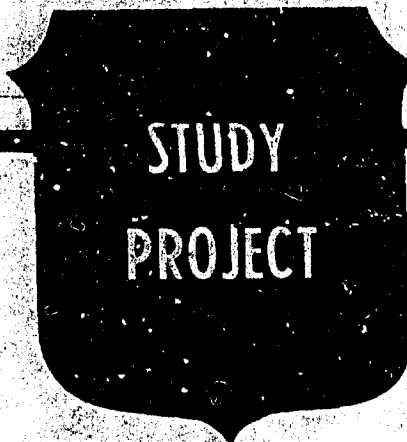


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ARMORED CAVALRY AND RECONNAISSANCE  
A DOCTRINAL SHORTFALL IN FORCE STRUCTURE

BY

LIEUTENANT COLONEL CHARLES A. ROUSEK

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by

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With recent cuts to the overall defense budget, the reductions in U.S. Army force structure, and the probability of an INF treaty ratification, the challenge to maintain an adequate and viable conventional deterrent is greater now than it has been for several decades. This study seeks to: analyze the army's active force structure; justify, through doctrine and history, the imbalance of this force to conduct the operational level of war; and suggest a recommended force to correct a part of this deficiency. To assess the imbalance several constants were maintained, e.g., the retention of the 18 active divisions and an end strength capped at 772,300. Substantiation for the imbalance is accomplished by historical examples, references to FM 100-5, Operations, an examination of the Division Force Equivalent (DFE), Clausewitz, and several recent force structure actions.

Additional findings and recommendations which coincide with the main thesis are also provided. These include the need: to apply the methodology for analysis to other arms and services; to establish and resource a well defined Division Force Equivalent / Corps Force Equivalent (DFE/CFE); to develop and field doctrinal resources for the army's light forces, i.e., a Light Armored Cavalry Regiment; and, to structure the 3 tiers of the "Total Army" so that each component adds to, not depends on, the warfighting capabilities of the other.

While the principal issue is the inclusion of 3 Armored Cavalry Regiments to our current force, the objective is the recognition of the requirement to correct the balance of the total force. This balanced force will provide the U.S. Army a relative warfighting posture capable of exceeding its strength limitations in achieving the objective of deterrence.

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ARMORED CAVALRY AND RECONNAISSANCE  
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CHAPTER I

INTRODUCTION

"The calculus of deterrence and defense is far more complicated than just static numbers. At least as important are the performance characteristics of the weapons, the quality of people operating them, and the tactics used. Moreover, geography and the unique features of a specific security mission decisively affect the military forces needed. These variables, plus others, are weighed against the threat to our security in determining our concrete military needs for protecting U. S. interests and meeting our commitments."<sup>1</sup>

Theories, policies, and even national strategy are basically all rhetoric or 'panache without substance' unless properly resourced and sustained. Past United States strategy and policy directed resources to the nuclear component of our defense triad in order to maintain a strong deterrent, but today these strategies and policies have changed.

↓  
The parity of nuclear weapons between the United States and the Soviet Union has elevated the need and priority to continue our build-up and maintenance of a strong conventional force to insure a viable deterrent. Since 1980, the Congress and the Defense establishment have recognized our conventional military inferiority to the Soviets "correlation of forces". National defense policies are now directed toward achieving, as quickly as possible, an adequate balance of forces, both between and within the services.<sup>2</sup>

The success of balancing our land forces, specifically within the U.S. Army, has been limited. There is, as the text of this paper will substantiate, a critical shortfall in the balance and mix of our combat forces to implement and sustain our national defense and military strategy. Further aggravating this force imbalance and delineating a narrower scope of interest, is the army's renewed concern and recognition of the neglect, since World War II, in the Operational Art of warfare. It is this level, the operational level, that our force imbalance is most apparent.

One of the most significant structural voids contributing to this imbalance is in the arm of Cavalry. Thus, the purpose of this paper will be to (1) substantiate the historical and doctrinal requirements for cavalry; (2) present the current force imbalance, i.e., the authorization of 3 Armored Cavalry Regiments (ACR) for 6 Corps versus a <sup>4</sup> Request Rapid Deployment, Military Force Levels, conventional warfare. (JTS) ←

one to one ratio; (3) provide a recommended force to increase the ACR structure while retaining 18 active divisions with an end strength of 772,300; (4) introduce an evolutionary organization, a Light Armored Cavalry Regiment to correspond to the doctrine of light forces; and, (5) provide a methodology for the use in evaluating the requisite balance of other arms and services necessary to plan and execute the operational level of war.

## ORGANIZATION

To justify and support a minimum requirement for the proper balance and mix of cavalry, specific examples of history and doctrine are cited as the principal arguments. Chapter II provides a historical overview to allow for the readers knowledge as to the role of cavalry in the past, to document the current need, and to support the basis for the evolution of doctrine.<sup>3</sup>

Chapter III concentrates on the doctrinal requirement for cavalry using Field Manual 100-5, Operations, (FM 100-5) as the cornerstone. Additional fundamental and authoritative doctrinal rules and principles, which guide our actions in attaining national objectives, are also provided.<sup>4</sup>

Chapter IV addresses the current force, specifically concentrating on the combat arms from Corps to separate battalions. A detailed accounting is contained in Annex B.

Chapter V provides a recommended force with the major change being the inclusion of 3 additional Armored Cavalry Regiments. This structure assumes the necessity to retain the 18 active divisions while also implementing a Department of Defense directed manpower space reduction. The resulting active duty end strength will be capped at 772,300.<sup>5</sup> Detailed accounting and explanations are found in Annex C.

Chapter VI summarizes the advantages and lists the recommendations which should be implemented to correct other current force imbalances. These advantages are in addition to the enhancement of our warfighting capabilities at the operational level of war.

#### ASSERTIONS

Within the scope of this document the term cavalry is used in recognizing the spectrum and evolution of this arm from Dragoons and Regiments of Mounted Riflemen to mounted and dismounted scouts, Divisional Cavalry, Armored Cavalry Regiments (ACR), and Air Cavalry.

In addition, the scope of this analysis deals primarily with the active or standing army and not the Army Reserve or National Guard. Recognition is given to the 'One or Total Army' concept but: (1) this is considered more of a theory than a combat tested practice and is disproportionate in its structural balance and mix with respect to the active army; (2) it is the contention of this writer that the respective

components of the Army be structured and resourced as a balanced mix of forces within each tier for employment as packages and not individual parts; and, (3) the basic mission and role of cavalry to be deployed first in executing a lodgement or as a security force is to protect follow-on forces and/or major units and dictates its need in the standing army. A requirement for restructuring the National Guard and Reserves is necessary; however, the priority for correcting the imbalance must begin with the active force and will be the primary scope of this paper.

Finally, the shortfall of cavalry in our force structure is not presumed to be an isolated case. There are other voids within the combat, combat support, and combat service support arms. To analyze and document each of these cases individually would entail the development of an encyclopedic series versus the few short chapters used here to convey the requirement, justification, and substantiation for one variable. I would recommend that further assessments of the other arms and services be applied to the methodology, logic, and thought provided. Determination of additional corrections should then be made to fully balance our force structure.

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ARMORED CAVALRY AND RECONNAISSANCE  
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CHAPTER II

HISTORICAL DOCUMENTATION

"If men could learn from history, what lessons it might teach us! But passion and party blind our eyes, and the light which experience gives is a lantern on the stern, which shines only on the waves behind us!"

Samuel Taylor Coleridge  
18 Dec 1831

The words of Samuel Taylor Coleridge are as pertinent today as they were in 1831. There are few among us who do not express the merits of reading, studying, and applying history to prevent repetitions of the past. The problem one often finds is that personal parochialisms often limit our focus and while we concentrate on the parts we fail to see the whole. In examining force structure, divisions can be construed as the parts, while a balanced force mix using the corps as the base, to provide combat, combat support and combat service support, is the whole.

History provides the documentation for the requirement to maintain a proportionate share of the parts in a resource constrained whole. The following review of specific historical examples is a method of examining the whole by the respective parts, in this case cavalry. This review is not intended to provide a historical synopsis of cavalry but to provide enough substantive evidence to justify the need for this critical warfighting asset.

Philosophies and examples cited are separate and distinct. The methodology, however, demonstrates the variety and amounts of documentation which exist to support the requirement for a balanced proportion of cavalry to be included in the active force.

#### CLAUSEWITZ

In assessing our military force requirements to project a global warfighting capability it is evident we cannot maintain a standing profession of arms capable of satisfying all of the specific needs. Thus, we are confronted with the recurring dilemma of solving the questions of how much and of what type of forces are necessary, within constrained resources, to satisfy our national strategies and policies, i.e., deterrence.<sup>2</sup>

Clausewitz, supported in theory by Jomini, recognized that if a nation was unable to maintain a force that was by itself superior in numbers then "the forces available must

be deployed with such skill that even in the absence of an absolute superiority, a relative superiority is attained at the decisive point."<sup>3</sup> The application of Clausewitz's thought was in reference to actual warfighting; however, I would contend that it is as equally as important to war preparedness. Thus, recognizing our economic and manpower constraints on achieving, let alone maintaining, a numerically superior force, our balance and mix must be structured to develop a relative superiority, i.e., the synergism of the proportionate parts of the whole.

#### U.S. ARMY CHRONOLOGICAL HISTORY

Even a hasty review of the U.S. Army's chronological history reflects the importance of maintaining an adequate balance of cavalry in the active force. In 1774, General George Washington recognized the value of mounted militia as cavalry and recommended to Congress that they authorize one or more mounted regiments in the Continental Army.<sup>4</sup> Since that time cavalry has experienced, at a minimum, 19 major force structure revisions. These changes varied in extremes from: a minimal force in name and cadre strength only, 1783-1810; elimination completely, 1815-1833; composition of one fifth of the total army force, 1901-1916, to more than quadrupling in force from 13,000 to 53,000 in 1941, and subsequently expanding to 92,000 spaces by 1945. Nine of the 19 structure changes involved, in most cases, mass

increases in the quantity of cavalry organizations.<sup>5</sup> While most of these increases were related to impending or actual conflicts or wars, from the Revolutionary War to Vietnam, history has shown that nations have recognized the importance of retaining a higher percentage of cavalry in their 'peacetime' military structure in order to maintain war preparedness. A specific example of the maintenance of a proper ratio of cavalry to combat divisions was evidenced in the U.S. Army's implementation of a major force structure change, the Combat Arms Regimental System (CARS). In 1959 the United States Army consisted of 15 divisions and 9 ACR's while operating within an end strength of 861,964.<sup>6</sup> Today, with the Army of Excellence, we find 18 divisions and only 3 ACR's contained within an end strength of 781,000 (772,300 by 1 Oct 1988). There is a disproportionate balance in decreasing the end strength by 89,664 and reducing the number of ACR's by 6, while increasing the number of divisions by 3.

#### CIVIL WAR

The importance and requirement for cavalry during the Civil War was demonstrated by both the North and the South.

In the case of the Union Army, the significance of cavalry resulted in a specific force structure rule being developed and implemented. On the initiation of hostilities two problems existed in the North's use of and experience

with cavalry. The first involved the existing deployment of the Union's 5 regiments to the western frontiers. Their geographic locations prevented the immediate commitment of these regiments against the South, i.e., the Battle of Bull Run in July 1861. The unavailability of the cavalry regiments was assessed as a detriment to the union's ability to have had a more positive influence on the early engagements of the war.<sup>7</sup> The second issue, compounding the geographic stationing of the unions cavalry, was the fact union military leaders of the day did not understand the mobility, shock effect, or potential value of cavalry.<sup>8</sup>

By the end of the war the Union, learning from experience, had expanded its cavalry structure from 5 to 272 regiments and added 45 separate battalions and 78 companies. This expansion of force structure and resulting doctrinal use of cavalry directly influenced the establishment of a "Rule of Service" which specified that one or more cavalry regiments would be assigned to each combat division.<sup>9</sup> Of note, the South, while no absolute records are known, was estimated to have increased its cavalry to 137 regiments, 143 separate battalions, and 101 companies by the termination of the war.

The example of the South's use of cavalry, is in fact, an example of their failure to use the capabilities of this arm of service to its full potential and value. The scene is the Battle of Gettysburg and the interpretation is that of Michael Shaara from his book The Killer Angles.

General Lee who, when confronted with the lack of knowledge on the whereabouts of General Jeb Stuart and the army's cavalry, said that without "the eyes of the army" he was blind as to the enemy's movements and intentions.<sup>10</sup> General Lee further exclaimed that "without cavalry in the rear no victory would be complete."<sup>11</sup> Stuart's failure to provide this necessary reconnaissance and depth directly resulted in Lee's poor operational and tactical decisions which included his decision to attack the Union Army and his positioning of confederate forces, i.e., Hood's division in the vicinity of Devil's Den. Had Lee been informed by Stuart that the right flank was unprotected, as Hood expected but was unable to confirm to Lee, these decisions and the outcome of the Battle of Gettysburg may well have been different.<sup>12</sup>

## WORLD WAR II

A force ratio of cavalry to the sum of the force, as developed during the Civil War, was evidenced in the U.S. Army structure between World War I and World War II. While the overall ranks of the army were thinned, a deliberate decision was made to retain 14 regimental organizations at a reduced but operative strength. The stated intent for this decision was to allow cavalry to take to the field on short notice if so required. These organizations were designed to

enhance the firepower and mobility of the force while reducing the overhead.<sup>13</sup>

On the outbreak of World War II, additional cavalry was again recognized as a necessity for combat operations. The expansion of the army to meet and defeat the aggression resulted in the immediate, fourfold increase of cavalry structure to the force. The growth of cavalry continued to expand until the end of the war when it equated to 92,000 men.

Of more importance for referencing the historical needs and requirements of cavalry to World War II is the requirement to document its flexibility and versatility. Overall, the missions conducted by cavalry equated to: (1) holding and defensive actions, 33 percent; (2) special operations, mobile reserves, and rear area security, 29 percent; (3) screens, guards, and security of other arms, 25 percent; (4) offensive combat and exploitation, 10 percent; and, (5) reconnaissance, 3 percent.<sup>14</sup>

A specific example of cavalry's employment was General Patton's use of the 6th Cavalry Group, assigned to the Third Army, in Europe. Through the use of their speed and equipment the 6th Cavalry Group was able to maintain contact and provide orders and instructions to all the elements of the Third Army, which were dispersed at times, over a hundred miles from one another.<sup>15</sup>

Even after the end of the war there was an unusual need for cavalry's highly mobile and flexible organizations to

perform the requirements of occupational forces. A majority of these needs were filled by cavalry units until 1952, when the last of the Constabulary Brigades and Squadrons (cavalry) were inactivated.<sup>16</sup>

#### 1967 ARAB-ISRAELI WAR

The evolution of time and technology have only added to the requirements for cavalry: The 1967 Arab-Israeli War and the Crimean War, 1853- 1856, revealed remarkable similarities. In the latter the decimation of the Light Brigade at Balaklava taught that the advancement of forces unprotected by cavalry is disastrous.<sup>17</sup> In the former, General Sharon's use of surprise on the enemy flanks and rear resulted in the ambush and destruction of an unprotected Egyptian mechanized brigade at Nakhl. The resulting carnage was simply termed "Death Valley".<sup>18</sup> The need for adequate security and/or guard forces for combat units has withstood the test of time, by these examples, for over 110 years. If we should choose to ignore this lesson from the past we may repeat the outcome in the future.

#### VIETNAM

While some might not expect the Vietnam conflict to add to the historical justification and substantiation for

cavalry, the opposite is true. There are two very significant aspects which enhanced the role of cavalry during this period of our history.

With the development and procurement of the helicopter and its inclusion as a 3rd dimension to the force, Air Cavalry was added to Divisional Cavalry and ACR's in 1963.<sup>19</sup> Technology has added Air Cavalry which improves not only the reconnaissance and security functions and roles, but also the magnitude of cavalry's mobility and firepower. As such, the traditional role of the infantry soldier, who was the main force in combat as a finding and fixing force, is no longer required in the strengths and configurations as have been common in the past. These roles can and should be performed by "small, mobile, and highly armed units of the type used so effectively in Vietnam by air and armored cavalry units."<sup>20</sup>

The second aspect was the requirement during this period for new and lighter equipment. The development of the M551, General Sheridan in 1965, provided a revolutionary new armor system.<sup>21</sup> The equipping of cavalry with Sheridans provided more lethality and mobility while expanding the scope of cavalry's operable terrain. The application of a concept for lighter cavalry is necessary today for operations in tropical climates and terrain but more importantly, there is a need for cavalry units structured toward the organization and support for the lighter spectrum of our forces, i.e., I Corps and XVIII Corps.

## SUMMARY

The necessity to achieve and maintain a balanced force within the whole is clearly documented in history, both past and present. Analysis of a specific part of the total force, cavalry, substantiates the requirement for a force structure equation to establish a proportionate ratio of each of the parts in developing the whole. History provides the blueprint to achieve the balanced force. Technology in weapons and systems adds the materials to strengthen the construction of the force. Doctrine, which evolves from and is refined by history, directs the 'how to' in employment of the force.

The balance of cavalry as evidenced by history is in disproportion to the whole. The force ratio is not only in percentages, i.e., 3 ACR's to 18 divisions and 6 corps, but also in the type and composition of cavalry organizations supporting the force, i.e., Heavy versus Light. Determination of the correct ratio and composition of cavalry, a particular part of the whole, is explained in the next chapter.

The point to remember from this brief analysis of history is we should not repeat the paradox the Israelis suffered when they committed the basic errors in the Yom Kippur War which evolved from their victory in the Six Day War - the structuring and resourcing of their force in an unbalanced manner.<sup>22</sup>

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CHAPTER III

DOCTRINE

"An army's fundamental doctrine is the condensed expression of its approach to fighting campaigns, major operations, battles and engagements. Tactics, techniques, procedures, organizations, support structure, equipment and training must all derive from it. It must be rooted in time vested theories and principles, yet forward looking and adaptable to changing technologies, threats, and missions. It must be definitive enough to guide operations, yet versatile enough to accomodate a wide variety of worldwide situations. Finally, to be usefull, doctrine must be uniformly known and understood."<sup>1</sup>

The requirements and justification for cavalry are clearly documented in the above definition. The shortfall is the incomplete or inadequate application of the last sentence, i.e., "to be useful, doctrine must be uniformly known and understood." I contend that doctrine must also be sufficiently resourced which, it is not.

U.S. military strategy, to develop a winning combination for potential battlefields, is based upon the premise that a well defined doctrine may be executed by even more capable forces in revolutionizing warfare. Programs designed to achieve the goals of a well defined doctrine and a more capable force are qualitative versus quantitative.<sup>2</sup>

The development of doctrine has been accomplished with the dynamics of FM 100-5, Operations. The achievement of a capable force has only been partially satisfied. This partial achievement is especially true when the force as a whole, examined by the respective parts, is assessed against qualitative versus quantitative scales. In addition, consideration of the required balance and composition of forces provided by the following examples of doctrine must also be applied.

The analysis contained in this chapter concentrates on the doctrinal requirements stipulated in the army's keystone fighting manual FM 100-5. Supporting doctrine, the Division Force Equivalent (DFE), and additional theories by Clausewitz are provided to add weight and merit to this field manual. Further, recent force structure changes and initiatives are listed to illustrate some of the army's attempts to correct these doctrinal shortfalls. Again, the specific shortfall which is examined is the requirement and ratio for cavalry in a balanced force.

The evolution and content of Airland Battle Doctrine contained in FM 100-5 clearly expresses the U.S. Army's approach to fighting campaigns, major operations, battles and engagements. To ensure our unity of effort and future successes in battle FM 100-5 also provides examples of the types and amounts of forces required to achieve these tactical, operational, and strategic goals. One specific reference is contained in the explanation for the conduct of operation for a corps execution of the covering force. Forces required are listed as "one or more armored cavalry regiments because they are specially organized, trained, and equipped for security missions." 3

Additional references and requirements for cavalry in FM 100-5 are found in: Chapter 3, Major Functional Areas - Maneuver (Cavalry)<sup>4</sup>; Part II, Offensive Operations<sup>5</sup>; Part III, Defensive Operations<sup>6</sup>; and, Appendix C, Echelons of Command.<sup>7</sup> The significance is, our corps: (1) in half the cases, 3 of 6, do not have even one ACR assigned, and (2) will require them, one or more, prior to the initiation of hostilities to satisfy the purpose for establishing security.

Another method of assessing the needs for cavalry may be accomplished by an examination of Airland Battle doctrine's basic tenants and combat imperatives. The tenants are the basis for the development of all U.S. Army doctrine, tactics, and techniques. The imperatives prescribe the key operating requirements.<sup>8</sup>

Basic Tenants:

Initiative  
Depth

Agility  
Synchronization

Combat Imperatives:

- Ensure unity of effort
- Anticipate events on the battlefield
- Concentrate combat power against enemy vulnerabilities
- Designate, sustain, and shift the main effort
- Press the fight
- Move fast, strike hard, and finish rapidly
- Use terrain, weather, deception, and OPSEC
- Conserve strength for decisive action
- Combine arms and sister services to complement and reinforce
- Understand the effects of battle on soldiers, units, and leaders

These tenants and combat imperatives are, in most instances, a repetition of the definition, missions, structure, and training concepts of cavalry. While organized for the specific purposes of surveillance, security, and reconnaissance, cavalry is extremely capable of and more often tasked to conduct economy of force missions (see historical reference to WW II, Chapter II). Cavalry's flexibility also provides for the execution of multiple missions simultaneously. Organized as a combined arms team for continuous combat operations and sustainment in all types of terrain and under all weather conditions its combined firepower, mobility, and shock effect make it the Army's most flexible and versatile maneuver organization.<sup>9</sup>

Cavalry is not the answer to all our needs, nor is there an inference that other units which, when properly task organized, supported, and trained cannot accomplish and duplicate these missions and roles. Cavalry is, however,

doctrinally organized, structured, and equipped to accomplish these tenants and combat imperatives without the necessity for additional time, resources, and training.

In addition, the structure and allocation of the army's divisions and separate brigades are designed, equipped, and trained for their doctrinal role in conducting the close battle. The close battle however, is only 1 of the 3 areas of combat operations specified by FM 100-5 for our concentration, i.e., the Deep, Close, and Rear battles. Thus, we are still confronted with the problem of who and what will execute the land force role as the nucleus of the deep battle and the specifics of the rear battle. It will not be prudent to rob Peter (the divisions structured and trained to conduct the main battle) to pay Paul (the allocation of cavalry forces for the deep and rear battle). The resolution and established doctrine implies cavalry, specifically for the rear battle and as a nucleus for the deep battle, however the resources, i.e., number of units, defy this solution.

#### DIVISION FORCE EQUIVALENT (DFE)

An examination of the Division Force Equivalent (DFE) further supports the doctrinal requirement for additional cavalry organizations. Complementing FM 100-5's definition

of doctrine, as it applies to deriving organizations and structure, the DFE specifies the composition of the force.<sup>10</sup>

Established as a 'doctrinal' force accounting tool the DFE consists of a fully structured division with all the support necessary to provide warfighting and sustaining capabilities. Within the DFE force are arms and service organizations which are categorized into three increments: the Divisional Increment (DI); the Nondivisional Combat Increment (NDCI); and the Tactical Support Increment (TSI).<sup>11</sup> Cavalry, while classified as a combat element by Concepts Analysis Agency<sup>12</sup>, is included within the DFE as part of the NDCI. It is a corps asset for the conduct of the operational level of war and provides support for divisions.<sup>13</sup> Although this is not a one for one ratio (one ACR to one Division) an examination of today's doctrine, historical substantiation, and an analysis of the CINC's warfighting requirements would easily justify one ACR per Corps. This balance is not in existence within our active (or reserve) forces.

Supporting the need for designated forces to conduct the rear battle, providing a nucleus for or the execution of the deep battle, and establishing an adequate force ratio of 1 ACR per corps, were the subjects of a study conducted in 1970, by senior commanders and retired general officers. Their recommendation for a small field army to replace the corps consisted of a force of 4 divisions as the base with one separate brigade and two armored cavalry regiments.

These additions provided the commander with adequate forces for screening and rear area battles.<sup>14</sup> Sufficient combat and combat service support was also necessary to allow for self-sustainment. These requirements are very similar with the doctrinal requirements listed in Airland Battle, the major difference being, the senior commanders and generals specified the detailed resource requirements to accomplish the doctrine.

The problem arises in our inconsistency to field these organizations in accordance with established requirements and doctrinal needs. On the contrary, it appears that to justify these resource shortcomings, definitions are changed to compensate for the gray areas.

As early as World War II the army established a balanced divisional slice of "auxiliary administrative troops" at 45,000.<sup>15</sup> In 1970 the definition of the Division Force Equivalent, which was capped at 48,000 spaces (16K - DI, 12K - NDCI, and 20K - TSI, Annex A), was:

"A division force is a division including its assigned maneuver battalions, organic combat support and combat service support units, and the nondivisional support units (or the proportionate share of nondivisional support units when more than one division is deployed in the same area) within the theater of operations which are necessary to support operations of the division in combat."<sup>16</sup>

The version which is applicable today, pending the expected revision of Army Regulation 71-11: Total Army

Analysis, was established in 1982, and still uses a base strength of 48K:

"A notional portrayal, based on a world-wide average of the number of troops required to man a typical division and its supporting units in sustained combat. The DFE includes divisional, nondivisional combat, and tactical support units within the Theater of Operations. Nondivisional combat units include separate brigades, armored cavalry regiments, and nondivisional units of field artillery, air defense artillery, combat aviation, and combat engineers. Tactical support units include noncombat units in support of, but not part of, division or nondivisional combat units."<sup>17</sup>

However, a 1988 definition discloses not only weaker language but a DFE strength now computed at 39+ K:

"A DFE is a fully structured division with all support necessary to provide warfighting and sustaining capabilities. It includes the division and all nondivisional combat, combat support and combat service support units required to support the division within a theater of operations. The DFE is divided into three increments: a Division Increment (DI), a Nondivisional Combat Increment (NDCI), and a Tactical Support Increment (TSI). These increments are notional planning concepts and are not standard organizations. Their composition depends on the type of division supported, the mission, the environment, the tempo of activity, and the overall force employed."<sup>18</sup>

The difficulty with the most recent definitions, 1982 and 1988, is in comprehending how the army plans to satisfy its doctrine with "notional units", the diversity in the

variables of the 1988 definition's the last sentence, and at decreased strengths.

The answer may not lie in the original 48K, but even when considering the 10K Light Divisions, the totals and subsequent average DFE requirements may be very similar. Light force requirements must consider the added number of NDCI and TSI that are required to sustain and support Light, Airborne, and Motorized Divisions compared to the combat support and combat service support infrastructure built into heavy divisions. A different consistency of forces between the varied types of divisions will evolve but the resulting numbers will, in all probability, be close to the original 48K.

The Army needs to reevaluate the equation for all types of divisions and establish a 'mean' definition for conditions, tempo, and environments to provide a tangible force package which: (1) adequately resources the light forces as well as the heavy; (2) is understood by the Army as a whole; and, (3) is marketable to Congress. The DFE could then be explained to the decision makers in the same manner as the U.S. Navy markets their Carrier Battle Group, the Marines market a Marine Expeditionary Force (formally a Marine Amphibious Force (MAF)), and the Air Force markets a type wing.

Regardless, the requirement for cavalry exists within all the definitions of the DFE. The total number of units may not be attainable, i.e., a recommended 2 ACR's per

corps, but we must field, as a minimum, one per corps. This would require the activation of 3 additional ACR's to correct the current shortfall.

#### CLAUSEWITZ

FM 100-5 uses several references to Carl von Clausewitz in substantiating its doctrine. As such, the application of his thoughts and theories on the doctrinal requirements for cavalry are also considered appropriate.

While Clausewitz classifies the three main branches of services as infantry, cavalry, and artillery, there is a valid argument that cavalry may be substituted today with armor. This substitution is acceptable and logical but not in a total one for one exchange. There are other branches of service today, besides armor, which were not applicable in Clausewitz era. Each of these arms and services now contribute to the outcome of war to such a measured significance, Clausewitz would be obligated to include them in his analysis of the relationships between the branches of the service. Cavalry, even considering the advent of armor, would have been included in these additional arms. The significance of Clausewitz's analysis is his theory that "An Army consisting only of infantry and artillery would, to be sure, find itself at a disadvantage when faced with one composed of all three arms."<sup>19</sup> This analogy to our modern force matched against the composition of our expected

adversaries, the Soviet Union and the remainder of the Warsaw Pact, reveals, even to an amateur of military power, a significant imbalance of cavalry in our structure, e.g., Soviet Reconnaissance Battalions at Army and Division, Reconnaissance Companies at Regiment, and the basis of their doctrine for Operational Maneuver Groups (OMG).<sup>20</sup>

Clausewitz also negated the need for reconnaissance by exclaiming it "has gone out of fashion - or, rather it has become impossible."<sup>21</sup> However, an examination of his analysis prior to the industrial and technological revolutions, is fully explained by Michael I. Handel in his article "Clausewitz in the Age of Technology." Handel specifically addresses the impact the evolution of mobility and technology created during these two eras. Clausewitz could not foresee, during his era, the changes mobility and technology would add to our ability to conduct reconnaissance at all levels with multiple assets.<sup>22</sup> His assessment then, that in modern warfare the use of more variables to evaluate the balance of power will directly influence the most likely outcome of war, would have justified a proportionate balance of cavalry in his recommended force.<sup>23</sup>

#### SUPPORTING DOCTRINAL / STRUCTURAL CHANGES

The addition of more cavalry organizations to the force is not revolutionary. Given the doctrinal justification, it

could not even be classified as evolutionary. The problem is we have sought the wrong solutions to correct the force imbalance. Current perspectives to the strategic, operational, and tactical levels of warfare have required changes and reorganization; however, the end results have left us with a doctrinally under-resourced and combat deficient force. The following examples of force structure changes and reorganizations are provided to explain the further degradation to the balance and examine the less than adequate solutions to correct these imbalances.

#### LIGHT INFANTRY DIVISIONS

The activation of the Army's new Light Divisions has been accomplished to satisfy the requirement for strategic flexibility. This added dimension, while providing the United States with more rapidly deployable units for operations across the spectrum of conflict has increased the number of divisions by 2, in the active force, while failing to provide the necessary active supporting forces.<sup>24</sup> In fact, the available support base for the original 16 divisions must now be divided between 18, thus reducing the overall sustainment capabilities, i.e., 39+k per division (DFE) versus the previous 48K. The problem is compounded when one examines the total types and numbers of infantry units, i.e., Mechanized, Light, Ranger, Special Forces, Airborne, Air Assault, Motorized and Infantry Divisions, 8.

of which 7 are not aligned with any corps cavalry organizations.<sup>25</sup> This equates to 3 corps which do not have an assigned cavalry or reconnaissance asset, nor is there a cavalry organization structured to correspond to the light forces' strategic mobility.

#### SPECIAL FORCES

Doctrinal needs were recognized for forces to combat limited objectives at the lower end of the conflict spectrum and as such the Army, in compliance with the Department of Defense, organized the Special Operations Command. The latter was designed for their superb utility for low intensity conflicts but are also important to unified commanders in mid- and high-intensity conflicts.<sup>26</sup> The point being, there was a doctrinal requirement, and it was resourced.

#### ARMY OF EXCELLENCE

Initial designs for the Army of Excellence, i.e., Division-86, provided for the addition of cavalry assets to the force. These concepts failed in implementation. The need was clearly recognized and is still supported today, by the U.S. Army Armor/Cavalry School and division and corps commanders, to restore these capabilities to our force. Two issues that were most apparent were the need to include

Scout Platoons to all combat maneuver brigades and the requirement to retain tanks in the Divisional Cavalry Squadron. Neither of these structural requirements were ever resourced or activated but, they both remain valid in the recurring needs of our combat forces.

#### COMBINED ARMS BATTALIONS

The spirit of cavalry, however, is alive and well. Current force structuring disguises it by another name (Combined Arms Battalions), provides partial proponency to another branch (Infantry), and is unsupported by any How-to-Fight manuals. The development of these organizations clearly portrays the recognition for the necessity for combined arms organizations, which is the basic structure of cavalry. The 9th Infantry Division (Motorized) consists of five Combined Arms Battalions - Heavy, three Combined Arms Battalions - Light, and two Light Attack Battalions.<sup>27</sup> The army has created, developed, and documented organizations, doctrine, tactics, and training which constitute a Light Cavalry Division. However, the latter may be immaterial, as without proper funding for research, development, and procurement of an Armored/Assault Gun System (AGS) the structural survivability of this type of division is questionable and the concept doomed to failure.

In addition, combined arms structural changes have been made to our heavy forces by the formal task organizing, documented by MTO&E, of Tank and Mechanized Companies, into Combined Arms Battalions within the III Corps.

Both of these examples provide justification for the need for structured combined arms organizations, which again is the essence of cavalry.

#### CORPS INDEPENDENT TANK BATTALIONS

Another recent force structure action which indicates the army's search to resolve the balance of forces problem without looking at the obvious - cavalry - is the authorization of independent tank battalions at Corps level. This occurred in FY 1986-87 with the removal of the organic tank battalions from both the 82nd Airborne Division and the 9th Infantry Division. Each battalion was then assigned to their respective corps, the XVIII and I Corps. The problem, similar to the adding of new Infantry divisions, was the initial void of support structure programmed to fuel, fix, or sustain these battalions during combat operations. Recognition of these critical shortfalls, by the respective corps, resulted in only partial corrections by army force planners/programers. These battalions were provided with a Direct Support Detachment which consists of approximately half of the force structure and capability provided a divisional tank battalion. However, no resources have been

identified or provided for the necessary combat multipliers of Direct Support Artillery, Fire Support Teams, Air Defense, Combat Engineers to include bridging, intelligence, communications, etc.

In addition, a further need has been recognized, based on actual exercises, Celtic Cross IV, and warfighting assessments by I Corps and XVIII Corps, to provide the Light Infantry Divisions with additional anti-armor capabilities, providing kinetic weapons, structured as Corps AGS Battalions. A recommended solution is to modernize National Guard TOW Light Anti-Tank Battalions (TLAT) with the AGS. The problems with this solution are the future availability of the AGS and the mobilization and deployment time associated with the National Guard.

#### SUMMARY

Doctrine clearly provides the requirement for a sufficient number of ACR's, 2 per corps, to be available to the active force. In addition, to successfully execute doctrine across the spectrum of conflict there is a definite need for the development, activation, and assignment of an armored cavalry organization to support the light corps. Recent force structure actions, i.e., Corps Independent Tank Battalions, and concepts, i.e., modernizing TLAT Battalions, are insufficient to meet the requirements of rapid deployment or are currently beyond the reach of research

and development budgets. It would be easier to provide these and other divisions and corps a tactically sound, strategically deployable, doctrinally established, logistically supportable, and combat proven organization - Cavalry!

#### ENDNOTES

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2. U.S. Department of the Army, The United States Army Posture Statement FY 88, p. 9.
3. FM 100-5, p. 146.
4. Ibid., pp. 40-42.
5. Ibid., pp. 91-128.
6. Ibid., pp. 129-160.
7. Ibid., pp. 183-187.
8. Ibid., pp. 22 - 23.
9. U.S. Department of the Army, Field Manual 17-95, Cavalry Operations, p. 1-1.
10. U.S. Army War College, Army Command and Management - Theory and Practice, p. 10-11.
11. Ibid., p. 10-18.
12. U.S. Army Concepts Analysis Agency, A Dynamic Programming Approach To Army Force Planning, p. 10.
13. Army Command and Management, pp. 18-19.
14. U.S. Army Combat Developments Command, Study: Echelons Above Division, pp. 6-10.
15. "Operation "Overlord" Report and Appreciation with Appendices " in U.S. Army War College, Joint and Combined Theater Warfare - Volume I, p. B-116.

16. Ibid, pp. 31-36.
17. U.S. Department of the Army, Army Regulation 71-11: Total Army Analysis, p. Glossary 3.
18. Army Command and Management, pp. 10-18.
19. Carl von Clausewitz, On War, p. 285.
20. Friedrich Wiener and William J. Lewis, The Warsaw Pact Armies, pp. 60-75.
21. Clausewitz, p. 361.
22. Michael I. Handel, "Clausewitz in the Age of Technology," The Journal of Strategic Studies, June / September 1986, pp. 51-92.
23. Ibid.
24. The United States Army Posture Statement - FY 88, pp. 10-12.
25. Caspar W. Weinberger, Report of the Secretary of Defense Caspar W. Weinberger to the Congress on the FY 1988 / FY 1989 Budget and FY 1988-92 Defense Programs January 12, 1987, p. 153.
26. The United States Army Posture Statement - FY 88, pp. 10-12.
27. Ibid., p. 13.

ARMORED CAVALRY AND RECONNAISSANCE  
A DOCTRINAL SHORTFALL IN FORCE STRUCTURE

CHAPTER IV

CURRENT FORCE

"figures wont lie, but liars will figure"<sup>1</sup>

Gen Charles H. Grosvenor

The purpose of this chapter, the current force, is to allow for an individual assessment of the active force structure and its warfighting capabilities. Combat forces by definition equate to the total of the Division Increment (DI), Nondivisional Combat Increment (NDCI), and Theater Forces (TF).<sup>2</sup> As the specific intent is to examine combat maneuver forces, NDCI organizations of Field Artillery, Air Defense Artillery, and Engineers are not listed. Special Forces and Ranger Battalions, part of the TF's, are provided to account for Special Operations forces and to document the resources that have been allocated for their specific requirements.

In examining the listed units, quantities, and strengths, individual assessments should consider the

requirements for the operational level of warfare. The Army places a premium on maintaining forces in a ready, balanced, and flexible status to react immediately to any crisis situation within the spectrum of conflict, i.e., terrorism to strategic nuclear war. Army policy, in support of National Security Objectives and consistent with National Military Strategy, is to strengthen its capability to conduct combat operations in the conventional spectrum of warfare.<sup>3</sup>

To execute a global strategy the Corps is designated as the largest tactical organization and is the lowest echelon of command charged with the execution of the operational warfare mission. Corps designations and strengths are provided to understand the foundation of the organizational structure for the employment of combat maneuver forces on an operational level. Corps strengths are not included in the aggregate.

Divisions, as the cornerstone of the DFE structure and force development process, are listed as light or heavy.<sup>4</sup> A breakout of each division assigned number of battalions, by type, is at Annex B.

Separate brigades and battalions are also provided to complete the force list. Type battalions and brigades are listed by their Combat Arms Regimental System (CARS) designation at Annex B.

Battalion quantities are aggregated to provide a measure of the available maneuver forces, the warfighting

capabilities at the tactical level, and to represent the 'heart' of the resource management process.<sup>5</sup>

National Guard and Reserve forces are not identified. Applicable round out brigades and battalions are annotated in the notes at Annex B - Current Forces.

Force composition is the list of active maneuver resources available to counter initial combat confrontations until additional forces can be mobilized and deployed.

FORCE LIST<sup>6</sup>  
(See Annex B)

<u>TYPE ORGANIZATION</u>	<u>TOTAL</u>	<u>TOTAL</u>
CORPS	6	
Heavy		3
Light		3
DIVISIONS <sup>7</sup>	18	
Heavy		10
Light <sup>8</sup>		8
SEPARATE BRIGADES	6	
Heavy		3
Light		3
SEPARATE BATTALIONS	5	
Heavy		2
Light		3
TOTAL BATTALIONS	163	
Heavy		102
Light		61

SPECIAL OPERATIONS GRP's & REGT	5	
Special Forces		12
Rangers		3
ARMED CAV REGT's	3	
Squadrons		9

NOTES:

1. Light Battalions include Infantry, Light Infantry, Airborne, Air Assault, and Motorized MTO&E's.
2. Heavy Battalions include Armor and Mechanized MTO&E's.
3. "Resource constraints force our active divisions to rely on reserve forces to reach their full combat potential. Five of our 18 active Army divisions will draw one-third of their combat units from the reserves. Four other divisions will rely on the reserves to supply one or more combat battalions."<sup>7</sup>

END NOTES

1. Charles H. Grosvenor, The Home Book of Quotations - Classical and Modern, p. 1112-6.
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3. U.S. Department of the Army, The Army Overview, p. 12.
4. U.S. Department of the Army, Army Force Planning Cost Handbook, p. IV-1.
5. Bunnie Smith, "Refocusing Resource Management-Stage 2", Resource Management Journal, Winter 1985, pp. 6-7.
6. U.S. Department of the Army, Force Accounting System Active Army Troop List, pp. 1-91.
7. Caspar W. Weinberger, Report of the Secretary of Defense Caspar W. Weinberger to the Congress on the FY 1988 / FY 1989 Budget and FY 1988-92 Defense Programs January 12, 1987, p. 153.
8. Ibid.

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CHAPTER V

RECOMMENDED FORCE

"Since land forces must engage in combat with the enemy and must at the same time sustain themselves while in combat, the land force in the field is a team composed of units which perform combat, combat support, and combat service support functions. The composite force is often referred to as the "balanced field force."<sup>1</sup>

The Department of the Army Manual

Army concepts in the development of achieving a balanced field force are to provide for the maximum combat forces possible while retaining only the essential sustaining components.<sup>2</sup> Thus, any recommendations to changing our current force composition must document a net gain to our warfighting capabilities and expand on our ability to execute Airland Battle doctrine at the operational level of war. The recommended force presented in this chapter provides for an increase of 3 Armored Cavalry Regiments (ACR), the retention of 18 active

divisions, and an evolutionary force structure proposal to improve light force doctrine and wartime execution. In addition, the following proposal enhances our combat forces; improves the doctrinal balance within combat forces; provides a better mix of weapons lethality, i.e., kinetic and chemical armor killing systems; increases total systems, i.e., 342 versus 188 tank guns; strengthens the "one Army concept"; and, retains the 18 active divisions while implementing force structure cuts resulting in an expected end strength of 772,300.<sup>3</sup>

#### 772,300 END STRENGTH

The reduction of the Army's total active-duty strength by 8,600 spaces prior to 1 Oct 1988, as directed by the Department of Defense, must be applied to establish a base to the current and programmed force prior to the substantiation of any further changes.<sup>4</sup> The cap on our end strength is accepted, for the purpose of this analysis, to be 772,300. Force structure reductions currently under consideration by the Army have been applied to the development of the Recommended Force. Appropriate notes and computations have been annotated to Annex C - Recommended Force to prevent double counting and provide a projected force for implementation over the next five to eight years. Proposed structure cuts, by the Department of the Army, affecting the combat increment, the area of analysis for

this study, include the inactivation of the 2nd Bde, 9th Inf (Mtz), and the elimination of a programmed activation for one active duty infantry battalion and the postponement of the activation of a second infantry battalion for the 6th Inf (L).<sup>5</sup>

#### 18 ACTIVE DIVISIONS

With 772,300 as the cap on our end strength, an examination of the effects on the 18 active divisions is required. Prior to Defense Department mandated cuts the infrastructure of the Army's 18 active divisions included 5 divisions structured with National Guard (NG) round out brigades and 4 divisions with NG round out battalions. Implementation of structure cuts increases these numbers to 6 and 5 respectively. Note that computations include the 6th Inf (L) twice, once with a separate round out brigade and a second time with an additional, separate, round out battalion.

A more important assessment can be viewed from the net effect on the number of active duty combat maneuver battalions/squadrons, to include ACR's and Special Operations forces, programmed to 1991. Prior to strength reductions, the active force was to consist of 64 tank battalions, 47 mechanized battalions, and 82 "type" infantry battalions. Application of cuts results in a force of 64

tank battalions, 47 mechanized battalions, and 76 "type" infantry battalions.

#### ONE ARMY CONCEPT

The solution of retaining 18 active divisions by increasing their round out units is fully supported. Direct affiliation of round out assignments for National Guard and Army Reserves have proven, in the experience of this writer, to increase the readiness, standards, training, and esprit of the affected units. This part of the "One Army Concept" works and should be exploited on a one for one bases, by type unit. I would add caution to this philosophy, that no more than one third of an active unit, from corps to battalion, should consist of round out structure.

Expanding on this round out policy I now offer the first of two components which act as "bill payers" to resource the addition of 3 ACR's to the force. Inactivation of an active duty brigade from the 7th Inf(L), 25th Inf(L), and 101st Aslt provides 5753 spaces (See Annex C - Recommended Force). Concurrent assignment of a round out brigade to each of these divisions results in a programmed force of 9 divisions with round out brigades and 5 divisions with separate round out battalions (6th Inf(L) counted twice). Number of active battalions, with the addition of 3 new ACR's, would be 70 tank battalions/squadrons, 46 mechanized battalions, and 69 "type" infantry battalions.

## REDESIGNATIONS

The force structure required to account for the deficit to the total requirement for 2 Light and 1 Heavy ACR's (12433) is 6680 spaces. These spaces are identified and obtained by redesignating organizations contained in the current force. Units include the collective structure of the 177th Armor Brigade and Ft Irwin, the 6th ACCB, the 1-33 and 3-73 Armor Battalions and their respective maintenance detachments, and the TDA CDCEC Composite Battalion at Ft. Hunter-Liggett, Ca. Total spaces available equal 7194, of which 6680 are applied to structuring the new Armored Cavalry Regiments. The remaining 514 spaces are reallocated for continuance of TDA mission requirements and base operations support at Ft Irwin and Hunter-Liggett.

Redesignations also increase combat maneuver forces at all currently assigned locations, with the exception of the 6th ACCB at Ft Hood, while adding force structure to Yakima Firing Center, Wa., and Ft Chaffee, Ar. (See Annex C - Notes).

### LIGHT ARMORED CAVALRY REGIMENT ACR (L)

While the activation of 3 ACR's resolves the doctrinal void for the I Corps, IX Corps, and XVIII Corps, there remains an organizational or structural void. The issue is

the assignment of an ACR, classified as a heavy force, to a Light Corps. Given the size and weight of an ACR's equipment they do not meet the requirements for rapid, strategic deployment, as do the light corps and divisions they would support. Thus, the need for a Light Armored Cavalry Regiment (ACR(L)).

The suggested authorized strength for this organization is 4000 spaces. Organizational structure would be the same as a heavy ACR. Survivability will be achieved through mobility. Systems and equipment must be changed and down-sized.

Recommendations to achieve this "lightening" of the Armored Cavalry Regiment include:

(1) Replace the M113 series and M3 Bradley vehicles with corresponding models of HMMWVs, i.e., the M966 TOW for the M3 Bradley, the M1037 Shelter Carrier for the M577, the M997 Ambulance for the M113, the M1069 Utility-Prime Mover for 2 1/2 and some 5 ton trucks.

(2) Replace the M60A3 or M1 Tank with an Armored Gun System (AGS). While this system has not been fielded there are several models available and the concept and procurement are a high priority of the Chief of Staff of the Army, Gen Vuono.<sup>6</sup> AGS is a 20 ton tracked vehicle, armed with a 105mm tank gun, crewed by 2 to 3 men, and transportable by Air Force C-130's.

(3) Replace the M109A2/A3, 155mm Self Propelled Howitzer with the M102 or M119, 105mm Towed Howitzer. Prime mover would be the M1069 HMMWV.

(4) Replace the M741 Vulcan with Towed vulcans and Chaparrals.

(5) Eliminate the Armored Vehicle Launch Bridges (AVLB) from the squadrons and engineers.

(6) Downsize the Regimental Engineer's with equipment currently issued to Light Division Engineers.

This organization will be capable of performing all of the doctrinal missions and roles of cavalry for a Light Corps while also attaining the strategic mobility required for a rapid deployment force. Recommended force structure would be 2 ACR (L) for assignment to the I Corps and XVIII Corps and 1 "heavy" ACR for the IX Corps and/or 8th Army. Stationing of the IX Corps ACR would be at Ft Irwin to execute and enhance the peacetime function as the NTC OPFOR.

#### RECOMMENDED FORCE SUMMARY (SEE ANNEX C)

The addition of 3 Armored Cavalry Regiments to the active force is at a cost of inactivating 3 Light Infantry Brigades and 9 Light Infantry Battalions and redesignating 1 Armored Brigade (-), 1 Air Cavalry Attack Brigade (ACCB), 2 Corps Tank Battalions, and 1 Composite (TDA) Battalion. Changes are considered advantageous when examining: the

increase in combat power and systems; the attainment of a better balanced force to conduct the operational level of war; the structuring and assignment of round out brigades to replace those inactivated, which enhances the readiness of the National Guard; the synergistic effect of combined arms integration and training for light units; and the expansion of combined arms forces and OPFORs to 6 posts, i.e., Ft Bragg, Ft Chaffee, Ft Lewis, Yakima Firing Center, Ft Hunter-Lisgett, and Ft Irwin.

#### END NOTES

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4. Jim Tice, "10,300 Spaces to be Sliced from Army Force Structure," Army Times, 14 March 1988, pp. 1 & 19.

5. Larry Carney, "'89 Budget Cuts Active, Keeps Reserve Buildup," Army Times, 29 February 1988, pp. 1 & 6.

6. Tom Donnelly, "Vuono: 'One Way or Another,' Army will get a Light Tank," Army Times, 6 July 1987, pp. 4 & 30.

ARMORED CAVALRY AND RECONNAISSANCE  
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CHAPTER VI

CONCLUSIONS AND RECOMMENDATIONS

"Cannibalisation of fighting units may be necessary in both British and United States armies to produce a balanced force, and if so an early decision to effect this must be taken if the necessary administrative units are to be fit to operate under battle conditions by the 1st of May 1944."<sup>1</sup>

The United States Army force structure contains critical voids in its ability to execute the doctrine of Airland Battle and the military and national defense strategies expressed today. One of these voids is in the structure of cavalry and reconnaissance assets, specifically Armored Cavalry Regiments (ACR's). Substantiation of this void has been documented by historical evidence, doctrinal requirements, and an analytical examination of the active component combat forces.

Although the recommended correction to a specific force imbalance, i.e., the addition of three ACR's, and the composition of these ACR's, i.e., the need to structure

Light Armored Cavalry Regiments for Light Corps, have been provided, there still remains a problem. The requirement to complete the examination of the whole, through an analysis of the remainder of the parts, has yet to be accomplished. As such, the summary of this paper will address additional recommendations and advantages to correcting doctrinal shortfalls in our total force structure.

### RECOMMENDATIONS

The following recommendations are applicable to the force in total, i.e., "One Army".

#### Division Force Equivalent/ Corps Force Equivalent (DFE/CFE):

The U.S. Army should develop a type DFE/CFE for a combat ready/deployable corps. A 'mean' definition for the number of divisions, type conditions, tempo, environment, and duration must be established. Force packaging can not include notional units, must be accomplished for both a Heavy and Light corps, and contain a force ratio of no more than 1/3 round out units.

Balance Army Components: Balanced forces in the Active Army (Compo 1), National Guard (Compo 2), and Army Reserves (Compo 3) should be based on DFE/CFE deployability and subsequent build-ups. Each tier of the components should add to, not depend on, the warfighting capabilities of the other, beginning with Compo 1. Compo 2 and 3 units directly

integrated/assigned to Compo 1's should be expanded, by percentages, i.e., 1 brigade per division, 1 company per battalion, to retain and enhance active army deterrence. Specific examples include:

(1) Activating 3 Armored Cavalry Regiments (Compo 1): If the active army maintains 6 corps and 18 divisions there is a requirement to activate 3 additional ACR's. The implied requirement for a corps is 2 ACR's, FM 100-5,<sup>2</sup> however, to obtain a proper balance 1 ACR should be active (Compo 1) while the other should be either Compo 2 or 3.

(2) Activate or designate remaining combat support (CS) and combat service support (CSS) units to attain the proper balance for a DFE/CFE between the respective Compo's.

Balance Force Structure between the Spectrum of Conflict:

There is a need for light cavalry to asument and support light infantry. The Field Artillery and Engineer's have adapted their doctrine and equipment to comply with the light forces rapid deployment missions and roles. The army, as a whole, needs to examine the necessity to develop/adjust combat/combat support/combat service support assets to enhance light forces, i.e., the Armored Gun System (a CSA priority), a light motorized howitzer, a 9600 1b HMMWV.

CINC's Requirements: A further examination or study by the Army War College should be conducted to assess the respective CINC's initial and subsequent force requirements.

Study should maintain a capped end strength, address the required balance of forces, and provide a list of organizations which could be selected for changes.

#### ADVANTAGES

Advantages in restructuring the active force to achieve historical and doctrinal balances are assessed against the addition of 3 ACR's. Further application to the other parts of the whole, once examined, should provide similar arguments to justify their changes.

Doctrine is Resourced: The addition of 3 ACR's provides a better balance of resources to execute U.S. Army doctrine as it pertains to the deep, close, and rear battles. The doctrine to plan actively for the operational level of war by the corps is now available, structure is required for the execution.

Increases Combat Power: Changes to existing force structure not only increases the quantity of tank killing systems, i.e., number of tank guns and missile systems, and the type, i.e., a higher ratio of kinetic energy systems. but also increases the active army artillery, engineers, intelligence, and sustaining combat service support units.

Retains Critical Division Base Assets: Tradeoffs of active infantry brigades for roundout brigades does not decrease CS

and CSS units in the division base. Field Artillery Battalions, Engineer Companies, transportation, maintenance, medical, etc, units are retained to maintain minimal and/or low density military occupational skills and resources.

Expands the Training Base: The addition of 3 ACR's produces two significant advantages to the current training base.

(1) They increase the density of combat, combat support, combat service support units and OPFOR at Ft Bragg, N.C., Ft Chaffee, AR., Ft Lewis, WA., Yakima Firing Center, WA., Hunter-Liggett, CA., and Ft Irwin, CA.

(2) They provide additional Armor (Cavalry)/Infantry training resources for the I Corps, XVIII Corps, 7th Inf (L), 9th Inf (Mtz), and 82nd Abn Div's. Insufficient training in infantry-tank cooperation, employment, and tactics was recognized as a tactical lesson learned from World War II and remains a problem today, only magnified by the the proliferation of light infantry forces.<sup>3</sup>

Enhances Rapid Deployment Force Capabilities: The addition of an ACR (L) to each light corps not only increases types and numbers of anti-armor systems, but provides the reconnaissance, security, and guard forces they so obviously lack today.

Provides 'a' Recommendation for Mutual Balance of Force Reductions (MBFR): Current USAREUR forces include 4 divisions, 2 division forwards, and 2 ACR's. Increasing the

number of ACR's in the total force structure by 3 would allow for dedicated alignment of one ACR per corps and the possible restationing of these forces to assist in MBFR negotiations while retaining combat roles and missions. The recommendation would be to assign to USAREUR 2 divisions, 4 division forwards, and 3 ACR's. This would align an ACR per U.S. corps sector while maintaining the major combat force infrastructure.

#### SUMMARY

The analysis presented in this study provided: an examination of one part of the whole, the addition of 3 Armored Cavalry Regiments to assist in achieving a balanced field force; "a" recommended solution to correct the shortfall, and suggested methods to resolve the remaining structural voids. The consequences of, what appears to be, personal parochialisms today, may be of great risk to the soldier and the nation tomorrow. There is more than a requirement to structure and maintain a balanced force, there is a professional obligation.

#### ENDNOTES

1. U.S. Army War College, Joint and Combined Theater Warfare Volume I, p. B-22.
2. U.S. Department of the Army, FM 100-5, p. 146.

3. "Tactical Lessons Learned by O.M. Bradley" in U.S. Army War College, Joint and Combined Theater Warfare Volume II, pp. E-6 & 7.

ANNEX A

DIVISION FORCE EQUIVALENT  
(DFE)

Computation of the division force equivalent (DFE) as originally designed was centered around a small field army or the equivalent of today's Corps. Planners foresaw this organization consisting of four or less divisions for a contingency employment.

Data was extracted from FM 101-10-1, September 1969. Some units, by type and strengths, are recognized as not being fully applicable today when considering MTO&E structures and functional missions.

The point of providing this information is to demonstrate the type of units and functions which have been doctrinally required to support and sustain a division in combat. An simple analysis of the following combat support and combat service support forces and strengths to available resources today, especially when matched against 18 divisions, should evoke concern as to our balance of forces.

		Aggregate	
<b>Divisions and division equivalents:</b>			
Divisions	10 at 1805	180570	
Separate Bde's	4 at 2819	11276	
		191846	191846
 <b>Cavalry Organizations:</b>			
Armored Cavalry Regiments	4 at 3483	13932	
Air Cavalry Squadrons	2 at 770	1540	
		15472	207318
 <b>Nondivisional Combat Support Forces:</b>			
Artillery		16683	
Air Defense		11894	
MI / ASA		4707	

MP	2017	
Aviation	4192	
Signal	4981	
Engineer	17851	
Civil Affairs	1562	
Chemical	2219	

Aggregate

PSYOP	862	
Field Army HQ's (Corps)	552	
	67457	
x 2	134914	342232

Nondivisional Combat Service Support:

FASCOM HQ's & Special Troops	1803	
Support Groups	20342	
Ammunition Group	4020	
Medical Brigade	7820	
Transportation Group	5807	
Personnel & Admin Bn	1263	
	41055	
x 2	82110	424342

Theater Army Forces

TA HQ's	1701	
PERSCOM	2062	
S&M Command	24347	
TRANSCOM	17628	
MEDCOM	21029	
TAACOM (less MP & Chem Gp's)	12197	
ADACOM	13553	
MP (inclusive of TAACOM MP Gp)	9106	
MI & ASA	3712	
USASTRATCOM	17307	
ENCOM	22437	
CA Command	1416	
Chemical (inclusive of TAACOM Gp)	1891	
PSYOP (less Bn to Field Army)	1740	
	150126	574468

Non-DFE forces included in Total Force:

Nike Herc Bn's	5532
Theater ADA	13553
USASTRATCOM	17307
Theater Civil Affairs	1416
Theater PSYOP	1740

Theater ASA	500
Nike Herc Support	600
ADA Support	1540
	42178

TOTAL FORCE 574468

Less Non-DFE (-) 42178

TOTAL DFE STRENGTH 532290

Total DFE Strength by 11 1/3 DFE = 46980

or 47 K

#### ENDNOTES

1. U.S. Department of the Army, Institute of Combined Arms and Support, Combat Developments Command, Study: Echelons Above Division, pp. 31-36.

## ANNEX B

### CURRENT FORCE

1. An analysis of the active Army current force structure for the purpose of determining the doctrinal and historical balance is important in assessing our capabilities from the operational level of warfare. Corps' are the largest tactical units and are charged with the mission of conducting maneuver at the operational level. Tailored for specific theaters and missions, they contain all the organic combat, combat support, and combat service support capabilities to sustain operations over a considerable period of time.<sup>1</sup>

2. Information includes all active divisions, separate brigades, separate battalions, Armored Cavalry Regiments, an independent Air Cavalry Brigade, and Army Special Operations forces. In assessing the balance the following is provided:

a. Infantry Battalions include all Light, Airborne, Air Assault, Motorized, and Infantry MTO&E's.

b. Ranger and Special Forces Battalion quantities and strengths are provided for information and comparison of resources designated for the Special Operations mission and role.

c. Armored Cavalry Regiments and their respective squadrons are also listed.

d. Divisional Cavalry Squadrons are not listed as they are an intrinsic part of the division base like engineers, artillery, signal, etc.

f. Separate companies and troops, e.g., tank, infantry, and cavalry, are not contained in the force list, unless specifically noted.

e. Strengths listed are authorized strengths plus augmentations, per the Active Army Troop List, dtd 30 June 1987.<sup>2</sup>

3. Current Force:

Corps:	LOCATION	STRENGTH
1. I Corps	Ft Lewis	359
2. III Corps	Ft Hood	365
3. V Corps	USAREUR	494
4. VII Corps	USAREUR	712
5. IX Corps	USARJ	77
6. XVIII Corps	Ft Bragg	379
		2366

	UNIT	LOCATION	BDE'S	TYPE BN			STRENGTH	NOTES
				TANK	MECH	INF		
Divisions:								
1.	1st Mech	Ft Riley	3	5	4		16605	1 & 3
2.	2nd Inf	Korea	3	2	2	3	15003	4
3.	3rd Mech	USAREUR	3	5	5		17627	
4.	4th Mech	Ft Carson	3	5	4		15773	1
5.	5th Mech	Ft Polk	2	3	3		12166	2
6.	6th Inf	Alaska	2			3	4775	2 & 5
7.	7th Inf	Ft Ord	3			9	10747	
8.	8th Mech	USAREUR	3	5	5		18000	
9.	9th Mtz	Ft Lewis	3			9	13889	6
10.	10th Inf	Ft Drum	2			5	6006	2 & 7
11.	24th Mech	Ft Stewart	2	3	3		12131	2
12.	25th Inf	Hawaii	3			9	10900	
13.	82nd Abn	Ft Bragg	3			9	14591	
14.	101st Aslt	Ft Campbell	3			9	15632	
15.	1st Cav	Ft Hood	2	4	4		11975	2
16.	1st Ar	USAREUR	3	6	4		17371	
17.	2nd Ar	Ft Hood	3	5	4		16543	1 & 3
18.	3rd Ar	USAREUR	3	6	4		17314	
	Para Total		49	49	42	56	247048	

Separate Brigades:

1.	193rd Inf	Panama	1			2	1392	
2.	194th Ar	Ft Knox	1	2	1		4080	
3.	197th Mech	Ft Benning	1	1	2		4362	
4.	Berlin Bde	USAREUR	1	(1 Co)		3	2891	
5.	177th Ar	Ft Irwin	1	1	1		3503	8
6.	6th ACCB	Ft Hood	1				2036	9
	Para Total		6	4	4	5	18284	
	Subtotal		55	53	46	61	265330	

UNIT	LOCATION	BDE'S	TYPE BN			STRENGTH	NOTES
			TANK	MECH	INF		
Separate Battalions:							
1.	1- 3 Inf	Ft McNair				1	1176
2.	2- 4 Inf	USAREUR				1	877
3.	3-325 Abn	ACE				1	1144
4.	4- 31 Mech	Ft Sill			1		257
5.	1- 33 Ar	Ft Lewis		1			552
6.	3- 73 AR	Ft Bragg		1			473
7.	CDCEC Comp	Hunter-Liggett					578
	Para Total			2	1	3	5057
TOTAL			55	55	47	64	275446
Armored Cavalry Regiments							
1.	2nd ACR	USAREUR	1	3			4703
2.	3rd ACR	Ft Bliss	1	3			4115
3.	11th ACR	USAREUR	1	3			4480
	Para Total		3	9			13298
Special Operations Cmd (Army):							
1.	75th Ranger Regt.		1			3	1854
2.	S.F. Grp's		4			12	4891
	Para Total		5			15	6745
TOTAL			63	64	47	79	290432
							4,10,&13

NOTES:

1. Division organization includes a Round-Out Battalion.

2. Division organization includes a Round-Out Brigade.

3. Forces and strengths include division's forward deployed Brigade(+) in USAREUR.

4. 2nd Inf. Div's three infantry Bn's are programed for conversion to two Air Assault Bn's in FY 89.<sup>3</sup>

5. 6th Infantry Division (Light) is in the process of being activated. Division's structure will contain 2 Bde's and 6 Bn's within the active force. Remainder of division's forces, 1 Bde HHC and 3 Bn's, are structured as a Round-Out Brigade.<sup>4</sup>

6. 9th Infantry Division (Motorized) consists of 5 Combined Arms Battalions-Heavy (CAB(H)), 2 Combined Arms Battalions-Light (CAB(L)), and 2 Light Attack Battalions (LAB). Surrogate equipment for the Armored/Assault Gun System (AGS) is the HMMWV-TOW which results in this division's classification as a medium to light organization when using C-5 and C-141 sorties as a measurement.

7. 10th Infantry Division (Light) is in the process of activating and stationing at Ft Drum. Division's structure will contain 2 Bde's and 6 Bn's within the active force. Remainder of forces, 1 Bde HHC and 3 Bn's, are structured as a Round-Out Brigade.<sup>5</sup>

8. 177th Armor Brigade HHC has an authorized strength of zero. Troop strength listed for Ft Irwin consists of:

Bde HHC	0	85 Det TOW/Dragon	2
6-31 Inf	826	259 OD Det Explos	15
1-73 Ar	552	119 OD Det TOW/Dragon	2
87 Eng Co	211	171 Det Mov Contr	7
31 Mnt GS	220	82 Tm Water Purif	14
581 Mnt Fwd	311	157 Det Msl Mnt	6
247 Det Air Amb	45		
Ctr Nat Tng Cn & Ft Irwin			505
OF CUSAMEDDAC			246
CTR USA NTC OPNS			541

9. 6th ACCB consists of an HHT, 6 Atk Hel Bn's, 1 Sot Bn, and 1 Sig Co.

10. 2-4th Inf is currently the security force for USAREUR's Pershing Bde and may be programmed to convert to mechanized and assume the mission of the OPFOR for the CMTIC at Hohenfels, GE. Bn is counted as a "type" infantry battalion in all aggregates.

11. CDCEC maintains a TDA Composite Battalion at Ft. Hunter-Liggett, Ca. Battalion is composed of a Hq's element, a Tank / Mech Co, an Artillery Battery, an Engineer Company, and support forces. Battalions 578 spaces are computed in total combat strength for the purpose of resourcing the recommended force, Annex C. The battalion is not counted as a separate number in arriving at the aggregate.

12. Special Forces strength includes 4 Groups, 12 S.F. Bn's, and support and aviation forces.

13. Current Army programs will increase the number of Infantry Battalions by 4, 1 for the 10th Inf (L) and 3 for the 6th Inf (L), and reduce the number of infantry battalions in the 2nd Inf by 1 in 1989. Totals by 1991 will be 64 Tank, 47 Mech, and 82 Inf.

#### ENDNOTES

1. U.S. Department of the Army, Field Manual 100-5, Operations, p. 185.

2. U.S. Department of the Army, Force Accounting System Active Army Troop List, pp. 1-91.

3. Caspar W. Weinberger, Report of the Secretary of Defense Caspar W. Weinberger to the Congress on the FY 1988 / FY 1989 Budget and FY 1988-92 Defense Programs January 12, 1987, p. 153.

4. Ibid.

5. Ibid.

## ANNEX C

### RECOMMENDED FORCE

1. Data base is Annex B - Current Force, extrapolated from the 30 June 1987, Force Accounting System Active Army Troop List.<sup>1</sup>

2. Changes, additions, and deletions are highlighted in boldface type. Explanations and accounting information are detailed in corresponding notes.

3. Programmed changes by the Department of the Army to achieve an active duty end strength of 772,300 (round numbers) are included as notes.<sup>2</sup> Actual reductions are not applied to recommended force to allow for an accurate crosswalk to the current force's number of battalions and aggregate strength, Annex B.

4. Combat Arms Regimental System (CARS) designations for the recommended activations/redesignations of 3 Armored Cavalry Regiments (ACR's) are the 6th, 14th, and 17th. Designations were based on historical lineage and honors to include year of origin and battle honors.<sup>3</sup>

a. 6th Cav: Year of origin - 1861, Battle honors - 36.

b. 14th Cav: Year of origin - 1901, Battle honors - 8.

c. 17th Cav: Year of origin - 1916, Battle honors - 4.

(Previously associated as the Reconnaissance Troops for Airborne Divisions.)

#### 5. Recommended Force:

Corps (No Change):	<u>LOCATION</u>	<u>STRENGTH</u>
1. I	Corps Ft Lewis	359
2. III	Corps Ft Hood	365
3. V	Corps USAREUR	494
4. VII	Corps USAREUR	712
5. IX	Corps USARJ	77

6. XVIII Corps Ft Bragg

379

2386

UNIT	LOCATION	BDE'S	TYPE BN			STRENGTH	NOTES	
			TANK	MECH	INF			
Divisions:								
1.	1st Mech	Ft Riley	3	5	4	16605		
2.	2nd Inf	Korea	3	2	2	3	15003 1	
3.	3rd Mech	USAREUR	3	5	5	17627		
4.	4th Mech	Ft Carson	3	5	4	15773		
5.	5th Mech	Ft Polk	2	3	3	12166		
6.	6th Inf	Alaska	2			3	4775 2	
7.	7th Inf	Ft Ord	2			6	8953 3	
8.	8th Mech	USAREUR	3	5	5	18000		
9.	9th Mtz	Ft Lewis	3			9	13889 4	
10.	10th Inf	Ft Drum	2			5	6006 5	
11.	24th Mech	Ft Stewart	2	3	3	12131		
12.	25th Inf	Hawaii	2			6	9109 6	
13.	82nd Abn	Ft Bragg	3			9	14591	
14.	101st Aslt	Ft Campbell	2			6	13464 7	
15.	1st Cav	Ft Hood	2	4	4	11975		
16.	1st Ar	USAREUR	3	6	4	17371		
17.	2nd Ar	Ft Hood	3	5	4	16543		
18.	3rd Ar	USAREUR	3	6	4	17314		
Para Total			46	49	42	47	241295	
Separate Brigades:								
1.	193rd Inf	Panama	1			2	1392	
2.	194th Ar	Ft Knox	1	2	1	4080		
3.	197th Mech	Ft Benning	1	1	2	4362		
4.	Berlin Bde	USAREUR	1			3	2891	
5.	177th Ar	Ft Irwin	0	0	0	467	8	
6.	6th ACCB	Ft Hood	0			0	9	
Para Total			4	3	3	5	13192	
Subtotal			50	52	45	52	254487	
Separate Battalions:								
1.	1-3	Inf Ft McNair				1	1176	
2.	2-4	Inf USAREUR				1	877 10	
3.	3-325	Abn ACE				1	1144 10	
4.	4-31	Mech Ft Sill			1	257		

5.	1-33	Ar	Ft Lewis	0		0	11	
6.	3-73	Ar	Ft Bragg	0		0	12	
7.	CDCEC	Comp	Hunter-Liggett			78	13	
Para Total				0	1	3	3532	
Subtotal				50	52	46	55	258019

Armored Cavalry Regiments:

1.	2nd ACR	USAREUR	1	3	4703		
2.	3rd ACR	Ft Bliss	1	3	4115		
3.	6th ACR(L)	Ft Lewis	1	3	4000	14	
4.	11th ACR	USAREUR	1	3	4480		
5.	14th ACR	Ft Irwin	1	3	4433	15	
6.	17th ACR(L)	Ft Bragg	1	3	4000	16	
Para Total				6	18	25731	

Special Operations Cmd (Army) (No Change):

1.	75th Ranger Regt	1	3	1854
2.	S.F. Groups	4	12	4891
Para Total		5	15	6745

TOTAL	61	70	46	70	290495	1,2,4,&17
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NOTES:

1. 2nd Inf is programmed to convert its 3 infantry battalions to 2 air assault battalions in 1989.<sup>4</sup>

2. 6th Inf (L) is programmed by the Department of the Army as a partial "bill payer" to reach an active army end strength of 772,300 (round numbers). Division is scheduled for 2 active brigades and 5 active battalions by 1991, and 1 brigade with 3 battalions and 1 separate battalion as round out. This is an increase of 2 active Light Infantry Battalions to the active force by 1991.<sup>5</sup>

3. 7th Inf (L) would inactivate 1 brigade package consisting of a Bde HHC and 3 Light Inf Bn's. Total spaces equal 1794.<sup>6</sup>

4. 9th Inf (Mtz) is programmed by the Department of the Army to inactivate 1 brigade to allow the Army to reach an end strength of 772,300 (round numbers). Division will retain 2 active brigades and 6 active battalions (2 CAB(H), 2 CAB(L), and 2 LAB's). Expectations are 9th Inf (Mtz) will be assigned the Washington Army National Guard (WANG) 81st Bde (Mech) consisting of 2 Tank Battalions and 2 Mechanized Battalions as a round out.<sup>7</sup> The addition of the 81st to the 9th Inf (Mtz) provides the I Corps with 2 light divisions (the 6th and 7th), and 1 motorized division (the 9th) with a heavy brigade (2 tank and 2 mech bn's).

5. 10th Inf (L) is programmed for one additional light infantry battalion to the active force. Division will consist of 2 active brigades and 6 active battalions and 1 round out Bde with 3 round out Battalions.

6. 25th Inf (L) would inactivate 1 brigade package consisting of a Bde HHC and 3 Light Infantry Battalions. Total spaces equal 1791.<sup>8</sup>

7. 101st Aslt would inactivate 1 brigade package consisting of a Bde HHC and 3 Air Asslt Battalions. Total spaces equal 2168.<sup>9</sup>

8. 177th Armor Brigade units, National Training Center (NTC) operations spaces, and Ft Irwin base operations personnel would be redesignated as the 14th ACR. Total spaces gained would be 3036 of 3503 available. Remaining 467 spaces are retained for NTC agumentation and post support.<sup>10</sup> Regimental units will continue to fulfill NTC training missions and roles.

9. 6th ACCB is recommended for inactivation. A majority of authorized spaces, 2036, and equipment would be designated to resource 3 Combat Aviation Squadrons in the proposed ACR activations. 6th ACCB's inactivation would also:

(1) redistribute aviation resources across a broader spectrum of the Army, i.e., three corps versus one;

(2) assist in reducing aviation assets, a current Army force structure action, while providing justification for the remaining assets to more specific MTO&E and warfighting missions and roles.

10. The 2-4th Inf and 3-325th Inf (Abn) have not been included as recommended "bill payers". Another course of action would be to apply the spaces from the 2-4 Inf, 877, to an ACR squadron from the 17th ACR (L), proposed in Note #14 for the XVIII Corps, for assignment at Hohenfels, GE. to act as the OPFOR for the Combat Maneuver Training Center (CMTC). The 3-325th Inf (Abn), 1144 spaces, could be

designated as a forward deployed battalion of the 82nd Abn Div. One battalion from the division could then be inactivated, 697 spaces.

11. 1-33 Armor Battalion, 552 spaces, and the 164th Maintenance Detachment (DS), 16 spaces, would be redesignated as a squadron of the 6th ACR (L) and remain at Ft Lewis, Wa.

12. 3-73 Armor Battalion, 473 spaces, and their Maintenance Detachment (DS), 16 spaces, would be redesignated as a squadron of the 17th ACR (L) and remain at Ft Bragg, N.C.

13. Elimination of the CDCEC Composite Battalion stationed at Hunter-Liggett, Ca. CDCEC staffing is retained with a strength of 78. Functions and missions of this TDA Bn. will be assigned to a squadron from the 6th ACR (L).

14. Activation of the 6th ACR (L) is recommended to align a regiment with I Corps. Structure strength is proposed to be 4000 authorized spaces. Reduction of strength compared to an existing ACR is based on the use of HMMWV's and Armored/Assault Gun Systems (AGS) in place of tracks and tanks and the overall lightening of combat support and combat service support forces. Assignment of the 6th ACR (L) to the I Corps would provide:

(1) A Squadron package stationed at Ft Hunter-Liggett, Ca., to: replace the CDCEC composite battalion, approximately 500 spaces, currently stationed there; provide combined arms integration and training for the 7th Inf (L); act as an NTC organized OPFOR for units training at Hunter-Liggett and Camp Roberts; and, provide an active force with the requisite MOS's and equipment to assist in training and evaluating units of the California Army National Guard's 40th Div (Mech).

(2) A Squadron package stationed at Ft Lewis, Wa., to: replace the 1-33 Ar Bn; provide combined arms integration and training for the 9th Inf (Mtz) in a European environment; and, provide an active force with the requisite MOS's and equipment to assist in training and evaluating units of the Washington Army National Guard (WANG) 81st Bde (Mech) stationed west of the Cascade Mountains. 81st Bde (Mech) is proposed as the round out brigade for the 9th Inf (Mtz).

(3) The Regimental HHT, a Cavalry Squadron, and the remaining regimental assets, i.e., engineers, aviation, CEWI, chemical, and support, stationed at Yakima Firing Center (YFC), Wa., to: provide an OPFOR for this 263,131 acre training area;<sup>11</sup> contribute to the justification for the firing centers importance and use, i.e., increase

training densities, to assist in acquiring more acreage; provide for combined arms integration and training for units using the firing center in a Middle Eastern / Desert environment; and, support the training and evaluation of the WANG's 81st Bde (Mech) stationed east of the Cascade Mountains.

15. Redesignation of the 177th Armor Brigade to the 14th ACR at Ft Irwin, Ca. Structure would be the same as the 2nd, 3rd, and 11th ACR J-Series MTO&E 17051JS with an authorized strength of 4433. Strength is calculated as the mean of the 2nd, 3rd, and 11th ACR's.<sup>12</sup> Redesignation of the 177th to the 14th ACR would:

(1) Provide an ACR for alignment with the IX Corps and / or the 8th Army in Korea.

(2) Increase the total forces available for the NTC OPFOR mission. The two battalions currently assigned this mission are over committed in relation to available manpower, training rotations, and individual and unit training requirements. In addition, the regimental organization would provide for permanently assigned engineers, aviation, chemical, CEWI, air defense, and support units under one command.

(3) An adequate base and training center operations force of 467 spaces to allow for Ft Irwin's continued operation as a mobilization and training base in the event the 14th ACR was deployed.

16. Activation of the 17th Armored Cavalry Regiment (Light) is recommended to align a regiment with XVIII Corps. Authorized structure strength is proposed to be 4000 spaces. Reduction of strength compared to existing ACR's is based on the use of HMMWV's and AGS versus tracks and tanks and the overall lightening of combat support and combat service support forces and equipment. Assignment of the 17th ACR (L) to the XVIII Corps would provide:

(1) A Squadron package stationed at Ft Bragg, N.C., to replace the functions and missions of the 3-73 Armor Battalion.

(2) The Regiment (L) stationed at Little Rock Air Force Base, Ar., to provide an OPFOR for the Joint Readiness Training Center (JRTC) at Ft Chaffee, Ar.<sup>13</sup>

17. Infantry battalion strength will increase by 3 with the programmed additions of 1 battalion to the 10th Inf (L) and 2 battalions to the 6th Inf (L) by 1991. In addition, 3 battalions from the 9th Inf (Mtz) and 1 battalion of the 6th Inf (L) will be inactivated or not activated. 2nd Inf will reorganize from 3 battalions to 2.

Total Infantry "type" Battalions in the programmed force will be 69 if recommended inactivations are accepted.

END NOTES

1. U.S. Department of the Army, Force Accounting System Active Army Troop List, pp. 1-91.
2. Larry Carney, "6th Infantry Deal Saves 1,400 Slots," Army Times, 15 Feb 1988, pp. 1 & 24.
3. Russell F. Weigley, History of the United States Army, p. 132-134.
4. Caspar W. Weinberger, Report of the Secretary of Defense Caspar W. Weinberger to the Congress on the FY 1988 / FY 1989 Budget and FY 1988-92 Defense Programs January 12, 1987, p. 153
5. Carney, pp. 1 & 24.
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7. Carney, pp. 1 & 24.
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