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THEATER ARMY SUPPORT COMMAND:
SUPPORT FOR THE NON-FORWARD DEPLOYED FORCE

BY

Colonel Peter W. Lichtenberger
United States Army

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## Title
THEATER ARMY SUPPORT COMMAND: SUPPORT FOR THE NON-FORWARD DEPLOYED FORCE (U)

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### Abstract
During Operations Desert Shield and Desert Storm, the 22d Support Command of the U.S. Third Army/Army Forces Central Command was not organized or employed in accordance with current Army doctrine. It was formed similarly to and functioned much like a Theater Army Support Command or TASCOM, an element of force structure that had been eliminated almost twenty years earlier. This study is based upon a thorough review of the evolution of both the doctrine and force structure at the theater level that brought the Army to the combat service support position in which it found itself on the eve of Desert Shield. From that foundation, it evaluates the utility of the TASCOM in supporting a force without the benefit of a forward deployed logistical structure and projects some recommendations for the future under the new AirLand Operations doctrine.
THEATER ARMY SUPPORT COMMAND: SUPPORT FOR THE NON-FORWARD DEPLOYED FORCE
AN INDIVIDUAL STUDY PROJECT
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ABSTRACT

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INTRODUCTION

Background

Without a doubt Operations Desert Shield and Storm were unprecedented successes. Every branch of service performed magnificently in the Gulf War and the concept of "jointness" reached new heights. Initially, in almost every area of evaluation of the Army's participation - training, doctrine, leadership, morale, discipline, planning and execution - there were overwhelmingly winning scores and praise for all.

For the Army's logisticians, it was an especially rewarding time. In fact, the Chief of Staff gave special recognition to their efforts by saying:

Operation Desert Storm displayed for all the world to see the results of nearly two decades of hard work in shaping an Army that is second to none. And it showed what the Army's logisticians can accomplish - men and women who undertook some of the most daunting challenges in half a century and forged a victory of fire and steel.

But now a year since its end, the thousands of pages of newsprint containing literally millions of words of praise and commendation from the Nation's military and civilian leadership are beginning to yellow. The magazines and books cataloging the first impressions of the coalition's victory in the Gulf War are gathering dust on the shelves. The in-depth reviews and lesson learning have begun.
In his March 1991 article "Triumph of Doctrine", General Donn A. Starry, US Army, Retired, outlined the tremendous success of AirLand Battle doctrine in the war. As its "godfather", he also more sadly pointed out:

Inevitably, it is the time for Monday morning quarterbacking to begin. Inevitable also, is the likelihood that by examining the details, larger conclusions may be obscured." 2

Objective

It is the object of this paper to reach "larger conclusions" about theater-level logistics by examining a major doctrinal anomaly of the Gulf War. Very simply stated, while it achieved remarkable success, the 22d Support Command (SUPCOM) of the US Third Army/Army Forces Central Command was not organized or employed in accordance with current Army doctrine. Current doctrine required Third Army to serve as the senior administrative and logistical headquarters. The 22d SUPCOM should have been organized as a Theater Army Area Command (TAACOM) charged with providing supply, maintenance, and field services to corps and theater army units. 3 Instead, it served as the Army's senior logistical headquarters. To perform this mission, it was formed similarly to and functioned much like a Theater Army Support Command (TASCOM), an element of force structure that had been eliminated almost twenty years earlier. 4

This study supports two "larger conclusions". First, that the formation and functioning of the 22d SUPCOM as a TASCOM was inevitable, because current doctrine did not then nor does it now
provide the guidance or the force structure required to meet the demands of the Gulf War scenario. And secondly, it supports the post-conflict recommendation that the reintroduction of the TASCOM into the Army's force structure is necessary in order to establish the capabilities required for the future battlefield.5

This examination in no way is designed, however, to be a history of the 22d SUPCOM. It will not address many of the questions related to the selection of its leader, decisions not to activate Reserve Component units that had been programmed to serve with Third Army as its TAACOM and Transportation Brigade, or matters dealing with the quantities of supplies and services provided.6

Instead, it will trace and focus on the last forty years of evolution of doctrine and force structure at the theater-level that brought the Army to the combat service support position in which it found itself on the eve of Desert Shield. The TAACOM and TASCOM concepts will be compared and then evaluated against the needs of a force fighting under the tenets of the former AirLand Battle doctrine, but without the benefit of a forward deployed logistical structure. And finally, it will project some thoughts for the future based upon the needs being generated as the new AirLand Operations concepts replace those of the AirLand Battle and joint and coalition warfare doctrines continue to evolve.
Background

The evolution of both Army doctrine and force structure in itself can be a fascinating process to study. As one author sees it, the value of that study is only best understood when one accepts as fact the premise that battlefield capabilities and effectiveness are in a great degree related to force structure. In his 1977 short history of Army force structuring John Brinkley proposed that four factors underlie force structure development:

- The military tactics and doctrine used;
- The command and control capability available;
- Technological innovations which include weapons, transportation and communications;
- And the enemy threat, either real or perceived. 

These elements will be accepted in this analysis for their utility in describing the evolution of the theater-level logistical force structure that appeared in Desert Shield and Desert Storm, evaluating its effectiveness, and establishing a platform from which to predict future needs.

Strategy, Doctrine and Structure of the 1950's

The Army's doctrine and force structure can be traced in exquisite detail from the days of the early colonial militia. For the purposes of this discussion, the decade of 1950's serves as an excellent starting point. It was at that juncture in American and world history that several significant influences came about that have been projected into today's force. Most
notable has been the sustained impacts of both the joint doctrine resulting from the National Security Act of 1947 and the Cold War with the Soviet Union.

The 1950's was the first full decade of the Cold War. The Soviet Union and the United States had emerged from World War II as super powers and both had deliverable tactical and strategic nuclear weapons. It was during that decade that the United States began to change its initial Cold War national security strategy.

From the almost the end of World War II, a national security strategy of massive retaliation had evolved that drove the Army’s mission, doctrine, and resulting force structure as well as the resourcing it received. Both the experiences of the Korean War and the development of Soviet nuclear weapons had sparked changes in structure across the board in the Army, but most noticeably in the division. The need to reduce unit vulnerabilities to tactical nuclear weapons and the thought "that high-intensity conventional war could not be separated from nuclear war" resulted in the formation of the lighter, more mobile pentomic division. Unlike the World War II and Korean War "triangular" divisions, the new pentomic division was organized around battle groups rather than regimental combat teams. Its major impact was felt in the infantry division. There it essentially eliminated the battalion as an organizational echelon.

Although the pentomic infantry division seemed an ideal solution on paper, in realistic testing it suffered from several
fatal flaws. Among these were the battle group's inability to muster enough sustaining power for either nuclear or conventional warfare, inflexibility due to the lack of the battalion echelon, and the greatly increased span of control burden it placed upon the division commander. Nevertheless, the pentomic division very importantly marked the recognition that:

unlike the Soviet Army, which had to fight only in the terrain of Europe and Asia - terrain favorable to mechanization - the US Army had to remain relatively light in equipment, so that it would deploy rapidly to any trouble spot in the world.10

Concurrent with the doubts raised during the implementation of the pentomic division was the growing concern of the Nation's military and civilian leaders that a new threat was evolving. By the late 1950's, "as the assumptions upon which massive retaliation was predicated were questioned increasingly, limited war appeared to be at least as much a threat as nuclear conflict."11 Certainly the experiences with Soviet subversion in the late 1940's in Greece and Iran, the 1956 war between Egypt and Israel, and France's loss in Indochina against a Soviet-sponsored Communist force, served to raise and nourish these concerns. The results would be seen early in the next decade.

There were four major doctrinal publications of particular interest to this study: Field Manual (FM) 100-5, Field Service Regulations, Operations, FM 100-15, Field Service Regulations, Larger Units, FM 100-10, Field Service Regulations, Administration, and FM 38-1, Logistics Supply Management. A review of the
The evolution of their tenets provides a significant perspective on today's Army and a foundation from which to project the future.

The keystone was FM 100-5, Field Service Regulations, Operations. Changes to it were frequent. The 1954 edition was updated three times during the decade and had replaced the 1949 version which itself had been updated once in 1952. While this manual did outline the principles of war, it also prescribed a very general approach by saying that:

...the Principles of War, are immutable, but doctrines, tactics, and techniques must be modified with advances in weapons and weapons systems, transportation, and other means applicable to war...set rules and methods must be avoided.12

Unlike more recent versions, it was devoid of diagrams and pictures. It served as more of an encyclopedia of concepts, terms, organizational elements, relationships and descriptions of how the Army could fight rather than a source of a cohesive concept of how the Army would fight. One author might relate this lack of specificity as he did with the development of the pentomic division to the fact that because of the Eisenhower strategy of massive retaliation, the Army had to work to "justify its existence" on the atomic battlefield.13

FM 100-15, Field Service Regulations, Larger Units, provided descriptions and discussions of the missions, functions, and organizational structures of the theater army, the field army, and the corps. It also identified the key support units at those levels and provided diagrams and text that outlined the Army's relationships with the other services on the battlefield and
within the theater of operations. During this decade, it must be noted that the corps was a tactical headquarters, and, unless it was fighting independently, did not provide administrative support (combat service support) to its subordinate divisions. The field army or army group provided the combined command and control and sustainment functions that today's corps does.\textsuperscript{14}

FM 100-10, Field Service Regulations, Administrative Support, complemented the other FM's in the series and provided a detailed explanation of administrative support operations in the communications and combat zones. Like FM 100-15, it described the Army's relationship in joint operations. It reaffirmed the tradition that:

service forces within the theater are usually organized unilaterally; thus, each component has its own organization for providing administrative support. Exceptions occur when support is otherwise provided for by agreement or assignments involving common, joint, or cross servicing at force, theater, department, or Department of Defense level.\textsuperscript{15}

Equally important it reflected, as did FM 100-15, that the theater Army headquarters, even in joint operations, retained what would be known today as command and operational control of all Army forces, except if they functioned under a joint task force or, as in the case of the Theater Air Defense Command, directly under the unified commander. Additionally, it reflected that the theater army headquarters basically had four subordinate commands: (1) field armies or army groups; (2) the air defense command when not under the unified commander; (3) the civil
affairs command if necessary to the mission; and (4) the logistical command.¹⁶

The logistical structure was much different than today in more than just basic organization. Most significant was the fact that the Army separated its administrative support into two groups. One segment was known as the technical service branches and was composed of the Quartermaster Corps, Army Medical Service, Ordnance Corps, Transportation Corps, Chemical Corps, Corps of Engineers and the Signal Corps. Unique at this time was the fact that, although the latter two performed supply, maintenance, and other support functions, they were also considered combat arms branches. The second segment was called the administrative services and included the Adjutant General, Finance, Judge Advocate General, Chaplain and Military Police Corps.¹⁷

Organizationally, the theater army was responsible for providing administrative direct support to the field armies and corps and general support to the divisions. It did that through an organization known as the theater army logistical command or TALOG.¹⁸ The divisions had administrative support units of their own that were organized into what were known as the division trains.¹⁹

The logistical command was a very flexible organization that could be formed into any of three different sizes, depending upon the number of soldiers to be supported. Their employment was also extremely flexible in that they could be formed into three basic subordinate commands, the number and location of which was
mission and situation dependent. An advance logistical command or ADLOG could be found forward in the combat zone with a base logistical command (BALOG) in the communications zone providing support to the ADLOG as well as area support. One or more area commands could also be added in either area, if required.20

The relationship of the TALOG staff and its subordinate battalions and groups was also somewhat unconventional when compared to many current organizations. The logistical command staff was divided into four groups: (1) the personal staff which was much like that of today; (2) the coordinating staff organized into functional directorates such as the comptroller, security, plans and operations, etc.; (3) the technical service staff which included the chemical, quartermaster, engineer, transportation, signal, medical and ordnance staffs; and (4) the administrative service staff composed of the provost marshall, the adjutant general, the finance officer, the Army exchange officer (PX) and the chaplain. The coordinating staff functioned much as its counterparts do in the current Corps Support Command (COSCOM) or TAACOM, as did the administrative service staff. Several of its members to include the adjutant general, finance officer, and provost marshall served not only as their branch's advisor to the commander and his other staff, but also exercised "direct technical supervision over the activities of their respective services through out the logistical command" and across the theater, if so authorized by the theater army commander.21 The technical service staff performed similar functions and, in some cases at
the subordinate BALOG or ADLOG level, might also command their branch's group or battalion. This tradition appears to carry forward today in special staffs where, for example, the senior quartermaster or ordnance officer may serve as both a subordinate commander and special advisor to his superior.

Most unique to the logistical structure of the Army of the 1950's were three other concepts. First was the continuation of the philosophy that separated supply and maintenance into technical service oriented systems. The concept of multifunctionality had not yet come of age. Therefore, each of the technical services maintained its own direct and general support units as well as in-theater depot units. Secondly, the logistical command was responsible for a large amount of the construction and repair of roads, bridges, railways and other militarily essential facilities within the theater. And lastly, the concept of inter-sectional support linked the communications zone to other theater areas in terms of transportation, communications, and pipelines.22

The first FM 38-1, Logistics Supply Management, was published in August 1954 and was "the first comprehensive exposition of principles to guide the management of the Army Supply system."23 This manual served as the doctrinal interface for what would be known in later terminology as the strategic and tactical or wholesale and retail levels of supply. In doing so it identified the technical aspects of the system and the organizations and individuals responsible for Army supply system policy and
operations. Of note was its discussion of the role of the Department of Defense Appropriations Act of 1953 in limiting the supply operations of the services in terms of "common use standard-stock items of supply."  

This manual was updated four years later in August 1958. Although its format remained relatively the same, it identified three major changes that had occurred in that period. First, Department of Army headquarters had been reorganized and the G-staff had been replaced with functionally oriented staff elements. The Assistant Chief of Staff was now known as the Deputy Chief of Staff for Logistics. Second, the post-Korean War dramatic drawn down of the supply system in the Continental United States (CONUS) had continued. Of the 70 depots and 175,000 personnel that comprised the Army's Conus depot system in 1954, only 48 depots and 17 smaller storage activities and 40,000 personnel remained. Thirdly, the Planning, Programming, and Budgeting System was introduced.  

Changes of the 1960's

The decade of the 1960's began with a change of command. And in 1961, with the inauguration of President Kennedy a new strategy came about that was called flexible response. It fostered a new doctrine, one that perceived the need to fight at all levels of conflict, and gave quick approval to Army studies of a new division structure, the ROAD division (Reorganization Objective Army Divisions), a framework which still serves as the
basis of today's divisional structure.\textsuperscript{26} The division, whether airborne, airmobile, armor or mechanized had a common base that included "a cavalry reconnaissance squadron, of some type, three brigade headquarters, division artillery, division support command, engineer battalion and eventually an air defense battalion".\textsuperscript{27} Its greatest strength was its ability to "task organize" and tailor the numbers and combinations of combat and combat support units that its brigades commanded. The ROAD division eliminated the battle group and established its replacement, the combat arms battalion, as the "largest fixed-maneuver organization."\textsuperscript{28}

This new division also gave rise to several assumptions, if not principles, which have been carried forth since then. First, task organizing or tailoring the division could be done both internally with its own units or by adding capabilities from external units. Secondly, the presence of the brigade headquarters not only eliminated any span of control problems related to adding capabilities from external sources, but also added the dimension of fighting the brigade independently. Thirdly, it institutionalized the trend, that had begun after World War I, to move combat service support to the lowest feasible levels by establishing the division support command (DISCOM) as a replacement for the division trains of the pentomic division. And lastly, it demonstrated a "most pronounced...trend toward highly mobile and flexible combat arms teams integrating all forms of weapons systems" that could respond easily and quickly to change.
especially to changes in the threat or those resulting from technological advancements. While these were first seen at the division level, more significantly, they will been seen again in the evolution of corps and army-level doctrine and force structure.

FM 100-5 was republished in 1962 and updated in 1964 and most certainly reflected the new strategy. Unlike its predecessor, it talked to national objectives, policies and strategy as well as providing considerable attention to "limited war" and the role of land forces. It devoted entire chapters to such topics as "operations against irregular forces, situations short of war" and "unconventional warfare" and for the first time talked to airmobile and special forces operations. In addition to some of its other new terms, it replaced "administrative support" with "combat service support".

Changing Logistical Structure

During this evolution in national strategy and division structure, the basic command and control elements of the corps, field army, and theater army and the doctrine underlying their employment remained rather unchanged. In the early 1960's, however, the need for change in logistical doctrine and organization did begin to appear.

The period of the 1960's was significant for major command and control change, as well as logistical change at all levels of the armed services and the Army in particular. There were
distinct relationships between the actions being undertaken across strategic levels such as Department of the Army headquarters (HQDA) and those at the tactical and operational levels of the Army in the field. In the early 1960's HQDA was reorganized to reflect the demise of the technical services (Quartermaster, Ordnance, Transportation, and Signal). By 1964, two equally multifunctional, strategic-level operating commands, the Army Materiel Command (AMC) and the Department of Defense's Defense Supply Agency, now known as Defense Logistics Agency (DLA), were created. At both ends of the command and control spectrum, tactical and strategic, multifunctional logistical headquarters became a way of life. The tactical had its division support command; the strategic, its AMC and DLA.

FM 38-1, Logistics Supply Management, was again updated in 1961 and also reflected significant changes. The drastic reductions in the Army's depot system continued. Another 15 depots and storage activities had been closed and an additional 15,000 personnel released since 1958. Of greater importance was the increased attention it paid to the relationship between the Department of Defense and the Army in the planning system. 31

COSTAR and the FASCOM

The first of the major doctrinal and structural changes at the theater level was a concept called COSTAR (Combat Service to the Army). Basically, it was designed to provide the field army with an equivalent to the division's support command. That
organization was to be known as the Field Army Support Command or FASCOM and first appeared in the new FM 100-15, published in December 1968.

It provided the corps with the direct support necessary to meet the combat service support needs of its organic units and the general support required by those corps units and the divisions subordinate to the corps. For the purposes of this discussion of the FASCOM, combat service support includes all logistical functions and administrative services performed in a theater, as well as rear area security and area damage control.

Without a doubt, at the time of its introduction, the FASCOM had great impact on the field army and the corps. More important to this discussion, however, are the impacts it had which have been carried into current logistical doctrine and force structure. Among the most significant were that it:

1. Established in the field army the same multifunctional direct supply and maintenance support as provided in the ROAD DISCOM. Units supported by the FASCOM received the majority of their supply and maintenance needs from one supply unit and one maintenance unit.

2. Provided "clear and simple command lines for the support elements themselves" and eliminated "the need for field army staff officers to exercise operational control over the combat service support operating units employed throughout the army." 32
3. Allowed the flexibility to tailor army combat service support forces to meet the needs of a larger or smaller army and facilitated the movement of those units between command and control elements or between areas as the mission dictated.

4. Established an inventory control center (ICC) directly under the FASCOM headquarters that connected the army to its counterpart in the communications zone (COMMZ) as well as to its subordinate units.

5. Authorized a commander, a lieutenant general, equivalent in grade to the corps it supported.\(^{33}\)

**TASTA-70 and the TASCOM**

While COSTAR was being finalized and scheduled for implementation in 1965 and 1966, work was well underway that addressed the entire theater of operations.\(^{34}\) By February 1963 the Army's center for doctrine development, the Combat Developments Command (CDC), had initiated a study called The Administrative Support, Theater Army, 1970 or TASTA-70, that was documented in FM 54-8 (Test), The Administrative Support Theater Army TASTA 70. Similar to COSTAR's definition of combat service support, TASTA-70's "administrative support" included the same logistical, administrative, rear area security and area damage control functions. Essentially, it continued the "general orderliness of the COSTAR concept" and developed a system "for the integrated support of a theater of operations. Its territorial responsibilities encompassed both the combat zone and COMMZ and extended..."
from the division to the continental United States (CONUS) base."35 In addition, TASTA-70 made some improvements to the FASCOM structure and created a new structure for the theater army. As a result, in April 1969, the US Army Theater Support Command (TASCOM), Europe, replaced the US Army Communications Zone, Europe.36

In reorganizing the COMMZ, TASTA-70 created a TASCOM with six major subordinate commands that (1) carried out day-to-day operations within the COMMZ in direct and general support of COMMZ units, (2) provided general support to the field army, and (3) conducted rear area security and area damage control operations in the COMMZ. It moved personnel replacement activities away from the theater army headquarters, where it had been under the logistical command concept, and gave up the operation of intersectional communications. Notable among its characteristics were:

1. The focus of TASCOM headquarters on planning and coordinating longer range combat service support requirements. It issued mission type orders to its five functional subordinate commands (Engineer, Medical, Personnel, Supply and Maintenance, and Transportation) and one multifunctional direct support command, the Area Support Command.

2. The creation of theater-level, automated, functional management centers similar to the movements control, inventory control and maintenance management control centers within the FASCOM. A notable exception was their subordination to the
Transportation and Supply and Maintenance Commands, respectively, and not to the headquarters as in the FASCOM.

3. The continuation of the concept of tailoring to meet mission requirements.

4. The expansion of the concept of throughput supply from depots in theater to include shipments as directly as possible from the CONUS base to the supported unit.37

Changes to the FASCOM

In terms of the FASCOM, TASTA-70 did several things:

1. Military police and transportation battalions normally operating in the corps area were added to the corps support brigades.

2. Provision was made to attach an engineer brigade if construction was required in the army service area.

3. Direct and general support groups were replaced by multifunctional support groups in the corps support brigades.

4. The ammunition brigade was replaced by ammunition groups assigned on a one-per-corps slice basis to the support brigades.

5. Both movements control and maintenance management centers were added to the FASCOM and support brigade headquarters.38

Net Results of TASTA-70

As indicated in a 1967 review of the TASTA-70, its implementation would yield five aggregate benefits in addition to those
already mentioned:

1. Flexible, responsive command structures for both the TASCOM and FASCOM commanders.

2. Institutionalized compatibility between functional control and commodity management.

3. Complete functionalization of combat service support in the field and elimination of the technical service staff.

4. Streamlined, automated combat service support functions.

5. Linkage between the commodity commands in CONUS and the user in the field.\textsuperscript{39}

By the late 1960's, more significant changes began to appear in the major doctrinal manuals. The September 1968 edition of FM 100-5 carried a new title, \textit{Operations of Army Forces in the Field}. It reflected both the impact of the US involvement in Southeast Asia and the increasing sophistication of international military alliances. For the first time, it talked to psychological and riverine operations and many chapters were annotated to indicate their compliance with numbered international standardization documents such as NATO standing agreements (STANAG). Much like the current Field Manual 100-1, \textit{The Army}, it discussed the role of land forces, strategy, and the principles of war.\textsuperscript{40}

Most importantly, the 1968 edition of FM 100-15, now renamed \textit{Larger Units, Theater Army-Corps}, reflected the addition of special forces and psychological operations groups at theater army level. Equally significant, it espoused the concept that, during wartime, the theater army commander would yield operation-
al control of all theater combat and combat support forces to the theater commander. Retention of operational control by the theater army commander would be an exception.41

A new FM 100-10 was also introduced in late 1968. Appropriately renamed Combat Service Support, it expanded upon the doctrine in both FM 100-5 and FM 100-15 with several new concepts:

1. When forces were first introduced into an area, a theater base would be formed that supported a division equivalent force by means of an augmented division support command. Upon expansion to a corps-level operation, the COSCOM provided theater base support and so on until "control of the theater base by the tactical commander" was "impractical". This varied greatly from the logistical command's ADLOG concept which provided a theater-level support command more immediately.42

2. When the theater commander exercised "direct operational control" over US Army combat and other forces, "the theater army headquarters" became "primarily an administrative and logistical headquarters".43

3. If a field army or corps was the major Army element in a theater and "its normal preoccupation with the combat mission" precluded performance of theater army responsibilities, a smaller theater army organization was "usually established."44

4. The TASCOM headquarters could receive its direction from the "US Army element" of a joint, unified, or combined staff rather than the theater army headquarters and, if need be, the
TASCOM headquarters could be replaced by the theater army headquarters. 45

5. A newly established theater would be supported by "automatic supply (push shipments)" until the theater gained control over its supply functions. While this was a coordinated action, "Department of the Army based on the recommendations of the theater commander", determined when automatic supply ended. 46

The 1969 edition of FM 38-1 contained more than just a new name, Logistics Management. For the first time, it talked to the transportation system and its relationship to the supply and maintenance systems that alone had been the subject of its preceding versions. Also for the first time, it discussed ways of stratifying the logistics system into component parts. It went beyond what had been traditional for that time, the wholesale and the consumer (today called retail) levels to a three level system. Those three levels included: (1) strategic logistics or "management considerations at the Office of the Secretary of Defense and the Joint Chiefs of Staff", (2) support logistics or the wholesale level of logistics, and (3) operational logistics or "the army-in-the-field logistics system." 47

Into the 1970's

The 1970's was characterized by several significant events, many of which served as catalysts for change both in doctrine and
force structure. The experience of counterinsurgency warfare and the aftermath of the cessation of hostilities with Vietnam, the 1973 Arab-Israeli conflict (to include some residual reactions from the 1967 encounter) and its impact on oil availability and prices, and sizable reductions in the defense budget all played a role.\(^4\) As a result of the 1970 CDC study on echelons above division, both the field army and its FASCOM were eliminated from the force structure in 1973.\(^4\) In March 1974, FM 100-15 (Test), Larger Unit Operations, was published and established that the corps was "the Army's principal force in a theater" and had "both tactical and administrative responsibilities." It outlined a "by exception" rule which allowed for the organization of a numbered army in theater as an intermediate headquarters between the theater army or theater army commanders and the corps only as an exception. More significantly, it documented the reorganization of the corps and the new concepts of forward deployed and contingency force corps. It also continued the detailed discussion of combined military operations begun in its April 1973 predecessor.\(^5\)

**COSCOM Replaces the FASCOM**

As Colonel John Stuckey addresses it in his 1983 article, "Echelons Above Corps", the 1970 Combat Developments Command study "Echelons Above Division", did not really indicate whether its purpose in streamlining and reducing the force structure above division level was:
necessitated by economics, by a perceived layering of headquarters, or by span of control issues per se. The study recommended, among other things, the elimination of all corps and field army echelons. In their place, it advocated the creation of a "small" field army which would be responsible for both operations and support.5

Obviously, these recommendations were not approved. Instead the field army and its FASCOM were eliminated. As documented in FM 100-15 (Test) and also in the April 1976 editions of FM 100-10, Combat Service Support, and the newly developed FM 54-9, Corps Support Command, the result was a corps structure in almost identical configuration and capability for independent operation as that in today's force. The assets, missions, and functions of the FASCOM were split between the TASCOM and the COSCOM. Thus, the COSCOM became a permanent organization within corps and not just a structure found in an independent corps. Like the FASCOM commander in his relationship to the corps commanders he supported, the COSCOM commander had equal status with the supported division commanders. It must be noted that this new doctrine did allow, however, for the formation of a numbered Army with only tactical control, no support mission or capability, to serve between the corps and theater headquarters, if required.52

Also significant to these changes was the new relationship that was established between the COSCOM and the CONUS support base. As indicated in FM 38-725, Direct Support System (DSS) Management and Procedures, the supply support activities (SSA) of the COSCOM would be the first stop for the throughput of items requisitioned by corps units. Through a series of theater
oriented depots, supplies would be consolidated and shipped
directly to the identified SSA and supply information would be
passed directly to the supporting COSCOM materiel management
center.\textsuperscript{53}

There was a significant delay in publishing that portion of
FM 54-9 designed to provide guidance for the corps while conduct-
ing contingency operations and providing the required contingency
logistics. Change 2 to FM 54-9 was not published until the end
of September in 1981. It will be discussed with other doctrinal
changes of the 1980's.\textsuperscript{54}

Elimination of the TASCOM, Introduction of the TAACOM

As outlined in FM 100-10 in April 1976 and reaffirmed in the
November 1976 initial issue of FM 54-7, \textit{Theater Army Logistics},
the last element of TASTA-70, the TASCOM, was obsolete. Most
important in assimilating the resulting new doctrine is the clear
understanding that the Theater Army Area Command (TAACOM) was not
a replacement for the TASCOM. The TAACOM replaced the Area
Command of the TASCOM and incorporated most of the functions of
the TASCOM's Supply and Maintenance Command. It did not, howev-
er, incorporate the inventory and maintenance management control
centers of the Supply and Maintenance Command. That materiel
management function, along with the transportation movements
control function, was moved from the functional command level of
the TASCOM to the theater army headquarters by this change.
While this mirrored the concept of the FASCOM, it also returned

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to the theater army headquarters the need for staff officers to exercise supervision over operating activities. In addition, while it mentioned other scenarios, the new FM 100-10 had a significant European flavor to it.

Probably just as important to this discussion as the pure logistical changes of this new doctrine and structure was the impact upon the peacetime command and operational control mission of the theater army as well as its wartime command responsibilities. As a result of TASTA-70, the theater army commander had command over one or more field armies, the TASCOM, and five to six functional theater commands (reserve forces, signal, air defense, military intelligence and civil affairs). Most importantly, in terms of combat service support, he had one subordinate commander to manage the daily requirements and operations of six functions.

Under the doctrine of 1976, his span of control was multiplied significantly by the addition of the former subordinate commands of the TASCOM. Combined with the loss of a routinely available field army headquarters to command the corps, his burden was increased by his responsibility for the special forces and psychological operations units that had been formed subsequent to TASTA-70. What had once been a theater army of seven to eight subordinate commands became one of 14 to 15. This phenomenon will weigh heavily in a later analysis of the Gulf War experience.
Volumes have been written on the effects of the 1976 version of FM 100-5. While not all those discussions are germane to this analysis, there are some key points that must be mentioned. Known as the doctrine of the "active defense", its development was been catalogued in great detail in 1984 by Training and Doctrine Command author John L. Romjue. The opening paragraph of his second chapter perhaps best describes it:

Not only was it a symbol of the Army's reorientation from Vietnam back to Europe and the arena of primary strategic concern, it presented a distinctly new version of tactical warfare. Sharp in its grasp of strategic realities and recognition of the lethal force of modern weaponry, attuned to concrete particulars and clear in delineation, the operations manual was a powerful, tightly written document that at once established itself as the new point of departure for tactical discussion, inviting an intensity of critical discussion.56

In addition, logistically, it had noticeable effects. First, it sustained the force structure changes of the recently published FM 100-10 and FM 100-15 (Test). Secondly, it levied a heavy burden on the logisticians in their role of assuring that "an outnumbered force" would be "more effective man-for-man, weapon-for-weapon, and unit-for-unit than the opposition."57

Thirdly, it talked to the austerity of the modern battlefield and established the philosophies of highly mobile logistical support capable of supporting operations as "far forward as possible" and that "support elements should not be deployed before they are required by the weapons systems committed to battle."58 This last point will be discussed later in greater detail. Lastly, it
introduced the term "Air-Land Battle" and its concepts by saying that "the Army cannot win the land battle without the Air Force." This statement seemed to be a beginning to overcoming the problems of joint operations that Jonathan House discussed in his study of 20th century tactics, doctrine and organization. It indicated a movement from the realm of "cooperation" to true coordination of capabilities in the very finest sense of joint operations. From a logistical view it added new emphasis to the Army's theater mission to provide common use items to the Air Force.

**FM 38-1, Logistics Management**

FM 38-1 was republished again in 1973. It completed the expansion of its linkage of the operational to the strategic by, for the first time, including a chapter that described the planning system required for logistics support of military operations. It detailed how the Army would participate in the Joint Operation Planning System (JOPS) and assigned very specific missions. Most notable was that given to the Army Materiel Command. The Army Materiel Command (then called the Army Materiel Development and Readiness Command) was:

...designated by Department of the Army (DA) as the DA coordinating authority for the provision of preplanned supply support (less accompanying supplies and medical supplies) to US Army forces designated to support an approved OPLAN; the single point of contact for the DA major commands and other Department of Defense agencies, the General Supply Administration, and the other military services for arranging preplanned supply support for the OPLAN's of the supported command.
Operational Changes of the 1980's

The 1980's was marked by an explosion of doctrinal change and the introduction of new publications, although FM 100-5 remained the doctrinal keystone. One of the most influential leaders in this period, both in his role as Deputy Chief of Staff for Operations and Plans in Department of the Army headquarters and subsequently as Army Chief of Staff, was General Edward C. Meyer. As Romjue recounts, General Meyer was anxious about the controversy raised by the perception that the July 1976 FM 100-5 was defensively oriented. Its very evident Central Europe orientation and lack of worldwide application also concerned him.62

In his famous White Paper, General Meyer wrote:

The most demanding challenge confronting the US military in the decade of the 1980's is to develop and demonstrate the capability to successfully meet threats to vital US interests outside of Europe, without compromising the decisive theater in Central Europe.63

Almost concurrent with General Meyer's assumption of duties as Chief of Staff were some significant changes in the Carter Administration's attitudes toward defense. Several Soviet and Cuban sponsored insurgencies, the Soviet invasion of Afghanistan, and the beginning of the hostage crisis with Iran had major impacts on the national strategy that only served to support Meyer's call for a new FM 100-5.64 Without a doubt, the tremendous force modernization effort underway at that time, an event which saw the fielding of the new Abrams M-1 main battle tank, the M-2/3 Bradley Fighting Vehicles, and numerous other state-of-the-art technological advances as well as the develop-
ment of the Division 86 and Army of Excellence force structure initiatives, further added validity to his concern for updating the Army's fighting doctrine.

As a result, the 1980's saw two major changes to FM 100-5. The first was published in 1982. It reflected not only the new offensively oriented national strategy and modern capabilities of the Army, but also a sizeable growth in the AirLand Battle concept of its predecessor.65

Without question, it contained one of the most momentous changes in thirty years. This publication added the term and concept of the "operational level of war" and placed it between the strategic and tactical levels in describing how the Army would fight. So pivotal was this concept that to many "the AirLand Battle was the operational level."66

To the logisticians, however, the May 1986 update was even more powerful. Yet, its introduction stated simply that it was altered only to reflect "the lessons learned from combat operations, teachings, exercises, wargames, and comments from the field".67

Far from just an update, it presented the new dynamic concept of an operational level of sustainment that expanded the more familiar and more traditional strategic and tactical levels and was focused organizationally on the theater army. Most interestingly, it did allow that, in certain situations subordinate units, corps and even divisions, might be required to plan and conduct operational level sustainment.68

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Logistically, both manuals had broad ramifications at all levels. They emphasized AirLand Battle's four basic tenets of initiative, depth, agility, and synchronization and set forth five complementing sustainment imperatives: anticipation, integration, continuity, responsiveness, and improvisation. In addition, the May 1986 update added to the four basic sustainment functions outlined in 1976, so that the list now comprised the six functions of manning, arming, fueling, fixing, transporting and protecting. An understanding of the commander's intent was key in its stress on leadership as was the "freedom and responsibility to develop and exploit opportunities...discovered or created, to act independently within the overall plan", that this doctrine gave to commanders.\footnote{6}

The August 1982 update had stated that "improvisation, initiative, and aggressiveness...must be particularly strong in our leaders."\footnote{70} It spoke of simultaneous battles conducted by air and land forces, thereby carrying the AirLand Battle well beyond the mutual support concepts of the 1976 doctrine. It talked extensively to joint and combined operations in recognition that the Army would most likely be fighting in a joint or combined force. It further outlined the concepts of "fast forward resupply and forward maintenance" and linked tactics and logistics in its thought that "what could not be supported logistically could not be accomplished tactically."\footnote{71} All of these when added to the ever-increasing complexity of the Army's sophisticated modern systems, only served to multiply the logis-
New Logistical Doctrine in the 1980's

The decade of the 1980's gave rise to several significant efforts in logistical doctrine that complemented the warfighting tenets of FM 100-5. They can be divided into three basic groups. The first group was that of the keystone logistical manuals, such as the, ironically enough, desert camouflaged, March 1983 edition of FM 100-10, Combat Service Support. As the heart of the "how-to-support" manuals, it updated logistical doctrine that had lagged behind operational doctrine since 1976. More importantly, it reflected the impact of AirLand Battle doctrine on the logistical community and focused combat service support planners and operators on offensive operations. Much attention was paid to rear area protection, the threat to combat service support forces, and base defense. It addressed both the European scenario and that of the contingency force in terms of initiative, depth, agility, and synchronization. It portrayed contingency operations as "likely to be conducted in a short-duration, limited objective environment characterized by austerity of personnel and equipment...by two or more services...no formal HNS (host nation support) agreement...reliance on strategic airlift and sealift for the rapid deployment and continued sustainment of forces."\(^72\)

The February 1988 edition of FM 100-10 reflected the change in the division support command from forward area support coordi-
nators to forward support battalions and other Army of Excellence initiatives and continued the expansion of the logistical doctrine necessary to support AirLand Battle. It fully included the concepts of sustainment imperatives and functions outlined in FM 100-5 and developed three critical thoughts in its discussion of operational sustainment:

1. It was required to sustain major battles and campaigns, but differed only from the tactical level in the longer times available to plan and prepare and longer time that the support was provided.

2. It was described primarily as a staff and command function planned and controlled at echelons above corps, because the same units performed both tactical and operational sustainment.

3. It was usually a joint or combined effort that required peacetime agreements and practice.73

The second group included the how-to-support manuals of the -63 series that addressed combat service support at command echelons from theater army to division. The manual of interest to this discussion is FM 63-4, Combat Support Operations, Theater Army Area Command, published in September 1984. Reflective of the AirLand Battle doctrine, this volume complemented the 1976 guidance of FM 54-7 and the 1982 revision of FM 100-5. It outlined organizational and functional relationships as well as the implementation of standard logistical systems and precepts. Nevertheless, it appeared rather slight in its doctrine on how to
plan for and execute combat service support for non-forward-deployed forces. It did support, however, what might be called an evolutionary approach to theater logistics:

In major contingency operations, it is generally conceded that the corps will be the force. It is the smallest force capable of sustaining itself - for extended periods. The bulk of the CSS of the corps is done by the COSCOM. As long as the corps can perform its mission and the COSCOM can support it, EAC CSS units will not be deployed. 74

This approach seems to be contrary to the concept of operational sustainment and the role of echelon above corps forces as outlined in FM 100-10. It also seems to ignore some of the common user support that the TAACOM normally provided to the other services, as well as other factors that will be discussed in the later analysis of the Gulf War.

Another important publication was FM 63-3, Combat Service Support Operations, Corps. Published in August 1983, it replaced the 1976 version of FM 54-9, Corps Support Command and focused on the traditional forward deployed corps, while expanding upon the contingency corps support doctrine that had first been published in 1981 as a change to FM 54-9. As had FM 63-4, it left no doubt in the reader's mind that the corps could be supported in contingency operations without theater army assistance. That position was reinforced by its discussion of the direct communication and coordination necessary between the COSCOM and the strategic level activities of the Army Materiel Command and Military Traffic Management Command. 75

In 1985 FM 63-3 was again revised and republished as
FM 63-3J in recognition of its incorporation of both Division 86 and Army of Excellence force structure changes. It continued in the doctrine of its predecessor and left no doubt that an anticipated contingency would occur in an environment of a "friendly host nation, geographically situated in an underdeveloped area where there is no existing US military base." In addition, it specified that the "contingency-oriented COSCOM" was "self-sufficient" and capable of operating "without the controls of a higher administrative headquarters that exists in a fully developed theater of operations." From its viewpoint, contingency operations were conducted in four phases: (1) deployment; (2) lodgement; (3) expansion of logistics base and buildup of forces; and (4) termination of conflict or transition to a mature theater. It remains as the current doctrine for today's Army.

The third group of publications replaced FM 38-1 and provided doctrine for the corps itself and echelons above corps. First in this group was FM 700-80, Logistics, which was published in September 1982 at the same time as its companion, FM 701-58, Planning Logistic Support for Military Operations. Together they very effectively incorporated a multitude of laws, regulations, joint and Army doctrines, and the numerous systems, commands and agencies involved in strategic and tactical logistics and combined them into a very understandable, functional approach to planning and programming logistics from the top down. FM 700-80 has remained current, was republished in 1985, and
again updated in 1990. Although FM 701-58 is involved in extreme operating-level detail, it, too, has remained current and was republished in 1987.

Another most influential publication of this period, FM 100-16, Support Operations: Echelons Above Corps, was issued in April 1985, although draft versions had been in existence for several years prior. With the majority of the Army's focus on the corps, its purpose was to modernize the doctrine concerning the role of echelons above corps (EAC) forces. It provides, even today, a level of detail for theater level operations that had not been available since the demise of FM 54-8, The Administrative Support Theater Army 70 (TASTA 70), written in 1967. It not only incorporated doctrine for the forward-deployed force, but also talked to the nonforward-deployed force's requirements and means of meeting them in a unilateral Army force or as part of combined operations. Key in its doctrine was the discussion of the evolution of the theater army from an initial organization in "the early stages of a war" to a more mature configuration "in a fully developed theater of operations. The significant change would appear with the introduction of "functional commands", such as the petroleum group, as the theater developed.

The last major doctrinal publication of the 1980's was the still current, September 1989 revision of FM 100-15. Renamed Corps Operations, it was the first update since FM 100-15 (Test), Larger Unit Operations, was published in 1974. Unlike its predecessor, it provides no doctrine and guidance for establish-
ing, organizing, supporting and employing the theater army or a
numbered army. Nevertheless, it provides an extremely detailed
explanation of the corps' role in AirLand Battle as part of a
larger, forward-deployed theater as well as in its role in
contingency operations. Most significant are the scenarios it
projects and the theories which it applies in explaining how the
corps operates relative to the levels of war, as it fulfills its
major role in the "planning and execution of tactical-level
battles." It clearly points out that:

whatever its mission or composition, today's corps
is the central point on the air-land battlefield
where combat power is synchronized to achieve
tactical and operational advantage over the
enemy.\textsuperscript{81}

Of importance to an analysis of Desert Shield and Desert
Storm is a detailed discussion of the corps in contingency
operations. The chapter in FM 100-15 on that subject provides a
greater degree of the theory related to contingency operations
than its predecessors. Yet, it, like other publications, focuses
on a single corps, engaged in a joint operation of relatively
short duration that is conducted not in four phases, as indicated
in FM 63-3J, but in five phases: (1) predeployment/crisis
action; (2) deployment/initial combat operations; (3) force
buildup/combat operations; (4) decisive combat operations; and
(5) redeployment. It also recognizes an austere and constrained
combat service support environment. Additionally, it foresees
the need to augment the COSCOM with theater resources so that it
does not become "overstressed", especially in supplying common

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use items to other services. After more than forty years of evolution, it was this doctrinal base that Army forces used to joined with its sister services in forging the successes of Desert Shield and Storm.

TAACOM OR TASCOM

Just before Desert Shield

On 2 August 1990 when Iraq invaded Kuwait, the key Army component commander and planner was LTG John J. Yeosock, Commanding General, Third US Army and Army Forces, US Central Command (ARCENT) and Deputy Commanding General, US Forces Command. As he stated in an analysis of the Gulf War, his missions were essentially those of US Central Command (CENTCOM):

deter further Iraqi aggression, defend Saudi Arabia, enforce UN sanctions...eventually, develop an offensive capability to liberate Kuwait."  

His enemy was the fourth largest Army in the world. Battle hardened from a long war with Iran, it was manned by more than 600,000 soldiers and equipped with an array of modern weapons systems that included 4,200 tanks and Soviet SCUD missiles capable of striking deep into Saudi Arabia and Israel, and chemical munitions.

When the call came, US Central Command and its Army component had, in fact, just days before on 28 July 1990, concluded an exercise known as Internal Look that had been focused on a reoriented Middle East scenario. The most likely war it had
forecast was the one that they now faced in the open desert areas of Saudi Arabia against the Iraqis.85

During this exercise numerous shortcomings were identified. Among the most important of these was the fact that the troop list which had been used since the early 1980's in the Iranian scenario was woefully inadequate for the Arabian peninsula's terrain and the Iraqi forces. It needed heavier and more mobile forces than the original rapid deployment force concept had required and provided. While the original product of Internal Look increased the force by some 50,000 soldiers, it was still being called a regional contingency. To support and sustain this force would require even more reserve component soldiers than had previously been envisioned. This raised serious concerns about the politics associated with a partial mobilization. However, it was a beginning to preparing for what would come much sooner than expected.86

On 1 August 1990, General H. Norman Schwartzkopf, Commander in Chief, US Central Command (CINC, CENTCOM), returned from a briefing with the Joint Chiefs and telephonically instructed LTG Yeosock to put a team together to go with Yeosock and him to Saudi Arabia. Based on his assessment that the logistical effort would be the most difficult challenge of the operation, LTG Yeosock asked for and was given permission to take FORSCOM's senior logistician, BG(P) William Pagonis with him to fill that position for Third Army. BG Pagonis had been deputy commanding general of the 21st Support Command during a REFORGER exercise
(Return of Forces to Germany) in which General Yeosock also participated as a division commander from the United States. Together, they shared a common understanding of "force projection, reception of forces, onward movement, and sustainment of forces." 87

Echelons above Corps: Command and Control

Key to determining why the TASCOM appeared to be not only successful, but also the correct theater logistical force structure for Desert Shield/Desert Storm is an understanding of the command and control responsibilities that faced LTG Yeosock. In both his article in the October 1991 Army magazine and in a September 1991 briefing on the mission and functions of Third US Army/US Army Forces Central Command, LTG Yeosock focused on the what he labeled as the evolution of "three armies": the Army component command, a numbered army, and a theater army. None of these was unique to Army or joint doctrine; the fact that their missions were rolled up under one headquarters was. Perhaps what that same doctrine had failed to anticipate was a CINC who would exercise his joint doctrinal prerogative and treat each service as an individual component and the impact it would have on the Army when that occurred. 88

As LTG Yeosock describes it, Third Army, as a component command, was involved (1) in operating the communications zone, (2) supporting the other services with such common use supplies as fuel and ammunition, (3) planning for ground operations,
(4) coordinating with other services and allies for joint and combined operations, and (5) providing civil affairs support. As a numbered army, one which existing doctrine had said would be subordinate to either the theater army commander or theater commander and organized only as an exception to the theater army's normal command structure, it controlled two corps and balanced "Army resources in theater in accordance with the campaign plan and assigned mission and the maintenance of the Army's operational perspective." 89

LTG Yeosock's description of the Third Army's role as a theater army provides perhaps the most cogent insight into the force structure challenges faced in this major regional contingency. He stated:

Third Army formed EAC units when a requirement existed for specific missions and functions outside of the corps' tactical warfighting capabilities, or where functional organizations could better coordinate or supplement existing corps capabilities. The theater air defense brigade (11th Air Defense Artillery Brigade) and the 513th Military Intelligence Brigade are examples of the former. The Third Army Medical Command, Personnel Command, 416th Engineer Command, and 352d Civil Affairs Command are examples of the latter. The Support Command (SUPCOM) units were able both to supplement corps sustainment efforts directly and operate the theater communications zone. 90

Throughout the buildup, tailoring of the force was conducted not only under a rule of austerity, but also under that of balancing the force. It appeared that the need for combat forces to counter the immediate threat of further Iraqi aggression outweighed the earlier arrival of combat service support units. While the impacts of reserve call-ups, strategic transportation

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and other issues were not directly identified, it can be surmised that they in no small way contributed to this prioritization of deployment.

Nevertheless, the result was that the Army "generated a force in 80 days equivalent to that committed in Vietnam in one year after the first deployment of US combat forces." At its full strength, Third Army was much more than the "administrative and logistical headquarters" that doctrine described. It consisted of two corps and 26 EAC subordinate commands. Again, contrary to the forecast of doctrine, with the exception of the Army Special Operations Forces, Third Army had both command and operational control of these forces.

To command such a massive organization, LTG Yeosock divided the responsibilities into four segments. His deputy commander, Major General Robert Frix commanded Task Force Freedom in Kuwait as well as overseeing fourteen subordinate commands including three combat service support units, the Medical Command, the Personnel Command, and the Finance Command. When requirements for theater-level engineer operations grew large enough, the 416th Engineer Command, a reserve unit commanded by Major General Terence D. Mulcahy, was brought into the theater and reported directly to the Third Army commander.

Although its headquarters was organized under a Table of Organization and Equipment for a theater army area command (TAACOM), the 22d Support Command was responsible for command and control of eight subordinate combat support and combat service
support brigades and groups during Operation Desert Storm. These units operated prisoner of war camps and provided sustainment support in the areas of transportation, ammunition, petroleum, direct and general supply, maintenance, field services and procurement. Except for the fact that the 22d SUPCOM did not always exercise command and control the over the medical, personnel, and finance functions, it was for all intents and purposes a TASCOM. During the redeployment phase, after CENTCOM and ARCENT headquarters had returned to CONUS, the number of subordinate units was even larger.  

Why a TASCOM

In comparing the structure of a theater army with a TASCOM against that with a TAACOM, the obvious conclusion is that the only major difference is the level at which selected combat and combat service support functions are integrated. The TASCOM separates the theater army commander from the daily operations of combat service support and allows him to more evenly balance his other responsibilities, especially those directed to warfighting when he exercises operational control of the subordinate corps. On the other hand, under the TAACOM concept, the theater army commander and his staff are directly responsible for integrating the combat service support functions that would otherwise be assigned to the TASCOM commander and his staff.

Analysis of Desert Shield and Desert Storm from a doctrinal perspective could probably lead to the conclusion that either
alternative would have worked. Nevertheless, it appears for several reasons that the TASCOM offered distinct advantages in several areas.

The first and most prominent reason, as indicated earlier, was the sheer magnitude of the theater army's span of control. One staff orchestrating the activities of more than 25 separate units, each commanded by a colonel or general officer, would have been at best impossible. There were many unknowns in the mission and the planning for its execution, especially in the first few weeks. Would there be offensive operations, if so, when and where? Would the coalition remain stable, if so, what role would its forces play? These were just two of many difficult and unanswered questions. To have attempted to add the workload of such a span of control to the great uncertainty of the early situation would not have created an environment with a high probability for success.

Secondly, this was a major regional contingency in literally uncharted waters. Without a doubt, even before the VII Corps was added to the troop list, it was certainly one of much greater magnitude in size and duration than that described in the latest edition of FM 100-15. Desert Shield fell into the doctrinal void between the short, quick corps contingency operation like Just Cause and the conflict which escalated to war in an area like Europe or Korea that was manned with forward deployed forces.

Thirdly, the force was going into an area without existing US infrastructure. Granted there were some of the world's finest
ports and airfields, modern communications, and other significant host nation assets, but Saudi Arabia was not Europe or Korea. The force was deployed in "a vast, empty area, the size of the United States east of the Mississippi River, far from the US or European bases, with a hostile environment and an alien culture suspicious of outsiders." 94

The fourth reason was that it made sense from a unity of command perspective. As reports indicated, "Schwartzkopf and other Army leaders wanted one person in charge of the joint deployment to discourage competition among the services for limited resources." 95 While that person could have been the theater army commander as envisioned in Europe, the creation of the TASCOM allowed the Third Army commander to assure that he maintained his perspective of the operational level of war while the combat service support part of his mission was accomplished without his becoming bogged down in minutiae and daily operations. The terms so frequently used in describing the AirLand Battle, initiative, depth, agility, and synchronization, appear to demand this decentralization.

The last and perhaps most variable of the factors is that of the personality of the CINC. If BG Pagonis was the deputy commanding general for logistics of the Third US Army, then it appeared that he held the same title for CENTCOM as well. This fact was evident in the Congressional testimony of General Schwartzkopf in June 1991. From the accounts regarding getting more trucks and mashed potatoes to the soldiers to his vivid
description of the logistical planning process that went into preparing for the ground war, there appears to be no doubt that the CINC treated the 22d SUPCOM as if it were under the direct operational control of CENTCOM.96

Nevertheless, the question that really must be answered is not just whether the TAACOM or the TASCOM was the right force structure for the Gulf War. The key is determining whether our current doctrine and resultant force structure have utility for the future, based upon the experiences of Desert Shield and Desert Storm. Most importantly, as pointed out in the previous outline of the evolution of that doctrine, it is not an either or alternative or some variation thereof in terms of the TAACOM and the TASCOM. It is a question of what is the most suitable doctrine and force structure for the combined concepts of theater-level command and control and the theater-level logistics necessary to support a CONUS-based force when deployed. The success of the 22d SUPCOM, as a TASCOM and not as the prescribed TAACOM, indicates that there is room for improvement in our future doctrine.

THE FUTURE

To suggest that there is room for improvement in our future doctrine should be in no way interpreted as a condemnation of our current doctrine. Probably the greatest compliment that could be paid to our doctrine and those who implemented it is found in the November 1991 edition of the 22d SUPCOM's Logger News. It is a
competent, proud and winning Army that can claim not only c
whelming victory, but also that "not one tactical operation _
curtailed, postponed, delayed or canceled for the lack of logis-
tical support." The successes of Desert Shield and Desert
Storm were testimonials to the foresight and dedication of the
Army's leadership in pursuing a strategy of acquiring and main-
taining a technological edge over our opponents. Even more so,
however, they marked the leadership's devotion to developing
doctrine that maximizes not only the capabilities of that equip-
ment, but those of the soldiers who fight with it. And most
importantly, they demonstrated the value of unfaltering persis-
tence in training the force to meet both the spirit and the
intent of that doctrine.

In a very pragmatic way, Desert Shield and Desert Storm
could not have been programmed to occur at a more opportune time.
Although it was costly in human life, it gave the armed forces of
the United States an unequalled opportunity to test its doctrine,
training, soldiers, and equipment at a time when the world
situation was undergoing revolutionary change. With that in
mind, the remainder of this analysis is directed at areas for
future doctrinal and force structure exploration and development.

Redefine Operational Sustainment

If there is any basic lesson to be learned from the Gulf
War, it is that operational sustainment needs more definition and
explanation. Current doctrine has given perhaps too much weight
to the corps. While it is described as the centerpiece of the Army's force projection capability, its real sustainment needs may have been oversimplified. The thoughts outlined in the 1988 edition of FM 100-10, *Combat Service Support* appear to reflect that point. It would seem that, as experienced in Desert Shield and Desert Storm, operational sustainment is much more than "a staff and command function planned and controlled at echelons above corps." In comparing the very early introduction of a theater logistician to the Gulf War with the main theme of current sustainment doctrine that "as long as the COSCOM can support it (the major contingency operation), EAC CSS units will not be deployed", there is a distinct dichotomy. To continue such thinking avoids dealing with the basic difference between a Desert Storm and a Just Cause. It fails to consider that there might be a need for a TASCOM-type organization in the active force when a major regional contingency exceeds the corps' capability. More significantly, it ignores the possibility that in any contingency, regardless of size, there may be an operational sustainment need above that of the corps' capability. Perhaps there is a need to logistically prepare or shape the AirLand Operations battlefield of the future just like doctrine prescribes for the intelligence function or as was done with the air war in Desert Storm. The forward deployed forces in Europe and Korea have been shaping the battlefield logistically for over forty years.
Relook History from the Operational Level

Perhaps one of the best ways to define and understand operational sustainment is by relooking the conflicts of the last forty years from perspective of the operational level. It would appear from the Army's current efforts in the coordinating draft of FM 100-7, The Army in Theater Operations and the Combined Arms Command's proposed EAC Command and Control Whitepaper that there is an acknowledged shortfall in doctrine in dealing with theater-level issues and major regional contingencies.\textsuperscript{100} Combined with current projections for the future, as found in Training and Doctrine Command Pamphlet 525-25, AirLand Operations, the study of the Korean conflict and the Vietnam War could not only shed new light on current and future doctrinal and force structure concerns, but also aid in fully defining and understanding operational sustainment and its relationship to tactics and strategy.\textsuperscript{101}

Two very simple examples show the types of situations that should be analyzed. In both these major regional conflicts, Korean and Vietnam, the Army operated under the doctrine where all logistical support, other than that in the division trains or the DISCOM, came from the theater logistics command. Both were much like Desert Storm, very distant and with no forward US presence. In the Korean War, it appears that the theater headquarters could function well in the only administrative and logistical headquarters mode. Doctor James Huston, author of the well known Sinews of War, a history of World War II logistics, pointed
that out in a 1957 analysis of the Korean conflict:

With no tactical functions, the theater army headquarters, in this case Army Forces, Far East, was concerned almost wholly with administration and logistics. In this circumstances a separate theater communications zone headquarters would have been superfluous.102

On the other hand, in its detailed review of the Vietnam War, the Joint Logistics Review Board listed as its first priority the need for the earlier introduction of a theater logistical command in support of a nonforward-deployed force.103 Both of these situations have the potential for providing valuable insight into the future.

Avoid the Joint Logistical Force Solution

As early as 1946 a document was written that proposed the joint logistics doctrine that would be codified after passage of the National Security Act of 1947.104 From that time to the present, there have been articles proposing the formation of joint logistical organizations.105 There is also great merit to the prediction in Don Snider's 1987 analysis of the effects of the Goldwater-Nichols Department of Defense Reorganization Act of 1986, wherein he states that "Congress is not finished with reform of our national security processes, either within DOD or externally."106

Nevertheless, while there is no doubt that the "future is joint", a joint logistical force is not a panacea.107 If, as Snider further suggests, "for the Army...this is an excellent time to reassess its own position...to see if there are new
opportunities for Army contributions, this assessment must be a logical and detailed process. Without a truly viable understanding of sustainment and its requirements in terms of systems and organizations at all three levels of war, rushing headlong into jointness will not solve the problem.

Pay the Price

If the result of redefining operational sustainment in terms of the new AirLand Operations doctrine and the scenarios of the future indicate the need to restructure our theater army forces to include a TASCOM, then the Army must be willing to pay the price. Interestingly enough, a study based upon an analysis of World War II and Korea by the Army Command and General Staff College in 1957 reached that conclusion in projecting changes that would be required in administrative support (combat service support) for success on the atomic battlefield. That study envisioned that future wars would find "US forces fighting under the United Nations flag" with communications zones that might be geographically separated from the combat zone or included in it. This prediction is remarkable in its similarity to current contingency operations doctrine. In offering solutions to successfully operating in that environment, the study went on to state:

A headquarters is not expensive in manpower if it contributes to the over-all effectiveness of the organization and if it expedites the performance of the support mission... it will be necessary to provide some organization capable of achieving a smooth transition of supply and other support from
the Zone of the Interior to the combat forces in
the field.\textsuperscript{109}

In February 1991 article on AirLand Battle Future, the former
commander of the Training and Doctrine Command, General John W.
Foss, predicted that "the COSCOM commander would be more involved
in real-time logistics, both moving supplies up for the next
day's battle and the throughput of supplies for the current
battle."\textsuperscript{110} These thoughts amplify the need to evaluate the
TASCOM concept as a solution to future operational sustainment
needs. This is especially true when taken in light of current
document which seems to limit the corps' capability and to
relegate it to that of operating in the upper limits of the
tactical level of war, interpreting, not developing operational
level intentions, and functioning within a 72-hour planning
horizon.\textsuperscript{111}

Read FM 63-3J, Chapter 11

In discussing contingency operations, FM 63-3J provides the
greatest imperative for resolving current doctrinal shortfalls.
It gives a "historical perspective" in its Chapter 11 that per-
haps should be mandatory reading for all those conducting contin-
gency planning or writing future doctrine. This chapter points
out a lesson which was apparently relearned in the Gulf War:

Analyses of previous United States combat opera-
tions have revealed that the Army needs a CSS
management organization that is actually in being
and ready for deployment to a contingency area.
When this was not accomplished, there was a lack
of preparedness, and inefficient management....... 
...these early problems in the support system were
usually manifested by an apparent shortage of supply. When the initial problems were overcome the lack of adequate prior planning reversed the problem from shortages to uncontrollable excesses...some of the specific details of this situation were the inability to control shipping coming into the contingency area and to quickly clear ports of incoming cargo...inability to establish inventory control of supplies...inability to establish a timely requisition system to CONUS.

A significant effort is now being expended on fixing the distribution system in response to the Gulf War's similar lessons learned. Although formal documentation is not yet available, there are indications that in the near future the COSCOM will be linked to the divisions and corps units they support while in garrison just as they were in the Gulf War. Material management and movement control centers will assume their true wartime functions across several installations in order to provide more realistic training and greater readiness.

With this in mind, is there not a place for the TASCOM headquarters and its management centers in peacetime to add even greater realism to training and provide for greater deployment readiness and contingency plan execution? Should the strategic sustainment base continue to be linked directly to the deploying corps force or should there be a theater-level support force that aids in the critical initial deployment period? Should that headquarters work to assure that the pitfalls outlined in FM 63-4 3J regarding nonforward-deployed contingency operations are avoided?
CONCLUSION

This paper was initially directed at analyzing the Gulf War in order to answer the question of whether the Army should reinstitute the doctrine that provided the theater army with a support command or TASCOM. Through a rather extensive amount of research it reached two conclusions. First, that in terms of the mission, enemy, terrain, troops, and time available (most commonly known as METT-T) during Operations Desert Shield/Desert Storm, implementing the TASCOM, even if on an ad hoc basis, made more sense than organizing the theater army headquarters to fulfill that function in accordance with current doctrine. Secondly, the key to success in the future can be best assured by fully defining the operational level art of sustainment before adopting structural changes solely based upon the Desert Shield/Desert Storm experience.

The goal of the doctrine and force structure development process for the future is formidable. General Gordon R. Sullivan, Army Chief of Staff, says in discussing the current process of revising doctrine that:

We all share in the challenge to ensure we arrive at a doctrine that balances continuity and change, is adaptable and realistic.113

Perhaps a quotation of LTG James M. Gavin is also an appropriate way to end this pursuit for it identifies a major cause for concern when deciding what is retained for the future and what is not:

Organizations created to fight the last war better are not going to win the next.114
ENDNOTES


8. Ibid., 78.


10. Ibid., 154.


16. Ibid., 15.

18. Ibid., 8-13.


22. Ibid., 9, 67-78.


24. Ibid., 24-25.


27. House, 158.

28. Ibid., 159.

29. Brinkley, 81.


33. Ibid., 5-9.

34. Ibid., 5.


38. Schlotzhauser, 5-6.

39. Ibid., 13.


43. Ibid., 2-9.

44. Ibid., 2-11.

45. Ibid., 2-12.


48. Doughty, 40-42.


51. Stuckey, 41.


59. Ibid., 8-1.

60. House, 189.


64. Romjue, 31.


66. Romjue, 61.


68. Ibid., 65.

69. Romjue, 68.

70. FM 100-5, August 1982, 2-1, 2-2.

71. Romjue, 71-72.


77. Ibid., 11-6.


82. Ibid., 8-2 thru 8-4.


85. Donnelly, 12.

86. Ibid.

87. Ibid., 13.

88. Yeosock, 45.

89. Ibid., 50.

90. Ibid., 48.

91. Ibid., 47.

92. Ibid., 47-48.

94. Yeosock, 47.


98. FM 100-10, February 1988, 2-3.


108. Snider, 88.


111. FM 100-15, September 1989, 1-1.

112. FM 63-3J, 11-2 thru 11-3.


114. Wiltshire, 2.
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