The Division General Staff: Can it Employ the Objective Force

A Monograph
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Abstract

THE DIVISION GENERAL STAFF: CAN IT EMPLOY THE OBJECTIVE FORCE? by MAJ Charlene D. Smith-McCoy, U.S. Army, 59 pages.

In 1917, General Pershing dictated General Orders, No. 8 creating the staff organization of the American Expeditionary Forces and subordinate army corps and division staffs. The new structure was developed in response to modern field conditions and was originally derived from a comprehensive study of French and British army staffs. Although doctrine and organization of the United States Army have changed significantly and repeatedly, the divisional staff structure has remained remarkably consistent. This monograph examines headquarters staff organization in relation to the modern field conditions within which the Objective Force will operate.

Modern field conditions are rapidly changing as the twenty-first century begins. The nature of the Objective Force reflects a transformation in U.S. Army organization and operation. The Army will be an extremely versatile, combined arm maneuver force expected to perform a variety of roles and missions. As a result, the staff, the mechanism that enables commanders to command and control their forces, must also be examined to determine if this ninety year old structure is suitable for effective employment of the Objective Force.

The hierarchical, functional organization and bureaucratic legacy of headquarters staffs no longer maximize the overall combat effectiveness and efficiency of Army forces. Current staff organization lacks the agility to rapidly employ the Objective Force. Nor is it modular, adaptable, interoperable or echeloned enough to achieve synchronized, integrated and lethal operations under modern field conditions.

In order to determine whether the current division-level general staff organization can employ the Objective Force, a discussion of modern field conditions or the Current Operating Environment (COE) is included as is an outline of basic organizational theory. A survey of the evolution of the United States Army's division staff structure provides a means to identify trends, shortfalls, and successes in staff design. The staff organization and theory of the United States Marine Corps, the British Army division and the French Army division staffs are examined and offer unique perspectives on the organization and function of headquarters staffs.

As a result of research conducted, the author concluded that: The division staff organization requires significant restructuring. Force designers must abandon the constraints of the bureaucratic organization intended to support mechanistic, predictable and consecutive operations and consider potential organizational concepts that are more conducive to achieving excellence under modern field conditions. Functional hierarchies and mirrored echelons serve little purpose on a dynamic, non-contiguous battlefield.

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CHAPTER ONE

Introduction

In 1917, General Pershing dictated General Orders, No. 8 creating the staff organization of the American Expeditionary Forces and subordinate army corps and division staffs. The new structure was in response to modern field conditions and was originally derived from a comprehensive study of French and British army staffs. In 1918, General Pershing issued General Orders No. 31 which created the basic staff organization still in use today. [1] Since 1918, doctrine and organization of the United States Army have changed significantly and repeatedly yet the divisional staff structure has remained remarkably consistent. This monograph will examine headquarters staff organization in relation to the modern field conditions within which the Objective Force will operate.

Modern field conditions are rapidly changing as the twenty-first century begins. The nature of the Objective Force reflects a transformation in U.S. Army organization and operation. The Objective Force will be designed to conduct sustained combat operations in future joint operations from low-end conflict to major theater war. The Army will be an extremely versatile, combined arms maneuver force expected to perform a variety of roles and missions.[2] As a result, the staff, the mechanism that enables commanders to command and control their forces, must also be examined to determine if this ninety-year-old structure is suitable for effective employment of the Objective Force. The design of the current division staff organization and mission requires careful analysis to determine its suitability to the Objective Force requirements.

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[1] *GO No. 8 Headquarters, AEF France, July 5 1917, GO No. 31 Headquarters, AEF France, July 5 1917,* United States Army in the World War 1917-1919, General Orders GHQ, AEF, (Washington: Center of Military History, United States Army, 1992), 13, 216.

[2] *Concept for the Objective Force, Concept Summary*, iv, 6-18, available from http://www.objectiveforce.army.mil/oftf/pages/ObjectiveForceWhitePaper.pdf; Internet; accessed 9 January 2002.

Adaptation to the operational environment, doctrinal changes and mission challenges must apply to the whole force. The sheer nature of the Objective Force's capability to conduct continuous, distributed operations mandates that the division level Unit of Employment[3] field a staff that is agile, and adaptable. The near century old design of the general staff must be designed to advise, plan, monitor, analyze, coordinate and administrate in an environment anticipated to be much more complex than that 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 adapt successfully to these developments win. Those that fail to adapt lose, and the nations they defend with them. Organizational adaptation thus is a vital and continuing professional military obligation.[4]

The staff of the Unit of Employment must be able to direct major operations in future joint operations while exploiting the Quality of Firsts: see first, understand first, act first, and finish decisively. The Objective Force concept stipulates that the Unit of Employment is capable of command and control of all Army, joint, and multinational forces. Additionally, the concept states that it should be organized to function as the Army Forces (ARFOR), Joint Force Land Component Command (JFLCC) or the Joint task Force (JTF).[5] The current staff organization is not organized or resourced to perform these tasks.

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[3] *The Objective Force Unit of Employment Concept*, Objective Force Seminar Wargame, 10 July 01, 5. The Unit of Employment (UE) consists of a multifunctional HQ nucleus with embedded joint staff elements and linkages. This base is expanded into a larger formation through mission-tailoring to support each contingency. The UE, the command and control element of the Objective Force, is the basis of the combined arms air-ground task force. It will resource, and execute combat operations and employ long range fires, aviation and sustainment. The UE will integrate synchronize Army forces with joint, interagency, multinational and non-governmental organizations for full spectrum operations. The headquarters will be joint interoperable through embedded joint staff elements and linkages. The staff will respond to contingencies by expanding when necessary through mission-tailoring. Its focus will be major operations and decisive land campaigns.

[4] Huba Wass de Czege, Brigadier General (R), and Richard Hart Sinnreich, Colonel (R), *Conceptual Foundations of a Transformed U.S. Army*, unpublished manuscript, accessed from e-mail, February 15, 2002, 3.

[5] *The Army Transformation Campaign Plan*, 10 April 2001, available from *h*ttp://192.111.52.91/resdoc/doctrine/Transformation/TCP%20FINAL%20Print%2010%20APR%2001%20Wsignature.pdf; Internet; accessed on 23 Feb 2002. The Objective Force is organized around a basic divisional design. It will have an interchangeable full spectrum capability. Division and Corps level

Currently, the basis for staff organization follows three interrelated considerations: mission, broad fields of interest, and regulations and laws. The broad fields of interest are organized into the general (G) staff structure which is further delineated into coordinating, special and personal staff sections.[6] The differentiated, mechanistic and hierarchical organization of the G-staff reflects the character of bureaucratic organizations.

It is the author's contention that the nature of the current staff organization will inhibit the integrated, coordinated staff effort required when confronted with more complex environments. The Division Air-Ground Task Force will be a highly tailorable organization, required to simultaneously conduct operations of varying intensity.[7] The division operating radius may extend to 150 kilometers with a planning horizon of approximately 48-72 hours.[8] In order to support the commander in leading the division, staff organization must be designed to anticipate, adapt, and control across the full-spectrum of operations. 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 organization. Environmental changes that create the modern field conditions of the Objective Force warrant a closer examination to determine what functions a staff must perform and what organization is best suited to respond to the environment. A staff structure must be designed to specifically support the Objective Force.

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headquarters set the conditions for and integrate all elements of the joint / multinational / interagency force. The unit of employment will direct and integrate the operations of its maneuver and support units.

[6] U.S. Army, Field Manual 101-5, Staff *Organization and Operations*, (Washington, 31 May 1997), 2-1.

[7] U.S. Army Training and Doctrine Command, TRADOC Pamphlet 525, *The United States Army Objective Force, Operational Concepts, Organizational Design Constructs and Materiel Needs Implications*, (Fort Monroe, VA 22 June 2001), 50-51. The division air-ground task force is highly tailorable for specific missions and is balanced between current and future battles. The task force provides access to joint long range fires and aviation fires, ISR, and maneuver support capabilities.

[8] *The Objective Force Unit of Employment Concept*, Objective Force Seminar Wargame, 10 July 01, 11.

In order to determine whether the current division-level general staff organization can employ the Objective Force, a discussion of modern field conditions or the Current Operating Environment (COE) is required. It is also necessary to outline some basics of organizational theory to better understand organizational structures and processes. Both of these are addressed in Chapter Two along with the delineation of criteria used to assess staff organization. Chapter Three follows with a study of the evolution of the United States Army's division staff structure. The historical record of staff evolution in response to changes in doctrine, organization and environment provides a means to identify trends, shortfalls, and successes in staff design. In Chapter Four, the staff organization and theory of the United States Marine Corps, the British Army division and the French Army division staffs are examined. These forces have similar missions, doctrine and organization yet offer unique perspectives on the organization and function of headquarters staffs. Chapter Five summarizes the author's findings and conclusions and gives recommendations on the function and organization of the division-level Unit of Employment staff.

CHAPTER TWO

Modern Field Conditions

General Pershing designed the American Expeditionary Force (AEF) and subordinate corps and division staffs to meet the requirements of modern field conditions of WWI. While modern field conditions have changed significantly since 1917, the basic organization of the division staff has remained very much the same. This chapter will address two essential elements of modern field conditions: the dilemmas future foes will present and the Army's transformation to the Objective Force.

The Enemy of the Future

The battlefield on which the Objective Force will fight is characterized as asymmetric, urban, high-tech, non-linear, asynchronous and complex.[9] The patterned, readily definable military threat of the cold war is evolving into varying threats, capabilities, methods and objectives. Opponents will become increasingly sophisticated and asymmetrical in their efforts to defeat the militarily stronger U.S. force. Unconventional threats will merge with the conventional and low intensity operations will escalate into major hostilities. Hostile forces will collocate with noncombatants and seek sanctuary in complex terrain making movement and targeting more difficult while diminishing the effectiveness of fires. Enemy forces will be better-trained, more mobile and better equipped with communications sensor, missile and night vision capabilities.[10] Complexity will dominate the battlefield.

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[9] Hughes, Patrick Major General (R) (Brief to School of Advanced Military Studies seminar *Leading Change* on 15 January 2002)*;* Wass de Czege, Sinnreich, 2. Ground operations in these non–linear, high–tempo conditions will require redefining the relationship among successive tactical and operational echelons. Close combat formations must be designed for greater cohesion and autonomy, while the higher tactical formations that employ them must be able rapidly and repeatedly to adjust their organizational configuration to changing tactical conditions and requirements.

[10] TRADOC Pamphlet 525, 7. The shift from a readily definable military threat based on widely common capabilities and a relatively consistent pattern of operations to a growing range of multiple sophisticated threats simultaneously reflecting varying objectives, capabilities, and methods, presents a force design dilemma.

Asymmetrical warfare is the means by which the enemy will attempt to maximize his comparative advantages against the United States' relative weakness. He will manipulate strategy, tactics, technology, organization, or culture to gain the advantage by rapidly changing the nature of the conflict. Similarly, future threats will strive to harness the effects of asynchronous warfare by orchestrating actions or events not directly related to the immediate situation. The effects of timing actions will generate asymmetries that are intended to create situational advantages for the enemy.[11] Staffs must be organized to anticipate and respond to the complexities of asymmetry and asynchronicity. Planning, synchronizing and supporting complex operations across the battlefield necessitate a modular, agile, interoperable, robust, adaptable and echeloned staff organization. The current delineation between the functions of planning and operating, for example, may constrain staffs and restrict collaborative efforts.

The evolving environment will disable methodical, mechanistic, and sequential staff functioning. Scenarios involving complex terrain, for example, will negate technological overmatches in intelligence and weapon systems. As the enemy seeks to gain sanctuary from U.S. strengths and minimize advantages of stand off and long-range precision fires he will operate in manners that are neither routine nor structured. A traditional staff designed for routine and structured operations will be ill prepared to respond 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…. adversaries will attempt to force units into rapid and continuous transitions between types of tactical operations to create windows of vulnerability. The enemy will seek to create conditions for which the unit is not properly prepared either in organization or in planning.[12]

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[11] U.S. Army Training and Doctrine Command, White *Paper: Capturing the Operational Environment, (*Fort Leavenworth, KS, Combined Arms Command Threat Support Directorate 2 February 2000), 5-6. Today's operational environment is more complex, more interconnected, more dynamic and perhaps more volatile. Asymmetric warfare focuses whatever may be one side's comparative advantages against an enemy's relative weakness. It encompasses anything – strategy, tactics, technology, organization, or culture that alters the battlespace to give one side an advantage or negate the other's advantage. Asynchronous warfare consists of actions or events not directly related to the current situation or conducted in direct response to current actions. It is a way of timing actions to generate asymmetries that create situational advantages.

[12] *White Paper*: *Capturing the Operational Environment*.

The U.S. Army of the Future

The United States will face an unstable and highly uncertain global environment. Future military threats may arise from states attempting to achieve greater power, new regional and or cultural alliances. There will be a merging of traditional military and unconventional threats as transnational terrorist and criminal organizations will also contribute to the increasingly complex environment. The Objective Force will operate across the full spectrum of operations as technological advances in response to and independent of the future enemy dramatically alter "modern field conditions" for the Unit of Employment.[13]

The Objective Force will achieve dominant situational understanding through advanced information systems that enable simultaneous and non-contiguous operations and will maintain superiority in maneuver, and weapons range, precision and lethality. Combat platforms of the Objective Force will achieve decisive maneuver in multiple operations: horizontal and vertical, day and night, in all terrain and weather conditions. Objective Force elements will strike multiple, distributed, decisive points and will not be constrained by linear boundaries. Instead, forces will develop situations out of contact and operate in depth to simultaneously attack the enemy in a variety of ways. Increased tempo and improved agility will result in battles occurring closer together in time.[14]

The tremendous advances the Objective Force will exploit create an environment that will continually and rapidly transition. Through powerful information systems, decision-making will become more decentralized. A common operating picture will enable situational awareness. Subordinate leaders and staffs must be able to conduct collaborative planning and decision-making through advanced command and control systems. Operations will change from plan-

[13] Wass de Czege, Sinnreich, 4-6.
[14] *Concept for the Objective Force, Concept Summary,* iv, 6-18.

centric to intent-centric.[15] Well synchronized, exceptionally capable staffs must merge functions and capabilities to develop comprehensive plans and direct operations that address the commander's intent. The cumbersome, hierarchical and differentiated organization of the current headquarters staff will inhibit the potential tempo of future operations. Headquarters staffs must be organized to exploit and maintain the vastly increased tempo achieved.

The staff of the Unit of Employment should, therefore, be structured to capitalize on emerging technologies without being constrained by existing structural and functional bureaucracies. The projected tempo and potential turbulence of future operations demand a command and control organization that is immediately responsive and postured to exploit the advantages of the Objective Force while maintaining the ability to ensure a unit of purpose and action in a complex environment.

Organizational theorists have struggled with designing a structure that best addresses the intricacies of the emerging environment. A survey of organization theory offers frameworks for the development of potential organizations and illustrates the potential impact of a changing environment on the staff organization of the Unit of Employment. In his writings on organizational theory, Elmer Burak highlights the relationship between the environment and organizational structure

> …"turbulent" environments are dynamic and are characterized by complex and rapidly changing conditions which impinge upon organizational systems. With turbulent conditions, uncertainty increases, control lessens, and prediction becomes more difficult…differing patterns of system behavior and modified organization structures are required or indicated.[16]

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[15] Ibid. The sequential, procedural and hierarchical staffing process will become more flexible and distributed based upon a clearly defined commander's intent, and less constrained by the time-consuming plans and orders productions processes. The Common operating picture will allow staff and subordinate units to make rapid, vital plans and decisions based on the commander's intent and situational understanding.

[16] Elmer H. Burack, *Organization Analysis Theory and Applications*, (Hinsdale, IL: The Dryden Press, 1975),10. Economic, social, legislative, political and ideological trends, along with scientific innovation and technological change, are among the environmental forces affecting the organization and its systems.

Organizational Theory

Organizational theory provides a means of assessing the organization of the division level general staff. The staff is intended to be more than groups of individuals working independently towards separate goals.[17] Instead, it is a complex structure created for the purpose of achieving specific ends or for a common purpose or objective.[18] Organizations exchange and process information and make decisions on order to achieve objectives. To be effective, organizations must adapt to the constraints, threats and opportunities of their environment.[19] Organizational theory identifies potential organizational configurations and processes suited for varying situations. The Bureaucratic theory dominated the field for the first half of the twentieth-century.

> For years, the literature of management promoted the "one best way"; it largely still does. A good structure was one with a rigid hierarchy of authority, spans of control no greater than six, heavy use of strategic planning, and so on [bureaucratic organization]. In the 1960's, organizational theory developed the contingency approach – "it all depends".... Organizations were to pick their attributes independently. [20]

The current division general staff structure is typical of the bureaucratic organization espoused by the German economist, Max Weber in his book *The Theory of Social and Economic Organization.*[21] The industrial environment during the early 1900's required a systematic, mechanistic approach to organizations. A bureaucracy is characterized by several basic constructs: specification of jobs through functional specialization with detailed obligations and responsibilities, an elaborate system of subordination and a well-defined hierarchy, a complex set of standardization, procedures and rules.[22] The elements of a bureaucracy make an organization

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[17] Peter M. Blau and Richard A Schoenher, *The Structure of Organizations,* (New York: Basic Books, Inc., 1971), vii. There is vertical differentiation into hierarchical divisions, as well as a division of labor among positions. This patterned differentiation along several dimensions defines the structure of an organization, and the extent of differentiation indicates structural complexity.

[18] Frank R. Hunsicker, *Organization Theory for Leaders,* available from http://www.acsc.au.ar.mil/au/awc/awcgate/au-24/au24-143.htm; Internet; accessed on 17 November 2001.

[19] Burack, 26.

[20] Henry Mintzberg, *Mintzberg on Management, Inside Our Strange World of Organizations,* (New York: The Free Press, 1989), 110.

[21] Max Weber, *The Theory of Social and Economic Organization*, (New York: The Free Press, 1947).

[22] James L. Gibson, John M. Ivancevich, James H. Donnelly, *Readings in Organizations, Order and Innovation: A New Look at Bureaucracy,* (Dallas: Business Publications, INC. 1973),69.

rational, mechanistic and efficient but they also cause it to become rigid and static. It is the mechanistic, rigid and static elements of a bureaucracy that are incompatible with modern field conditions.

The highly centralized, hierarchical control system of bureaucratic organizations, such as division headquarters, results in slow and ineffective response to changing circumstances. A bureaucracy does not respond well to rapid change or uncertainty.[23] Complexity and speed undermined formal and rigid infrastructures. Thus, the modern field conditions outlined above do not conform to the environment best addressed by bureaucratic organizations. Still, headquarters staff organizations have remained essentially unaltered since 1917.

In contrast to the Bureaucratic theory, a changing environment is the primary element in determining organization structure to Contingency theorists. The Contingency theory stipulates that there is no one best way to structure an organization. Instead, Contingency theorists suggest that an organization's structure is dependents on its size, its technology and its environment.[24] As open systems, organizations must be designed to balance the requirements of the organization while remaining flexible enough to adapt to environmental circumstances. Organizations that operate in more turbulent environments may be better served by different forms of organization.[25]

Two examples of organizational design that eventually evolved from Contingency theorists and offer input to the potential organization of the division headquarters are the Systemic Organizational Design and Fluid and Transitory Design. The former mandates that

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[23] Stephen P. Borgatti, *Bureaucracy*, Copyright 1996, available from http://www.analytictech.com.mb021/ bureau.htm; internet; accessed 1 Feb 2002. However, bureaucracies are better for some tasks than others. In particular, bureaucracies are not well-suited to industries in which technology changes rapidly or is not yet well-understood. Bureaucracies excel at businesses involving routine tasks that can be well-specified in writing and don't change quickly.

[24] Borgatti.

[25] Jay R. Galbraith and Edward Lawler III, *Organizing for the Future, The New Logic for Managing Complex Organizations*, (San Francisco: Jossey-Bass Publishers, 1993), 112-113. Complexity and speed are foes of this simple, machinelike organization. Rapid change undermines the stability of its infrastructure; goals, processes, jobs, and rules must change to meet changing environmental demands

complexity is reduced through differentiated units while, simultaneously, different functions work together through an integrating element.[26]

The Fluid and Transitory Design is based on a rapidly and continuously changing environment. The organization must also be fluid, transitory, team oriented and more lateral in structure. In this design organizations may become dominated by a more informal structure while still relying on the formal organization for macro-level decisions. A flatter organization may simplify and expedite decision-making in modern field conditions that will rapidly and continuously change. The divisional headquarters design must be designed to support the commander and subordinate units accordingly.

To achieve this, headquarters configurations will likely depict groupings of individuals who maintain a collective responsibility for particular operations or missions. Of course, brilliant organizational design will not stand alone. The success of a flatter organization will rely greatly on effective communications and information systems such as those anticipated for use by the Objective Force. Furthermore, "the challenge in developing multidirectional, rich information movement is in creating the technology and in developing the individuals who know how to access and use the information." [27] Not only must organization be examined but advances in technological enablers and staff education must accompany structural design initiatives.

Volumes have been written on organizational design, structure and effectiveness. However, the complexity, severity, and magnitude of purpose of the Unit of Employment headquarters staff surpass that of most civilian corporations. The staff organization must be evaluated against stringent and relevant criteria focused on the conduct of war.

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[26] Blau and Schoenher, 8. Differentiation: The division of labor and specialization developed in response to size and complexity in an organization. It is the subdivision of the total responsibilities to simplify tasks and create expertise in specialized functions. Burack, 49. Integration: Differentiation requires a unifying, coordinating and controlling function. The integration function synchronizes the efforts of specialists towards the accomplishment of the overall organizational objective.

[27] Galbraith, Lawler III, 294.

Evaluation Criteria

In their article, *Conceptual Foundations of a Transformed U.S. Army*, Brigadier General (R) Huba Wass de Czege, and Colonel (R) Richard Hart Sinnreich, identified several design characteristics as being critical to an organizations ability to operate effectively in multi-dimensional operations. The characteristics are similar to those identified in emerging Objective Force documents but are more specific and applicable to this monograph. Brigadier General Wass de Czege and Colonel Sinnreich place a great deal of importance on effective organizational configuration and recognize its position in the Army's transformation:

> An army's organizations are the lenses through which the energies of its soldiers, leaders, and weapons are focused. Clever organization cannot substitute for initiative, skill, and determination, but careless organization easily can nullify all of these. Organization thus is the touchstone of an army's operational concept.[28]

To achieve organizations that are suitable to the environment, the following criteria provide a framework for designing the touchstone.

Modularity. The first and possibly most essential criterion used to assess the headquarters organization is modularity. Headquarters staffs must be able to adapt to a broad range of scenarios without major reconfiguration or delays. The uncertainty of future operations suggests that even at the staff level, cohesion and synchronization are vital to effective operations. Like the combined arms formations at the tactical level, headquarters staffs should be organized as modular elements able to conduct maneuver, maneuver support and maneuver sustainment. The sheer complexity of command, control, and sustainment functions demands that the Unit of Employment headquarters exploit modularity that offers both flexibility and stability to the organization. Because reconfiguration of forces, integration of reserve components and cooperation with joint and combined elements are likely, modularity offers the headquarters staff

[28] Wass de Czege, Sinnreich, 34.

a means of adjusting its organization to incorporate additional elements. Modularity will improve the staff's agility.[29]

Agility. In order to deploy quickly and commence operations immediately upon arrival without a complete interruption of function, the staff requires agility. Rapid commitment on short notice, uncertain operations is a condition legacy forces confront currently with unwieldy, cumbersome, and massive staff organizations. The staff must be designed to plan for and coordinate the efforts of an integrated force immediately upon deployment. The staff will be required to coordinate maneuver, maneuver support and maneuver sustainment elements of varying size, function, duration and location and must therefore be organized in a manner that can do so quickly and effectively. Headquarters staffs must possess the organizational agility to seamlessly transition among the various types of operations. The Objective Force will be faced with stability or support operations and war fighting simultaneously and will require the agility to quickly coordinate the divergent efforts of the brigade level Units of Action. In the distributed operations of the future, the Objective Force will not work alone but will instead, be part of a joint or combined force.[30]

Interoperability. Another key criterion when considering staff organization is its ability to operate effectively and efficiently with other services, agencies and nations. Future operations will be inherently joint and probably combined. Headquarters staffs must have the design characteristics that readily accept assumption of or subordination to a joint or combined taskforce. Seamless integration with air, maritime, amphibious, space, and special operating forces is a critical aspect of future operations. Furthermore, cooperation and coordination with non-governmental organizations is essential and should be considered in the design of the headquarters staff. Interoperability must be organic to the staff organization. The broad scope

[29] Ibid. 21-22. The Criteria referred to in this section were identified as "Implications For Army Force Design" by BG Wass deCzege and Colonel Sinnreich. The author made modifications that were applicable to this monograph.

[30] Ibid., 22-23.

and rapid execution of future joint and combined operations necessitates an organization that is of sufficient density to excel.[31]

Robustness. Essential to the headquarters staff's ability to respond to increased and divergent requirements or loss of capability in modern field conditions is a sufficient force structure to realistically conduct sustained operations. The uncertainty of the future environment mandates that redundancy and modularity in method, organization and equipment be inherent in staff design. Elements of the headquarters must be durable enough to operate independently for limited periods of time. A robust organization with redundant functionality will be better able to respond to environmental vacillations.[32]

Adaptability. A criterion underrepresented in current staff organizations is adaptability. The nature of bureaucratic organizations discussed earlier precludes the organization from rapidly adjusting to immediate requirements generated by modern field conditions. The future environment characterized by successive, non-contiguous operations with rapid transitions may exceed the capacity of the current organization to adapt. Short notice tailoring of forces and capabilities will be the norm and must be immediately expedited by the functioning of the staff. Planning for, coordinating and integrating logistics alone will test organizational design. In order for staffs to achieve all that is required in the Objective Force, functions must be clearly and decidedly delineated between echelons while the minimum essential redundancy exists to overcome the inevitable fog and friction of war.[33]

Echelonment. The final criteria used in this monograph to address the function and design of the headquarters staff is echelonment**.** Echelonment should be incorporated into the staff design to control the magnitude of the organization's span of control and diminish some of the conflict between robustness and agility. It is unnecessary for each echelon of headquarters to possess the

[31] Ibid., 23.
[32] Ibid., 23-24.
[33] Ibid., 24.

exact same capabilities. The functions of the division level staff should be carefully considered and then fully resourced. Information technologies have the potential to streamline decision–making and enable both collaborative and parallel planning between echelons.[34] Maximizing the power of technological enablers and careful assignment of echeloned functions to levels of command will enhance the staff's ability to advise, plan, monitor, analyze, and coordinate.[35]

In this monograph, the author evaluated the division level staff structure synthesizing modern field conditions, organizational theory and the criteria of modularity, agility, robustness, interoperability and echelonment. However, in order to obtain the proper perspective on the current organization it was necessary to conduct an examination of the historical evolution of the United States Army division staff. The historical survey places the evolution of the current staff organization into a context of the environmental, technological or doctrinal variables that inspired change.

[34] Ibid., 21-24.

[35] Ibid., 34. Echelonment was addressed as a factor in organizing future forces. Again, the author modified the concept to more specifically pertain to this monograph.

CHAPTER THREE

The Evolution of the Military Staff: A Historical Survey

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.[36] Staff design, like divisional organization, evolved in response to changes in the environment, weapons, doctrine and technology but did so in a more subtle manner. 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. A brief outline of the development significant to the organization of military staffs follows.[37]

Alexander the Great's staff organization 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.[38] The situation Alexander the Great confronted is not dissimilar to the modern field conditions discussed earlier. Commanders are facing unparalleled increases in breadth, depth and complexity and must assess their current capability to command and control with current staff organizations.

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[36] James Donald Hittle, Brigadier General (R), *The Military Staff, its History and Development*, (Westport, CT: Greenwood Press Publishers, 1975), 3. Staffs must also bring to the commander's attention anything that requires his action…staff, an organization representing something the leader had to "lean on" in the exercise of his duties of command.

[37] Hittle's book, *The Military Staff*, provides account of staff beginnings during early ancient eras. This monograph begins it's survey with Alexander the Great because his staff organization, resulted from an environmental transformation not unlike that faced by the Army today.

[38] Gary B. Griffin, Lieutenant Colonel, *The Directed Telescope, A Traditional Element of Effective Command*, (Fort Leavenworth, KS: Combat Studies Institute, 1985), 11. Available from www.cgsc.army.mil/csi/PUBS/Pubs%20Intro.htm; Internet; accessed 15 February 2002.

The headquarters organization of Gustavus Adolphus was representative of the developing military staff of the sixteenth century. The use of firearms necessitated in increased battlefield dispersion, and subsequently increased the requirement for improved command and control processes. Gustavus responded by enhancing his system of command and control with the inclusion of a chief quartermaster, chaplains, judge advocates, surgeons, provost marshals as well as chiefs of artillery, engineers and scouts. The specialization and expertise of the members of his staff enabled Gustavus to effectively command his armies on an increasingly complicated battlefield. Gustavus' system served as the basis for most other European staffs and would remain the basic organization through the middle of the seventeenth century.[39]

Technological advances in weaponry and changes in the political environment continued to alter warfare. The organization of staffs evolved to parallel 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. [40] However, they were not alone in their efforts to refine the processes of administering, supplying, planning and conducting war.

It was the French who also evolved a system of staff organization that would eventually serve as the basis for the headquarters of the American Expeditionary Force in World War I. Toward the middle of the century, Bernard of Sace-Weimar, a former lieutenant of Gustavus exposed the French prime minister, Cardinal Richelieu (1585-1642), to new staff thought. The prime minister adopted several of the concepts into the French staff organization.

Richelieu allocated many administrative responsibilities to *intendants*. *Marechals de bataille* served under a chief of staff as operations officers and *marecahls general de logis* took over the duties of marches, transportation and supply. Sergeants major directed and supervised

[39] Hittle, 41-43

[40] Ibid., 50-85. The *Generalstab* is thoroughly covered by Hittle, however, the development of the American general staffs is more closely traced to the French.

the orders. The role of the quartermaster in the French army was significantly reduced while it grew in prominence in most European armies. The conceptual elements of functional divisions in the staff would eventually evolve into the modern functional staff organization. [41]

Prior to the French Revolution, significant advances took place in the French staff organization as well as in the refinement of staff procedures. Pierrre de Bourcet developed a formal estimate process during the Seven Years' War. His experiences during the war and dissatisfaction with the professional knowledge of officers resulted in his efforts, as director of the Grenoble Staff College, to develop instructional activities to train French officers on the "whole art of generalship" He later organized a general staff known as the *service d'etat-major des logis des armies,* a precursor to the typical modern general staff.[42]

Pierre Berthier, Napoleon's chief of staff, further refined the general staff and institutionalized staff processes. Berthier divided the staff into four primary sections. The first was similar to the G-1 found in today's headquarters and handled personnel, records and discipline. The second department was comparable to a G-4 section and was concerned with logistics and engineering. The current functions of the G-2 and G-3 sections were addressed in the third department which covered intelligence and operations. The fourth department dealt with the internal administration of the staff, responsibilities that today are covered by various headquarters elements.[43]

Prior to the outbreak of WWI, the French staff was delineated into three primary divisions based on the concept of the mobile and intermittent warfare of the Napoleonic campaigns and the Franco-Prussian War. Planners expected that this type of warfare would

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[41] Ibid., 48.
[42] Ibid., 91-92.
[43] Gunther E. Rothenberg, *The Art of Warfare in the Age of Napoleon,* (Bloomington: Indiana University Press, 1980), 209. Berthier was chief of staff to Napoleon in the Army of Italy and wrote *Document sur le Service de L'Etat-Major Gerneral a l' Armees des Alpes* which outlined how a headquarters staff should function in 1796. Hittle pp. 98-99 Paul Thiebault, an adjutant general of the army

require limited logistics and evacuation planning. The realities of material and personnel attrition in the complex war of the twentieth century necessitated reorganization into four primary sections in early 1917: first bureau - personnel, second bureau – intelligence, third bureau – operations and fourth bureau - supply.[44] The evolving nature of trench warfare, use of aviation, appearance of the motor vehicle for troop and supply transport, incorporation of tanks and use of gas warfare all complicated the conduct of operations.[45] Subsequently, the functions of intelligence and operations were separated and the areas of personnel/administration and logistics were again divided.[46] These changes were reflected in the staff organization of Pershing's American Expeditionary Force later that year.

Evolution of the U.S. Army Division Staff

In a continual search for balance in effectiveness, deployability, mobility, economy and firepower, the United States Army regularly examines its doctrine and organization. Accordingly, the organization of the division staff organization is addressed as part of organizational reviews. During the past ninety years, the division staff has changed but since the structuring of the AEF and subordinate unit staffs in 1918, staffs have remained consistent in their basic organization. A survey of the division staff organization from 1914 to the present illustrates the conversions of U.S. Army headquarters staffs.

The Field Service Regulations of 1914 outlines the organization of a headquarters staff prior to the changes made in 1917. "The staff functions of the headquarters of units larger than a brigade may be separated into two groups, i.e. (1) general staff group; and (2) a technical and

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of the Republic, in 1800 published *Manuel des Adjutants Generaux et des Adjoints Employes dans les Etats-Majors Divisionaires des Armees* a comprehensive compilation of staff theory and technique.

[44] Hittle, 124-125.

[45] Jonathan M. House, Captain, *Toward Combined Army Warfare: A Survey of 20th Century Tactics, Doctrine, and Organization*, Combat Studies Institute Research Survey No. 2, (Fort Leavenworth, KS: U.S. Army Command and General Staff College) 21, 28, 32. Their development made the problem of combining different weapons for attack or defense much more complicated. This reinforced the tendency for detailed planning and centralized control.

[46] Hittle, 126.

administrative group: record, inspection, law, supply, sanitary, engineer, ordnance, and signal."[47] The regulation further describes the Chief of Staff as the mouthpiece of the commander who controls and coordinates the operations of the troops and all administrative and technical services. The Chief of Staff was assisted by three sections: combat section, administrative section and intelligence section. The staff was also composed of a Technical and Administrative Staff that included representatives of various staff corps and departments. The simple organization reflected the relatively simple field conditions encountered by Army forces prior to World War I.

This structure would dramatically change as the United States entered World War I and the experiences of the allies were studied and applied to the organization of the AEF. John B. Wilson, in *Maneuver and Firepower* captured the essence of the war's impact on organizational design:

> World War I, an unprecedented conflict, forced fundamental changes in the organization of United States Army field forces. The infantry division remained the Army's primary combined arms unit, but the principles governing its organization took a new direction because of French and British experiences in trench warfare. Column length or road space no longer controlled the size and composition of the infantry division; instead, firepower, supply, and command and control became paramount.[48]

Military leaders conducted a series of studies on the design the American infantry division as the United States prepared to enter World War I. Major General Pershing headed one group and another was directed by Secretary of War Newton D. Baker. The two groups produced a single report known as the General Organization Project that covered most aspects of the organization of the AEF to include headquarters staffs. The resulting square division design was structured to allow the division to fight prolonged battles.[49]

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[47] United States Army, *Field Service Regulations 1914*, (Washington, Government Printing Office, 1914), 119.

[48] John B. Wilson, *Maneuver and Firepower, The Evolution of Divisions and Separate Brigades*, (Washington: Center of Military History, United States Army, 1998), 47.

[49] Ibid., 52-55.

Planners determined that the division needed greater firepower and sufficient staff, communications and supply units to support continuous fighting over long periods. The tables of organization published on 8 August 1917 provided a larger divisional staff than Pershing had recommended because of the expectation that it would have both tactical and administrative roles. "The staff comprised a chief of staff, an adjutant general, an inspector general, a judge advocate, and quartermaster, medical, ordnance, and signal officers. In addition, interpreters were attached to overcome any language barriers."[50]

During the war, Pershing formally modified the division staff to reflect the European functional staff. In his Final Report, General Pershing made the following comments regarding his staff:

> A General Staff was an indispensable part of the Army. The functions of the General Staff at my headquarters were finally allotted to the five sections, each under an Assistant Chief of Staff, as follows: To the First, or Administrative Section-ocean tonnage, priority of overseas shipments, replacement of men and animals, organization and types of equipment for troops, billeting, prisoners of war, military police … to the Second, or Intelligence Section-information regarding the enemy, including espionage and counterespionage, maps, and censorship; to the Third, or Operations Section-strategic studies and plans and employment of combat troops; to the Fourth Section-coordination of supply services… to the Fifth, or Training Section-tactical training, schools, preparation of tactical manuals, and athletics. This same system was applied in the lower echelons of the command down to include divisions.[51]

General Pershing was faced with a much more complex scenario than the Allies. He had to sustain his force from overseas, train the entire force and respond to the increasingly desperate straits of the Allies.[52] The growth of his staff in response to these dilemmas followed the trend commanders devised to counter increasing complexities on the battlefield.

The American division in WWI was intended to conduct sustained offensive and defensive operations. Although the division was faced with a variety of significant problems in

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[50] Ibid., 52-55. Hittle, 213. To accommodate the training of staff officers, a staff college was established at Langres in November 1917. It was at Langres that the designation "G" originated from the British custom. In 1921, these titles were applied to all general staff organization in the Army.

[51] John J. Pershing, General, *Final Report, Commander-In-Chief American Expeditionary Forces*, (Washington: Government Printing Office, 1920).

providing logistics and manpower, advancing against an extensive network of trenches, coordinating combined efforts and operating with Allied forces, the square division served adequately during the war.[53] Despite the success of the force, numerous reviews of the World War I division were conducted during the interwar period.

In 1920, General Pershing determined that a smaller, more mobile division was necessary for a more flexible and deployable force. This could be achieved, in part, by allocating infrequently used support units to the corps. He wrote: "The division should be small enough to permit its being deployed from a single road in a few hours and, when moving by rail, to permit all of its elements to be assembled on a single railroad line within twenty-four hours… 20,000 as maximum."[54]

A Special Committee was conferred by Secretary Baker to evaluate opposing reports and determine the best structure for the infantry division. Three questions were asked: Was the World War I division too large? If so, should the Army adopt a smaller division comprising three infantry regiments? And, if a division of four infantry regiments were retained, could it be reduced to fewer than 20,000 men? [55]

Experts predicted that another war in Europe was unlikely and felt that the next war would instead be in North America. Advocates of a three regiment division determined that it provided the necessary mobility and flexibility for the anticipated environment. Technological advances in artillery, machine guns and aviation would provide the fire power necessary in a

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[52] Ibid.

[53] House, 42. The square division was a four-regiment structure that varied in size from 24,000 to over 28,000 men, a giant considering the average strength of a European division was down to 8,000 men or fewer. It was intended to provide for sustained offensive and defensive operations despite the high casualties of trench warfare. A brigade commander, with one regiment in contact and the second behind it, could leapfrog his regiments to sustain an offensive almost indefinitely, thereby cutting the decision cycle time necessary to relieve exhausted assault troops.

[54] Wilson, 90. General Pershing directed a board of officers to study the complete organization of the AEF. The board recommended several minor changes to the staff and focused on authority and responsibility. The report suggested several precise rules and regulations to be used within general staffs for internal communication and coordination – characteristic of Weber's bureaucracy. Pershing shelved the report because he thought it had been produced too soon after the war to be a fair assessment. It also did not recommend the smaller, more flexible organization he would later advocate.

smaller division. Still, the square division was retained with some adjustments. Planners contended that the square division could be better modified by the commander to meet a variety of threats.

The division organization agreed upon by the Special Committee was comprised of 19,385 soldiers and was designed to have all the organic elements necessary for employment. The basic organization of a division headquarters staff remained unchanged despite the addition of headquarters, special troops, to handle the administrative and discipline requirements of the division headquarters and other separate company size units in the organization. [56]The National Defense Act of 1920,[57] the national aversion to war and Congressional appropriation of limited funds prevented the Army from fully manning the divisional structure envisioned by the Special Committee. Instead, the infantry and cavalry divisions diminished into skeletal organizations.

The headquarters staff as reflected in the Field Service Regulation of 1923 was similar to those developed in WWI. It was separated into two groups; a general staff, organized into the same four functional divisions of G-1 through G-4 but the G-5 (training) was included in the G-3 (Operations and Training),and a technical, supply and administrative staff comprised of "officers of the various branches who may be assigned to a headquarters."[58]

In the *Military Organization of the United States*, originally published in 1922, the staff school at Fort Leavenworth outlined the necessity of the headquarters staff. An capable staff was especially critical when the complexity of warfare "reached in the ascending scale where the multiplicity of details devolving upon the commander are too numerous to be handled in person

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[55] Wilson, 97-109.

[56] Ibid.

[57] Michael D. Doubler, Lt. Col., "Not So Calm Before the Storm: 1920 to 1940", *National Guard Magazine*, available from http://www.ngaus.org/ngmagazine/guardcentury-1920to1940-1099.asp; Internet; accessed 2 March 2002. The National Defense Act of 1920 rejected the a large, regular army in favor of a smaller, active force reinforced by standing units of the National Guard and organized Reservists. The active Army was authorized 280,000 soldiers and assigned the missions of defending overseas possessions, expeditionary duty and border protection.

[58] United States Army, Field *Service Regulations, 1923*, (Washington: Government Printing Office, 1923) 4-5.

and leave time for consideration of the broader phases of command."[59] The document further discussed the relationship of the functional staffs and warned against the stovepipe nature of such a bureaucratic organization:

> The functional subdivision of the staff into sections is not the establishment of lines where their work divides, but where it meets. The successful functioning of the staff requires coordination and collaboration within the staff as well as with those arms and branches with which it deals. Nothing is more important in war than unity of command, but, while there must be centralization of command and all that goes with it; i.e., policies, decisions, and basic plans, there is decentralization of execution. The staff is organized and functions so as to accomplish this decentralization.[60]

Despite the low manning levels and reduced funds of the post war army, developments in organizational theory were significant. Motorization and mechanization provided the impetus for military leaders to begin questioning and developing organization structures that would capitalize on technological advances.[61]

General Malin Craig became the Army Chief of Staff in 1935 and was greatly concerned about the readiness state of Army divisions. He directed a study to assess the division design and on July 30, 1936 a triangular division design was recommended by the study committee. The most critical consideration in the division redesign was flexibility which was theoretically achieved by basing the organization on the rule of three. From platoon to division, commanders at each organization had three elements for operations. One element was intended to provide a base of fire; one to maneuver and outflank the enemy, and a third to exploit success and act as a reserve. In 1939, the triangular design was adopted for all infantry divisions by the new Army Chief of Staff, General George C. Marshall. The Army retained the cavalry division and also developed armored, motorized, light infantry, mountain and airborne divisions.[62]

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[59] *Military Organization of the United States, General Services Staff School*, (Fort Leavenworth, The General Services School Press, 1923), 38.

[60] Ibid., 31.

[61] Wilson, 120.

[62] Glen R. Hawkins, James Jay Carafano, *Prelude to Army XXI, U.S. Army Division Design Initiatives and Experiments 1917-1995*, (Washington: United States Army Center of Military History, 1997), available from http://www.fas.org/man/dod-101/army/unit/docs/xxi/toc.htm; Iinternet; accessed on 25 January 2002.

By 1940, the Staff Officers' Field Manual, FM 101-5, indicates that as division structures were modified in the interwar period, so was the staff organization. The division retained three of the four G-staff functional alignments with the personnel functions being allocated to the G-4 section (Supply and Evacuation). The technical and administrative staff was renamed the special staff and was similarly structured with positions such as an air officer, artillery officer, chemical officer, provost marshal, surgeon, chaplain and adjutant general.[63]

During the war, the staff organization was further refined and the strength of headquarters staffs increased significantly. For example, the staff of the infantry division headquarters in 1941 was authorized twenty-seven officers; in 1945 the allocation rose to forty-five officers. Additionally, a brigadier general was authorized as assistant commander and by 1945 and the G-3 section went from eight to twenty-six personnel authorized. The G-1 staff section reappeared during the war and the G-5 position was reinstated to handle either Civil Affairs or planning.[64] Reminiscent of the staff evolution during World War I, World War II spurred significant changes to the division staff organization.

The staff sections prior to the war were understood to work in formal separation from each other. In keeping with the bureaucratic organization theory predominant at the time, the staff manual even dictated under what situations staff elements should coordinate with each other.[65] The distinct separation of effort outlined in doctrine proved inappropriate for the wartime environment and resulted in field modifications to staff organization:

> During the war, division and corps staffs often found that separation of general staff sections was cumbersome. This problem had several solutions. Often staff sections moved closer to each other and intensified coordination, thus preserving formal separation while informally joining together. This was the most common solution. As an alternative, elements of G-2 and G-3 joined formally and the G-2/G-3 group became

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[63] United States Army , Field Manual 101-5, *Staff Officers' Field Manual, The Staff and Combat Orders*, 1940, (Washington, Government Printing Office, 1940) 3-30.

[64] Bruce R. Pirnie, Major, *Division and Corps Command Posts in World War II*, (Washington: U.S. Army Center of Military History, 1986), 4. A.W. Pence, Brigadier General, and Eugene B. Brownell, Lieutenant Colonel, "Types of Staff Organization Found in the United States Military Forces", *Military Review*, 25, no. 7, (1945): 38.

[65] *FM 101-5 Staff Officers' Field Manual, The Staff and Combat Orders, 1940*, 4-16.

> the hub of the command post. In perhaps the best solution, a "War Room" developed. During World War II, a "War Room" usually corresponded roughly to today's tactical operation center.[66]

Following World War II the Army again examined the infantry division. Despite the weaknesses in firepower demonstrated in World War II, the three regimental combat team organization was retained and units normally attached in combat were added engineers, artillery, tanks, and transportation.[67] A primary concern to planners was, again, the increased depth and breadth of the battlefield. Eight aircraft were added to the division headquarters company to conduct reconnaissance across the increased battlefield and the division was authorized two brigadier generals; the assistant division commander and the artillery commander. The armored division was also authorized two brigadier generals as combat command commanders. This modified division structure increased to above 19,000 officers and enlisted men and was the U.S. Army division that fought the Korean War.[68]

The 1950 version of FM 101-5, *Staff Officers' Field Manual* emphasized the importance of coordination among staff elements. "The general staff must function as a single coordinating staff…Coordination and the prompt interchange of information among the staff sections are essential."[69] Planning for complex operations was also addressed with the recommendation that separate staff sections be organized. Such a division was stressed as being the exception because "planning and operational tasks generally must be performed simultaneously."[70]

Notably, several new Special Staff positions were addressed in the 1950 version of the field manual. A Chief of Information was added to handle all matters pertaining to relations with the public in general, public information, and troop information and education. A Military government staff officer was added to handle matters involving supervision and control of

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[66] Pence, Brownell, 12.
[67] House, 149.
[68] Wilson, 225-227.
[69] *FM 101-5 Staff Officers' Field Manual, The Staff and Combat Orders, 1940*, 5.
[70] Ibid., 70-71.

civilians in theaters of operations. A Psychological Warfare Officer was listed to exercise operational control over all tactical propaganda and psychological warfare units. These additions reflect the changing operational environment the Army experienced in the previous war and the anticipated changes in the milieu expected in the future.[71]

After the Korean War, the Army again addressed organizational structures in light of what were perceived to be the modern field conditions. In order to function on a nuclear battlefield, greater dispersion and flexibility were necessary. The requirement to rapidly deploy also played a significant role in the organizational development of the 1950's. Tactical units had to be sufficiently small, sufficiently balanced between the arms, and sufficiently self supporting. Command structures had to be streamlined to facilitate the passage of information and decisions and command echelons had to be decreased.[72]

> ...the Army under the administration of President Dwight D. Eisenhower sought an organization and doctrines that would support the nation's policy of containing communism over the "long haul" without wasting American resources or bankrupting the American economy… It also adjusted its organization to fight a tactical nuclear war, adopting atomic artillery and a new divisional organization, the so-called pentomic division, which used self-contained battle groups that could supposedly fight under the confused conditions of a nuclear battlefield with only minimal direction from higher headquarters.[73]

When developing organizational structures, planners increased the span of control of headquarters elements from three to five units spread over a greater area. At the division level, the large battalion type units were called battle groups. The result of the force structure analysis was the Pentomic Division.[74]

The battle groups that replaced the infantry regiments of the triangular structure were comprised of a headquarters and service company, five infantry companies, and one mortar

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[71] Ibid., 24-27.

[72] House, 157.

[73] David W. Hogan, *Years of Service, The U.S. Army, 1775-2000*, (Washington: Center of Military History, United States Army, 2000), 225. available from http://www.army.mil/cmh-pg/books/225/default.htm; Internet; accessed 17 February 2002.

[74] House, 154-155.

battery each. Conventional and nuclear artillery, tank, signal, and engineer battalions, and a reconnaissance squadron with ground and air capabilities were added to the division. The battle groups were intended to be more effective at operating on a widely dispersed nuclear battlefield but there were many problems associated with the organization. [75] The increase in span of control was a primary concern to those concerned with command and control issues.

Major General Hamilton H. Howze, Commander of the 82d Airborne Division, for example, argued that the battle group structure lacked flexibility and the organization lacked the ability to command and control five subordinate companies. In fact, the span of control at all levels was considered too great given the inadequate communications technology, insufficient support units and meager administrative staffs. He and his counterparts also determined that the battle groups were not large enough to conduct a sustained attack or an aggressive defense. [76]

A division commander in the pentomic organization had only one brigade headquarters which was commanded by the assistant division commander. This single command element was intended to help control the battle groups, a tank battalion and an armored cavalry squadron. The elimination of one echelon of command left the remaining headquarters with an excessive span of control and a potentially devastating impact if one of the headquarters was lost.

Fortunately, the pentomic organization was never tested in a combat environment. As the nation's strategic policy changed from massive retaliation to flexible response under the Kennedy administration, the likelihood of full nuclear warfare was significantly reduced and the Army was confronted with further reorganizations. [77] Planners determined that:

> …the United States would respond to the different forms of threat and aggression across the spectrum of conflict with an appropriate level of violence, ranging from nuclear exchanges through conventional warfare to low-key assistance to countries fighting Communist-sponsored "wars of national liberation." The Army dropped pentomic

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[75] John B. Wilson, *Influences on U.S. Army Divisional Organization in the 20th Century*, available from http://www.fas.org/man/dod-101/army/unit/docs/influncs.htm; Internet; accessed 1 March 2002.

[76] Hawkins and Carafano.

[77] House, 157.

> organization in favor of the Reorganization Objectives Army Division (ROAD). The ROAD division consisted of brigade task forces that were supposed to be flexible enough to fight in any environment, nuclear or nonnuclear. [78]

In 1960, the ROAD division consisted of a common base headquarters element (with two assistant division commanders); three brigade headquarters; a military police company; aviation, engineer and signal battalions; a reconnaissance squadron with an air and three ground troops; division artillery; and a support command that would be task organized in combat. The brigade headquarters did not have permanently assigned units and were intended to function purely as command and control headquarters for two to five maneuver elements in tactical operations.[79]

The ROAD base was used as the foundation for multiple organizational structures and emphasized the concept of interchanging the battlegroups within and between divisions. The brigade headquarters, designed for operational command, were highly flexible and could coordinate the actions of maneuver battalions and other support units attached for a particular mission. The division headquarters provided administrative support directly to battalions and a division support command provided all technical and supply support for the division.[80]

General and personnel staff organization did not change under the ROAD reorganization but the special staff structure was significantly altered. Three groupings of special staff were part of the ROAD staff design. One group was organic to the division headquarters company and was comprised of the headquarters commandant section; the chemical radiological section; the transportation section and the surgeon's section. The second section was organic to a division administration company and consisted of the inspector general, the staff judge advocate, the chaplain, the information officer, the adjutant general and the finance section. The third group of the special staff was organic to other division organizations such as the aviation battalion and

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[78] Hogan, 28-29.
[79] Wilson, 296-297.
[80] Richard W. Kedzior, *Evolution and Endurance: The U.S. Army Division in the Twentieth Century*, (Rand, Arroyo Division), 30. available from http://www.rand.org/publications/MR/MR1211/ ; Internet; accessed 2 March 2002.

division artillery but served directly as special staff officers.[81] This structure represents the most significant change to the division staff since 1917 yet it still retained the basic functional divisions of the functional G-staff.

Organizations initially introduced by ROAD served as the basis of organization for army divisions through the 1970's. In 1976, the Training and Doctrine Command (TRADOC) commander, General DePuy, directed the Division Restructuring Study (DRS) to assess the division's tactical organization which resulted in the heavy division. The division was a three brigade organization consisting of five maneuver battalions each. The reassessment was based on several developments: "the lost years of weapon development, the Warsaw Pact buildup, and the mirror of modern war provided by the destructive Sinai and Syrian battles of 1973…with new training and weapon programs and doctrinal revision well under way."[82]

Although this version of the heavy division never was actually fielded, the DRS served as the spring board for the Division 86 effort under TRADOC Commander, General Starry in 1978. Command and control issues were key elements of concern to the TRADOC commander.

> The assumption of the 1976 study and the Army 86 inquiries that followed was that those organizations, despite strengthening over the years, could no longer efficiently harness the combat power of the weaponry they possessed. New systems in development and scheduled for production in the 1980s, such as the M1 tank, a new infantry combat vehicle, and an advanced attack helicopter, would present an even greater leap ahead in combat power.[83]

In a radical departure from his predecessor, General Starry sought a division design structured on battlefield functions instead of new weapon systems. "General Starry saw the division's tasks as a 'Central Battle,' defined as that part of the battlefield where all aspects of

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[81] James M. Snyder, Colonel, "ROAD Division Command and Staff Relationships", *Military Review*, 43 no.1, (January 1963): 57-61.

[82] John L. Romjue, *The Army of Excellence: The Development of the 1980s Army*, (Fort Monroe, VA: Office of the Command Historian, United States Army Training and Doctrine Command, 1993), 7.

firepower and maneuver came together to produce a decisive action."[84] He later adjusted his concept to one of the Extended Battlefield with more in-depth physical, time, airland, chemical and nuclear dimensions. Division commanders required the ability to see deep into the enemy's rear and to simultaneously fight the assaulting forces, and delay, disrupt and destroy enemy second-echelon forces. The division commander was required to influence events up to 70 kilometers beyond the forward line of troops (FLOT) and up to twenty-four hours away.[85]

The intent of Division 86 designers was to create a force that could fight prolonged battles with disrupted lines of communications under faster-paced conditions. Two goals were identified to achieve this standard: dependence on armies and corps for support must be reduced and the leader-to-led ratio must be increased.[86]

> The Active Defense doctrine in 1976 and then the AirLand Battle doctrine that developed in the early 1980s each required a force that could fight and win certain envisioned kinds of battles and wars…When the Army modernized its equipment after the long neglect, it took advantage of technology advances to bring an entirely new generation of equipment to the force. The new equipment included not only new and more lethal weapon platforms, but also technologies that provided dramatically improved communications. This meant that the Army needed to restructure the way it handled command and control in order to communicate more effectively with the faster, more lethal systems. In turn, this meant that the roles of the different headquarters at different levels changed dramatically.[87]

Fielding Division 86 was complicated by manning requirements and constraints. By 1983, Army leadership directed a new organizational assessment know as the Army of

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[83] Anne W. Chapman., Carol J. Lilly, John L. Romjue, Susan Canedy, *Prepare the Army for War, A Historical Overview of the Army Training and Doctrine Command, 1973-1998*, (Fort Monroe, VA: Military History Office, United States Army Training and Doctrine Command, 1998), available from http://tradoc.monroe.army.mil/historian/pubs/TRADOC25/chap4.htm#fossdiv; Internet; accessed 25 January 2002.

[84] Romjue, *The Army of Excellence: The Development of the 1980s Army*, 9.

[85] John L. Romjue *The Evolution of the Airland Battle Concept*, available from http://198.252.9.108/govper/AirUniversityR/may-june84.pdf; Internet; accessed 25 February 2002.

[86] Kedzior, 3.

[87] Rodler F. Morris , Scott W Lackey, George J. Mordica II, Patrick J. Hughes, *Initial Impressions Report: Changing the Army*, (Fort Leavenworth, KS: CAC History Office, Center for Army Lessons Learned, U.S. Army Combined Arms Command) available from http://call.army.mil/products/exfor/specrpt/chp4.htm; Internet; accessed March 2002.

Excellence.[88] The structure that resulted was intended to "combine affordability, high combat readiness and strategic deployability."[89] An immediate impact on the division staff was the dissolution of the division adjutant general company with functions transferred to the G-1 or to the corps.

The Army of Excellence heavy division staff of 1998 was comprised of up to two hundred ninety seven soldiers.[90] The organization retains the G-staff organization to include a G-5 (Civil Military Operations) and a G-6 (signal). Up to thirty-two special staff officers are listed in the 1997 version of FM 101-5.[91] This organization served the Army through the Gulf War but in the mid 1990's, Army force designers began considering the force projected for the early 21st century.

The design project, titled Force XXI, began on 8 March 1994 when Chief of Staff of the Army, General Gordon R. Sullivan, directed the start of the major campaign effort to lead to the future Army in the early years of the next century.[92]

> Force XXI must be organized around information -- the creation and sharing of knowledge followed by unified action based on that knowledge which will allow commanders to apply power effectively. The purpose of Force XXI must be to dominate, to control, to win; information will be the means to a more powerful end. It is the information-based battle command that will give us ascendancy and freedom of action -- for decisive results -- in 21st century war and OOTW [operations other than war].[93]

Command and control (C2) in the Force XXI division is intended to integrate all of the division's functional elements to plan, prepare and execute operations in all environments. Based on the Army Battle Command System (ABCS) technology, the division's C2 system was

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[88] Romjue, *The Army of Excellence: The Development of the 1980s Army*, 23.
[89] Ibid, 55.
[90] TOE 87004A500 HHC, HVY Div (Armor), 20 August 1998
[91] United States Army, FM 101-5, *Staff Organization and Operations*, (Washington: 31 May 1997), 4-18
[92] Chapman, Lilly, Romjue, and Canedy
[93] Morris, Lackey, Mordica, Hughes, chap. 6.

developed to manage the multiple databases in order to provide a common operating picture to all brigade-equivalent units and separate battalions in the division. [94]

Information is a critical element in the Force XXI design. Acknowledgement of the decisive value of information resulted in the addition of an information operations cell directly subordinate to the division chief of staff. Planners designed this cell to provide operational planning and integration: to degrade enemy C2, to protect friendly C2, to establish situational understanding, and to share information horizontally and vertically across the division. Additionally, a full-time G-6 staff led by a lieutenant colonel and an engineer cell led by a colonel increase the capability of the division staff organization. Notably, the functions of the division rear operations center moved into the division main CP to gain staff efficiencies and consolidate efforts underneath the assistant division commander for support. [95]

Division XXI is not intended to be the organization of the Objective Force. In fact, an alternative divisional design to bridge the Legacy and the Objective Forces is currently in development. Although in draft, the division staff organization designed for the Interim Division will most likely retain the same G-staff organization of the Legacy Force with the addition of a G-5, plans section and G-7 for information operations. [96]

The Force XXI Headquarters organization includes over eight hundred and seventy personnel when augmented to perform ARFOR functions. A proposed Interim Division Headquarters with no ARFOR augmentation equates to approximately nine hundred and eighty personnel. This organization is segmented into four command posts: TAC for current operations; Main for planning future operations; Sustainment for sustaining operations and

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[94] John J Twohig, Colonel, Thomas J Stokowski, Major, Bienvenido Rivera, Major, "Structuring Division XXI", *Military Review*, 78, no. 3 (May-June 1998**)**: 25.

[95] Twohig, Stokowski, Rivera

[96] Author's notes from discussions with Combined Arms Command Futures Division personnel week of 14 March 2002.

intelligence and a Home Station Support Node (HSSN) to conduct deployment and reachback.[97] Many of the lessons learned during the development of the Force XXI and Interim division structures can be incorporated into the Objective Force.

Summary

It is the author's contention that force designers for both Force XXI and the Interim Division were constrained by two things which also hindered their predecessors: conventionalism and parochialism. Designers' struggle to account for every eventuality at every echelon resulted in headquarters organizations that are neither agile nor echeloned. Parochialism served to build unnecessary redundancy in the headquarters in apparent efforts to maintain branch relevancy. The possibility for echelonment was clearly abandoned.

> Changes in the U.S. Army division were derived to address factors such as:
>
> flexibility, firepower, agility, sustainability and economy. Technological advances in weaponry, information systems, transportation, and protection have all had significant influences on division reorganization and redesign, while human limitations have determined the span of control. Doctrinal prerogatives and expected battlefield conditions have greatly influenced the shape of divisions.[98]

Modifications to the staff evolved in attempts to address the same issues. Alexander the Great's staff evolved in response to the complexity induced by widening campaigns and increased spans of control. Gustavus's enhanced staff was necessitated by an increased requirement for command and control of the dispersion wrought by increased use of firearms. Doctrinal development spurred the changes in staff organization by Richelieu which were

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[97] Ibid., John M. Neal, "A Look at Reachback", *Military Review*, 80 , no.5 (September-October 2000): available from http://www.cgsc.army.mil/milrev/English/SepOct00/neal.htm; Internet; accessed 27 March 2002 Reachback is the electronic ability to exploit organic and nonorganic resources, capabilities and expertise, which by design are not located in theater. Reachback enhances the operational agility by improving access to timely and relevant information. Using informal or self-directed reachback, deployed units may contact out-of-theater resources directly. This may be as simple as placing a telephone call or manually searching global Internet or defense Intranet web sites for required information. Telemedicine, the ability of remote doctors to consult specialists electronically, is a striking example of self-directed reachback. Formal reachback is more resource-intensive and involves third-party, out-of-theater personnel. A deployed unit may identify an information requirement that cannot be met by in-theater resources or through informal reachback. The unit then contacts a central information resource, articulates its requirement and depends on the resource to research and provide an answer.

furthered by Berthier and provoked by the expanding maneuvers and command execution of Napoleon.

World War I necessitated significant changes in staff organization as military leaders attempted to manage the advent of trench warfare and the material and personnel attrition that resulted. Furthermore, advances in aviation, motorization, tanks and gas warfare spawned staff requirements that had previously not existed. The interwar period gave rise to new staff functions as well. Technical advances in artillery, machine guns and aviation catapulted the lethality of warfare. The cumbersome nature of the divisional force structure and increased complexity forced an increase in the staff organization and addition of G-staff sections to address the changing environment. After World War II, the increased breadth and depth of the modern battlefield again resulted in modifications to the staff organization and in 1950 special staff officers to overcome identified shortfalls in areas such as military government, information and psychological warfare.

The nuclear threat that dominated military thought in the 1950's and 1960's gave rise to increased spans of control and dispersion. Flexibility was a primary consideration and focus was placed on improved decision-making and moving information. The ROAD division was ushered in as the threat of massive retaliation diminished. The national strategy of flexible response was mirrored in force designers' attempts to build a more flexible organization. Echelonment of administrative responsibilities within the division marked the most significant change in the division staff during this period. New training and weapons programs, as well as doctrinal revisions and the Warsaw Pact buildup resulted in the advent of Division 86. Doctrinal changes again provoked organizational changes in the form of the Army of Excellence as Airland Battle doctrine directed the Army. The major change in staff organization as a result of these significant doctrinal and organization overhauls was the addition of a G-6, Signal, to the functional staff.

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[98] Kedzior, 3.

Technology spurred the organizational changes know as Force XXI. Efforts to capitalize on the decisive value of information were answered by the addition of an information operations cell in the division G-3 and the consolidation of command posts. The Interim Division added a G-5, plans section and a G-7, information operations section as well as a Home Station Support Node in order to leverage interim technologies, doctrinal and organizational changes.

It is clear that despite modifications to the staff organization, little in-depth, detailed study of division staff functioning and organization accompanied the deliberate, meticulous examination of the fighting force. The changes documented reflect only cursory thought to what is a critical element of warfighting organizations, the staff. The structure that originated in 1917 reflected the bureaucratic organization that was standard at the time. In fact, the organization proved adequate for the environment it supported. Warfare was relatively simple, slow and structured. Warfare has changed and the organization that plans, coordinates, and directs its execution remains structured to fight World War I.

As the U.S. Army transformed in response to technological, doctrinal and environmental changes, the United States Marine Corps, the British Army and the French adjusted simultaneously. A survey of the current staff organization of these three forces offers viable options to the design of the headquarters staff of the Unit of Employment.

CHAPTER FOUR

A Comparison of Staffs

Comparison with industry's major organizations can provide insight into effective headquarters design and processes but the blatant disparity in operational environments of military and business forces negate many absolute comparisons. The U.S. Army will fight as a joint and combined force. Three likely collaborators are the United States Marine Corps (USMC), and the British and the French Armies. An examination of the division staff organizations and doctrine of these forces offers alternative yet similar structures and processes for consideration.

The United States Marine Corps.

The USMC's Marine Air Ground Task Force (MAGTF) staff has the same functional staff structure as Army organizations. It is comprised of a chief of staff and three staff components: a general staff, a special staff and a personal staff. The staff is intended to be a flexible organization that can be modified by the commander to meet his requirements.[99] Marine Corps doctrine specifies that the staff assists the commander by "gathering and presenting to the commander that information he needs to make decisions, and providing oversight of their respective functions to ensure the execution of those decisions."[100]

Chapter Seven of Marine Corps Warfighting Publication (MCWP) 3-40.1, identifies three planning organizations: future plans, future operations, and current operations conduct planning at the component and Marine Expeditionary Force (MEF) levels. All warfighting functions and subordinate and adjacent commands are represented in these planning organizations.[101]

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[99] *Marine Corps Warfighting Publication (MCWP) 3-40.1, MAGTF Command and Control* Coordinating Draft, 1999, chap. 4, available from http://www.doctrine.USMC.mil/mcwp/htm/mcwp3401.htm; Internet; accessed 12 March 2002.

[100] Ibid., chap. 5.

[101] Ibid., chap. 7.

The Marine Corps radically adjusts staff organizations when deployed. The tailored organization is referred to as a Command Element organization. According to MCWP 3-40.1:

> It adopts a non-linear organizational structure that is different than the Napoleonic staff organization used in garrison. In such a system, the command element should be though of as the central hub is connecting a number of circles. At the center of this hub is the Command Group. Working outward from this hub is the Battlestaff and Integrated Staff Cells. These cells represent the major staff sections and major subordinate commands. Therefore, information is shared and disseminated faster, and the entire staff participates throughout all stages.[102]

The Command Group is the primary decision-making body of the organization. The Battlestaff is comprised of the principal staff officers and designated Special Staff. It receives, distributes and analyzes information; makes recommendations to the command group and integrates and synchronizes resources.[103]

Normally under the staff cognizance of the G-5 is the Future Plans section. This section focuses beyond the next battle or phase to link higher headquarters and the future operations section. Under the staff supervision of the G-3 are the Future Operations Section, the focal point of the planning process that forms the nucleus of the Operational Planning Team (OPT) and the Current Operations Section that coordinates and executes operations orders. The OPT is an effective organizational structure for planning at the MAGTF level because of its multi-functional, team-oriented design.

> The OPT is a dynamic, ad hoc organization that may be formed by either the future plans section or future operations section to conduct integrated planning…It integrates additional staff representatives (e.g. G-1, G-2, G-3, G-4, G-5, G-6, staff judge advocate, provost marshal, health services, public affairs) as appropriate to the mission. The OPT may also be augmented by warfighting function representatives, liaison officers, and subject matter experts needed to support planning. The OPT serves as the linchpin between the future plans, future operations, and current operations sections.[104]

The rapid maneuver and wide dispersion of Marine forces that comprise the expeditionary operations of the USMC mandate an extremely effective command and control organization. This has been partially achieved by extensive integration with Navy C2 and

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[102] Ibid.
[103] Ibid.
[104] Ibid.

communications assets and a split based operations capability based on collaborative networking and reachback. This capability offers flexible, responsive and cost-effective response to geographically dispersed contingencies.[105]

The environment described in Chapter Two of this monograph mirrors the widely dispersed rapidly transitioning nature anticipated by the command and control architecture of the Marine Corps. The temporary abandonment of the Napoleonic staff organization for the better suited and tailored Command Elements and Operational Planning Teams suggests a staff organization that is more responsive to the changing operational environment.

The British Army.

The doctrine of the British Army also addresses the structure and function of headquarters elements yet it is a less flexible than the USMC. As of the early 1980's the British Army adopted the North Atlantic Treaty Organization (NATO) staff structure. It, therefore, closely models the U.S. Army and Marine Corps staff organizations but retains the potential for tailoring in accordance with the current situation. [106]

> Commanders, supported by the staff, must acquire and communicate information, assess the situation and determine the actions required, in a timely manner. Thus, sound intelligence robust communications and an efficient planning and decision-making organization are essential. This process will take place within the HQ, the size, type and organization of which must reflect the nature of the operation which is to be conducted.[107]

British doctrine identifies features unique to the modern battlefield: Battle will be continuous; the pace of battle will increase and become more complex; information will increase visibility of the battlefield; as the cost of fielding armies forces a decrease in the size of armies,

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[105] Ibid., Chap. 8. The USMC further refines its staff organization to support operations through the use of command and control centers. "From these centers, watch officers and cells from the various staff sections plan, monitor, coordinate, control and support the day-to-day activities of the unit." Examples of command and control centers are: Marine Expeditionary Force Combat Operations Center, Ground Combat Element Combat Operations Centers, Rear Area Operations Centers, Combat Intelligence Centers, Force Fires Coordination Centers, Tactical Air Command Centers and Combat Service Support Operations Centers. Each of these centers requires personnel, automation, communication assets to support the headquarters.

[106] Ibid., 3-31.

[107] United Kingdom, *Army Field Manual Volume I – Combined Arms Operations*, 1995, Army Code No 71587, Part 1 Formation Tactics.(British Doctrinal Publication), 3-1.

the battlefield will become less dense, weapons capabilities will include greater range and precision; battle will be multi-dimensional.[108] All of these features point towards a requirement for organizational agility and robustness at the headquarters organization.

The discussion of headquarters in the British staff doctrine that is particularly useful. Three requirements are 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…a 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 organization.[109]

The similarities between the U.S. and British Army in staff functions, command posts and organization are significant. However, the affirmation of a changing operational environment and the corresponding importance of staff coordination, integration and agility support the premise that staff organization must be more responsive to the dynamic nature of the battlefield.

The French Army.

The division staff organization and function of the French Army bear considerable differences from the U.S. model. In an aggressive undertaking, the French Army recently pursued a significant reorganization of its forces in order to strike the illusive balance between capability and expense. The result of the French reorganization is an extremely modular system with clearly defined functions at each echelon of command. The redesigned Army is intended to be an "organizational system able to generate, whenever required and at short notice, contingency operational systems, the organization of which will be specific to each occasion" [110]

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[108] United Kingdom, *Design for Military Operations – The British Military Doctrine,* Army Code No 71451, (British Doctrinal Publication) 1.

[109] United Kingdom, *Army Field Manual Volume I – Combined Arms Operations*, Part 8, Command and Staff Procedures chap. 3.

[110] *The French Armed Forces*, (Joint Services Command and Staff College: 1999), chap.5.

The modular system is based on two primary principles. First, the basic modules must be combined arms brigades and second, units and headquarters must focus only on their operational mission.

> The implementation of both principles implies that responsibilities must be clearly separated between the contingency operational chain of command and the standing organic one. Mixing both operational and daily organic responsibilities within the same chain results in a limitation in the ability for immediate projection of the operational command.[111]

The French Army consists of four operational levels. The highest level is the *Commandement des Forces de l'Armée de Terre* (*CFAT*), Land Action Force Command, which is responsible for the training of all operational headquarters and for establishing either a NATO class corps command post or the nucleus of a joint multinational command post. The CFAT is responsible for concept planning, coordination and conduct of airland maneuver.[112]

The second level is divided into four force headquarters that are directly subordinate to the CFAT. They have no permanent subordinate units except during exercises or operations. The force headquarters are responsible for establishing a NATO class division command post or the nucleus of a joint theater command post for national operations. This headquarters is responsible for the planning and conduct of the combined arms maneuver and for coordinating land operational functions of support and fire. The remaining two levels are comprised of combined arms brigades and regiments that are organized under a force headquarters for operations or exercises. Administrative, basic training and financial services are provided by five territorial commands.[113]

The organizational structure of the force or division headquarters is based on four primary staff sections: plans, operations, logistics and information systems. When combined with personnel from the headquarters battalion, the Force Staff is comprised of approximately three

[111] Ibid.
[112] Ibid.

hundred and thirty personnel. When forward deployed, the staff is augmented with liaison officers, active, reserve and allied reinforcements on a situational basis as well as a security force.[114]

The modularity achieved by the French Army is in direct response to the great variety of contingencies it would face. Its previous organization, designed to fight major battles in Central Europe, was assessed as inadequate for modern field conditions. The French effort to directly address the current environment when designing its forces while conforming to economic and social constraints is a model for imitation.

The staff organization and philosophies of the United States Marine Corps, the British Army and the French Army offer three principle considerations for the design of the unit of employment staff. The Marine Corps concept of the Command Element Organization and multifunctional OPT's provides a means to address multiple contingencies simultaneously and efficiently. Although these organizations are both temporary and ad hoc, the author contends that the division staff organization should be comprised of similar organizations that are more permanent in nature. Both the Command Element and OPT structures can enhance the agility and adaptability of the staff organizations. The Marine Corps' abandonment of the fixed, functional and hierarchal structure during deployments suggests that the Command Element Organization and OPT structures are more conducive to rapidly changing and more complex environments.

The British three-faceted concept of deployment, continuity of command and fusion of command and staff effort provide the essential elements that should be retained or achieved in a staff organization. The British Army decision-making process is based on direct, detailed and continuous commander's input. Staff's are subsequently better able to plan and execute the commander's intent. The detailed participation of the commander in the staff process frees the

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[113] Ibid.

[114] Bertrand Daras, Major, *French Forces Staff Brief*, student, School of Advanced Military Studies, interviews by author winter 2002.

staff from conjecture and enables more comprehensive and directed planning efforts. In an environment of continual upheaval, the more certainty a commander can provide the staff, the better the staff can assist with planning, coordination and supervision of plans and orders. The conceptual framework of British staff doctrine could serve to enhance the staff's agility and adaptability as well. In complex, rapidly transitioning environments, clear understanding of the commander's intent and adequate freedom in subsequent decision-making will foster greater staff effectiveness

The French framework of modularity and clearly defined echelonment of functions identifies a deliberate means of overcoming shortfalls and redundancy in organizational structures. It also provides a means of maximizing flexibility and the effects of limited resources. The French headquarters organization reflects two of the critical criteria identified in Chapter Two; modularity and echelonment. Concepts derived from the French Army, the British Army, the USMC, the historical survey and organizational theory provided the basis for the following observations, conclusions and recommendations.

CHAPTER FIVE

Conclusions

General Anthony Zinni succinctly answered the question proposed by this monograph with the statement: "A new staff organization that mirrors the way we do business with today's 'realities' is needed….our Napoleonic staffs are based on function, not time, and this is the problem. They are inefficient and slow and not used when we have a crisis."[115] The following seven observations garnered by the author while researching this monograph support General Zinni's contention.

Modern field conditions differ drastically from those faced by division staffs in World War I. The former Commandant of the Marine Corps, General Krulak, described future operations in the following manner:

> In addition to fighting traditional battles, Marines will be fighting the "three block war." One moment they will be feeding refugees and providing other humanitarian relief. A few hours later (conducting peace keeping operations) Marines will be separating fighting warlords and their followers . . . Later that day, they may well be engaged in mid-intensity, highly lethal conflict -- and all this will take place within three city blocks.[116]

This environment described above is extremely complex; in fact, operations in Afghanistan already reflect the environment described by General Krulak. A staff must be capable of framing and resourcing operations to provide subordinate units the greatest freedom of action in simultaneous, rapidly changing operations.

Bureaucratic staff organization is no longer relevant under modern field conditions. The hierarchical, functional organization and bureaucratic legacy of headquarters staffs does not maximize the overall combat effectiveness and efficiency of modern Army forces. Instead,

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[115] Anthony C. Zinni, Brigadier General, Jack W. Ellertson, Colonel, Bob Allardice, Major, "Scraping the Napoleonic Staff Model", *Military Review*, 72, no. 7, (July 1992): 83-86.

[116] C. C. Krulak, General, *White Letter NO. 3-98, Sustaining the Transformation*, 26 June 1998. Available from http://www.usmc.mil/cmcalmars.nsf/f9c9e7a1fe55fe42852564280078b406/76062e654f685ff285256641006b15ec?OpenDocument; Internet; accessed 6 April 2002.

> …the emerging operational environment will place a premium on Army forces that are organized, equipped, and trained to shift rapidly and smoothly from any point on the conflict spectrum to another, precluding the need to improvise for any mission that diverges in scale or character from a single preconceived design requirement[117]

The nature of future environments that are asymmetric, and asynchronous, complex, rapidly transitioning and unpredictable suggests that a contingency approach to staff design better suits the current operating environment.

Despite radical environmental changes, today's staff organization retains the hierarchical, functional staff organization designed to support very mechanistic and predictable environments. The historical survey conducted by the author indicates several trends in the design of division headquarters staffs. The friction between robustness and agility continually plagued force planners. Current divisional headquarters are massive structures with limited deployability. Responses to changes in threat, technology and doctrine resulted only in the addition, subtraction or reorganization of G-staff functional or special staff positions. The essence of the bureaucratic staff organization was not challenged despite massive changes in the essence of the environment it operated in. In order to accommodate increasing complexity, the division staff increased its span of responsibilities until the distinction between corps and division staff functions became near indistinguishable.

Although temporary and ad hoc in nature, the Marine Corps alignments of Command Elements and Operational Planning teams achieve a degree of modularity and interoperability. The synchronized and integrated staff work that results from these multi-functional planning and operational cells is critical to the fast paced, dynamic environment of the Objective Force. The multi-functional nature of the Marine Corps staff organizations sets the stage for simultaneous and integrated staff functioning. It blends the sequential and disjointed efforts of disparate and functional staff alignments.

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[117] Wass de Czege, Sinnreich, 8.

Like U.S. Army doctrine, British doctrine acknowledges the changing environment and the need for flexible, integrated and coordinated staffs yet, their staff organization retains a bureaucratic structure. Some of the inherent organizational constraint is alleviated by significant commander participation in the planning and execution process. The British Armies guiding parameters of deployment, continuity of command and fusion of command and staff effort are valuable tenets for force designers to consider.

The recent reorganization of French headquarters staffs was a direct response to changes in the economic, political and operating environments. Revisions in the French headquarters system are intended to capitalize on the economy of echelonment and the flexibility of modularity to increase agility. The echelonment of functions enables the division staff the luxury of focusing only on operational and training issues while administrative actions are conducted by separate staffs that retain these specified functions during war. Additionally, headquarters at each level also maintain a charter and capability of interoperability with NATO forces. It is clear that force designers addressed modern field conditions when configuring the organization and function of the divisional staff structure.

A survey of current and emerging doctrine: FM 101-5 *Staff Organization and Operations*, FM 100-15 *Corps Operations*, FM 71-100 *Division Operations* and FM 5.0, *Command and Control* suggests that there is little clear doctrinal echelonment between the functions of corps and division staffs. In fact, in the most current FM 101-5 (1997) there is no distinction made between division and corps staff functions.[118] The draft doctrine, FM 5.0, *Command and Control* does not echelon the responsibilities of corps and division staffs, in fact, it retains much of the verbiage used in FM 101-5 when describe the two levels of staff functioning.

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[118] United States Army, FM 71-100 *Division Operations*, (Washington: Department of the Army, 28 AUG 1996), chap. 3. available from http://www.adtdl.army.mil/cgi-bin/atdl.dll/fm/71-100/c3.htm; Internet; accessed 27 March 2002. United States Army, FM 100-15 *Corps Operations*, (Washington: Department of the Army, 29 October 1996), chap 1. Available from http://www.adtdl.army.mil/cgi-bin/atdl.dll/fm/100-15/Ch1.htm#s2p1; Internet; accessed 27 March 2002. FM 101-5 *Staff Organization and Operations*, 2-4. United States Army, FM 5.0, Command and Control, draft.

FM 100-15 identifies interface with joint and multinational elements as key aspects of corps staff activities that are different from subordinate headquarters. However, the same requirements are addressed in FM 71-100 as divisional responsibilities. Although only an example, the duplication of function between echelons serves to unnecessarily increase the focus and size of the division staff. The immense capabilities of communications and information systems should supercede the necessity for complete duplication of function at each level and enhance the operations of all staffs.

From the observations described above, the author determined several conclusions based upon the criteria that division level Units of Employment must be modular, agile, interoperable robust, adaptable, and echeloned. The current staff organization falls short in each of these areas.

The U.S. Army recognizes the powerful potential of modularity as indicated in TRADOC Pamphlet 525-68, *Concept for Modularity:*

> Modularity enhances the Army's ability to rapidly respond to a wide range of global contingencies with a force possessing needed functions and capabilities, while deploying a minimum of troops and equipment. It is a methodology which puts the right amount of the right functions and capabilities in the right place at the right time. At the same time, it also leaves behind the remainder of an organization which can be deployed later or can provide mission capable support elsewhere if needed. In the force projection Army, this capability will become critical and indispensable.[119]

Despite doctrinal validation of a modular concept, it has yet to be applied to the headquarters organization. The hierarchical, functional organization of the general staff precludes modularity in the headquarters. Staffs are functionally divided by their alignment on an organizational chart; the separation permeates the staff process and inhibits effectiveness. The design of the Unit of Employment headquarters organization must be modular and multi-functional in order to orchestrate multiple and varied operations in modern field conditions.

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[119] U.S. Army, Training and Doctrine Command, TRADOC Pamphlet 525-68, *Concept for Modularity*, Fort Monroe, VA 10 January 1995, forward. Available from http://www-tradoc.army.mil/tpubs/pams/ p525-68.htm#4-4; Internet; accessed 1 April 2002.

A staff organization that is inherently agile will best support the Objective Force. Short notice operations that must be initiated immediately will require a staff organization that can quickly deploy and establish operations without a complete interruption of function to the remainder of the division. The current staff is unwieldy and cumbersome. Although it is efficient in garrison, it is not effective in operational environments. It is an interconnected and dependent organization that struggles to operate when elements are severed which, as a result, is precisely the condition that prevents it from being modular as described above. Headquarters staffs must possess the organizational agility addressed by the Marine Corps' Command Elements which enables seamless transition among the various types of operations while achieving a coordinated and integrated overall effort.

Integration with air, maritime, amphibious, space, special operating forces and non-governmental organizations will be inherent in future operations. Interoperability must be an organic quality of the Unit of Employment staff organization if it is to be relevant in modern field conditions. Headquarters staffs must readily accept assumption of or subordination to a joint or combined taskforce. Current staff organization was not designed to accommodate the inevitable and necessary tailoring of forces. Interoperability will depend on technological compatibility, organizational flexibility, and open-ended processes that will allow multiple and disparate organizations to be rapidly integrated into the operational process.

Robustness in the staff structure is critical in a non-contiguous and asynchronous environment. The pulsed tempo of past operations allowed the regeneration of the staff during periods of inactivity. The projected pace of future operations will not support such a luxury. . 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 Unit of Employment staff. The staff will be required to coordinate maneuver, maneuver support and maneuver sustainment elements of varying size, function, duration and location. The staff organization designed in 1917 was not intended to support such volatile conditions. The British example of considerable commander participation and well-defined intent can increase the staff's ability to adapt to continuous change. Furthermore, modular, cohesive, multi-functional and interoperable teams unconstrained by bureaucratic structure and regulation will more readily adapt to rapid transitions in non-contiguous operations.

Echelonment will mitigate much of the redundant and excessive structure built into current divisional headquarters. Clear delineation of functions between Units of Employment and installations will streamline the staff process and enable staffs to anticipate, plan and execute multiple operations simultaneously. It is neither economical nor efficient for every level of command to execute the identical tasks. The most obvious of which is the division of operational and administrative functions that enables each echelon to maximize effectiveness at the tasks for which they were intended. The French model of operational and territorial headquarters is a paradigm of efficient echolonment designed for modern field conditions.

The current functional staff organization inhibits modularity, agility, adaptability, and interoperability. Robustness and echelonment are constrained by the blending of staff functions at different levels of command. Instead of achieving in-depth capability in critical areas, the division staff currently operates with superficial means across a wide array of functions. Army Transformation presents the opportunity to revolutionize staff organization in order to overcome the immense shortfalls of the current bureaucratic organization and to design a force able to employ the Objective Force.

Recommendations

The division staff organization requires significant restructuring. Force designers must abandon the constraints of the bureaucratic organization intended to support mechanistic, predictable and consecutive operations and instead employ the tenets of the Contingency theory to consider potential organizational concepts that are more conducive to achieving excellence under modern field conditions. Functional hierarchies and mirrored echelons serve little purpose on a dynamic, non-contiguous battlefield. Brigadier General (R) Wass de Czege and Colonel (R) Sinnreich capture the essence of the author's recommendation in the following:

> …Army organizations 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 synchronization 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 specialization should be reserved for supporting formations and for the operational unit of employment.[120]

The cohesive and highly trained teams referenced above are critical in succeeding under modern field conditions. The rapidity, intensity and simultaneity of future operations will seriously stress staff organizations. Modular teams of maneuver, maneuver sustainment and maneuver support generalists provide redundancy and agility to staff operations. The graphic below represents the changing dynamic in staff operations described by General Krulak's Three Block War:

[120] Wass de Czege, Sinnreich, 37-39.

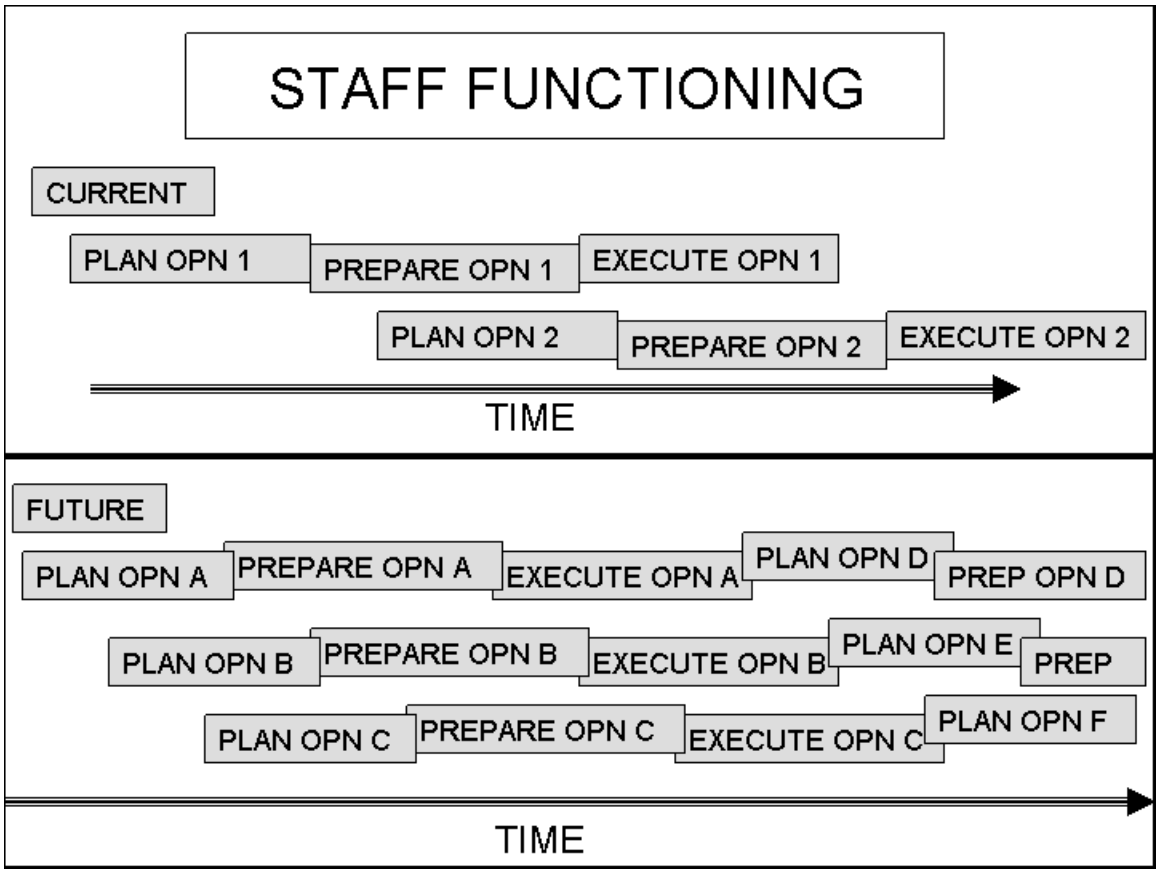

Figure 1 – Staff Functioning

In addition to developing the capability to synergize the multiple, simultaneous, rapidly transitioning operations portrayed above, several critical issues impact the design of the division level Unit of Employment Staff. It must retain the capability to interoperate with higher and lower commands as well as joint and combined forces. It must be deployable and maneuverable without complete loss of functioning. It must remain integrated despite they dynamic nature of modern field conditions. It must have the ability to seamlessly expand and contract. It must support the commander and subordinate units. In order to achieve all of these demands, the staff design must be structured to capitalize on strengths and mitigate shortfalls. Like the fighting force, the staff must change to meet the realities of today and tomorrow in order to realize the power of skillful, synergized functioning.

Following is a potential design for the divisional headquarters:

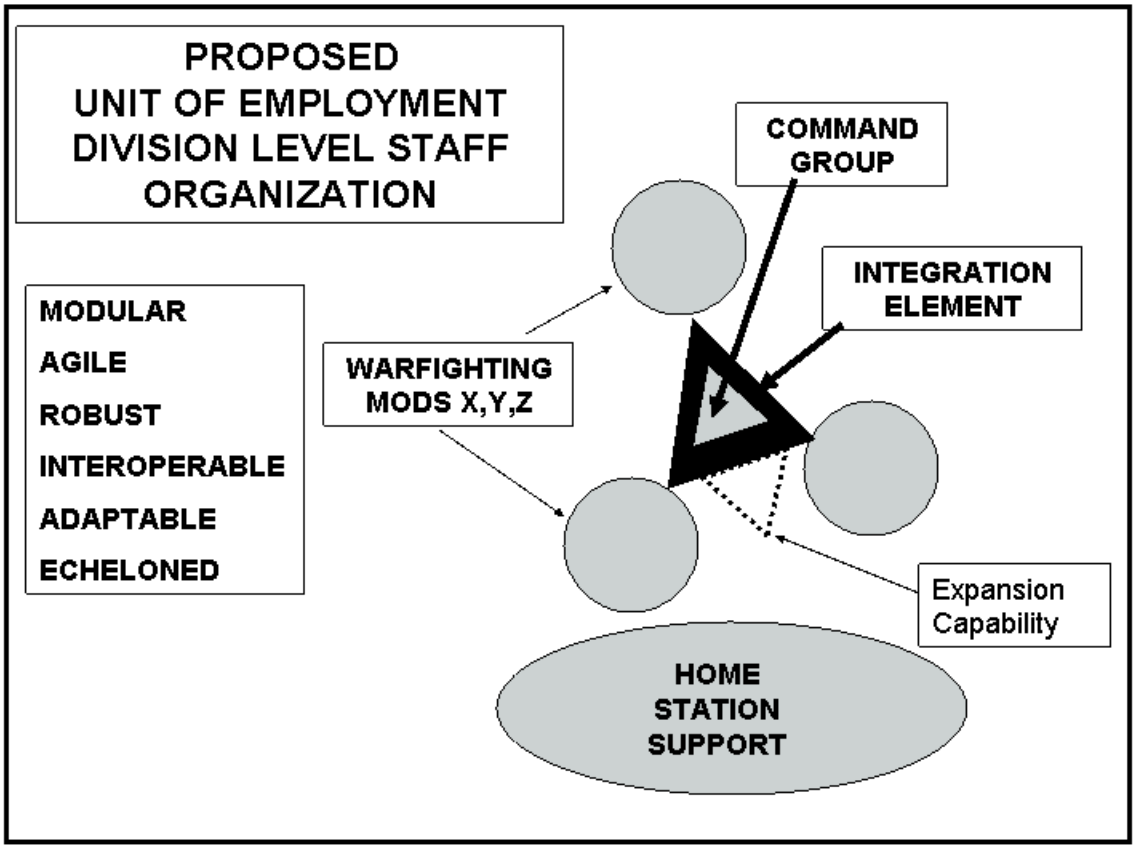

Figure 2 – Proposed Staff Organization

The proposed system is comprised of five essential elements: a Command Element, an Integrating Element, Warfighting Modules, a Home Station Support Node, and Expansion Capabilities. Echelonment of staff functions between levels of command, although not portrayed above, is absolutely critical to the system.

While retaining much of its traditional organization, the Command Element will provide central direction in order to exploit the expansive maneuverability generated by future combat systems. The commander will retain mobility and connectivity thus he will be able to move about the battlefield commanding the division. At the same time, the commander must play an integral role in the operations of the Warfighting Mods. Clear commander's guidance and explicit intent are required for staff elements to develop operations that achieve the commander's

overall aim. The commander's active role in all phases of the decision-making and execution processes will prove increasingly critical in future, distributed operations.

The Integrating Element of the headquarters will synchronize, deconflict, allocate and prioritize the functions of the Warfighting Mods. It will include low-density capabilities and functional representation to interface with remaining, traditional organizational structures. The integrating element will be the primary although not sole component that coordinates divisional operations with higher headquarters. In the complex future environment, it is essential that an integrating force orchestrate the efforts of each Warfighting Mod into a comprehensive endeavor. This core element of the staff will serve as the hub for interoperability with joint, combined and tailored oranizations. A life support capability will also be resident as a sub-unit of the integrating element that is also modular in nature and provides direct support to all headquarters elements.

Warfighting Mods will plan, prepare and execute operations. The rapid transitions and simultaneous nature of projected operations precludes staffs from detaching plans from operations. Because divisions will potentially conduct simultaneous missions across the spectrum of operations, each one will be completely husbanded by a single element.

The Warfighting Mods will provide the modularity, agility, robustness and adaptability essential to Objective Force organizations. Each Warfighting Mod will consist of maneuver, maneuver support, and maneuver sustainment functions. These modules will be independently mobile for limited durations and will be networked with the Integrating Element, the Command Group, additional Warfighting Mods, as well as subordinate and higher headquarters. Each element of the headquarters organization must have interoperability with joint and combined forces. The Warfighting Modules will be resourced to conduct twenty-four hour operations and will be organized to exploit the maneuverability of command and control future combat systems.

The personnel who comprise each element of the division headquarters must be extremely well trained within their specific functional area but must also achieve considerable

skills as generalists. The functional isolation of the current "stove-piped" organization will fail under modern field conditions. This modular design will potentially overcome many of the constraints of the outdated staff organization.

The Home Station Support (HSS) element will assume responsibility for many of the peripheral, i.e., not warfighting, yet necessary, administrative day-to-day functions of the division. Critical logistic functions such as deployment, resource and distribution management, and personnel actions are among the tasks the HSS element will perform. The HSS will also assume responsibility for key areas such as training administration and garrison taskings in order to enable the staff to concentrate entirely on mastering mission essential tasks.

Consolidation of efforts on an installation level will minimize the manpower requirements of such an organization. It will support split-based operations while minimizing the administrative footprint in forward operating areas. Capitalization of the Home Station Support node will enable continuity of operations, communications and support. The HSS will be at one end of many of the division's reachback requirements; providing and synchronizing, for example, intelligence and logistics analysis and information. Echelonment of tasks to the HSS will enable the operational headquarters staff to concentrate assets on fundamental warfighting functions.

To successfully incorporate this more agile headquarters, echelonment of tasks between levels of command is paramount. The corps level Unit of Employment will resource divisional operations through reachback technologies. It will reduce the requirement for comprehensive representation of every battlefield operating system at every level by careful analysis of the appropriate echelonment of functions. The effort will result in economic yet comprehensive coverage of key battlefield functions. For example, the corps will assign purposes and operating areas to the division, it will "allocate fires/effects, aviation, ISR, maneuver support, and maneuver

sustainment forces"[121] and will concentrate its efforts on future operations. Delineation of specific functions to different levels of command is absolutely critical and not an insurmountable challenge with the technological advances that support the objective Force.

Modern field conditions have changed. The current division headquarters is not organized to execute simultaneous and distributed operations. Its cumbersome, hierarchical structure will stifle the integrated initiative required to direct the Objective Force. A tailorable staff organized to exploit technology, maintain cohesive, continuous and comprehensive functioning that is agile, interoperable, and adaptable in a continually changing and complex environment is required to employ the Objective Force.

Superficial adjustments to the G-Staff organization chart are inadequate. The Army Transformation requires a transformed division level Unit of Employment headquarters. The bureaucratic organization must be replaced with a more fluid and flexible design that can successfully incorporate continual change and serve as a beacon, not an anchor to the Objective Force.

[121] TRADOC PAM 525, p. 50.

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