

AD-A'164 754

A thesis presented to the Faculty of the U.S. Army Command and General Staff College in partial fulfillment of the requirements for the degree

MASTER OF MILITARY ART AND SCIENCE

BY

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89-3332

UNCLASSIFIED
SECURITY CLASSIFICATION OF THIS PAGE (When Date Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
. REPORT NUMBER		3. RECIPIENT'S CATALOG NUMBER
	1211,7164	754
. TITLE (and Substitle)	1	5. TYPE OF REPORT & PERIOD COVERED
The Light Infantry Division:		į
How Many Are Needed?		Master's Thesis
		5. PERFORMING ORG. REPORT NUMBER
. AUTHOR(a)		B. CONTRACT OR GRANT NUMBER(A)
MAJ Richard R. Babbitt PERFORMING ORGANIZATION NAME AND ADDRESS		10 BROGRAM F. EMENT PROJECT TASK
TENT CHANG CHORNIZATION NAME AND ADDRESS		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
11. CONTROLLING OFFICE NAME AND ADDRESS		12. REPORT DATE
U.S. Army Command and General Stat	ff College	10 May 1985
ATTN: SWD-GD	5	13. NUMBER OF PAGES
Fort Leavenworth, KS 66027		100
14. MONITORING AGENCY NAME & ADDRESS(II dillerent from Controlling Office)		15. SECURITY CLASS. (of the report)
		UNCLASSIFIED
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S. DISTRIBUTION STATEMENT (of this Report)		
7. DISTRIBUTION STATEMENT (of the abstract entered	in Block 20, il different fro	an Report)
B. SUPPLEMENTARY NOTES		
9. KEY WORDS (Cantinue on reverse side if necessary er	nd identify by block number,)
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MASTER OF MILITARY ART AND SCIENCE

THESIS APPROVAL PAGE

Name of candidate Major Richard R. Babbitt

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Approved by:			
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Lawrence A. Yates, PH.D	· ·	ember Graduate Fa	•
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The opinions and conclusions expressed herein are those of the student author and do not necessarily represent the views of the U.S. Army Command and General Staff College or any other governmental agency. (References to this study should include the foregoing statement.)

ABSTRACT

THE LIGHT INFANTRY DIVISION: HOW MANY ARE NEEDED? by Major Richard R. Babbitt, USA, 100 pages.

The purpose of this Masters of Military Art and Science (MMAS) thesis is to determine how many Active Component and National Guard light infantry divisions are needed in the Army of Excellence (AOE) force structure through a survey of historical and current literature.

The study analyzes the historical perspectives and current strategic thoughts being used to defend the utility of and need for the light infantry division. From the findings, two conclusions are drawn. First, the light infantry division does have utility on the battlefield through the 1990's. Second, the AOE force structure needs to be balanced between heavy and light divisions.

The study then provides four approaches for arriving at an optimum program number of light infantry divisions: the balanced, the Active component, the corps, and the theater. The thesis concludes that the five light infantry divisions currently planned fall within the approach brackets, but that the planned componentry, stationing, assignment, and missions do not appear to fall with the rationale devised for any of the approaches.

ACKNOWLEDGEMENT

Three very special ladies deserve special thanks and recognition: Joanne, Pam, and Patty. To Joanne, my wife, for ensuring all went well on the home front. To Pam and Patty, my two dedicated typists, who struggled with the numerous changes and short suspenses of this project. All three exhibited uncommon patience — a virtue, I fail to possess.

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LIST OF ACRONYMS

AOEArmy of Excellence	
CACDA	
CDDConcepts Development Directorate	
CGSC S Army Command and General Staff College	
CINCCommander-In-Chief	
CINCEURCINC US European Command	
CINCLANT	
CINCSOUTH	
CONUS	
CSA	
CSICombat Studies Institute	
DARPADefense Advanced Research Project Agency	
DCSOPSDeputy Chief of Staff for Operations and Plans	
DODDepartment of Defense	
DRSDivision Restructuring Study	
FCField Circular	
FDDForce Design Directorate	
FYFiscal Year	
HTLDHigh Technology Light Division	
HQDA Headquarters Department of the Army	
IDInfantry Division	
JCSJoint Chiefs of Staff	
JSPDJoint Strategic Planning Document	
JSPDSAJSPD Supporting Analysis	
MMASMasters of Military Art and Science	
NCA	
NORTHAGNorthern Army Group	
ODCSOPSOffice of the DCSOPS	
PPBSPlanning, Programming, and Budgeting System	
TAP The Army Plan	
TOETable of Organization and Equipment	
TRADOC US Army Training and Doctrine Command	

CHAPTER ONE

INTRODUCTION

PURPOSE

The Army is currently in the midst of an unparalleled and much publicized modernization program. Major attention continues to focus on the funding decisions for new equipment and high technology. However, the more important decisions deal with designing and structuring a force to meet the expected threat of the 1990's.

Designing ground forces to perform multitudes of tasks presents a dilemma: those forces most capable of opposing Warsaw Pact forces — heavier, armored and mechanized units — are the most difficult to deploy rapidly, while lighter forces — designed to deploy more rapidly, against increasingly sophisticated threats worldwide — are less capable on arrival. \(\)

In August 1983, the Army began to develop a force structure called the Army of Excellence (AOE) to solve the dilemma.

The purpose of this thesis is to determine how many Active and National Guard light infantry divisions are needed in the AOE force structure through a survey of historical and current literature. The thesis first analyzes the historical perspectives and current strategic thoughts being used to defend the five light infants/divisions currently planned. Understanding that there are resource constraints and limited information on global war requirements, the study then provides four approaches for arriving at an optimum program number of light infantry divisions.

BACKGROUND

Army of Excellence is a total force reassessment, including both organizational redesign and organizational restructuring. AOE will supersede the Army 86 organizational redesign initiatives, which began in the mid 1970's. The purpose of AOE is to solve the Army's "hollowness," which results from forces composed of units assigned multiple missions and/or units manned at low authorization levels. In other words, the sum of the Army's required parts exceeds the available equipment and manpower resources. From the AOE study is to come a balanced force structure with greater flexibility and utility. The new force is to be fighter-heavy, more deployable, realistically attainable with available resources. 2 AOE looks to trim heavy divisions, design a light infantry division, develop a light infantry division base for the airborne and air assault divisions, and design an Airland Battle corps and echelons-above-corps structure. Additionally, the Army of Excellence Study will identify enough personnel spaces to field several new divisions. These new divisions, together with several existing divisions that will be converted, are all to be light infantry divisions.

Unlike regular and mechanized infantry divisions, the light infantry division is a small, flexible, and versatible fighting force optimized for employment against light forces in low-to-mid-intensity conflict. Some of its unique characteristics are approximate 10,000-man strength, deployability in fewer than 500 aircraft sorties, high foxhole infantry strength, excellent close terrain combat

operations training, and ability to quickly accept additional corps combat multipliers through force tailoring. The division will take advantage of the latest technology to enhance its battlefield performance and survivability and to reduce manpower and equipment resources. Composed primarily of fighters equipped with lightweight weapons, the division has a small sustainment requirement. Organized for rapid deployment and immediate combat operations upon arrival, the division has great utility as a get-in-quick stablizing, intervention, or peacekeeping force. It is capable of fighting in any environment and is easily extracted upon completion of its mission. compared with the current infantry division, the light infantry division is capable of deploying in a third less C-141 equivalent sorties and in one-third the time. This capability provides the National Command Authority (NCA) a unique new range of response options for meeting world crises. The ability to get in and out quickly with a small but strong force may preclude the later need for a larger, more costly force. 7

The need for a truly light infantry division has been the subject of continuous controversy ever since World War II, when LTG Leslie J. McNair attempted to design, develop, and test several 10,000-man light infantry divisions. LTG McNair's efforts failed for three reasons: field commanders preferred the bigger and more capable infantry and armor divisions, resources were not a limiting factor, and strategic flexibility and deployabilty was not a major consideration. During the last forty years the last two reasons have slowly changed. Today

resources are limited. With the Soviet threat now attacking on the peripheries of US world interests, there is a greater need today for strategic flexibility, deployability, and economy of force and a need for credible conventional deterrence at the lower end of the conflict spectrum. Between World War II and AOE, the airborne divisions and various special operations forces fulfilled these needs. However today, these forces alone can not meet the Soviet challenge. The US Army, therefore, has decided that its Army of Excellence will have several light infantry divisions in order to achieve the balanced force structure, to provide a credible conventional deterrence along the entire spectrum of conflict, and to respond quickly with a combat force capable of performing a variety of special missions.

The concept and design of the light infantry division was approved by General Wickham, Army Chief of Staff (CSA), at the Fall '83 Army Commander's Conference (20-21 Oct 83). This division met his design guidance for an affordable, credible, capable, deployable, and sustainable force optimized for the lower end of the conflict spectrum. However, the number of light infantry divisions and the place they will occupy in the force structure remains a problem, as illustrated by the debate from those who argue that the Army still does not need any light infantry divisions and those who agree on the need for some light forces, but argue over the optimum mix of heavy and light divisions. The arguments against light infantry divisions tend to be parochial. Argued are the capabilities and limitations of one type unit versus another. According to one group the Army does

not need a light infantry division when it already has considerable light infantry forces in the form of ranger, special forces, airborne, and air assault units. Other opponents employ the big battalion theory, which holds that right and might always side with the biggest battalion on the battlefield and that more is better. Both variations of the argument are parochial and out of step with resource reality, current strategic thought, and AirLand Battle doctrine.

The real argument is not which units are bigger or more universal and thus always better, but what types of forces are required in context of the threat situation.

"Obviously, US forces are not available to defend everywhere against any threat at all times. Should deterrence fail, general strategic priorities, specific circumstances, and forces available at the time would govern force employment."8

The problem is one of matching the requirements of the situation against the lowest common denominator of unit capability. Because of resource constraints, the Army has decided that it must have some units of limited capability such as the light infantry divisions. Determining how many and where these light infantry divisions should be in the force structure remains a challenge and the purpose of this thesis.

RESEARCH OBJECTIVES

In order to arrive at a proposed optimum number of light infantry divisions in the Army of Excellence force structure, two intermediate objectives are researched and answered in sequence. These two intermediate objectives provide an organizational framework and a means to sequentially narrow the reader's focus before attempting to answer the final thesis objective. With the findings and conclusions drawn from the intermediate objectives as a back drop, the thesis objective of determining how many light infantry divisions and where they should be in the AOE force structure is addressed. The intermediate objectives are:

- (1) To assess the foreign and American experience with light infantry divisions prior to the start of the Army of Excellence Study. This objective encompasses a historical literature assessment from which to draw parallels between past light infantry division employment and projected future employment.
- (2) To assess the need for and development of light infantry divisions under AOE. The focus here is on the requirements under AOE that necessitate the development of a light infantry division. Additionally, this objective sorts out when, where, how, and why light infantry divisions should and could be employed today. This objective entails a survey of current literature relying heavily on the Planning, Programming, and Budgeting System (PPBS) documents.

ASSUMPTIONS, LIMITATIONS, DELIMITATIONS, DEFINITIONS

In order to narrow the focus of this research effort to something manageable, the study makes the assumptions listed below. Each is significantly important in its own right, although there is certainly a good deal of synergism. Each is constrained by time; consequently, each could change overnight in this complex and fast-paced decade of the 1980's. However, as best can be determined now, none will change significantly enough before 1990 to affect the conclusions of the thesis or their significance. The assumptions are:

- (1) US global commitments and areas of interest will remain relatively unchanged through the early 1990's.
- (2) Active Army component manpower ceilings will remain constant through the early 1990's, although reserve component ceilings may rise somewhat.
- (3) AirLand Battle Doctrine will not significantly change through the 1990's.
- (4) The recently approved light infantry division design and concept is relatively fixed and will undergo only minor revision as a result of testing and unit shakedown.

The thesis does have limitations. A significant portion of the current reference material is classified. However, conclusions drawn from the classified material have been handled generically enough to make the thesis unclassified. Since AOE is an ongoing Department of the Army (DA) project, much of the primary source material is scattered throughout the Office of the Deputy Chief of Staff for

Operations and Plans (ODCSOPS), DA and Training and Doctrine Command (TRADOC), and has not yet been formally collected and categorized. Additionally, because there is considerable interest and development in the AOE study, newer and more accurate information on the light infantry division continues to be published. Therefore, the window for inclusion of new material was closed 1 March 1985.

Four research delimitations were deemed necessary. Because the number of light infantry divisions in the Army of Excellence force structure must be answered in context of the current situation of rapidly improving technology, complex national and international interests, and the continual shifting of power between nations, the study does not consider light infantry division type forces prior to World War II. Secondly, the thesis does not explore the need for specialized light infantry forces, such as commando, ranger, mountain, alpine, airborne and more recently air assault. All World War II belligerents, to include the United States, saw the need for some specialized units. The need is still recognized; consequently, all the major powers have a limited number of highly specialized light infantry forces. Literature and documentation of these specialized units is extensive. Any controversy surrounding them revolves around resource priority rather than need for the unit or their capability. Therefore, this thesis will concentrate on the light infantry division as a separate and distinct subset of light infantry forces, recognizing full well that the distinction between specialized light infantry forces and the light infantry division may not exist except for this academic study. Thirdly, the study does not challenge the currently approved light infantry division design. Doing so would be counterproductive to this thesis study, which deals with force structure and force tailoring. Finally, the study does not attempt to determine the need for heavy, airborne, or air assault divisions in the force structure, nor does it attempt to solve the riddle of optimum mix. These four delimitations are best left as recommended topics for other research projects.

To negate any confusion and misunderstanding, the following definitions are used:

- (1) Force Design: The process of developing organizations, usually no larger than division, within a given set of manpower, equipment, and deployability constraints and a set of concept capabilities and limitations.
- (2) Force Tailoring: The process of developing a force, usually of corps size, from approved organizational designs to meet the needs of a given theater, contingency, or threat.
- (3) Force Structuring: The process of developing the total Army force, to include its Active, Reserve, and National Guard components.
- (4) Army of Excellence (AOE): The Army's new force structure for executing AirLand Battle and meeting worldwide contingencies through the 1990's. The term also refers to the ongoing study to achieve the new force structure.

(5) Planning, Programming and Budgeting System (PPBS) Required, Objective, and Program Numbers: A required number is the total number of units by type needed to ensure defeat of a given threat. An objective number, which is sometimes used interchangeably with required number, is used in this thesis to denote the number of unit-types needed to accomplish a given mission. An objective number is usually somewhat smaller than the required number and is based on an assessment of mission, threat, and acceptable risk. A program number refers to the ability to resource the required or objective numbers and represents what is actually in existence during a given fiscal year.

SUMMARY

The Army of Excellence force structure is being blueprinted, approved and implemented piecemeal at a blistering pace compared with previous Army reorganizations. A study at this time, which sheds light on how many active and reserve component light infantry divisions are needed in the AOE force structure, should be of immediate benefit to the US Army.

Subsequent chapters will develop the research objectives through a survey of literature, categorize the findings, and finally provide conclusions and recommendations.

CHAPTER ONE NOTES

- l. Caspar W. Weinberger, Annual Report to Congress, FY 1985 (Wash, D.C.: US Govt Printing Office, 1 Feb 84), p. 113.
- 2. US Army Combined Arms Combat Development Activity (CACDA), Force Design Directorate (FDD), Field Circular: FC 100-1, The Army of Excellence (Ft Leavenworth, KS: FDD, CACDA; 1 Sep 84), p. 1-4.
 - 3. Ibid., p. 1-3.
- 4. US Army Combined Arms Combat Developments Activity (CACDA), Concepts Developments Directorate (CDD), Operational Concept for the Infantry Division (Light) (Ft Leavenworth, KS: CDD, CACDA; 15 Mar 84), pp. 2-3.
 - 5. FDD, CACDA, FC 100-1, p. 2-1.
- 6. CDD, CACDA, Operational Concept for the Infantry Division (Light), p. 2-3.
 - 7. FDD, CACDA, FC 100-1, p. 2-1.
 - 8. Weinberger, Annual Report to Congress, FY 1985, p. 38.
- 9. Dept of the Army, Army Guidance (U), Vol II (Wash, D.C.: DA 29 Aug 84), pp. II-F-1 thru II-F-2.

CHAPTER TWO

SURVEY OF LITERATURE

INTRODUCTION AND OVERVIEW

This Master of Military Arts and Science (MMAS) thesis surveys two broad categories of literature: historical and current. The term historical, for the purposes of this study, refers to anything prior to the start of the Army of Excellence (AOE) Study in August 1983. A wealth of historical literature is available as outlined in the Combat Studies Institute (CSI) Historical Bibliography No 2, Light Infantry Forces prepared by Scott R. McMichael (January 1984). This CSI annotated bibliography was first prepared during the early stages of the light infantry division force design process for the purpose of facilitating research on past and current light infantry division type forces. It was later expanded to include light forces in general. Likewise, a wealth of current information or anything published after August 1983 is becoming available as AOE assumes major importance and priority at HQDA and within TRADOC. Current information consists of two groupings: unclassified briefings, interviews, and periodicals; and classified Department of Defense (DOD) PPBS resource documents. To facilitate research by those wishing to use the bibliography in this thesis, the bibliography is divided into three sections: historical, current and classified.

HI STORICAL

Before proceeding with any historical research on the light infantry division, first consult the CSI Historical Bibliography No 2, Light Infantry Forces. The bibliography encompasses pertinent sources covering all angles of research emphasis on light infantry forces. Included are sections on the World War II American experience, airborne division, divisions of the period 1950-60, comparative views and alternative proposals, technical analyses, and foreign armies. The bibliography refers to all types of light infantry forces; consequently, it contains sources not directly germane to the scope of this thesis. Those works of greatest benefit in the development of this thesis are discussed in the following paragraphs. In any case, the CSI bibliography should be a first stop for anyone doing research on the light infantry division or light forces in general.

Dr. Edward Luttwak's Historical Analysis and Projection for Army 2000 is the single best document for obtaining information on American and foreign light infantry division type forces. The document, done under contract for TRADOC in 1983 just prior to Army of Excellence, contains eighteen separate research papers on historical and contemporary "dissimilar" forces. Each paper describes force design, capabilities, limitations, and employment considerations. Analyzed are such units as the Swedish Norland Brigades, the Swiss mountain division, the Austrian mountain battalions, the Israeli light brigades, and the 10th Light (Alpine) Division. In his conclusions, Dr. Luttwak outlines in extensive detail the need for light infantry,

when and where to use them and when and where not to use them.

Because the conclusions make comparisons between heavy and light forces, the conclusions are of interest to persons doing research on both types of forces. Each paper contains an extensive bibliography.

Perspective on Infantry written by John A. English in 1981 provides a Well-researched, clearly written, and interesting history infantry organizations. This Canadian of modern author infantryman describes the role of infantry on the modern battlefield in terms of training, tactics, employment, and effect on the outcome of battle. The bulk of his effort is on the role infantry has played since World War I. English's thesis and purpose are to convince the reader of the continued utility and importance of infantry. After Dr. Luttwak's study, English's book is the most useful overview because of its extensive treatment of foreign infantry. As a follow-up to his book, English presented his views to the Infantry School in 1984. An article entitled "Thinking About Light Infantry," which is an adaptation of that talk, appeared in the November-December 1984 issue of Infantry magazine.

The only other detailed source dealing with worldwide infantry forces is Roger A. Beamont's, Military Elite (1974). While dealing with specialized units, such as ranger and special forces, that are not within the scope of this thesis, the author does discuss both the benefits and the price to be paid in terms of battle outcome and strategic policy for having these type units. This same theme is germane to the costs and benefits of having elite light infantry

divisions in the Army of Excellence force structure. Field Marshall the Viscount Slim also addresses this same theme in his concluding chapter of Defeat into Victory (1961).

The US Army's only experiment with a truly light infantry division before the start of AOE occured during the period 1942-44. The Army Ground Forces: The Organization of Ground Combat Troops (1947), by Greenfield, Palmer and Wiley, provides the best source for obtaining information concerning these American experiments. This source is a US Army in World War II historical series volume citing original materials. It provides a clear, concise picture of LTG Leslie J. McNair's attempts to form and test several concepts of light divisions. Neither specifics of the light infantry division design or test results are discussed, but the authors do explain the concept and resulting failures in context of the World War II effort.

Between World War II and Army of Excellence, the United States did not have a truly light infantry division. Only the airborne divisions of the period approximate the size, mission, and deployment capability of the recently approved light infantry division. Consequently, no detailed source materials exist on US light infantry divisions. However, there are excellent primary and secondary sources explaining the need, employment, capabilities, limitations, and design of the other basic divisions of the period: armor, mechanized, airborne, and air assault. From these sources, the rationale for not having an American light infantry division can be derived. Discussed in subsequent paragraphs are these primary and secondary sources.

Several primary source documents from post World War II review boards, offer conclusions which guided divisional design to 1960. One of these documents from a 1946 infantry conference at Fort Benning, Georgia, includes transcripts of comments by Generals Bradley, Krueger, Hodges, and Gavin. Two other studies come from a General Board convened bу US Forces, European Theater, "Organization, Equipment and Tactical Employment of the Infantry Division," and "Types of Divisions - Postwar Army." All these studies (there are other similar studies describing different organizations) contain recommendations for technical equipment, organizational design, and doctrinal changes. While giving valuable insights into the thoughts of America's most prestigious military leaders and commanders of the war, the documents provide little more than recommendations for near- term fixes to existing divisional structures. For persons researching specific divisional subordinate unit issues these are excellent sources.

Between 1954 and 1956, three valuable primary source documents were produced that provide the prevailing thought of the time regarding the direction of divisional design and force structure composition. The first was a CGSC Study, dated February 1954, entitled, "Optimum Organization of US Army Divisions in 1960." The second is the Infantry School's associated study entitled, "[Re] Organization of the Infantry Division, 1960." In May of 1956, a CGSC Study, "Ficture Determining Optimum Division Size (Implications of Small Divisions)," was produced. As a whole, these three documents

primarily discuss divisional needs on the conventional and nuclear battlefield in terms of weaponry, new technology, manpower ceilings, and capabilities. The 1954 CGSC Study provides a brief but valuable discussion of the need for only two basic divisions: heavy duty, reinforced infantry divisions for 'toe-to-toe' fighting; and mobile forces (described as armor) for conducting counterattacks, pursuit, and exploitation. There is no mention of anything light. The airborne division is handled almost as an afterthought and very succinctly - airborne divisions are needed for strategic purposes and are employed tactically, but only temporarily.

Several excellent secondary sources discuss the evolution of divisional designs since World War II. For the purposes of this thesis, Robert A. Dougherty's, The Evolution of US Army Tactical Doctrine, 1946-1976, completed in 1979 was the most useful. While concentrating on doctrinal changes, this Leavenworth Paper gives an excellent account of the factors contributing to the changes in divisional designs as well. The author discusses such factors as national security policy, new technology, service and branch parochialism, and battlefield experience. Discussion of the interrelationships between factors provides a clear understanding of the force structure decisions without getting bogged down in force design issues and details.

Virgil New authored two fairly comprehensive histories that trace the development of the US Army divisions and the US infantry battalion. Respectively, these are <u>Evolution of the US Army Division</u>, 1939-1968, and Evolution of the US Army Infantry Battalion, 1939-1968 (1968). The first work, written in January 1969 for the US Army Combat Developments Command, contains an extensive bibliography. While tracing the development of the divisions, Ney focuses primarily on comparing and contrasting the design characteristics of the different divisions and the employment of the brigade.

An article written by John C. Binkley for Military Review in February 1977 provides a short, concise history of US Army divisional changes. For other than an overview, this article entitled, "A History of US Army Force Structure," provides little in-depth information.

Binkley's article and the two documents by Ney only cover the period up to 1970. To fill the gap between 1970 and the st rt of Army of Excellence, the single best source is by John L. Romjue, TRADOC Historian. His two volumes of official TRADOC history, A History of Army 86, Volume I: Division 86, published in November 1980, and a History of Army 86, Volume II: The Development of The Light Division, the Corps, and Echelons Above Corps (November 1979-December 1980), published in December 1981, describe the development of Army 86. Of interest to this thesis were the efforts to develop Infantry Divsion-86 and the initial efforts to develop what was referred to as a light infantry division, but was in reality only a light heavy division - The High Technology Light Division.

A study produced under contract for the Defense Advanced Research Project Agency (DARPA) in December 1982 has some very useful information and insights concerning light infantry. The title of the document is Classic Light Infantry and New Technology, written by Steve L. Canby. The purpose of the paper is to identify areas where technology could increase light infantry performance in the High Technology Light Division (HTLD). 4 From these potential areas, American scientific and engineering communities could then focus their research and development efforts towards high-payoff improvements. Before identifying the high-payoff areas, Canby first explains the traditional American way of designing and employing light infantry forces versus the European philosophy. This European philosophy is described as "classic light infantry." Camby then describes how this classic light infantry could be used in defense of the Zagros Mountains, the defense of Europe, and in an adjunct role for urban and that the US document recommends forest warfare. The European-style light infantry tactics and organizations. Although produced with the HTLD in mind, the document provides the transition of light infantry division thought from historical literature to current AOE light infantry division literature.

CURRENT

As mentioned earlier, considerable information on the light infantry division approved by General Wickman in October 1983 is available. For the purposes of this thesis, current information is divided into two groups. The first group consists of unclassified briefings, interviews, official publications, and articles in periodicals. The second group surveyed is the classified DOD PPBS resource documents.

Four unclassified primary documents are essential for a full understanding of the AOE light infantry division. The first is the Operational Concept for the Infantry Division (Light), dated 15 March 1984 and developed by the Concepts Development Directorate, Combined Arms Combat Developments Activity (CDD, CACDA). This document explains how the light infantry division and each of its major subordinate units is optimized and will perform combat operations at the lower end of the conflict spectrum. Two other documents were developed by the Force Design Directorate (FDD), CACDA: Circular, FC 100-1: The Army of Excellence, dated 1 September 84, and Army of Excellence Final Report, Volume II, The Light Infantry Division, (Draft), dated 29 June 84. These two FDD, CACDA reports. document the design evolution and key decisions made during the design process of AOE and the light infantry division, respectively. fourth document is the CGSC. Field Circular, FC 71-101: Light Infantry Division Operations, dated 31 July 84. The purpose of this Field Circular is to provide an interim description of the light infantry division organization and how it will fight. Each of the four references, as the titles indicate, contribute insight into the need for a light division and how, where, and when it should be employed. A note of caution for future users of these sources: because refinement of the AOE force structure will continue for several years, the details of the organizational charts are sure to change. Additionally, these references will continue to be updated or superseded by field manuals. Therefore, users should check to ensure that more recent versions do not exist.

Another source that may prove to be of extreme importance is a TRADOC study currently underway by Dr. Luttwex entitled Strategic Utility of US Light Divisions, A Systematic Francisco. This study is due to be completed by October 1985. The study atends to explain how the light infantry division will enhance national strategy by developing four possible mission scenarios that light infantry divisions could be called upon to perform. These light division missions are: (1) defending in a mature theater as either a forward-deployed or reinforcing division; (2) fighting in desert or arid mountain terrain such as found in Southeast Asia; (3) performing counterinsurgency, military assistance, or advisory roles in low intensity conflict theaters such as Central America; and (4) performing roles of rescue, anti-terrorism, or intervention (coup de main). A review of the DRAFT study report indicates the study results will not differ greatly from Dr. Luttwak's conclusions in Historical Analysis and Projection for Army 2000. Additionally, it appears the

new study, while articulating quite well how the light infantry division can be used at the tactical or operational level, will not be able to cross-walk the rationale developed in the four scenarios into a convincing strategic utility argument, except through inference.

Articles in periodicals provide the bulk of the information on the light infantry division. Through this media, the defense of the division is being waged. While not all articles are discussed here, a complete bibliography as of March 1984 has been compiled. articles of the greatest significance are those by General Wickham, US Chief of Staff, US Army, (CSA) and LTG Fred Mahaffey, Deputy Chief of Staff for Operations and Plans, (DCSOPS), who have the responsibility and positions of influence to convince DOD and the Congress of the need for light infantry divisions in the Army and in the numbers required. While each has written other articles, both have written one cornerstone document expressing their views on the light infantry division that should be a first stop on any research project. One is General Wickham's White Paper reprinted in the Army Times on 7 May 84 entitled, "Light Division's Effectiveness will Grow From 'Soldier Power'." This article first provides the White Paper, then a lengthy, detailed follow-up. Explained quite clearly are the CSA's position on the need for and purpose of a light infantry division and the direction he expects the Army to take in bringing the light infantry division into the force structure. The other, LTG Mahaffey's article entitled, "Structuring Force to Need," appeared in the October 1984 issue of Army magazine. This comprehensive article is key to

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understanding the Army's position on the need to balance the force structure and to understanding the concept of risk versus probability along the spectrum of conflict.

Three articles voice reservations concerning the concept and utility of light infantry divisions. The first of these is Michael R. Gordan's, "The Charge of the Light Infantry-Army Plans Forces for Third World Conflicts." This 19 May 84 National Journal article, while not taking a position on the argument, outlines the opinions of those who are lining up on each side of the issue. The February 1984 issue of Army magazine ran Edwin W. Besch's article, "Are Our Light Divisions Too Light?" Besch states that a light mechanized division as opposed to a light infantry division is needed in the force structure to handle most contingency missions. Beach takes issue with the light infantry division's tactical mobility and firepower. contending that most third world areas already have forces with more mobility and firepower than the US light infantry division. OL Brudvig's article in the 10 September 84 issue of Army Times entitled, "The Division May Be 'Light,' But Can it Fight?" takes issue with the light infantry division's ability to fight on the high intensity battlefield against either the Soviets or her surrogate forces. He states:

"The main adversary of the United States is the Soviet Union and her surrogates. To be able to fight these forces, which are equipped with modern armor, helicopter and support equipment, one can deduce that light divisions will have a very unfavorable combat power ratio."

Several articles rebutt COL Brudvig's article, but the best by far is Cpt David Petraeus', "Light Infantry in Europe: Strategic Flexibility and Conventional Deterrence," appearing in the December 1984 issue of Military Review. In this article, Petraeus lays out a convincing argument for the utility of light infantry in Europe and as a strategic conventional deterrence. Another source is a series of three articles appearing in the July-August 1984 issue of Infantry magazine: LTG Galvin's "Heavy-Light Forces and the NATO Mission;" MG Crowell's "Heavy-Light Connection: Division; and LTC Wood's "Heavy-Light Connection: Brigade." These three articles attempt to disspell reservations with the light infantry division and show how the light infantry division can be synchronized with heavier forces for participation in AirLand Battle on the NATO battlefield.

To assess the current US joint defense posture in terms of interests, policies, and deployed forces three current unclassified sources were used. United States Military Posture, FY 1985, not dated, was developed by The Organization of the Joint Chiefs of Staff (JCS) to supplement JCS testimony on the DOD FY 85 Budget. Also used was Secretary of Defense, Caspar W. Weinberger's, Annual Report to Congress: Fiscal Year 1985, dated 1 February 84. These two documents describe the need for light infantry divisions in the context of US defense program priorities. The third source is the November/December 1984 issue of Defense 84, which is devoted entirely to a series of ten articles by the Chairman, JCS, and each of the Unified and Specified Commanders. Each commander provides a current, accurate, and

unclassified assessment of his command's national security responsibilities and priorities.

The classified sources used to assess the current US defense posture are the many documents and studies that feed into the DOD Planning, Programming, and Budgeting System (PPBS). A detailed explanation of these documents and how they interrelate in the PPBS can be found in any PPBS handbook. Suffice it to say that these documents attempt to match manpower and material resources to national objectives and policies. From these documents the force is structured and assigned missions for planning and execution. The classified section of the bibliography lists those PPBS documents and related studies surveyed and used in the development of the thesis.

SUMMARY

A wealth of literature is available on light infantry divisions and light infantry forces in general to conduct a myrid of different studies: historical, current, positive, negative, unclassified, and classified.

CHAPTER TWO NOTES

- 1. Scott R. McMichael, <u>Light Infantry Forces</u>, US Army Command and General Staff College (CGSC), Combat Studies Institute (CSI), Historical Bibliography No 2 (Ft Leavenworth, KS: CSI, CGSC; Jan 84), p. v.
- 2. US Army Command and General Staff College (CGSC), "Optimum Organization of US Army Divisions in 1960," (Ft Leavenworth, KS: CGSC, 27 Feb 54), p. 4.
 - 3. Ibid., p. 6.
- 4. Steven L. Canby, Classic Light Infantry and New Technology (Arlington, VA: C&L Associates, Dec 82), p. i.
 - 5. Ibid., p. 1.
 - 6. Ibid., p. Forward.
- 7. Edwin W. Besch, "Are Our Light Divisions Too Light?," Army 35 (Feb 85): 48.
 - 8. Ibid., p. 44.
- 9. Col Dale K. Brudvig, "The Division May Be 'Light,' But Can It Fight?," Army Times 45 (10 Sep 84): 65.

CHAPTER THREE

METHODOLOGY

To answer the principal question of this thesis, which is to determine how many light infantry divisions the Army needs and where they should be in the force structure, a series of two intermediate objectives were researched. The intermediate objectives were:

- (1) To assess the foreign and American experience with light infantry divisions prior to the start of Army of Excellence.
- (2) To assess the need for and development of light infantry divisions under Army of Excellence.

The purpose of the two intermediate objectives was to first establish how and where light infantry type forces have been or are currently being employed. Secondly, who has or is using light infantry and why. From this research was determined the relatively utility of, need for, and number of light infantry divisions required in the AOE force structure. By the time the last intermediate objective is examined and discussed, opposing arguments will have been dealt with sufficiently so that the reader then need only concentrate on the thesis purpose.

On the basis of research into each intermediate objective, findings were drawn, which are discussed in the next chapter. By the very nature and intent of the research objectives, the bulk of the historical literature survey is front-loaded into a discussion of the first intermediate objective. Conversely, the most pertinent current

information is used for discussion of the second intermediate objective. Chapter five contains the conclusions and recommendations developed from the findings.

The Fort Leavenworth Combined Arms Research Library (CARL) has the vast majority of the historical research material outlined in the Light Infantry Forces bibliography and current information contained in periodicals and journals. In finding PPBS information CARL proved to be less useful. Observations indicated that CARL does not have a complete, current, or centralized set of DOD PPBS related documents.

The Force Design Directorate, Combined Arms Combat Developments Activity (FDD, CACDA) was used as the primary source for obtaining the most current official publications and information concerning AOE. This directorate is the TRADOC proponent for force design and has the lead in AOE and light infantry division design. Personnel from this directorate were most helpful in answering questions, offering suggestions, and providing primary source documents and points of contact at Headquarters, ARADOC and DA. Interviewing FDD action officers who were directly responsible for developing significant portions of the light infantry division and AOE, proved to be an excellent method of supplementing and filling gaps in the study research.

Summarizing, the methodology used in this study entailed determining from the available historical and current information a rationale of need and utility for the light infantry division, from which to determine the number to have in the AOE force structure.

CHAPTER FOUR

FINDINGS

INTRODUCTION AND OVERVIEW

The thesis proposes to determine how many light infantry divisions should be in the Army of Excellence force structure. Keeping this purpose clearly in mind, the two intermediate objectives outlined in chapter one were researched using the survey of literature described in the second and third chapters. This chapter, divided in five sections, reports findings from that literature survey.

Each section relates to an intermediate research objective and attempts to blend the historical and current literature survey findings. However, by the very nature and intent of the research objectives to sequentially narrow the reader's focus towards the research question, the bulk of the historical survey findings cluster together in the first two sections entitled "Foreign Experience" and "United States Experience: WWII to AOE." Likewise, the most pertinent current literature findings are discussed in the next two sections entitled "Army of Excellence" and "Placing the Light Infantry Division in the Force Structure." The final section is a summary of the findings.

FOREIGN EXPERIENCE

Foreign experience with light infantry division forces far exceeds the American experience. The reasons are many: resource constraints, lack of overseas or extra-continental commitments, defensible borders comprised of compartmentalized terrain, organization and equipment, tactics, and training. Consequently, most foreign light infantry division type forces are brigade equivalent in size, highly elite, context-specific. and unburdened υν overseas deployment constraint. While foreign light forces are suitable for most forms of close terrain warfare (mountain, urban, forest, jungle, or tundra), they are particularly well suited for the close terrain unique to their homeland. Steven Canby refers to these forces as "classic light infantry," where the tactics are infiltration in the attack, and ambush and counterstroke in the defense. Only Great Britain, France, and the Soviet Union provide exceptions to the general rule because they have extensive overseas interests and commitments. Except for resource constraints, the US experience and requirement for light forces has not fit the European model, until possibly now.

Two definitive works with an eye towards light infantry describe this foreign experience best: Dr. Edward Luttwak's eighteen separate research papers collectively entitled, <u>Historical Analysis and Projection for the Army 2000</u> and John English's, <u>Perspective On Infantry</u>. While the scope and purpose of these works differ considerably, each provides an excellent historical assessment and convincing argument for the continued need for and utility of light

infantry by foreign powers and the United States.

Dr. Luttwak in his analysis for Army 2000 provides a series of eighteen separate research papers on historical and contemporary "dissimilar" forces. From these research papers, he derives a series of general conclusions which apply universally to all forces. While the conclusions provide no new revelations, they do establish clearly identifiable situations in which only light forces or heavy forces are preferred. Dr. Luttwak recognizes that there are many grey or neutral situations in which either light or heavy forces could do equally well so long as all other things remained equal, such as deployability and sustainability. His purpose, however, is to clarify the two extremes, which call for one or the other, but not both types of forces. Once establishing the utility of light infantry, Dr. Luttwak then describes the need for US light infantry by projecting his light infantry utility arguments into overseas areas of US interest and concern. The conclusions follow:

- (1) While heavy divisions will continue to dominate high-intensity warfare on the European continent, conditions exist even on this high-intensity battlefield for light infantry division type forces if properly trained and employed.
- (2) The heavy division is unsuitable for rapid deployment by air, extremes of untrafficability, extremes of compartmentalization, and low-intensity warfare.

- (3) Heavy division suitability decreases as trafficability and force density decrease and/or as compartmentalization or theater spatial extent increase.
- (4) Heavy divisions could be outperformed by light infantry forces in urban warfare, warfare in medium mountains and heavily wooded areas, and in expeditionary warfare in large theaters with low force densities.

If Dr. Luttwak has a singularly important research paper, it is Paper No 18, "Notes on Special Purpose Forces, Dissimilar Formations and Expeditionary Headquarters in the British Army." British tradition and practice in responding to its strategic extra-continental commitments are fundamentally different from those of the United States. Quoting Dr. Luttwak:

the use of "dissimilar", ad-hoc, terrain-specialized, task specialized, and culturally-tuned forces has in fact been part of normality for the British Army, for which by contrast, the deployment of homogenous, "general-purpose" formations has been unusual. In practice, the British Army has only been a normal army (in both "Continental" or US terms) between 1915 and 1918, and again between 1938 and 1949. These were of course very important experiences but they were not truly formative, if only because the British Army has been engaged in extra-continental combat, or combat with "dissimilar" forces every single year this century, with the solitary exception of 1968.

In summary, British strategic forces have been, and are today, elite, specialized, and light, where they form the cutting edge for follow-on, balanced forces in spearhead operations. Additionally, given England's fiscal problems and tradition for small standing homeland forces, these same strategic forces provide the nucleus for expansion in general war. 4 From this paper on British forces Dr.

Luttwak appears to draw most of his recommendations concerning development of US light infantry division forces.

In his concluding paper, Dr. Luttwak describes the type of light infantry the US Army needs, how it should be employed at the tactical through the strategic level, and finally how it should be recruited and trained. His prescription for the US Army sounds terribly like the British approach, particularly those characteristics that would create unit cohesion. Luttwak's recommendations based primarily on the foreign experience with light forces are summarized below: 5

- (1) Light infantry should be context-adaptable, not context-specific, even though there must be terrain specialization and/or theater-strategic specialization.
- (2) There ought to be a light infantry branch, with mechanized infantry becoming part of the armor or heavy force structure.
- (3) The light infantry branch should include what are commonly referred to as special operations forces, airborne forces, and air assault forces.
- (4) All light infantry forces ought to be trained and regarded as elite soldiers, to include the light infantry division.

Clearly, Luttwak has taken light infantry force structure development at least one step beyond AOE objectives by proposing light (infantry) and heavy (armor/mechanized/motorized) branches. Such a step would create a force orientation and force structure not upsimilar to the British.

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One country not analyzed by Dr. Luttwak in his historical analysis for Army 2000, but having strategic commitments, is France. For much the same reasons as the United States, France is currently developing a rapidly deployable strategic force called the "Force d' Action Rapide" (FAR). This extra-continental oriented force is composed of five different type divisions: airborne, marine, alpine, light armor, and airmobile. The FAR concept appears to closely resemble a US contingency corps or possibly a US unified command because of its joint service capability. Nevertheless, France recognizes the need to give its national command authority greater flexibility in dealing with overseas problems, while accepting some force structure risks on the continent.

In the other definitive work, <u>A Perspective on Infa.</u> <u>y</u>, John English, a Canadian infantryman, reaches a much broader conclusion than Dr. Luttwak. While not always differentiating between mechanized, motorized, specialized, or light infantry, his conclusions are that conventional infantry on the battlefield has been and always will be the ultimate arm of decision regardless of terrain, threat, or technological invention. 8 In this regard, his conclusions are very similar to S.L.A. Marshall's in Men Against Fire. 9

Dr. Luttwak and John English draw their conclusions extensively from the German and Soviet experience on the Eastern Front during World War II. At the strategic level both World War II belligerents used light infantry mountain (Alpine) divisions as an economy of force in the rugged, compartmentalized Balkans. 10 At the tactical level,

the use of light infantry by both beligerents is well known and documented. However, it is at the operational level that light infantry played a major role for the Russian Army. Operation Barbarosa began with a German Army consisting of 108 infantry, 19 Panzer, and 14 motorized divisions attacking 89 infantry, 36 armored, 18 motorized, and 8 cavalry Red Army divisions. 11 Although many Soviet formations disintegrated and thousands of infantry surrendered, many others contested the German advance, hanging tenaciously in pockets of resistance. 12 While many of the resistance pockets were spontaneous and unplanned, many more using the forests and swamps south of Leningrad and Moscow were well planned and coordinated. What finally slowed the German blitzkrieg was the steadfast determination of the Russian infantryman and his use of sound light infantry tactics at the tactical and operational level. 13

Another historical example used by both Luttwak and English is the Russo-Finnish War of 1939-40. The Finns used well-trained, disciplined, and well-lead arctic light infantry to halt the Russian offensive of 1939 along the Mannatheim Line. The Finnish Army was composed almost entirely of light infantry organized into ten divisions. Although finally bludgeoned into submission in 1940 by a larger and better equipped Russian Army, the Finnish light infantry proved that when properly employed in close, difficult, and harsh terrain, light infantry does have utility as an economy of force and can fight heavier forces to a stand still for an extended period of time with minimal sustainment and/or reinforcement. 14

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Roger A. Beaumont's <u>Military Elites</u> and Field Marshall the Viscount Slim's <u>Defeat into Victory</u> provide opposing insights and background on the foreign experience with light forces, particularly with respect to elite and special operation units. Beaumont analyzes a variety of units and countries, while Slim discusses his Burma theater experience exclusively. However, each comes to the same conclusion, namely, that elite forces, while usually fighting gallantly, contribute little to the final operational outcome and mainly drain valuable resources needed for conventional forces. Beaumont maintains that use of such units constitute attempts to compensate for strategic and technological weaknesses or to serve as a psychological need or model. Field Marshal Slim wrote:

The Britis's Army in the last war spawned a surprising number of specialized units and formations ... each trained, equipped and prepared for some particular operation. We had commandos assault brigades, amphibious divisions, divisions. mountain long range penetration airborne formations, desert forces. groups extraordinary variety of cloak and dagger parties. equipment of these special units was more generous than that of normal formations and many of them went so far as to have their own bases and administrative organizations Yet I came firmly to the conclusion that such formations, trained, equipped, and mentally adjusted for one kind of operation only, were wasteful. They did not give, militarily, a worthwhile return for the resources in men, material and time they absorbed ... The result of these methods was undoubtedly to lower the quality of the rest of the Army, especially of the infantry ... I would lay it down, that any single operation in which more than a handful of men are to be engaged should be regarded as normal and should be carried out by standard formations. 15

Both of these books warn that elite, specialized units should be very limited in order to compensate for technological difficulties and that

the greater effort should go into developing highly trained, context-adaptable conventional infantry forces. This same theme is evident in Dr. Luttwak's analysis and conclusions and in the traditional American approach to light infantry forces.

In summary, the foreign experience with light infantry division type forces is greater and more diverse than the US experience. Such foreign forces have always existed in countries that can ill afford heavy forces and/or have little need for heavy forces because of compartmentalization and terrain difficulties. Sweden, Switzerland, and Austria are cases in point. Germany and Israel have a growing number of light infantry forces, which they intend to use in special operations and as an economy of force in conjunction with their predominately heavy forces. In the freeworld, only England and France have problems similiar to those of the US, i.e., a dominating NATO orientation, resource constraints in maintaining a large standing army, a historical national discontent with maintaining a large standing home army, and many strategic overseas interests. Yet each country has a long tradition of maintaining light infantry forces for extra-continental missions that have the same desired operational characteristics of the AOE light infantry division. The Soviet Union, which also has extensive global interests and commitments, has partially solved its strategically deployable force problem by using third world forces, most notably Cuban. Most important, the desire to have and the need "for classic light infantry" remains strong, and until the AOE light infantry division concept, unique to Europe.

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UNITED STATES EXPERIENCE: WWII - AOE

The light versus heavy controversy in the United States came to the forefront early in World War II. Heavy forces being defined then and now, as anything motorized, mechanized, or armored and with a wealth of mobile firepower. Light forces meanwhile being defined as anything foot-or-hoof propelled and with little firepower. invasions of Ethiopia, Poland and France in World War II made it quite clear to the Allied powers that being heavier was the solution for nearly all situations. Just as Polish cavalry and light infantry failed to halt German armor formations, American equipment and divisional structures failed miserably in North Africa. The lessons thought to be learned were that light and pure infantry divisions were obsolete and that heavier and mixed divisions were needed. American technology and the American industrial base were pressured to produce equipment in such quantity and quality that US heavy forces would not again be found lacking on the battlefield. 16 The fixation with better equipment and heavier forces still continues and has become nearly an end in itself rather than a means to an end. However, there has been occasional experimentation with limited formations of light forces by all the major powers, to include US experimentation with light infantry divisions during World War II.

The US first experimented with light infantry divisions during the period 1942 to 1944. These experiments were attempts to convert the newly developed standard triangular infantry division into seven unique specialized units. Jungle, desert, and mountain divisions were

envisioned to meet specific climatic and terrain considerations. Airborne and amphibious divisions were envisioned to meet special operational situations. Light pack and light truck divisions were envisioned to meet requirements in close, difficult, and untrafficable terrain. While desert, jungle, and amphibious training centers were established to test new equipment and formulate training requirements, no divisional units of these types were ever organized or formed. 17 The other four types experienced a different history. The fate of all seven special divisions hinged on four factors: LTG Leslie J. McNair's philosophy towards reorganization and training, technological limitations, manpower recruitment and training, and the desires of the theater commanders.

LTG McNair as the CG, Army Ground Forces (AGF), was responsible for developing the Tables of Organization and Equipment (TOE) for all ground forces and for training the ground forces. In this capacity, his philosophy toward reorganization and training was not only instrumental but dominating in the eventual World War II force structure. McNair's fundamental approach to specialized units was that the two basic divisions (armor and infantry) could and should be used for specialized operations after first receiving general military proficiency training by AGF and then specialized training by the theater to which they were assigned. He emphasized the futility of perfecting men in the techniques of skis, gliders, or landing craft if, after meeting the enemy, they were not competent all-around soldiers. He had already trimmed the

prewar square infantry division down to an all-purpose, no-waste, and low-overhead triangular division acceptable to the theater commanders. Any further reductions in capability or increases to the training base requirements ran counter to AGF's mission. McNair's one exception was the light (pack or truck) divisions, which he thought could further save supplies and service requirements, deployment assets, and valuable manpower in the Pacific theater. 20

In January 1943, LTG McNair agreed to an all-purpose light infantry division for testing. The division resembled the standard triangular infantry division except for reduced numbers of personnel approximately 9,000. and equipment. Total strength was Organizational transportation was limited to handcarts or toboggans for combat service support, and mules or jeeps for the 75mm pack artillery. The divisions activated for testing were the the 89th Light Division (Truck), 10th Light Division (Pack, Alpine), and the 71st Light Division (Pack, Jungle). Tests of the 89th and 71st at Hunter-Liggett Military Reservation, California, with its rugged and roadless terrain, proved unfavorable. Testing of the 10th Light Division likewise produced negative results. Because of technological limitations, the bulk of the division's fighting strength was consummed in hauling supplies and maintaining lines of communication. As a result, the 71st and 89th were converted to standard infantry divisions. However, the 10th Light Division (Alpine) was retained and deployed to Italy in December 1944, but with a new TOE more in concert with the standard infantry division.

A World War II problem of poor infantry recruitment, training, and recognition may have also led indirectly to the unfavorable results of the light division testing. The following is a summary from the Army Historical Series concerning AGF manpower procurement and training. Throughout the war, Army Ground Forces received the least capable personnel, while Army Air Forces, Army Special Services Forces, the Navy, and the Marines received the best personnel. The best personnel were identified through a battery of entrance examinations similar to those given today. A series of mental categories were established to rank order the examination results, with personnel in the lowest mental categories then going to AGF. Training and testing programs regardless of mental category were of necessity quickly formed, experimental, and of short duration. Consequently, if ideas, concepts, and equipment did not quickly prove successful they were dropped. Additionally, not until 1944 were special awards given to infantryman, such as the Bronze Star, Expert Infantryman's Badge, and Combat Infantryman's Badge, in recognition of the important role infantrymen play on the battlefield and on behalf of the total war effort. 21 The lack of experienced and quilified NCO's and officers skilled in small unit infantry operations must have complicated the hurridly arranged testing of the light infantry divisions.

Dr. Luttwak, in his historical analysis for Army 2000, identifies three causes for the failure of the Hunter-Ligget experiments: limited tactical capabilities, an undefined employment concept, and failure to adhere to the advice of field commanders. 22 It was the

failure to adhere to the advice of field commanders that spelled the greater doom for the all-purpose light infantry division. General Eisenhower thought the light division might have limited usefulness in rugged mountainous to reain as found in Tunisis. 23 COL Merrill, representing General Stilwell's China-Burma-India Theater, thought the light divisions to be valuable in jungles and mountains in undeveloped countries such as China. 24 General McArthur thought the division too weak in firepower and logistics for Pacific Island amphibious operations where the policy was to insert a standard infantry division and use it to the point of exhaustion. 25 Each theater commander with his own set of unique theater requirements was looking for a specialized theater division, not an all-purpose light infantry division. Additionally, they wanted these specialized light divisions in addition to their allocated standard armor and infantry divisions. They did not want to convert or lose any of their standard divisions.

Between World War II and the Army of Excellence, the United States went through a 35-year period of continuous force structure change. Organizational designs either implemented or tested included the Pentomic divisions, the ROAD divisions, TRICAP, air assault, Division Restructuring Study (DRS) division, and the High Technology Light Division (subsequently changed to High Technology Motorized Division). Each divisional design attempted to match the prevailing strategic policy and priorities to the current operational doctrine and to the perceived threat. Several works provide the cause and effect evolution of these organizational designs.

Although the focus is on doctrine, the best work is Robert Doughty's "The Evolution of US Army Tactical Doctrine, 1946-76." This Leavenworth Paper capsulizes the cause and effect relationship between scrategic policy and organizational design without getting bogged down in details of the design. 26 To sort out the capabilities and limitations of the various US Army divisions during this period, two excellent works should be consulted. Virgil Ney traces the development of the divisions from 1939 to 1968 in Evolution of the US Army Division: 1939-1968. Completing the gap between 1968 and AOE is TRADOC's A History of Army 86 Volumes I and II.

From 1946 to 1960, while the US was the undisputed leader in nuclear weapons, the policy of massive retaliation dampened the development of conventional forces. In particular light forces suffered, even though the US Army sew the need for such conventional forces. The closest the US came to having light infantry forces were its two airborne divisions.

By 1960 Soviet-backed forces had found several means to circumvent the nuclear threat, except in Europe, primarily by taking an indirect approach through the use of wars of rebellion, insurgency, terror, and surrogate forces. Another means was using economic aid and military assistance in much the same way as the United States. Instead of confronting US presence in Western Europe, the Soviet indirect approach targeted the Third World, where US interests were not clearly defined or not properly defended. Additionally, the Soviet's were beginning to realize that massive retaliation was only applicable

to direct super-power confrontation. In the Third World, where the Soviet's were attempting to take advantage of rising nationalism, remaining colonial dissatisfaction, and economic aspirations, the use of nuclear weapons was seen as clearly inappropriate. With parity emerging (quanity, quality, and capability of stockpiled warheads) massive retaliation was no longer a viable US option or threat to the Soviet Union, so long as direct confrontation over vital US interests could be avoided. To respond to the new Soviet threat the US adopted a strategic policy of limited flexible response and a build up of unconventional forces, while retaining a heavy force orientation towards Europe. Thus the airborne and air assault divisions remained the only light-oriented infantry forces.

In the mid-1970's, TRADOC began work on the Army 86 series of Division 86 (heavy, armor-mechanized division) was divisions. developed and approved fairly easily because its European oriented concept was both readily understood and widely accepted as needed. However, the design and concept for Infantry Division 86 (straight-leg division) would never resolve itself. A need for lighter and more deployable divisions, somewhere between the heavy divisions and the that could respond air assault divisions, airborne and contingencies worldwide was recognized, particularly by General Meyer, then the Army Chief of Staff. TRADOC's guidance from General Meyer was to develop a rapidly deployable light division to reinforce NATO and to conduct global contingency missions, capable of destroying enemy forces and controlling land areas, population centers, and resources. Between 1979 and 1983, TRADOC developed several designs attempting to meet the CSA's guidance, including a 12,000 man design, but did not succeed in gaining approval. 27

During this same period, the High Technology Light Division at Fort Lewis was formed using the 9th Infantry Division as a test bed. Purpose of the test bed was to find and evaluate current technology and innovative concepts and designs in an attempt to formulate a division meeting General Meyer's guidance. However, given the state of current technology and the clearly dual mission desired of Infantry Division 86 and HTLD, a light, deployable division design has been impossible to achieve. Given the nature of the guidance, the requirement was never to develop a truly light infantry division, only a much lighter, yet fully capable heavy division.

While the period before AOE is characterized by organizational design indecision, with numerous starts and stops, the reasons are many and in hindsight understandable. The single most influencing factor was the atomic bomb and the use of tactical nuclear weapons. Historically, with the introduction of any new weapon system on the battlefield, there is a period of confusion while trial and error are used to deal with the new weapon. The Pentomic divisions are an excellent case of a trial and error. Also, in these intervening years the Korean and Vietnam wars disrupted any long term organizational development. To complicate matters, the last forty years saw technology turning over every three to five years, the balance of power diffusing, and US economic interests in Europe decreasing.

Additionally, full mobilization was assumed possible, if really needed at all, before any major conflict occurred. With full mobilization and time available, the US then could afford to deploy fully capable heavy divisions for employment whenever and wherever needed. Consequently, a significant number of rapidly deployable forces was not seen as needed or a priority before AOE.

In summary, US experience with light infantry divisions prior to AOE, except for the airborne and air assault divisions, is quite limited. Although the need may have been recognized, a light infantry division never received resource priority. Also the Army's basic force structure philosophy changed little since World War II. Elthough new doctrines and technology changed the divisional designs several times. American (foot) infantry has always been (1) an all-purpose infantry suitable for worldwide generalized deployment, (2) designed, organized, and equipped for positional set-piece combat, and (3) regular infantry made light for strategic mobility. 28 force structure orientation has always inclined toward the NATO battlefield, resulting in evolved divisional designs and force structure. At no point was there a significant change, particularly as it regards light infantry. Today, changes in US global interests, the threat, and technology have substantially increased the need for a force structure change.

ARMY OF EXCELLENCE

The second intermediate objective in narrowing the thesis focus is to assess the need for and development of the AOE light infantry division. Specifically what strategic political and military circumstances have changed to require a light infantry division.

No other country has the same extensive worldwide commitments and contingencies as the united States. These commitments and contingencies are all tied in some way to political, economic, military, or cultural interests of the United States. Given the basic nonagression policy of the US, it follows that the US global strategy is defensive in nature, excluding the initiation of attack or preemptive strike. Accordingly, General Vessey, Chairman of the Joint Chiefs of Staff, states, "We vely on the maintenance of strong, always-ready nuclear and conventional forces supported by superbintelligence, good mobility, and superior command and control....²⁹

To protect the collective US interests, the NCA and JCS have established one CONUS and five overseas unified commands. The CONUS unified command is the US Readiness Command. The five overseas unified commands are the Pacific, European, Southern, Atlantic, and Central Commands. Of the five commands, the Pacific, Southern, and Atlantic Commands are predominately low-to-mid-intensity ground conflict theaters, while the Central Command ranges from mid-to-high-intensity. The European Command alone ranks as a clear high intensity conflict theater. It follows, then, that as a first cut, US Army heavy forces should be oriented toward the European and Central

Commands; and that lighter forces should be oriented toward the other three. However, it does not follow that light forces do not have utility in Western Europe and the Mid-East as suggested by COL Budvig and Edwin Besch. 30 While each overseas unified command has a unique mission, a unique slice of geography, and a unique set of allies, each also has multiple combinations of terrain reliefs, climatic conditions, geopolitical considerations, demographic makeup, and threat situations with which to contend. 31 Consequently, joint service force tailoring is difficult, but US Army component force structuring and designing remains even more so.

AOE is a total force reassessment that takes into account the difficulties of meeting worldwide commitments. There are clearly two circumstances that have significantly changed so as to warrant the need and development of light infantry divisions. The first of these circumstances is the need for a more credible conventional deterrence. The ability of the light infantry division to enhance conventional deterrence is explained in several ways to include the need for strategic economy of force and for more strategic response options, risk versus probability, and the need for a balanced force structure. The second circumstance is the recognized need for light infantry forces to perform tactical and operational economy of force missions. Both circumstances occupy prominent positons in all the current documents emanating from the Department of the Army in defense of the new light infantry division concept and design.

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In the case of deterrence, General Wickham, Army Chief of Staff, stated the following in his Light Infantry Division White Paper:

Their (Light Division) rapid deployability will enable them to arrive in a crisis area before a conflict begins. By demonstrating US resolve and capability, they may well prevent the outbreak of war. This is particularly so where low-to-mid intensity conflict threatens, then their presence could decisively affect the outcome. And because of their strategic mobility, these light infantry divisions will help reassure our friends, and allies - and deter our adversaries. 32

Captain Petraeus argues that the capabilities of the light infantry division, when integrated with those of the heavy division complicates and frustrates Soviet hopes for a quick conventional victory in Europe, thus deterrence is served. 33 According to LTG Galvin, Cdr VII Corps, fast-arriving light infantry divisions improve the possibility of conducting a conventional defense of western Europe without having to result to nuclear weapons. 34

Enhancing deterrence is also explained in terms of strategic economy of force and more strategic response options for the National Command Authority. The light infantry division has the potential for going any place in the world on very short notice, thus providing the NCA a get-in-quick show of force, stabilizing force, intervention force, or peacekeeping force. This utility provides the NCA greater flexibility in meeting US global interests and strategy, without having to tap the few and valuable heavy forces or the highly specialized airborne and air assault divisions.

Another deterrence dilemma facing the force planners in terms of interests and strategy is the problem of risk versus probability.

LTG Mahaffey in his Army magazine article, "Structuring Force to Need," summatizes this dilemma best. 36 On the whole, because of the economic, political, and cultural ties involved, Europe remains of priority interest to the United States. Because of the proximity of NATO and Warsaw Pact forces, this theater has the greatest risk of escalating quickly into nuclear war; however, for many reasons such a conflict is least probable to occur. Meanwhile, worldwide terrorism and third world unconventional and limited conventional warfare resulting from the Soviet indirect approach are low risk to US survival, yet their occurrence remains quite probable. LTG Mahaffey maintains that the US must renew its attention to this dilemma of risk versus probability and develop an effective response. He states:

"Clearly, the array of forces required to deal with the complex nature of modern warfare must have greater balance and flexibility, and be easily tailored to specific needs since multiple types of conflicts can and may occur at any level of intensity." 37

In their congressional hearings testimony, the Joint Chiefs of Staff also recognize the need for balanced, strong conventional forces across the entire spectrum of conflict, because nuclear capability and nuclear deterrence alone are inadequate to prevent military attacks against US interests overseas.³⁸

However, finding a place for the light infantry division in a manpower capped and balanced force structure was never meant to diminish the need for other type forces or to replace them. AOE not only leaves the heavy divisions in the force structure but attempts to enhance their war-fighting capability through simplifying and

streamlining command and control and logistical support. In accordance with AirLand Battle doctrine and AOE design concepts, the corps will be a greater sustainer of logistical support. The heavy divisions will now be a far more responsive and flexible fighting force in keeping with the AirLand Battle tenets of speed, initiative, and adaptability. 39

Likewise, the light infantry division is not meant to signal the demise of the airborne or air assault divisions. Given the right environment for employment and once completely deployed—both of which are significant restrictions to its strategic utility—the air assault division is a most lethal and tactically mobile force, far out weighing the light infantry division. Additionally, the light infantry division is not designed for forced-entry. If forced-entry is needed, the NCA has use of marines, rangers, or the airborne division. The light infantry division would follow these forced-entry units into an objective area, thus quickly relieving these specially trained and valuable assets for employment elsewhere by the NCA. AOE intent is to make both the airborne and air assault divisions more useful as flexible, mission-specific divisions by using the light infantry division design as their base design only.

In regard to economy of force at the tactical and operational level, General Wickham said in his White Paper that when properly employed in cities and close terrain, light infantry divisions on the mid-to-high-intensity battlefield free up armored and mechanized formations to counter the enemy on more suitable, open terrain. 40

The most current and comprehensive article written on the utility of the light infantry division in the high-intensity environment is by David Petraeus, "Light Infantry in Europe: Strategic Flexibity and Conventional Deterrence."

Petraeus argues for a balance between heavy and light forces in Europe because of the urban sprawl, terrain compartmentalization, rear battle, and weather. Additionally, because of their higher state of light infantry training, light infantry divisions would provide operational commanders greater tactical flexibility in conducting MOUT and air assault operations versus using mechanized infantry. However, Petraeus does not commit himself to determining whether light infantry divisions should be permanently stationed in Europe and thus be context-specific. He only declares that light infantry divisions have significant utility in Europe and other high-intensity areas and should arrive before conflict begins to give operational commanders greater tactical flexibility and economy of force options. 41 Canby states that this conclusion is empirical.

In summary, six things become readily evident from reviewing US global interests by theater or unified command, i.e., Western Europe, Southwest Asia, the Pacific, the Atlantic, and Central-South America.

- (1) Close and compartmentalized terrain abounds worldwide for the tactical and operational employment of light infantary divisions.
- (2) Given a global conflict or threat of an impending global conflict, the US does not have the required forces to meet all of its interests and commitments simultaneously with existing forces.

(3) With limited equipment available for heavy forces, heavy forces will have to be deployed to the one or two most vital and/or high-intensity theaters only, thus requiring forces that are lighter by virtue of their lack of equipment, manpower, and deployment assets to conduct operations in other theaters.

The existence of widespread instability and conflict in areas that contain the preponderance of the world's energy and strategic mineral resources further heightens this prospect. Thus, an emerging strategic reality is that light forces with great flexibility may well be required to respond to these kinds of crisis in order to demonstrate US resolve, protect vital interests, and prevent the escalation of minor crises and low-intensity conflicts into superpower confrontations.⁴³

(4) If required to fight a global war, even with the support of its allies, US forces will fight outnumbered, yet be expected to win. The US has seldom had to use economy of force at the strategic level, although it has used economy of force at the operational and tactical 'evel many times in its history. The US Army no longer has the luxury of always sending the "big battalion" with its unconstrained capabilities to deal with a problem, especially when the problem is small. This "sort it out on the ground" approach of the big battalion theory is no longer affordable.

Our national security policy, supporting military strategy, and the characteristics of those regions of vital interest to the United States collectively demand forces with greater balance, flexibility, and deployability than those we currently possess. 44

Unused forces in one theater will assuredly be needed elsewhere in a global conflict. Economy of force starts with the design process, continues through the force structuring process, and

only ends when the appropriate force is employed against a threat.

- (5) While context specialization is desired, so long as there remains a great imbalance between force size and commitments, US forces will have to be primarily context-adaptable.
- (6) While LTG Mahaffey's assessment of risk versus probability is not a radically new pronouncement, it does offer a new approach to assessing the problem and signals that there is a need for force structure change not just evolving improvements.

Summarizing further, the light infantry division gives the NCA additional response options to conflict. No longer does the NCA have to use its only large, Army forced-entry force (the airborne division) its most tact!cally mobile infantry force (the air assault division) in situations that clearly do not warrant the use of these unique and costly assets. The light infantry division is neither a substitute nor a replacement for the heavy divisions, airborne division, or the air assault division. So long as the light infantry division remains context-adaptable, the division is the long sought after, strategically flexible response. If light infantry divisions become mission, terrain, or theater specific, they do not lose their usefulness only limit the NCA's flexibility. Army of Excellence recognizes that the US no longer has the luxury of achieving full mobilization and conducting lengthy deployments. Consequently, the light infantry division will be used as a strategic economy of force and synchronized into AirLand Battle on the mid-to-high-intensity battlefield whenever possible.

PLACING THE LIGHT INFANTRY DIVISION IN THE FORCE STRUCTURE

It would seem that documents feeding into the DOD Planning, Programming, and Budgeting System or that the flood of current light infantry division literature would help to answer the thesis question. However, this is not the case. Determining how many light infantry divisions and where they should be in the Army of Excellence force structure (Active or National Guard Components) based on these documents is difficult to come to grips with.

A review of the primary PPBS documents provides no concrete analysis or reason for the five light infantry divisions the Army has publicly stated it is pursuing. What these documents present, as one might expect, is a mixed-bag completing only a portion of the puzzle. A European scenario and a multi-front scenario of Europe, the Mid-East and Northeast Asia are discussed. But there is relatively little discussion of the specific force structure required to handle contingency crises or global war. Nor is there a means to logically track from the Joint Strategic Planning Document (JSPD) to the Army Program Objective Memorandum (POM) a requirement for light infantry divisions in terms of what, where, or how many.

The Joint Strategic Planning Document Support Analysis (JSPDSA) provides the JCS and the unified commanders force requirements for a three front war in Europe, the Mid-East and Northeast Asia. However, the same requirements are needed for a global war scenario, a war in which US forces are also needed in Southeast Asia, South Africa, Central-South America, and the North Pacific. While all geographic

areas may not require Army ground component forces, each does contain at least one potentially dangerous Soviet ally that must either be defeated or neutralized by someone. Cuba, Angola, Nicaragua, and Vietnam are four trouble spots overlooked in PPBS force planning. Planning should be worst case, not best or most likely case. It should be global, regardless of how difficult. All other scenario requirements fallout from the global scenario.

Because PPBS documents do not define a total global requirement for forces, the total required and objective numbers of light infantry divisions can not be derived from this source. For the three front scenario an objective or planning number can be determined, even though the current JSPDSA has not been updated in accordance with the latest JSPD. Additionally, programmed forces outlined in the Army POM and The Army Plan (TAP) do not appear to follow from the JSPD other than meeting the JSPD goal of balance.

What does appear from the PPBS documents is that units have been assigned to theaters based on their capabilities rather than needs of the theater. Thus the total force structure assigned for planning against the three most likely scenarios appears to have evolved much like the Army force structure. As organizational pieces are developed they are stuck in where they best fit or are assigned to a theater because they exist and must go somewhere. A joint service statement of need specifically addressing service requirements for a global scenario and against the entire spectrum of conflict appears to be badly needed.

Reviewing current literature does little to help answer the final objective question either. The primary focus of current light infantry division literature is on defending the need for any such division. In other words, if the light infantry division design and concept can not survive its heavy force opponents or budget constraints, then answering the thesis objective becomes a mute point. The on-going struggle appears to be one of getting the first several divisions into the force structure, demonstrating their utility, and then determining how many are really needed and where they should be in the force structure.

However, two areas are discussed often enough in current literature so as to give insights into possible constraints on an eventual number of and location for light infantry divisions in the force structure. Army of Excellence calls for responsive strategic forces and for a balanced force structure. If the rationale for light infantry divisions is strategic economy of force or the need to provide the National Command Authority with a viable strategically deployable, conventional deterrent, then logically any light infantry division should be Active Component. If there is time to mobilize and train National Guard light infantry division, then there are probably ample time and assets available to deploy a heavier division. If however, the light infantry division has additional or needed utility in NATO, as suggested by Captain Petraeus' and LTG Galvin's articles, and can arrive after mobilization but before hostilities, then this negates against all of the light infantry divisions being Active

component. Nevertheless, the first constraint stemming from the call for strategic responsive forces appears to argue for finding light infantry divisions exclusively in the Active Component. Meanwhile, the call for balanced forces puts an upper constraint on the number. Presumably, no more than half of the total force structure would be light. This assumes the force structure is either heavy or light with nothing in the middle. Combining the two constraints results in light infantry divisions being found only in the Active Component and comprising no more than half of the Active Component.

In summary, a review of PPBS documents and current periodical literature provides few clues as to the number of light infantry divisions the JCS or Army needs or how many can be afforded at the expense of the remaining force structure. What does appear consistently is the stated need for a balance of heavy and light forces. In achieving this goal, the method and rationale for proceeding with implementation of the AOE force structure and activation of light infantry divisions appears to be one of what ever the political and budget process can bear.

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SUMMARY OF FINDINGS

A recapitulation of the major findings from the literature survey follows:

- (1) Foreign experience, particularly the European experience, with light infantry division forces differs and exceeds that of the United States. Foreign light infantry, using classic light infantry tactics and organizations, have historically provided European powers the means to conduct economy of force and close-terrain operations. Additionally, foreign powers have preferred light infantry forces for political interventions and most contingency operations in the Third World. 45
- (2) Traditionally, American forces of all types have been organized for all-purpose, general combat with a tactical system orientated to open flatland, to linear, positional combat, and with little orientation for intervention abroad. American force design philosophy towards light infantry has simply been to make regular infantry lighter by reducing weight and numbers. Consequently, until AOE the Army's force structure evolved rather than undertake a marked departure from the past.
- (3) "In Europe and America there is a renaissance in infantry...The Europeans want to leverage the tank...In America the interest is strategic mobility." Consequently, Army force structure concepts under AOE more closely resemble traditional Europeans corcepts, particularly the British and French use of light infantry in extra-continental affairs. In order to be able to respond

along the entire spectrum of conflict, the US is looking to balance its force structure.

- (4) A review of PPBS documents and current literature does not provide rationale for specific employment of the light infantry division or numbers needed. Because neither a global scenario nor contingency missions are adequately laid but, a total force structure requirement can not be determined. Objective and program numbers can be derived for the three front scenario discussed in the PPBS documents, which is probably the more dangerous scenario, but also may be the most unlikely.
- (5) Based on the call for strategic responsive forces and balanced forces, current literature indicates that light infantry divisions should be Active Component and number about half the Active force.

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CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

INTRODUCTION

Chapter four contains a series of findings loosely connected by the two intermediate objectives. This chapter describes two broad conclusions derived from those findings and from the conclusions describes a recommendation for the primary thesis question. The first conclusion is that the Army of Excellence light infantry division has utility on the battlefield. When properly employed, the light infantry division is an extremely effective force at the tactical level, a valuable economy of force at the operational level, and a most credible conventional deterrent at t he strategic level. Secondly, the AOE force structure needs to be balanced between heavy and light forces. The complexity of US interests and national strategy require that US forces be able to respond quickly and credibly anywhere in the world along the entire spectrum of conflict.

While the PPBS documents and current literature provide no concrete analyses for the five light infantry divisions the Army is currently pursuing, four approaches for determining a program number are available—the balanced, Active component, corps, and theater approaches. Using anyone or a combination of the approaches provides both the means for and rationale behind determining an optimum program number of light infantry divisions in the AOE force structure.

UTILITY OF THE LIGHT INFANTRY DIVISION

There is utility for the Army of Excellence light infantry division on the battlefield for the foreseeable future. It matters little where that battlefield is or whether it of is high or low intensity. As with the capabilities of all divisional types, there are some situations in which the light infantry division should not be placed tactically. Armored divisions should avoid restricted terrain with limited fields of fire, visibility, and maneuverability, while the converse is true of the light infantry division. At the operational level, the light infantry division can be used in all theaters to create situations of economy of force and surprise. At the strategic level, the light infantry division provides the NCA and JCS an additional highly deployable, capable, credible, affordable, and context-adaptable force to meet global crises early on. This conclusion dealing with utility comes from the ability to project the lessons of history into the future through historical analogies.

In this age when numbers and statistics are treated like little gods, a conclusion based on history may find little support and enormous criticism. But the conclusion can not be reached analytically, nor should it be. At the tactical level, the science of war can be exercised through war gaming and computer simulation to demonstrate unit capability and effectiveness. Thus an analytical base can be established, but it has little value at the operational and strategic levels, because here the art of war plays a far greater role than the science of war. The commander exercising the art of war

relies on much more than the science of war, he must call upon his ability to sense and feel the battlefield, relying on his experience, training, personal attributes, and the abilities of others. To await unquestioned analytical data, if really possible at all, would cause not to have any type division.

This is a case where the nation and the Army must first defer its judgement to its senior Army leadership, who have experience sensing and feeling the battlefield at the tactical and operational levels, who have experience in the art of war at the operational and strategic levels, and who have a sense of history and the proper role of Army organizations in fulfilling national policy. Secondly, the nation and the Army can and must defer their judgement to an assessment and understanding of history and current events. As the findings in chapter four describe, the role of infantry on the battlefield has not diminished. More important, every indication is that the role of infantry may be increasing as battlefields become more urbanized and/or expand towards the lower end of the conflict spectrum.

To be avoided is the unimaginative, steadfast grip on the past, which has haunted armies and nations for centuries. In the 1920's and 1930's, J.F.C. Fuller and Liddell-Hart had difficulty conveying the concepts and future of armored and mechanized warfare. Both shared one disabling habit of thought, although each was blessed with a vivid and creative imagination, backed by an aggressive drive without which nothing is achieved. Their reasoning was never empirical nor analytical. Rather their concepts were futuristic, departing from

the past and based on historical analogies. Many nations, including the United States, failed to see the inevitable motorized and mechanized warfare of World War II. Most clung to the large unwieldy infantry divisions of World War I, until enlightened by the German offensives into Poland and France. Whereas Hart and Fuller had little historical armored operational information available to them, there is an unlimited source of infantry practical experience and experiments available today. As Canby stated in his study, the tactical and operational utility of light infantry is known empirically.

Empirical data is not forthcoming, however, concerning the strategic utility of light divisions regardless of how many studies are done. The most that the Army can hope for from studies such as Dr. Luttwak's currently ongoing study entitled Strategic Utility of US Light Divisions, A Systematic Approach is a clearly written and rationalized argument that somehow captures what is already known and available—the lessons of history, the principles of war and the experienced deductions of senior military leaders. Nevertheless, the strategic utility of light infantry can be deduced. Quoting General Wickham, "The British action in the Falkland Islands, Israeli operations in Lebanon, and our recent success in Grenada confirms that credible forces do not always have to be heavy forces." Light infantry divisions have a role. Consequently, they must be found in the AOE force structure — trained and in sufficient numbers to make a difference early on in any future conflict.

A BALANCED FORCE STRUCTURE

The Army of Excellence force structure needs to be balanced between heavy and light forces, particularly in the Active component. United States global interests and the world situation are so complex and constantly changing that any other approach is potentially disastrous. The force structure simply must be flexible enough to respond quickly and adequately to all situations along the entire spectrum of conflict.

The balance between heavy and light should not be achieved by structuring light infantry divisions from regular infantry, simply by reducing weight, size, robustness, and redundancy. This traditional US approach results in units organized, equipped, and trained for positional, set-piece combat and in units requiring augmentation for sustained combat. Osuch traditional units may have utility in a mature theater and at the higher end of the conflict spectrum. They have very little utility, however, at the lower end where warfare is usually far from static or linear.

Although the light infantry division concept and early designs appear to be that of classic light infantry, the more recent designs appear to have already grown beyond that needed for classic light infantry. Whereas heavy forces need to be able to execute the four tenets of AirLand Battle—agility, initiative, depth, and synchronization, light infantry division forces need to be able to execute Canby's tenets of classic light infantry—infiltration in the attack and ambush and counterstroke in the defense. The light

infantry division must not fall back into the traditional US mold of redesigning regular infantry into light infantry.

More important, the balance between heavy and light should not be achieved by designing units capable of all things and thus unable to deploy rapidly. This was tried and found impossible with the Army 86 Infantry Division and the early designs of the High Technology Light Division (HTLD). The required technology to achieve the desired survivability, mobility, and firepower of the heavy division while decreasing sustainment, personnel, and deployability is not yet available. 13 Fully capable general purpose divisions may have merit in the Reserve component, but not in the Active component. There are ongoing efforts to redesign the National Guard regular infantry divisions with a heavy division combat support (CS) and combat service support (CSS) base and a 6-2-2 configuration (six infantry, two mechanized, and two armored battalions). 14 These divisions will have enormous utility once mobilized, trained, and deployed. Active component divisions, however, need to gravitate toward the extremes, because of !esource constraints, limited deployment assets, and the need for credible strategic deterrence at both ends of the conflict spectrum.

In summary, a preponderance of forces either heavy or light neither serves the nation's principal policy of deterrence nor the nation's ability to respond militarily whenever and wherever needed. 15

RECOMMENDATIONS

Because there is a lack of information and analysis on global war and contingency scenarios, it is not possible to determine a total required number for any type division, no less light infantry divisions. Likewise, accurate objective numbers based on threat, national interests, and acceptable risk cannot be determined, except for the three front scenario. Suffice it to say that the US could use, because of its universal utility, all the light infantry divisions it could mobilize and train in time of global war, but this remains both unrealistic and unaffordable in a resource conscious peacetime environment. Until a complete joint service global war assessment is made, total required and objective forces can only be speculated. In the meantime, the Army must function within its total authorization for personnel and to a greater extent within the existing command and control structure. These two factors provide the real determinants of how many light infantry divisions there will be in the force structure

While PPBS documents and current literature provide no concrete analysis for the five light infantry divisions the Army is currently pursuing, four approaches for determining a program number are available—the balanced approach, the Active component approach, the corps approach, and the theater approach. The last two approaches center around who would employ and support the light infantry divisions. The operational concept states that light infantry divisions normally operate as part of a corps or joint task force and

require external support when operating as an independent force in excess of 48 hours. ¹⁶ An exception to the rule might be peacekeeping operations. Even in coup de main or counter-insurgency operations, where the light infantry division was the sole combat unit, it would not operate completely independent of a unified command and/or corps command and control structure. The balanced and Active component approaches stem directly from the thesis findings and conclusions.

The Active component approach takes the position that any light infantry division will be on Active duty. As stated in the findings of chapter four, if the rationale for light infantry divisions is to provide the NCA and JCS strategic flexibility, then National Guard light infantry divisions make little sense. Only Active component light infantry divisions, which are in a higher state of readiness (personnel, equipment, and training) provide this flexibility. Most crisis situations in which the light infantry division would be used simply do not provide the political, mobilization, or security reaction time to use National Guard divisions. Since this approach only states where the light infantry division should be in the force structure and not how many, it must be used in conjunction with the other three approaches to fully answer the thesis question.

Using the balanced approach, which also follows directly from the findings and conclusions, calls for the number of heavy and light divisions to be nearly equal. Therefore, the maximum number of light infantry divisions should not exceed ten. This is slightly more than

a third of the currently planned total force structure of twenty-eight divisions, the other thirds being he vy and medium. This approach is purely mathmatical and makes three assumptions. 17 First, that the National Guard divisions will be structured eventually at 6-2-2 and thus should be considered medium divisions. Second, that the 9ID and 2ID because of their current unique missions and organizational designs are also somewhere in the middle and should not now be considered part of the lighter or heavier ends of the force structure. Third, that although not within the scope of the thesis, there will be balance between separate light infantry brigades and heavy separate brigades, thus these units are not a distraction to the thesis question. If the airborne and air assault divisions are considered light because of their light infantry division base structure, then the maximum number is correspondingly reduced to eight. However, this balance is not currently achievable without converting between four to six other type divisions. Politically, this pure approach with the necessary conversions is not acceptable. Nevertheless, the balanced approach remains applicable for the future as new divisions are added to the total force structure.

Combining the Active component and balanced approaches, in other words applying balance to the Active component only, results in a very similar set of numbers as above. The number of light infantry divisions is between six and eight, again depending on how the airborne and air assault divisions are treated. This combination of approaches makes the same three assumptions as previously discussed.

As an example, assuming that the airborne and air assault divisions are light, the resulting Active component breakdown is eight light divisions, two medium divisions (2ID and 9ID), and eight heavy divisions, for a total of eighteen divisions. At the other extreme, if the airborne and air assault divisions are not considered light, then the breakdown looks as follows: six light infantry divisions, two medium divisions (2ID and 9ID), the airborne and air assault divisions, and eight heavy divisions. Fither example requires converting heavy divisions to light, which simply will not happen. However, as new divisions are added to the Active component force structure balance can be achieved by making the first few new divisions light infantry divisions.

The corps approach argues for a minimum and maximum program number of two and ten light infantry divisions, respectively. Each heavy corps could use at least one light infantry division for tactical and operational economy of force missions somewhere within the depth of the battlefield. This approach assumes that on most battlefields the factors of METT-T (mission, enemy, terrain, troops, and time available) would argue for a least one light infantry division being assigned to each corps. Given that each corps is capable of commanding and controlling only five divisions over an extended period of time, each heavy corps certainly would not want more than two light infantry divisions. ¹⁸ Therefore, based on four heavy corps there would be a need for no more than eight light infantry divisions. If on the other hand National Guard 6-2-2 infantry divisions could be

mobilized and deployed before employment of the heavy corps there is arguably no need for light infancry divisions in these corps. Because of the 6-2-2 mix and the heavy division base, the National Guard divisions provide the heavy corps needed infantry for economy of force and close terrain operations and the sustainment and support packages (CSS and CS) for cross attachment with heavy forces. The contingency corps also must be considered. Given the sustained maintenance of five divisions, the contingency corps could also absorb at most two light divisions in addition to an airborne division, an air assault division and a heavy division. It is assumed that the contingency corps would always consist of five full divisions assis. Therefore the minimum number of light infantry divisions under the corps approach is two. This then brackets the number of light infantry divisions under the current five corps structure between two and ten.

The two to ten bracket from the pure corps approach is too wide to be useful. A better bracket, two to four light infantry divisions, results from combining the Active component and corps approaches. This bracket assumes as a minimum that the contingency corps has assigned two light infantry divisions. The maximum number assumes that in ddition to the contingency corps each of the forward deployed corps in Europe would have one light infantry division either assigned in Europe or in CONUS ready to be assigned in the event of a crisis. The two CONUS corps would not need a light infantry division, because, before they need to be or could be completely deployed, National Guard infantry divisions should have been mobilized and ready for

deployment as well. The bracket resulting from this combined approach does not require heavy division conversion and is achievable now.

The theater approach argues for a minimum of five light infantry divisions - one each to the overseas unified commands. Each of these commands could use the capabilities of the light infantry division, if needed, to display a show of force, stabilized a situation, or conduct coup de main, counter insurgency, and peace keeping operations. The benefit of this approach is that it allows each light infantry division to achieve a degree of context-specialization for the particular theater assigned regardless if stationed in the theater. Not only would training and readiness be enhanced, but planning and deterrence as discussed in chapter four would be enhanced as well. This approach assumes that under no circumstances should a CINC have to share a light infantry division for planning, particularly CINCSOUTH and CINCLANT. These two CINC have areas of vital national interests and growing regional tensions that strongly argue against any overlap. 19 Unless either the airborne or air assault were applied against this minimum number, a conversion of one other type division would be needed to achieve this approach.

Combining the Active component and theater approaches results in the same minimum number of five light infantry divisions. One exception to the Active componentry under the theater approach above, might be the light infantry division earmark: i for CINCEUR. As in the balanced approach, CINCEUR may need only a high state of readiness National Guard light infantry division or regular infantry division.

This assumes he already has adequate forces to handle most small crisis situations and that timely mobilization would allow for responsive employment of either type division. However, this exception is negated by the problems in the NORTHAG area, where the capabilities and responsiveness of an Active duty light infantry division would serve deterrence and reassure our allies in the area.

In summary, whereas the three pure approaches (balanced, corps, and theater) attempt to answer how many light infantry divisions there should be, they do not answer where they should be in the force structure. Based on the preponderance of findings from historical and current literature the light infantry divisions should be in the Active component structure. Therefore the Active component approach needs to be combined with one of the other approaches. But which of the three combined approaches is best?

The answer really depends on the priority and importance placed on the need for a balanced force structure, who will supley the division, who needs the capability, and on the need for a greater degree of context-specialization. The majority of current information argues for a balanced force structure. Each unified commander certainly needs the light infantry division's capability, although the division will normally operate through a corps structure. Historical findings and current information, meanwhile, both argue for a greater degree of context-specialization (climate, tervain, threat, or mission) than ever before. Taken as a whole, the weight of evidence falls evenly between the combined balanced approach and the combined theater

approach. A far greater knowledge of the threat, current national objectives, and status of forces is required to determine the appropriate approach for the Army of Excellence. The ODCSOPS, DA is best able to make this decision. Nevertheless, based upon the literature survey the combined theater approach appears to offer the greater strategic responsiveness and ultimate success through context-specialization, without converting heavy divisions.

Synthesizing the brackets of all three combined approaches produces a bracket of between two and eight Active component light infantry divisions. Two being the minimum number from the corps approach and eight being the maximum number from the balanced approach. If the airborne and air assault divisions are considered light under the balanced approach, as they should be, then the new bracket is two to six Active component divisions. Using just the combined balanced and combined theater approaches, results in a synthesized bracket between five and eight Active component light infantry divisions. Reducing the combined balanced approach by the airborne and air assault divisions results in new bracket of five to six light infantry divisions.

The five light infantry divisions currently planned fail within the synthesized brackets. But as discussed in the findings of chapter four, there is no rationale in either the PPBS documents or current literature to support this number. This thesis concludes that this is probably a good number, but now needs to be supported by the rationale of one of the pure or combined approaches described in this study.

SUMMARY

In attempting to arrive at the number of light infantry divisions needed in the Army of Excellence force structure, this study has set forth both the historical perspective of light infantry and the current context of strategic thought in which the light infantry division is being designed and its utility argued. The findings of chapter four should come as no great surprise or subject to great debate. While the conclusions may not change diehard opponents of light infantry forces, they will, hopefully, change the minds of those previously uncommitted, and reaffirm the convictions of light infantry proponents.

While not within the scope of this thesis, several areas were mentioned throughout the paper that should be researched further. The first of these is the development of a joint service global war scenario from which to derive a complete picture of the total required and objective forces. Incorporated into this scenario should be the numerous contingencies the US may be called upon in peacetime to execute and most certainly execute in time of war. Second, the Army must ensure that it has not reverted to its traditional approach of designing light forces—making regular infantry light. Third, light infantry divisions should not be employed in the traditional methods of regular infantry. The light infantry division referred to in this paper and described by the concept is classic light infantry, not regular infantry made light. Throughout the research for this paper, a concern developed that only a few authors of the many talking about

light infantry had discerned the difference and that greater reference and emphasis to the traditional approach is reappearing in current discussions of the US light infantry division. Fourth, that while the five light infantry divisions currently in the Army plan fall within the recommended brackets of numbers, the rationale for the stationing, component makeup, and mission of the five divisions does not appear to fall within any rationale. Every attempt should be may to use one or more of the recommended approach rationales to justify the number of light infantry divisions in the AOE force structure.

Finally, the thesis recommends four basic approaches—balanced, Active component, corps, and theater—for determining an optimum program number of light infantry divisions in the AOE force structure. The approaches can be used individually or collectively to defend a desired program number falling within the brackets. The approaches are universal enough, that if theater and/or corps headquarters requirements for global war were known, an objective numbers of light infantry divisions could be bracketed as well. In the meantime, given resource constraints and the given command and control structure, hopefully, the approaches are beneficial to Army planners and programmers.

CHAPTER FIVE NOTES

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- 2. Edward N. Luttwak, "Part Two: Analysis and Conclusions (Final Draft Report)" <u>Historical Analysis and Projection for Army 2000</u> (Chevy Chase, Md: Edward N. Luttwak, 15 May 83): 33.
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- 4. LTG Fred K. Mahaffey, "Structuring Force to Need," Army 34 (Oct 84): 206-207.
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- 8. Steven L. Canby, Classic Light Infant y and New Technology (Arlington, VA, Dec 82): iii.
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- 14. Interview with Robert L. Keller, Deputy Director, FDD, CACDA, Fort Leavenworth, KS, 30 Apr 85.
 - 15. LTG Mahaffey, "Structuring Force to Need," pp. 204-207.

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- 17. Interview with Robert L. Keller, Deputy Director, FDD, CACDA, Fort Leavenworth, KS, 30 Apr 85.
- 18. US Command and General Staff College (CGSC), Field Circular, FC 100-15, Corps Operations (Ft Leavenworth, KS, Mar 84): 1-4.
- 19. Gen Paul F. Gorman, "US Southern Command: Sentinel of US Interests in Latin America," <u>Defense 84</u> (Nov/Dec 84): 17-23; and Adm Wesley L. McDonald, "US Atlantic Command: Implementing the Vital Strategy of Forward Deployment," <u>Defense 84</u> (Nov/Dec 84): 24-28.

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