Front only (and the administration of the army as a whole), while OKW directed operations on the other fronts. There were now effectively two general staffs, often competing with each other.

The German General Staff system that evolved from the 1800's to the end of the Second World War was a unique institution that was both vilified and venerated. Although often misunderstood, the German General Staff system became an institution of excellence, leading the German Army and the German nation to the domination of Europe by the end of the 19th century. Twice in the first half of the 20th century, it also dragged Germany into devastating wars that could not be won. On 08 May 1945, the surrender of Germany in the Second World War marked the end of the German General Staff system. Although Germany was hopelessly over-committed strategically in the Second World War, the German Army and the German General Staff still achieved many great triumphs and victories.

United States of America⁶

Baron Friedrich von Steuben, who had served in the Prussian Army for more than 20 years in both field and staff assignments, became George Washington's inspector-general and drillmaster to the Continental Army

during the winter of 1777-78. He organised Washington's headquarters, including the establishment of the operations and intelligence sections, which he supervised directly. The concept of general staff that Washington had in mind was far less ambitious than what prevailed in European armies. By 1798, the war departments staff was organised along the functional lines suggested by Washington, including the departments of quartermaster, inspector-general, adjutant general, paymaster-general and surgeon-general. His closing comment had become something of a legacy, "The appointment of General Officers is important, but those of the General Staff all important."

The origin of the modern staff in the US Army began with the reforms instituted by Elihu Root, Secretary of War, at the turn of the twentieth century. He is considered the father of the modern US Army General Staff, establishing a system in 1903 that gave the army separate staff sections responsible for administration, logistics, intelligence and planning, which became a model for staffs throughout the remainder of the century.

In 1918, General Pershing issued General Order No. 31, which created the basic staff organisation still in use today. Since 1918, the doctrine and organisation of the US Army has changed significantly and repeatedly; yet, the divisional staff structure has remained remarkably consistent. During the war years, the staff organisation was further refined and the strength of headquarters staffs increased significantly. For example, the staff of the infantry division headquarters in 1941 was authorised twenty-seven officers; in 1945, the allocation rose to forty-five officers.

While the beginning of a modern staff system in the US Army emerged during the American Civil War (1861-1865), doctrine regarding staff procedures, decision-making and planning was limited until the First World War. Not until the 1924 publication of Field Service Regulations did army doctrine show formatted orders with annexes, maps and tables. Even then, the doctrine only alluded to the requirement for leaders to make an "estimate of the situation" and follow a deliberate process that culminated in a decision. In 1932, the first manual for staff officers was published under the authority of General (later General of the Army) Douglas MacArthur. The 1932 Staff Officer's Field Manual (FM) provided the US Army's first comprehensive command and staff doctrine on which today's staff procedures are based. In August 1940, the first FM101-5-*Staff Officer's Field Manual, The Staff and*

Combat Orders was published. FM 101-5 was revised five times between 1940 and 1984. In May 1997, 13 years after its last revision, FM 101-5, then titled *Staff Organisation and Operations*, was republished. It focused on command and staff relationships, staff organisations, staff officer responsibilities, the military decision-making process and the mechanics of producing orders.

Great Britain

The British experience has been somewhat ambivalent. Despite the establishment of a staff college at Camberley in 1858, reform of the regimental system and reorganisation of the war office under Cardwell, the progress towards the formation of a general staff in Britain remained slow.

The creation of a general staff followed the recommendations of the Esher Committee in 1904. After a couple of years of hard work, Special Army Order 233 on 12 September 1906, set out its purpose:

- To give advise on the strategic distribution of the army.
- To supervise the education of officers and the training and preparation of the army for war.
- To study military schemes – offensive and defensive.
- To collect and collate military intelligence.
- To direct the general policy in army matters and to secure continuity of action in the execution of that policy.⁷

The British adopted only a pale copy of the German system; it lacked 100 years of steady development and expert fashioning at the hands of Helmuth von Moltke and Alfred von Schlieffen. JFC Fuller wrote in *Generalship: Its Diseases and their Cure*, “No soldier can doubt the immense value of a general staff, if it is the general’s servant and not the general’s gaoler.” Despite the valuable staff training conducted at Camberley, Haifa and Quetta prior to the Second World War, the British army soldiered on without a full-fledged general staff. There was a little opportunity to provide the doctrinal foundation and preparation for high command which all the German general staff officers received. Despite the writings of Liddell Hart and Fuller, the systematic intellectual stimulus from the top downwards on the lines of the Reichswehr Chief of Staff (COS), Seeckt, was missing in the British army. The difficulties in establishing an authoritative COS, the principal general staff

officer, in a headquarter is instructive. Of all the British higher commanders of the Second World War, only Montgomery created a true field COS, de Guingand. Montgomery made his innovation of a COS under the pressures of wartime command, to free him, the higher commander, from meddling in the business of the staff. It allowed him time to think and sleep. After the Second World War, apart from the introduction of chiefs of staff into higher level headquarters against some opposition, little changed in the British staff system. Courses of instruction at Camberley stressed staff duties rather than the development of strategic thinking and operational concepts on war college lines. Not until the 1970s did Camberley title its principal course as command and staff. While the British army reluctantly adopted the NATO staff nomenclature in 1981, little of substance changed in either the organisation or running of the staff. Yet with the establishment of an army higher command and staff course in 1988, which became fully joint (tri-service) in 1998, perhaps the foundations of a true general staff ethos have been laid.

Russia

The development of the Soviet General Staff went in the opposite direction. With the demolition of the old tsarist military, the General Staff was quickly dissolved. However, measures to create a new General Staff in its place were underway. A large number of tsarist General Staff officers were accepted for service in the Red Army. Thus, in the fall of 1918, 518 former General Staff officers served in the Workers' and Peasants' Red Army (WPRA), which included 160 generals and 200 colonels and lieutenant colonels. In 1921, the staff of the WPRA was created, which combined operational, administrative and economic functions. By 1922, this staff was 12,583-strong. The name "General Staff" was not given to the staff of WPRA. During that period, the Bolsheviks were still reluctant to use this name, since the official propaganda of the day viewed the General Staff as an attribute of the imperialistic state. Gradually, however, the term itself was rehabilitated. A book that appeared in the late 1920s by the Chief of Staff of WPRA, Boris Shaposhnikov (1928-31 and 1941-42 Chief of the General Staff of WPRA), played an important role in this rehabilitation. The book was called *The Brain of an Army* and it looked at the past experience of foreign General Staffs, particularly in Austria-Hungary.⁸

In the war years, the functions of the General Staff expanded significantly, particularly in issues of military production. In his memoirs, Marshal Matvey Zakharov (Chief of the General Staff and first Deputy Minister of Defence 1960-63 and 1964-71), described the “General Staff of the pre-war years.” For a long time, Marshal Zakharov’s book was essentially the only reliable open source of information that revealed to some degree the structure and function of the Soviet General Staff, even if the information was 60 years old. Only in 1998 did it become possible to judge the tasks and functions of the contemporary Russian General Staff. This was the result of the publication of President Boris Yeltsin’s Decree No. 1357 on 11 November 1998, “Issues of the Ministry of Defence of the Russian Federation and the General Staff of the Armed Forces of the Russian Federation,” together with the “General Staff of the Armed Forces Rules and Regulations.”

India

The army in India was not a mere replica of the British Army at home, in terms of higher organisation, staff and command arrangements. It was led by the C-in-C in India, who was, in turn, directly responsible to the government of India, the governor general and ultimately, the Secretary of State for India in London. Given the size of the army in India and later its role in the First World War, little attention was paid to the development of the general staff in the subcontinent. Lord Kitchener’s efforts to improve the Indian staff system during the early 1900s eventually culminated in the formation of general staff in India in April 1910.

The appointment of Lord Kitchener as C-in-C in India on 28 November 1902 started a period of far-reaching reform of the military in British India. In 1903-04, Kitchener published sweeping plans to improve the army in India. The standard of training of staff officers at army headquarters and the organisation and staff immediately concerned the new C-in-C in India. In 1902, the staff of Army HQ was organised along the same lines as that in the UK. No attempt had been made to organise a staff on the continental model. No difference was made between the day-to-day administration and the various duties involved in preparing the army in India for war. It was ill-prepared for hostility. The staff in India did not enjoy a reputation for efficiency.

In 1903, the Government of India submitted its proposal, with the strong endorsement of Viceroy Lord Curzon, for an Indian Staff College. It met strong opposition from the army council. Lord Kitchener won the agreement of the Secretary of State, after accepting that it would have the same entrance examination, curriculum and syllabus as Camberley. The Indian Staff College opened in temporary accommodation at Deolali, and soon after, at its permanent location at Quetta in Baluchistan in April 1907. After independence, the Defence Services Staff College (DSSC) was established at Wellington.

The British did not expose Indian officers to critical staff appointments like operations and intelligence. It was not surprising that when independence came, there were only three Indian officers – GSO 1 (Ops), GSO 2 (Ops) and GSO 3 (Ops) in the Military Operations Directorate in Army HQ – Lieutenant Colonel SHFJ Manekshaw (later Field Marshal), Major Yahya Khan (later General and President) and Captain SK Sinha (later Lieutenant General). The present Indian Army is following the then-British Army's staff system since independence and there has not been much of a change. Recently, staff appointments at all level of headquarters have been upgraded or increased to accommodate the aspirations of officers, post the AV Singh Committee Report. There is a serious dichotomy here. What should come first – organisational interest or individual aspirations?

Existing Staff Systems: An Analysis

We don't pay enough attention to...the whole essence of making decisions on how staff is going to be structured, physically laid down on the ground, interact with each other, the processes/procedures they need to go through, the technical systems they'll need to support them-that needs to be structured in a way to be conducive to rapid, effective, relevant decision- making.

— General AC Zinni, USMC (Retd), Former CINC CENTCOM (US)

A staff must be capable of framing and resourcing operations to provide subordinate units the greatest freedom of action in simultaneous and rapidly changing operations. Bureaucratic staff organisation is no longer relevant under modern field conditions. The hierarchical, functional

organisation and bureaucratic legacy of headquarters staffs does not maximise the overall combat effectiveness and efficiency of modern armies. Despite radical environmental changes, today's staff organisation retains the hierarchical, functional staff organisation designed to support very mechanistic and predictable environments. Current divisional or corps headquarters are massive structures with limited deployability. Responses to changes in threat, technology and doctrine resulted only in the addition, subtraction or reorganisation of general staff functions or special staff positions.

Technological advances will greatly enhance staff operations but the people who comprise the staff cannot endure the unprecedented tempo of future operations indefinitely. Robustness will extend the capability of the staff to function efficiently on the modern battlefield. Robustness in capability is critical to the unremitting cadence of future operations. Adaptability should also channel the design of the staff. The staff will be required to coordinate manoeuvre, manoeuvre support and manoeuvre sustainment elements of varying size, function, duration and location. The staff organisation designed in 1917 was not intended to support such volatile conditions.

Military Decision-Making Process (MDMP): Certain management techniques should be utilised for the military decision-making process. Every year, a large number of officers are trained in these management tools in the College of Defence Management, but their expertise is not optimally utilised. A method of using quantification techniques is given at Appendix A.

Risk Management: Uncertainty and risk are inherent in tactical operations. Commanders cannot be successful without the capability of acting under conditions of uncertainty while balancing various risks and taking advantage of opportunities. Planning helps commanders reduce uncertainty and risk. During planning, commanders and staffs perform risk management.

Risk management is the process of identifying, assessing and controlling risks arising from operational factors and making decisions that balance risk cost with mission benefits. Risk management consists of five steps that are performed throughout the operations process. The relation between risk management and MDMP is given below:

Fig 2: Risk Management and the MDMP

	Step 1- Identify Hazards	Step 2- Assess Hazards	Step 3- Develop Controls + Decision	Step 4 - Implement Controls	Step 5- Supervise + Evaluate
Mission Receipt	X				
Mission Analysis	X	X			
Course of Action (COA) Development	X	X	X		
COA Analysis	X	X	X		
COA Comparison			X		
COA Approval			X		
Orders Production			X	X	
Rehearsal	X	X	X	X	X
Execution	X	X	X	X	X

Source: US Army Field Manual, FM 100-14, Chapter 2, "Risk Management," Headquarters Department of the Army: Washington, D.C., 23 April 1998, p. 2-1.

In the Indian Army's staff system, there is no formalised process of risk management. It should include formalised risk management techniques in its staff procedures.

Information Management: Effective command and control in war demands that the commanders have access to timely, relevant and accurate information continuously. The primary staff products are information and analysis. Staffs use information management to extract relevant information from a vast amount of available information. They collect, analyse and present relevant information to commanders to assist them in achieving situational understanding and to make decisions. There are certain activities like retrieval of information from large data stores or arithmetic computations that can be performed more quickly and accurately by computers, while humans are more capable in other areas. A computer-based system could be used to relieve some of the staff officer's workload. This could allow the staff and commander to analyse a wider range of factors, with the critical factors being examined in greater detail and depth.

Estimates and Appreciation⁹

Appreciation: With the establishment of the staff system around the turn of the century and with the growth of technology in many specialised military fields, the need for an effective and more or less standardised decision-making process became pressing. The proliferation of staffs and committees which occurred during and after the 1918-41 war period only emphasised this further. Thus, the formal staff appreciation became the accepted thought process on which decision-making was largely based—a convention which continued throughout the Second World War, and for the Indian Army, continues till date.

Staff Estimate: A staff estimate is an assessment of the situation and an analysis of the courses of action a commander considers that best accomplish the mission. The staff estimate is a continuous process that evaluates current and future operations to determine if a current operation is proceeding according to the plan and if future operations are supportable. Staff estimates are used to support the decision-making process during planning and execution. The commander uses recommendations from them to select feasible Courses of Action (COAs) for analysis and to decide which COA to execute. The importance of staff estimates increase as time decreases. Staff members keep their running estimates current. When planning, time is limited. They can provide accurate up-to-date assessments quickly and move directly into the development of COAs.

Running Estimates: A running estimate is a staff estimate, continuously updated based on new information, as the operation proceeds. It is a staff technique that supports the commander's visualisation and decision-making process. It is also a staff tool for assessment, during the stages of preparation and execution. In running estimates, staffs continuously update their conclusions and recommendations, based on the impact of new facts.

Size of HQ

For large and complex organisations, expanding the size of staffs is much easier than changing the entire structure of the organisation. Increasing staff size does increase the capacity to gather more information. However, more information requires more analysis and coordination and these tasks increase the amount of time it takes to process the information. The result may be accurate but produce outdated information. The commander essentially

may still not be receiving the information he needs and this can lead to the perceived need for larger staffs to do more processing, which starts the cycle over again.

The new realities resulting from the changes in technology and doctrine are reflected in the thinking of military theorist Martin van Creveld,¹⁰ who proposed in his book *Command in War* that the complexity of modern war and the systems one employs require even larger and more capable staffs in order to be effective. While many of his proposals are in line with the concepts of modularity, the other side of the issue is that these deployable and modular units are very technologically and information dependent; and therefore, either require more robust headquarters or the creation of a method to gain efficiencies in Command and Control (C2) and information management. There is a tendency of cutting headquarters elements to gain efficiency, but not manning and equipping elements adequately for their required capabilities.

Larger headquarters inevitably mean more centralisation. Decentralisation permits outward focus and encourages initiative, which in turn, speeds up Boyd's OODA loop and improves accuracy of orientation. Centralisation, in contrast, slows the OODA loop down and blurs orientation, because the picture that is the basis for decisions is many layers removed from the actual observation. There is a dichotomy here. The Indian Army leader has to decide whether to follow a directive system of command and control and have less staff, like the Israeli Army or US Marine Corps, or a centralised functioning, which would require more staff.

William S Lind, the leading military theorist of this generation, expressing his own personal opinion, wrote,

One of the reasons none of America's armed services has yet transitioned from the Second to the Third Generation is the vast number and size of their headquarters. All those headquarters' officers are continually looking for something to do and for some scrap of information that will give them 30 seconds of face-time in the endless PowerPoint briefings that are American headquarters' main business. The result is that they impose endless demands on the time and energy of subordinate units. One army battalion last year told me they had to submit 64 reports to their division every day.¹¹

Staff size at each echelon should reflect the magnitude and complexity of tasks. While information technology should increase staff members' productivity, countervailing trends may, in some cases, prevent staff reductions. Overall organisational size may shrink in many cases, but the complexity of tasks and the number of capabilities that must be integrated at each echelon will increase. The net of these two countervailing trends may leave staff size at a given echelon relatively constant.

Continental Staff System: Most NATO countries have adopted the continental staff system (also known as the general staff system) in structuring their militaries' staff functions. This system is based on one originally employed in Napoleon's Grande Armée. Each staff position in a headquarters or unit is assigned a letter corresponding to the formation's element and one or more numbers specifying a role.¹²

The element letters are:

- N – Navy headquarters
- G – Army or Marines ("ground") headquarters
- A – Air Force headquarters
- J – Joint (Navy/Army/Air Force) headquarters
- S – Staff roles within units subordinate to a headquarters (battalions and below; not used by all countries)
- C – Combined headquarters (exercising command of units of multiple nations)

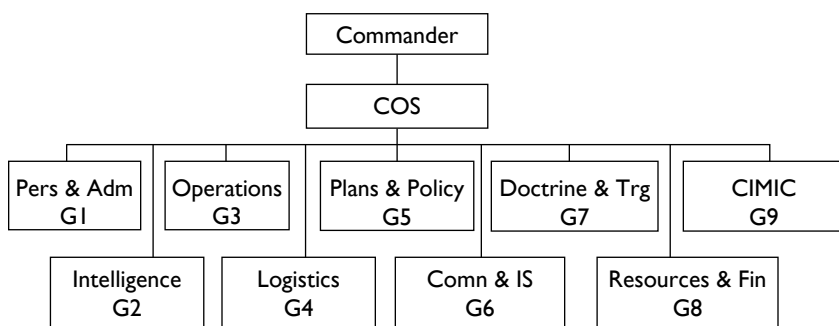
The staff numbers are assigned arbitrarily; 1 is not "higher" than 2:

1. Personnel and Administration
2. Intelligence
3. Operations
4. Logistics
5. Plans and Policy
6. Communications and Information Systems (IS)
7. Doctrine and Training
8. Resources and Finance
9. Civil-Military Cooperation (CIMIC)

Thus, the personnel officer of a naval headquarters would be referred to as N1. In reality, in large organisations, each of these staff functions will

require the support of its own large staff, so NI refers both to the office and the officer in charge of it. The continental staff system can be carried down to the next level: J13 is thus the operations officer of the personnel office of a joint headquarters, but the exact definition of the roles at this level may vary. Below this, numbers can be attached following a hyphen, but these are usually only positional numbers assigned arbitrarily to identify individuals (G23-2 could be the budget officer in the operations section of the intelligence department; A11-1-1 might simply be a receptionist). Some of the major differences from the Indian system are the branches of civil military cooperation, resources and finance, and communication and information system (IS).

Fig 3: The Continental General Staff System



Source: US Joint Publication, *The Joint Staff Officer's Guide*, 2000, JFSC Pub 1, pp. 1-51.

Staff for Conventional vs. Counter-Insurgency/Counter-Terrorism Operations (CI/CT Ops): Asymmetrical warfare is the means by which the enemy will attempt to maximise his comparative advantages against one's relative weakness. He will manipulate strategy, tactics, technology, organisation or culture to gain the advantage by rapidly changing the nature of the conflict. Staffs must be organised to anticipate and respond to the complexities of asymmetry and asynchronicity. Planning, synchronising and supporting complex operations across the battlefield necessitate a modular, agile, interoperable, robust, adaptable and echeloned staff organisation. The current delineation between the functions of planning and operating may constrain staffs and restrict collaborative efforts. A

traditional staff designed for routine and structured operations is not prepared to respond to the environment that is changing toward a paradigm of non-linear, simultaneous operations conducted throughout the depth of the area of operations and beyond, using conventional and unconventional means, oriented on the destruction of national will as well as strategic, operational and tactical ability to wage war. Ground knowledge is important for both staff and commander. In CI/CT ops, the dynamics change very fast.¹³

Fighting an asymmetric enemy successfully is more dependent on art than science. In essence, it meant challenging his sanctuaries, protecting one's vulnerabilities against his asymmetric approaches while using one's asymmetric advantages in terms of means and dimensional supremacy to erode his strength and will, disintegrate his organisational and functional coherence and dislocate his efforts in time and space. The requirements of the art become more difficult as one moves from the tactical to the operational and strategic realm. More often than not, the art is less in reacting to the enemy than in conceiving viable options and reliably imposing new realities on the enemy. Information technologies are extremely helpful in the scientific aspects of tactical and operational design, but creativity in this complex environment is still an art that depends on the brains of commanders and their staffs.

A de novo look into the adequacy of existing staff system in formation headquarters, which are unchanged for both conventional as well as CI/CT ops, may be in order. In CI/CT ops, the staff has to be on their toes 24x7. It is humanly not possible to remain alert without any break. Ad hoc arrangements have been made for public relations, psychological operations, winning hearts and minds (WHAM), especially at the cutting edge of brigade HQ. Should there be a staff system to man staff appointments on a three-shift basis?

Flat vs. Hierarchical Structure: Traditional hierarchical military staff organisations at the operational level of command remain suited for executing the status quo and slowly evolving military operations focussed on simple problems. However, the same hierarchies are rendered ineffective when faced with complex problems. Replacing traditional staff structures with flat, self-organising networks at the operational level of

command and war will allow commanders to efficiently synchronise vast resources and more effectively attack the rapidly evolving complex and wicked problems.

Information technologies enhance the span of control more than the span of command. The span of command is the limiting factor in units designed for combat. Recognising, measuring, tracking and controlling many things and processes are taxing tasks for the human brain, but relatively easy for computers. The workload associated with controlling a given number of subordinates decrease significantly as information technologies are applied. The span of command can be greater at higher echelons than at lower. A corps can handle more divisions than a battalion can handle companies, or a company, platoons. Higher commanders and staffs are more experienced; higher staffs are more robust; the potential rate of change in the combat situation is more moderated; and all divisions are not as likely to be equally engaged. On the other hand, companies and platoons will not permit an expansion of the span of command beyond what is there in Indian units today because of the variety and complexity of their tasks, the intensity of combat when engaged and the price of command in attention. In the Indian system, the best and the brightest of staff get posted at the lowest level. Is there a dichotomy here?

Future organisations must operate within a hierarchical framework of mission-type command supported by an integrated network of cooperating staffs. A hierarchical command system will remain essential, but it must not be overly centralised. In high-tempo operations against an enemy, an overly centralised command system will be too slow to take full advantage of opportunities. Some commanders fear that allowing lower level staffs to network with higher level staffs will cause confusion, mistakes and inefficiency. This need not be the case if commanders clearly enunciate missions and their intent. Subordinate actions that clarify the commander's intent and improve planning should be encouraged.¹⁴

Command Information Decision Support System (CIDSS)

We cannot achieve battle...nirvana merely by putting more computers and communicators into the command posts, nor by linking all existing and future computers into a local, regional, or even a global "grid"...we...need to know

how to design the perfect organisation, one which is completely adaptable... we need to know enough about how people process information to be able to design the necessary tools and systems to avoid errors and the loss of time when dealing with information...we need to know enough about how people work together to make sure that the organisational design, procedures development, training development and systems design provide products which are optimised for the most effective performance by the commander and staff as a whole.

— US Army Research Institute for the Behaviour and Social Sciences

An effective command and control system contains three elements: the staff that the commander forms to support him, the procedures that are used to process information and the technical means used to communicate. All three elements employed together allow the commander to effectively gather, process and distribute critical information

In order to keep pace with evolutionary changes in tactical doctrine, improvements in army command and control (C2) are required. The rapidly changing combat environment will impose severe time pressures on the staff and the commander. An enormous amount of information is available for commanders and staff officers and there is little time to process this information for the purpose of decision-making. It is easy for humans to become overburdened as information changes rapidly and becomes more abundant. Though there is an abundance of data and information, uncertainties about the situation, goals and outcomes will not necessarily be diminished. Time pressures, uncertainty, stress and mental fatigue can adversely affect human performance.

The army is currently transitioning to a digitally-based information system that will form the basis for commanders' C2 systems. These systems are designed to provide commanders and staffs with timely, accurate, mission-critical information to support an effective C2. The range of digital devices the army is fielding greatly enhances both analytical and intuitive decision-making. Modern information systems should enhance planning in several ways:

- Collect information more efficiently than analog systems.
- Process information faster and more accurately than analog systems.

- Allow information to be stored in a manner that provides rapid access through distributed databases.
- Display information in useable, tailorable and common formats.
- Disseminate information to the right place faster with fewer errors and less lag time than analog systems.
- Allow leaders access to expertise and databases through reach-back to service, national and civilian institutions.

The most significant challenge to planning is overcoming uncertainty. Traditionally, commanders have devoted a significant amount of planning time to developing situational understanding. A large effort by staffs is devoted to gathering information to produce or update products that help commanders understand the current state of the enemy, friendly forces and the environment. Now, distributed databases and modern information systems enable commanders at all echelons to share information immediately. This capability allows commanders to share a common operating picture. This capability significantly speeds situational understanding and enables commanders and staffs to develop feasible COAs faster.

India has spent an enormous amount of money and time for the development of the CIDSS. The different sub-systems are in various stages of completion. It is imperative that the army learns fast from the fielding of such systems, viz. Army Battle Command System (ABCS) by US Army in Iraq and Afghanistan. Even the US Army is facing teething problems which are being resolved. The Indian staff system organisation and competency to man the system should be in place. Training procedures should start now.

Command Post of the Future¹⁵

The military command post – whether at headquarters, brigade or battalion level – has been the nerve centre of war planning and operations since the creation of the first organised army. As technology and information flow has increased, so has the size and complexity of the command post. The decision-making teams at the typical division-level command post alone may exceed 1,000 people and hundreds of computers, map boards and communications consoles.

The characteristics of the current command post include:

- 60+ workstations, 100+ people.
- People are flooded by individual data streams.
- Disjointed data systems; fragmented pictures of the battlefield.
- No portrayal of uncertainties, inconsistencies or unknowns.
- Requires too many people, too much communication.

Some consequences are:

- Disjointed systems can cause negative situational awareness.
- Increased time to comprehend the significance of information.
- Incomplete, inaccurate understanding of the battlefield.
- Delayed decisions while waiting for more data and understanding.

Operational Impact

Increased operational tempo will necessitate:

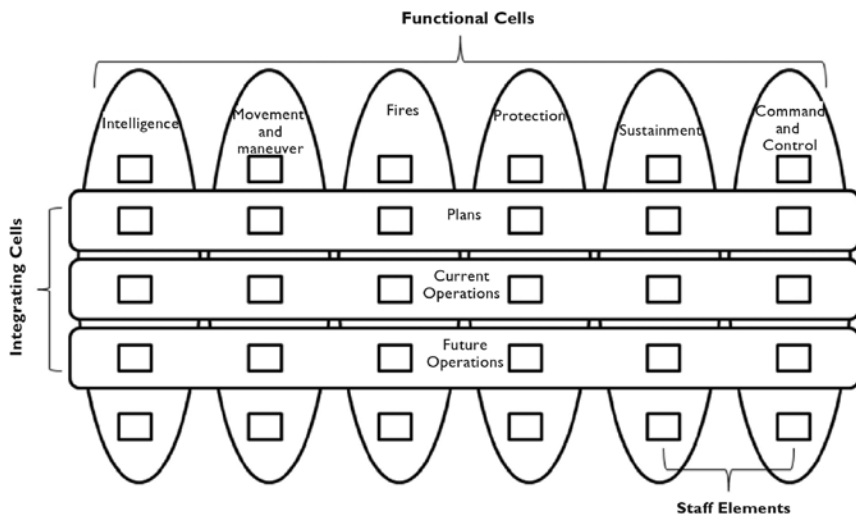
- Faster recognition and better understanding of significant battlefield changes.
- Faster and more complete exploration of available courses of action.
- More rapid and accurate dissemination of commands.
- Increased span of control.
- Smaller, more mobile command structures, which implies:
 - Fewer staff members.
 - Smaller support trail and reduced deployment requirements.
 - More mobile, distributed command organisations.

Defense Advanced Research Projects Agency (DARPA) in the US has taken up a project to build the “Command Post of the Future” which is better known as CPOF. The commander’s job is to make decisions and monitor their execution in the midst of great uncertainty. Most commanders spend very little time in the command post. Instead, the commander goes where he’s needed most and when he is out of the command post, he is in touch by the radio, which is really inefficient for advanced planning. The commander and his staff officers should be able to travel around and carry the command post with them. The commander’s success in the battlefield of the future will depend on the use of information dominance

to increase the speed and precision of his decisions, while survival will depend on being small and mobile as large command complexes will not survive in the highly lethal, future battlefield. The commander's portal into this information environment will need to be easily operated by a small, distributed staff. To achieve this operational goal, the technical objective is to develop the technology necessary to create an adaptive, decision-centred, information visualisation environment for the future commander and his immediate staff.

The command post (CP) is the basic headquarters organisation used to perform command and control (C2) during operations. A command post cell is a grouping of personnel and equipment to facilitate command and control during operations. There are two types of CP cells – functional and integrating. Integrating cells normally focus on different time horizons. For example, the plans cell focusses on the long-range time horizon, while the current operations cell focuses on the short-range time horizon. The sustainment cell integrates numerous logistic areas and services. The fire support cell integrates army indirect fires and joint fires. It also integrates the contributions of all fire support units to targeting through the targeting working group. Integrating cells focus the efforts of functional cells on planning, preparing for or executing the overall operation within a time horizon. Functional cells and integrating cells are not single staff sections. For example, in a corps main CP, G-2 section personnel often form elements of the intelligence, fires, current operations and plans cells. Not all cells depicted in Figure 3 are in every CP. A battalion or brigade tactical CP is usually not divided into cells: the entire TAC CP is the current operations cell. It comprises representatives from various staff sections. A corps TAC CP, in contrast, normally has all cells listed in Figure 3, except for plans.

Fig 3: Functional and Integrating Cells of a Command Post today – Limitations



Source: US Army Field Manual, FM 5-0, "The Operations Process," Appendix A-3, Headquarters Department of the Army, Washington, D.C., 26 March 2010, p. A-3.

There are military occupational specialties for specific weapon systems and there must be specialty skills created for staff positions. Among these are highly skilled command post officers trained as communications and automation specialists, etc. These are only a handful of the changes needed to update existing staff force structure.

Providing a commanding battle staff with the tools it needs to maintain situational awareness means integrating information technology into mobile, deployable command posts. A commanding battle staff should be equipped with either appropriate vehicles or prefabricated office shelters or containers in which information technology is integrated into the work-stations. Local area networks (LAN), computers, printers, communications, intelligence systems and wireless links to e-mail are only a few of the information technologies necessary for a battle staff to keep the commander informed.

Battle Management: The intent of battle management is to be able to control the battle, either through decentralisation of tasks and resources or to centralise it. And the intent is to have less people managing the battle and leveraging on computers to assist in monitoring the situation and alerting

when there is a critical need and providing the possible alternatives for the commander and staff to choose. An integrated and protected system of mobile streamlined information-age command posts will be essential. They must provide effective command and control for very complex high-tempo operations while their organisations are moving and fighting. These facilities must be conducive to extended periods of non-stop planning and execution. They must be self-sustaining, compact, mobile and secure from both information and physical attacks.

A good C4I system is, therefore, required with decision support. There is a perception, especially pertinent to strike formations in extremely fast moving, high-tempo operations, that the existing headquarters and staff system of working may not suffice.

Reports and Returns: Are battle management reports still useful today, if there are good chat forums, instant messaging and visualisation graphics? Even with technology today, reports and returns are still being used at periodic intervals to give the higher headquarters the feel of control.

With the technology available, every formation HQ can see the same operational picture and relate on their status online. One should exploit web-based technology to convert these battle management reports to the web in a more intuitive form, linked to the mission and event lists. Critical alerts can also be provided to the commander and staff for areas of concern. One should be able to do concurrent planning at different levels of sub commands so that there is common situation and information awareness throughout the planning phase, leaving only for a short time for the sub-command to query on the final orders given. To achieve concurrent planning, tools such as TV, video conferencing, collaboration tools and high bandwidth communications network will facilitate network planning between the higher and lower command post.

The end objectives of battle management should be:

- To improve one's understanding and visualisation aspects of the battle so that one can plan with less uncertainty.
- To reduce the overall briefing requirements and briefing time to the commander through the intelligent web-based information hub. This will create more time for battle management and allow the commander and staff to call up any information through the hub. The idea is to also

do away with long orders as this can be put on the web with video if required and together with parallel planning, the sub- commanders would have already known the plan.

- To capture the voice recordings or recognition of the commander, with the ability to translate them into actionable missions or goals.

Problems of Existing Staff Systems

Napoleon could reappear today and recognise my Central Command staff organisation: J-1, administrative stovepipe; J-2, intelligence stovepipe- you get the idea. The antiquated organisation is at odds with what everyone else in the world is doing; flattening organisation structure, decentralising operations, and creating more direct communications. Our staff organisation must be fixed.

— General AC Zinni, USMC (Retd), Former CINC USCENTCOM¹⁶

The army of the future will be an extremely versatile, combined-arm manoeuvre force expected to perform a variety of roles and missions. The hierarchical, functional organisation and bureaucratic legacy of headquarters staffs no longer maximise the overall combat effectiveness and efficiency of the army. Current staff organisation lacks the agility to rapidly employ the force, nor is it modular, adaptable, interoperable or echeloned enough to achieve synchronised, integrated and lethal operations under modern field conditions. The near century-old design of the general staff must be designed to advise, plan, monitor, analyse, coordinate and administrate in an environment anticipated to be much more complex than faced by staffs in 1918. Perhaps Brigadier General Huba Wass de Czege states the issue most succinctly,

While the essential nature of war has changed remarkably little throughout history, the conduct of war has changed repeatedly in response to geopolitical, demographic and technological developments. Armies that successfully adapt to these developments win. Those that fail to adapt lose and the nations they defend with them. Organisational adaptation, thus, is a vital and continuing professional military obligation. Be flexible, adaptable and accept change and manage it.

The nature of the current staff organisation will inhibit the integrated, coordinated staff effort required when confronted with more complex environments. Future operations will no longer be sequential and tempered by operational pauses. The staff will be required to excel under high-tempo and fluid conditions while simultaneously adapting to and preparing for impending actions. Divisional forces will conduct diversified actions on a distributed battlefield. Controlling the more complex scenarios will exceed the capabilities of the current bureaucratic, functional staff organisation. Environmental changes that create the modern field conditions warrant a closer examination to determine the functions a staff must perform and the organisation best suited to respond to the environment.

Conditions for Improving HQ Structure: Some of the ways to improve functioning of HQ staff are:

- Emphasise knowledge management.
- Have reduced reliance on traditional functional staff by having teams organised around operational functions and products or services.
- Be based on strict rules for collaboration and information sharing.
- Foster personal accountability.
- Be disciplined.
- Be capable of shared tasks while distributed across space, time or organisational boundaries.

Joint Task Force Headquarters: Increasingly, the Indian army is being tasked to carry out a variety of tasks including operations beyond its shores, like in the Maldives; aid to civil authorities like relief operations for tsunami victims in other countries and so on. Invariably, a joint task force is required to be made for coordinating Army, Navy, Air Force and other government agencies. Similarly, for amphibious operations, the existing headquarters and staff system would not suffice. There is a need to make these organisations during peace-time, train and identify personnel for filling up these staff assignments when required. Joint exercises must be held and practiced on these important issues. There is an urgent need to solve the issue of interoperable communications between the services.

Recommendations

As war becomes more complex and the battlespace expands the immense amounts of information provided by technology, armies must either have large, robust staffs or find technology-based methods to better manage the information and synchronisation requirements.

— Martin van Creveld¹⁷

Three requirements have been identified to guide the design of headquarters: deployment, continuity of command and fusion of command and staff effort. Coordinating and monitoring in support of the commander's intent are the key functions identified for each staff element. While all cells should have clearly defined responsibilities, few, if any, will be able to operate in isolation. Co-ordination between them will be important. Larger headquarters may provide greater endurance but often at the expense of security and mobility. The key is to strike the right balance, thus producing a responsive and agile organisation.

Corps and divisions may organise their future command posts into three self-contained elements:

- A small, low-signature, forward command post used for mission execution – its signature should be no larger than the forward command post of current brigades.
- A main command post that conducts long-range planning and provides execution support – its initial location may be the initial staging base.
- A rear command post that supports deployment operations and provides reach-back staff support for the main and forward elements – it will typically be located outside the area of operations or maybe even at a permanent location. However, locations have to be different for holding, strike or mobile formations.

At the brigade level, command posts should be organised into two self-contained components. One should be a small, low-signature, forward command post used for mission execution. The other should be the main command post, located near the division main or forward command post.

Conclusion

The only thing harder than getting a new idea into the military mind is to get the old one out.

— BH Liddell Hart

Functional hierarchies and mirrored echelons serve little purpose on a dynamic, non-contiguous battlefield. Brigadier General Huba Wass de Czege and Colonel Sinnreich capture the essence,

...army organisations operate within a hierarchical framework. Some hierarchy is essential to assure common purpose, match authority with responsibility and distribute the decision-making burden consistent with information, experience and resources. At the same time, to conduct high-tempo operations against an adaptive enemy, the command and control framework must balance predictability with opportunism and synchronisation with agility...all the advanced technology in the world will not produce effective command and control if staffs are too large and unwieldy, planning and coordination procedures are too rigid and formalistic or control is exerted too tightly over subordinate unit decisions and actions. Future tactical staffs should be relatively small, cohesive teams of highly trained generalists. They should be able to access functional expertise electronically as required. Broad functional specialisation should be reserved for supporting formations and for the operational unit of employment.

Despite radical environmental changes, today's staff organisation retains the hierarchical, functional staff organisation designed to support very mechanistic and predictable environments. Responses to changes in threat, technology and doctrine resulted only in the addition, subtraction or reorganisation of staff functions on an incremental basis like addition of Information Warfare and Information Systems staff at formation headquarters staff.¹⁸

One should take a de novo look at the existing system of staff in the Indian Army. The following aspects need to be looked into:

- The present command post structures – There is a tendency to add structures in the command post like Force Multiplier Command Post (FMCP). The principal staff officers cannot be at the operations room

or CP and at FMCP at the same time. During operations, the complete information support system has to be made available to the staff officer at the ops room. Today, the means are available for the same.

- When the CIDSS is fielded, have the positions required to be manned been planned for? Are staff officers being trained accordingly? Even if they are trained, is the mindset correct? Where is the manpower going to come from? The tendency to call for signals or technical persons to man the system has to be curbed. In case it is required, then the same should be authorised and the headquarters organisation should be restructured.
- The strength of staff at each HQ – Availability of Colonels and above, courtesy of the developments post the AV Singh Committee Report, should not dictate the staff structure.
- Staff organisation for HQs in CI/CT Ops vis-a-vis conventional formation HQ.
- Use of modern communication systems and reduction of paperwork – more analysis than collation of information is needed.
- Use of modern management techniques like risk management, operations research, statistical analysis and tools.
- Present tendency of “groupthink” in staff because of high cohesion and how to avoid the same. Is there a need for the revision of the present staff system?
- Should we follow the System of Appreciation or Staff Estimates?

Sample Decision Matrix-Numerical Analysis

CRITERIA (Note 1)	WEIGHT (Note 2)	COA1 (Note 3)	COA2 (Note 3)	COA 3 (Note 3)
Maneuver	3	2 (6)	3 (9)	1 (3)
Simplicity	3	3 (9)	1 (3)	2 (6)
Fires	4	2 (8)	1 (4)	3 (12)
Intelligence	1	3 (3)	2 (2)	1 (1)
ADA	1	1 (1)	3 (3)	2 (2)
Mobility/ Survivability	1	3 (3)	2 (2)	1 (1)
CSS	1	2 (2)	1 (1)	3 (3)
C2	1	1 (1)	2 (2)	3 (3)
Residual Risk	2	1 (2)	2 (4)	3 (6)
IO	1	2 (2)	1 (1)	3 (3)
Total/ Weighted Total		20 (37)	18 (31)	22 (40)

Source: Field Manual FM 101-5, Chapter 5, "The Military Decision Making Process," pp. 5-25, http://www.dtic.mil/doctrine/jel/service_pubs/101_5.pdf, accessed on 15 July 2010.

1. Criteria are those assigned step 5 of COA analysis.
2. The chief of staff/executive officer may emphasise one or more criteria by assigning weight to them based on their relative importance.
3. COAs are those selected for wargaming.
4. Procedure: The staff assigns numerical values for each criterion after wargaming the COA. Values reflect the relative advantages or disadvantages of each COA action. The lowest number is best. The initially assigned

score in each column is multiplied by the weight and product put in parenthesis in the column. When using weight value, the lower value assigned indicates the best option. The numbers are totaled to provide a subjective evaluation of the best COA without weighting one criterion over another. The scores are then totaled to provide a “best” (lowest number value) COA based on weights the commander assigns. Although the lowest value denotes the best solution, the best solution may be more subjective than the objective numbers indicate. The matrix must be examined for sensitivity. For example, COA 2 is the “best” COA; however, it may not be supportable from an ADA standpoint. The decision-maker must either determine if he can acquire additional support or if he must alter or delete the COA.

Notes

1. James D Hittle, *The Military Staff* (Westport, CT: Greenwood Press, 1975), p. 1.
2. Martin van Creveld, *Command in War* (Cambridge, MA: Harvard University Press, 1985), p. 27.
3. James D Hittle, *The Military Staff* (Harrisburg, PA: The Stackpole Company), 1961, pp. 93-114.
4. Walter Goerlitz, *History of the German General Staff 1657-1945* (New York: Praeger, 1953) p. 70.
5. Antulio J Echevarria II, “Moltke and the German Military Tradition: His Theories and Legacies,” *Parameters*, Spring 1996, pp. 91-99, <http://www.carlisle.army.mil/usawc/parameters/Articles/96spring/echevarr.htm>, accessed on 10 May 2010.
6. Louis A DiMarco, “The US Army General Staff: Where Is It in the Twenty-first Century?” *Small Wars Journal*, 12 March 2009.
7. David French and Brian Holden Reid (eds.), *The British General Staff: Reform and Innovation, 1890-1939* (Abingdon, Oxon: Routledge, 2002) p.10.
8. Alexander M Golts and Tonya L Putnam, “State Militarism and Its Legacies: Why Military Reform Has Failed in Russia,” *International Security*, Vol. 29, No. 2, Fall 2004, pp. 121-158.
9. US Army Field Manual, FM 101-15, “Staff Organisation and Operations,” Appendix ‘C’, Headquarters Department of the Army, Washington, D.C., 31 May 1997.
10. Van Creveld, n. 2.
11. William S Lind, *Reorganisation or Reform*, http://www.dnipogo.org/lind/lind_3_16_06.htm, accessed on 20 July 2010.
12. Lieutenant-Colonel Jacques Hamel, CD, “The Command and Staff System in the Information Age: Is the Continental Staff System Dead?” *Canadian Armed Forces Journal*, http://www.army.forces.gc.ca/caj/default_e.asp?view=more&issueID=29, accessed on 20 Mar 2010.
13. Nigel Aylwin-Foster, “Changing the Army for Counterinsurgency Operations,” *Military Review*, Vol. LXXXV, No. 6, November-December 2005, p. 6.

14. Col PK Mallick, "Organisational Restructuring of Army – An Analysis", *Defence Management Journal*, March 2004.
15. BG Harry Greene, Larry Stotts, Ryan Paterson, and Janet Greenberg, "Command Post of the Future: Successful Transition of a Science and Technology Initiative to a Program of Record," January 2010, www.dau.mil, accessed on 10 June 2010.
16. General Anthony C Zinni, USMC (Retd), "A Commander Reflects," *US Naval Institute Proceedings*, July 2000, p. 36.
17. Van Creveld, n. 2, p. 279.
18. Brigadier General Huba Wass de Czege and Colonel Sinnreich, "Conceptional Foundation of a Transformed US Army", The Institute of Land Warfare, Association of the United States Army, *Land Warfare Paper No. 42*, March 2002, p. 35, <http://www.ausa.org/SiteCollectionDocuments/ILW%20Web-ExclusivePubs/Land%20Warfare%20Papers/lwp40.pdf>, accessed on 15 March 2009.

