

~~11~~ (2)

AD-A240 742



DTIC
ELECTE
SEP 26 1991
S D D

THE ROLE OF THE NATIONAL
TRAINING CENTER DURING
FULL MOBILIZATION

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

EDWARD P. DONNELLY, MAJ, USA
B.A. United States Military Academy, West Point, NY, 1978

Fort Leavenworth, Kansas
1991

This document has been approved
for public release and sale; its
distribution is unlimited.

Distribution authorized to U.S. Government agencies only;
proprietary information, 7 June 1991. Other requests for this
document must be referred to: HQS CAC & Ft. Leavenworth, ATTN:
ATZL-GOP-SE Ft. Leavenworth, KS 66027-6900.

91 0 26 861

91-11581



GENERAL INSTRUCTIONS FOR COMPLETING SF 298

The Report Documentation Page (RDP) is used in announcing and cataloging reports. It is important that this information be consistent with the rest of the report, particularly the cover and title page. Instructions for filling in each block of the form follow. It is important to **stay within the lines to meet optical scanning requirements.**

Block 1. Agency Use Only (Leave Blank)

Block 2. Report Date. Full publication date including day, month, and year, if available (e.g. 1 Jan 88). Must cite at least the year.

Block 3. Type of Report and Dates Covered. State whether report is interim, final, etc. If applicable, enter inclusive report dates (e.g. 10 Jun 87 - 30 Jun 88).

Block 4. Title and Subtitle. A title is taken from the part of the report that provides the most meaningful and complete information. When a report is prepared in more than one volume, repeat the primary title, add volume number, and include subtitle for the specific volume. On classified documents enter the title classification in parentheses.

Block 5. Funding Numbers. To include contract and grant numbers; may include program element number(s), project number(s), task number(s), and work unit number(s). Use the following labels:

C - Contract	PR - Project
G - Grant	TA - Task
PE - Program Element	WU - Work Unit Accession No.

Block 6. Author(s). Name(s) of person(s) responsible for writing the report, performing the research, or credited with the content of the report. If editor or compiler, this should follow the name(s).

Block 7. Performing Organization Name(s) and Address(es). Self-explanatory.

Block 8. Performing Organization Report Number. Enter the unique alphanumeric report number(s) assigned by the organization performing the report.

Block 9. Sponsoring/Monitoring Agency Names(s) and Address(es). Self-explanatory.

Block 10. Sponsoring/Monitoring Agency Report Number. (If known)

Block 11. Supplementary Notes. Enter information not included elsewhere such as: Prepared in cooperation with...; Trans. of ..., To be published in When a report is revised, include a statement whether the new report supersedes or supplements the older report.

Block 12a. Distribution/Availability Statement. Denote public availability or limitation. Cite any availability to the public. Enter additional limitations or special markings in all capitals (e.g. NOFORN, REL, ITAR)

DOD - See DoDD 5230.24, "Distribution Statements on Technical Documents."

DOE - See authorities

NASA - See Handbook NHB 2200.2.

NTIS - Leave blank.

Block 12b. Distribution Code.

DOD - DOD - Leave blank

DOE - DOE - Enter DOE distribution categories from the Standard Distribution for Unclassified Scientific and Technical Reports

NASA - NASA - Leave blank

NTIS - NTIS - Leave blank.

Block 13. Abstract. Include a brief (Maximum 200 words) factual summary of the most significant information contained in the report.

Block 14. Subject Terms. Keywords or phrases identifying major subjects in the report.

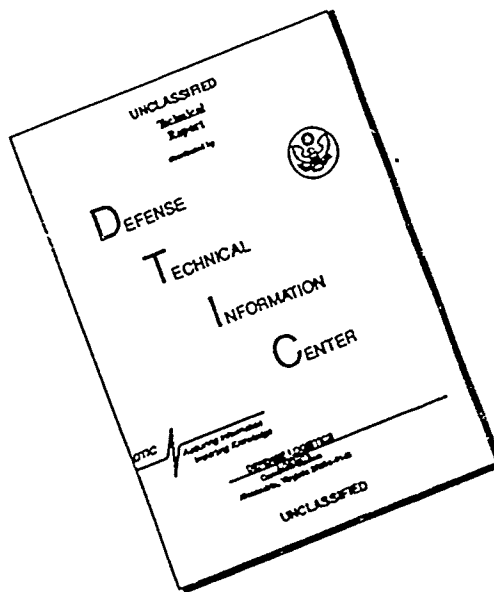
Block 15. Number of Pages. Enter the total number of pages.

Block 16. Price Code. Enter appropriate price code (NTIS only).

Blocks 17. - 19. Security Classifications. Self-explanatory. Enter U.S. Security Classification in accordance with U.S. Security Regulations (i.e., UNCLASSIFIED). If form contains classified information, stamp classification on the top and bottom of the page.

Block 20. Limitation of Abstract. This block must be completed to assign a limitation to the abstract. Enter either UL (unlimited) or SAR (same as report). An entry in this block is necessary if the abstract is to be limited. If blank, the abstract is assumed to be unlimited.

DISCLAIMER NOTICE



THIS DOCUMENT IS BEST
QUALITY AVAILABLE. THE COPY
FURNISHED TO DTIC CONTAINED
A SIGNIFICANT NUMBER OF
PAGES WHICH DO NOT
REPRODUCE LEGIBLY.

THE ROLE OF THE NATIONAL
TRAINING CENTER DURING
FULL MOBILIZATION

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

EDWARD P. DONNELLY, MAJ, USA
B.A. United States Military Academy, West Point, NY, 1978

Fort Leavenworth, Kansas
1991

Distribution authorized to U.S. Government agencies only;
proprietary information, 7 June 1991. Other requests for this
document must be referred to: HQ8 CAC & Ft. Leavenworth, ATTN:
ATZL-GOP-SE, Ft. Leavenworth, KS 66027-6900.

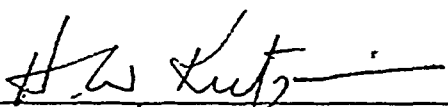
MASTER OF MILITARY ART AND SCIENCE


THESIS APPROVAL PAGE

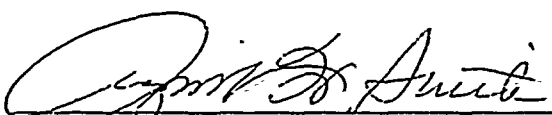
Name of Candidate: Major Edward P. Donnelly

Title of Thesis: The Role of the National Training Center
During Full Mobilization

Approved by:

 Thesis Committee Chairman
COL Howard W. Kietzman, M.A.

 Member
LTC Anthony L. Barnhill, M.A.

 Member, Consulting Faculty
LTC August W. Smith, Ph.D.

Accepted this 7th day of June 1991 by:

 Director, Graduate Degree
Philip J. Brookes, Ph.D. Programs

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 ROLE OF THE NATIONAL TRAINING CENTER AT FULL
MOBILIZATION by MAJ Edward P. Donnelly, USA, 212 pages.

This study proposes a role for the Army's National Training Center at a state of Full Mobilization. Current plans for mobilization disestablish the manpower resources for the National Training Center at Fort Irwin, CA upon declaration of a state of full mobilization in event of war or other national emergency. It is hypothesized that these resources may have some better value if applied to assisting in the mobilization of the Army National Guard's four heavy divisions.

Study of past mobilizations reveal negative trends in the areas of personnel and training readiness of mobilizing reserve component divisions. It has proven increasingly difficult for reserve component forces to demonstrate adequate levels of individual and unit task performance proficiency when called upon to mobilize. Additionally, personnel turbulence has caused pre-mobilization training readiness assessments to be invalid instruments for predicting post-mobilization readiness.

Current training and mobilization doctrines address some, but not all, identified trends. Resources at the National Training Center have the potential to correct the remaining deficient trends. Possible full mobilization roles for the National Training Center and its resources are proposed by this study. Additionally, recommendations for future study are suggested.

DIST A ~~per~~ Philly Clark
ATZL-SWSL
Ft Leavenworth, KS 66027-6900



iii

Accession For	
NTIS CRA&I	<input checked="" type="checkbox"/>
DTIC TAB	<input checked="" type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By	
Distribution/	
Availability Codes	
Dist A-1 100	Avail and Special 100 (m)

ACKNOWLEDGMENTS

It would be a mistake for any reader to assume that this study is the product of my own intellectual and research abilities. I am indebted to my research committee who gave generously of their time and talents to ensure that this study was both professional and complete. COL Howard Kietzman, my committee chair, was instrumental in keeping me focused on the subject and ruthlessly herded me back into my axis as I strayed to attack targets of opportunity. LTC Tony Barnhill ensured my objectivity by insisting that I justify each and every one of my findings. I was further blessed with two consulting faculty, LTCs Ernie Pitt and August Smith, who, offering frequent but gentle advice, adjusted my study to conform to generally accepted scholarly practices.

Far from Fort Leavenworth, I am indebted to my old Combat Training Centers Programs Directorate comrades. LTC Mike Cuff and MAJs Tom Tinsley and Ben Taylor worked long, hard hours and beat the odds to build the system that is the subject of this study. Thanks, also, are due the soldiers, past and present, who are the Combat Training Centers. Their working conditions are hard and arduous but their contributions to the Army are many. Finally, I owe a debt of extreme gratitude to COL Kietzman's Gal Friday and my long-time colleague and friend, Mrs. Linda "Mom" Darnell. Although she wasn't named as a member of the research committee, she should have been.

TABLE OF CONTENTS

	<u>PAGE</u>
APPROVAL PAGE.....	ii
ABSTRACT.....	iii
ACKNOWLEDGMENTS.....	iv
SECTION I. INTRODUCTION	
CHAPTER 1. THESIS STRUCTURE.....	1
CHAPTER 2. LITERATURE REVIEW.....	9
CHAPTER 3. METHODS AND PROCEDURES.....	17
SECTION II. HISTORY OF MOBILIZATION	
CHAPTER 4. THE EARLY YEARS (1775-1938).....	29
CHAPTER 5. THE SECOND WORLD WAR (1939-1945).....	62
CHAPTER 6. THE TOTAL FORCE (1946-1989).....	91
SECTION III. FORCE READINESS	
CHAPTER 7. TRAINING THE FORCE.....	119
CHAPTER 8. MOBILIZING THE FORCE.....	151
SECTION IV. POSSIBLE IMPROVEMENTS	
CHAPTER 9. COMBAT TRAINING CENTERS.....	166
CHAPTER 10. CONCLUSIONS AND RECOMMENDATIONS.....	183
GLOSSARY.....	201
BIBLIOGRAPHY.....	203
INITIAL DISTRIBUTION LIST.....	207

SECTION I

INTRODUCTION

CHAPTER 1

THESIS STRUCTURE

BACKGROUND: In January 1987, the Chief of Staff of the Army approved and directed the implementation of an Army-wide concept for combat training centers. The concept provided for the peacetime multi-echelon training of Active and Reserve Component heavy, light, and special operations forces. Further, the concept called for the training to be tough, stressful, and conducted in a near-real combat environment under conditions of joint and combined environments on the tactical and operational levels of war.¹

Yet, the concept failed to specify a use for the combat training centers during war or near-war situations. No agreement has been achieved between Department of the Army, the US Army Training and Doctrine Command (TRADOC), and US Forces Command (FORSCOM) as to how the Training Centers will be used when the Army goes to war. Current plans disestablish the National Training Center at Full Mobilization. The units which make up the opposing force

(OPFOR), principally the 177th Separate Armored Brigade, are deploying units. Other personnel at the Center will be made available to meet Army needs in accordance with priorities established in Chapter 3, AMOPS Volume III.² The other Centers are not included in current mobilization plans. Beyond broad agreement that the Training Centers will continue to exist during mobilization, there is no plan to utilize the Centers to assist in the mobilization effort.

The United States has mobilized significant portions of its manpower to fight each of the nine major wars in the nation's history. In all cases, the mobilization has failed to deliver trained and ready units to the fighting front in a timely and efficient fashion. The situation seems to be the same today. As the Army deployed to Saudi Arabia during Operation Desert Shield, the Training Centers virtually ceased operations except for previously scheduled exercises with non-deploying forces. None of the deploying forces went to the Training Centers for pre-deployment training. None of the Reserve Component forces which make up the strategic reserve were activated and deployed to the Training Centers to raise their level of combat preparedness. Indeed, the Army National Guard roundout brigades for two of the deploying divisions were not deployed due, in part, to combat preparedness deficiencies that arguably could have been corrected by training at the Centers.³

As the Army continues to draw down and to shift from a forward-deployed force to a rapid deployment contingency force, mobilization preparedness grows even more important. The Active Component forces, which have first priority on the Combat Training Centers during peacetime, will deploy quickly and, presumably, at a high state of readiness. The Reserve Component forces which mobilize deploy later must be able to achieve equally high states of readiness prior to deployment. A well thought-out, coordinated and rehearsed plan to utilize the Combat Training Centers during mobilization could provide the means to achieve those states of readiness.

PURPOSE: This thesis will consider the utility of employing National Training Center resources to assist mobilization and training of Reserve Component units alerted for deployment to combat. If such a concept has utility, the thesis will suggest a plan to expand the concept to include utilization of all Combat Training Centers in a similar fashion. If the concept does not have utility, the thesis will suggest a plan to reallocate the Training Center resources to provide the maximum support and assistance to the mobilization effort.

ASSUMPTIONS: The baseline assumption for this study is that Reserve Component close-combat heavy brigades will require additional training upon mobilization prior to

their attaining levels of readiness appropriate for employment in combat in a mid-to high-intensity environment. This study further assumes that current indices for measuring Reserve Component readiness and the systems for mobilizing Reserve Component Forces will remain in existence. Reserve Component readiness and mobilization procedures will be more fully examined in Chapter 5 of this study.

The second assumption of this study is that the NTC training experience as it currently exists is a valid training instrument to prepare units for combat. All available literature indicates that the NTC experience is as close to a wartime experience as possible in peacetime. Any changes made to the existing methodologies to train units during mobilization for war are assumed to make the experience more like combat. The NTC training experience is more fully examined in Chapter 6 of this study.

The last assumption for this study is that the National Training Center will continue to exist during mobilization and that it can be used in a manner consistent with the findings of this study. This assumes a number of prior conditions:

(a) That there are no open-source plans to utilize the NTC during Full Mobilization. This study assumes that there are no unwritten or close-compartmented plans to

utilize the CTCs in the event of mobilization and deployment.

(b) If there are plans in existence, this study assumes that they can be altered if a better utilization is proposed. And

(c) If a better utilization is proposed and approved, funds and additional resources required to implement proposed solutions can be made available.

Finally, this thesis assumes that the mobilization policies and procedures in force today are the product of genuinely well-intentioned individuals and that they will be carried out with all the dedication one would expect of professional soldiers. This does not imply any doubt as to the dedication of the men and women currently assigned to either the Combat Training Centers or the mobilization apparatus. Instead, this assumption implies that these individuals will well and faithfully execute their assigned duties notwithstanding the fact that the system is flawed.

LIMITATIONS: This study will focus on the question of the role of the National Training Center at Full Mobilization. Inherent in this focus are a number of limitations.

(a) This study will consider only the National Training Center. The NTC provides training opportunities for close-combat heavy brigade slices in mid- to high-intensity scenarios. Thus, the study will examine only close-combat

heavy brigades in the organized force structure. This study will not consider the training needs of either close-combat light forces or of close-combat heavy forces of larger than brigade size. It is possible that requirements for these forces may be met by methodologies similar to those postulated in this study applied at the JRTC or BCTP respectively.

(b) This study will consider the role of the NTC at Full Mobilization. To focus the consideration, the study will only address close-combat brigade-sized units assigned to currently organized Army National Guard close-combat heavy divisions. These divisions are the 35th (Mech), 40th (Mech), 49th (Armor) and 50th (Armor). The other six organized ARNG divisions are not close-combat heavy units and are subject to the limitation above.

ARNG close-combat heavy brigades designated ROUNDOUT to Active Component Forces under CAPSTONE alignments are assumed to have been mobilized at Partial Mobilization or as part of the 200K call-up. These units, the 48th (Mech), 155th (Armor), 116th (Armor), and 256th (Mech) Separate Brigades are assumed, for purposes of this study, to be trained to a level equal to that of their Active Component parent unit and do not require additional training prior to deployment. Alternatively, they would have been afforded an opportunity to conduct post-mobilization training at the National Training Center because it does not disestablish during Partial Mobilization.

The remaining nine ARNG close-combat heavy brigades (30th (Armor), 30th (Mech), 31st (Armor), 32nd (Mech), 81st (Mech), 218th (Mech), 107th ACR, 163 (Armor) and 278th ACR) are assumed to have the same training considerations as the close-combat heavy division. They were not considered by this study due to a desire to limit its scope. The findings of the study probably are applicable to these units.

Other close-combat heavy brigades may be activated and mobilized during a Total Mobilization. This was the case in both WWI and WWII. During those conflicts, units were formed from cadres of existing Active Component or ARNG close-combat heavy brigades and filled with draftees. If this is, again, the case, these units will require a more complete training program than the NTC provides. These units are not considered as part of this study. The findings of this study are probably applicable to the unit and maneuver training portions of these units' more complete training programs.

(d) This thesis will concentrate on historical lessons from the mobilizations and deployments which occurred in the twentieth century and which are applicable to this study given the previous limitations. In essence, this limitation focuses on the lessons gained during the WWI, WWII, Korean War, Cuban Missile Crisis and Vietnam mobilizations and deployments.

The study was focused on lessons of the twentieth century because the conditions of earlier combat and, hence, their training requirements were so radically different from the training environment at the National Training Center. It was only in this century when combat formations were created requiring real coordination of war-fighting in a manner approximating that of the battlefield in today's mid- to high-intensity combat environment.

Warfare of the eighteenth century was primarily conducted by units which resemble today's companies in size and are far more restricted in their requirement for interaction with other units on the battlefield. The training requirements for these units was though to be so much less than for those of today that relying upon their lessons would somewhat skew the findings. Lessons from these mobilizations were considered but not used to verify trends.

(d) Finally, this study will not consider any data from the Desert Shield and Desert Storm operations which were occurring while this thesis was being written. These operations, and the mobilization of the National Guard roundout brigades in support of them, were felt to be of too immediate an occurrence to be properly analyzed in this study. It is believed that the findings and conclusions of this study should be examined in light of the lessons of these operations. This study may then prove to be an appropriate basis for the beginnings of a more scientific and scholarly examination of those operations.

CHAPTER 2

LITERATURE REVIEW

Much has been written about the history of mobilization of the United States Army. Principally, the mobilization literature discusses the process of mobilizing the nation as a whole for war. These studies primarily address aspects of industrial mobilization and ignore the mobilization of the Army. Even those studies which address military mobilization tend to focus on the mobilization of manpower rather than units. Thus, the military draft and individual replacement training are covered in great detail to the exclusion of unit post-mobilization training. Nonetheless, there is still a considerable body of literature on the subject of unit mobilizations.

Kriedberg and Henry's, History of Military Mobilization in the United States Army, 1775 -- 1945, provides an excellent overview of the differences in procedures and the lessons learned from previous military mobilizations. It is unfortunate that many of the lessons seem to be learned and relearned with each conflict. More general, but also good background texts on the role of mobilization in time of war are Weigley's, History of the United States Army, and The American Way of War; Dupuy and Dupuy's Military

Heritage of America; Mahan's, History of the Militia and the National Guard, and Williams', The History of American Wars.

With these background texts, one then can examine the history of mobilization in each of America's wars. Galloway's, History of United States Military Policy on Reserve Forces, 1775 -- 1957, provides a war by war analysis of the mobilization effort. Stuckey and Pistorius', Mobilization of the Army National Guard and Army Reserve, Chapter 2, Historical Mobilization Perspective, also provides an excellent starting point for each of the wars.

Literature is very scarce for the mobilizations occurring prior to World War I. The general texts referenced above provide much of the same material for these conflicts. These conflicts also featured mobilization procedures which relied very heavily upon volunteering individuals and, thus, more closely resemble the draftee divisions of WWI and WWII than they do the National Guard organizations of today. During the period between the Spanish-American War and World War I, federal legislation fundamentally altered the mobilization process.

The Militia Act of 21 January 1903, the "Dick Act", as amended by the Militia Act of 27 May 1908 organized the state militias in a structure similar to that we know today. Henceforth, militia units would be mobilized and deployed as units in the federal service. It is at this

juncture that literature pertinent to this study becomes more available.

Hill's, The Minute Man in Peace and War, devotes three chapters to the WWI mobilization of National Guard units and the Historical Evaluation Research Organization (HERO), devotes a large section of its, Origins, History and Accomplishments of the US Army Reserve, to similar treatment of mobilizing USAR units. The Army Almanac, too, covers WWI mobilization in good detail.

The most detailed treatment of wartime mobilization is that associated with World War II. Johnston's, Building an Army, is a primer on how to conduct a mobilization. Two volumes from The Army Ground Forces subseries of the Army Historical Division's The United States Army in World War II, are of particular significance. The Procurement and Training of Ground Combat Troops, describes programs and procedures used to train ground combat divisions. The Organization of Ground Combat Troops, provides insight into the organizational problems of the ground forces, particularly in the 1940-42 period when most of the National Guard divisions were mobilized and deployed.

In addition to these general texts, there are many excellent unit histories. All told, eighteen ARNG divisions (the 26th through 45th, less the 42nd, Infantry Divisions) were mobilized between September 1940 and November 1941. Each left some kind of unit history. While most of the text of these studies is devoted to the

performance of a particular unit in combat, some of them contain real insights into the problems of post-mobilization training. Additionally, there are many books written by individuals which recount the history of the National Guard divisions and regiments during WWII. Balkowski's, Beyond the Beachhead, devotes two chapters to the 29th (ARNG) Infantry Division's pre-combat training in the United States and England.

Besides the National Guard divisions, there were seventy-three other divisions mobilized and deployed. These were either Regular Army, Organized Reserve or Army of the United States (the latter difference referring to the creation of a new unit designation prior to activation). These units also left unit histories, but, due to differences in their peacetime establishments, were not studied. Some of the Regular Army divisions, particularly the 4th, 6th, 7th, and 8th resembled the National Guard divisions of today in that they were created from Regular Army companies and battalions which had little pre-war association. These may be worthy of later study.

Some of the Organized Reserve and Army of the United States draftee divisions, too, have some of the characteristics of the National Guard division if they were organized around a cadre largely drawn from a single previously activated, mobilized and trained division. The 88th Division, especially, was studied. This division was formed from a carefully selected cadre from the 9th (RA)

Infantry Division just prior to the that division's deployment to North Africa. The 88th distinguished itself in Italy and, it was thought, some of its lessons may have bearing on this study. HERO's, The 88th Infantry Division in World War II: Factors Responsible for its Excellence, and Brown's, Draftee Division: A Study of the 88th Infantry Division. First All Selective Service Division into Combat in World War II, were considered.

Eight National Guard divisions were mobilized for the Korean War. Two (40th and 45th Infantry) were deployed to Korea and two (28th and 43rd Infantry) to Germany. The remaining four were retained in the continental United States and used as training divisions for the deployed force. The after action reports of the four deployed divisions were studied in addition to Heymont and McGregor's, Review and Analysis of Recent Mobilizations and Deployments of US Army Reserve Components. Also worthy of consideration are the US Department of the Army and Air Force's, Annual Report (s) of the Chief National Guard Bureau, Fiscal Year Ending 30 June 1950 (and 1951). All four divisions contained a high percentage of WWII combat veterans so the comparison to today's divisions may be somewhat skewed.

During the Berlin Crisis of 1961, two National Guard divisions (32nd Infantry and 49th Armored) were mobilized but not deployed overseas. Their after action reports are on file and were reviewed. Partially in response to this

call-up, the Continental Army Command (CONARC) programmed mobilization times for various units. In CONARC's, Mobilization Production Times, TOE and TD Units as of 15 January 1960, found that even National Guard divisions organized and trained at the battalion level envisioned seven months of post-mobilization training time -- no different than that required for similar units mobilized for WWII.

No National Guard divisions were mobilized for the 1962 Cuban Missile Crisis. Nor were any divisions mobilized for the War in Vietnam. Only two combat brigades (29th (HI) and 69th (KS) Infantry) were mobilized and did not deploy. Their after action reports and the US Department of the Army's, After-Action Report: Mobilization of the Reserve Forces, 1968, were studied. As a result of these mobilizations, sweeping changes were made in the manner in which Reserve Component peacetime training was conducted and evaluated. For this reason, many of the lessons of these mobilizations may not be applicable to the situation which exists today.

More recent assessments are found in Binkin's, US Reserve Forces: The Problem of the Weekend Warrior, and Haffa's, The Half War: Planning US Rapid Deployment Forces to Meet a Limited Contingency, 1960-1983. Both find improvements in the capability of the Reserve Component forces to mobilize and deploy. Annual Reserve Forces Policy Board, Readiness Assessment (s) of the Reserve Component, Fiscal Year 19--,

echo that sentiment. Barnhill's, Train As You Will Fight: Factors Affecting Development of a Strategy to Train National Guard Units to the Level Organized, and Wilson's, The Guard and Reserve in the Total Force: The First Decade, 1973-1983, provides an excellent overview of the problems and solutions at work today.

Another area of interest is the manner in which other nations conduct mobilization and post-mobilization training. HERO's, German and Soviet Replacement Systems in World War II, provided a valuable insight.

The current system of mobilization is established in AR 500-5, The Army Mobilization and Operations Planning System (AMOPS). It is given form in AMOPS Volumes I through IV (U) and The Army Mobilization Plan (U). Specific mobilization procedures for National Guard divisions are contained in FORSCOM Regulation 500-3, The Forces Command Mobilization and Deployment Planning System (FORMDEPS) and given form in FORMDEPS Volumes I through IV (U). FORMDEPS Volume I is the authority to disestablish the National Training Center at Full Mobilization.

Army training systems are explained in FM 25-100, Training the Force, and FM 25-101, Battle Focused Training. Requirements for Reserve Component training prior to and after mobilization are contained in FORSCOM Regulation 350-2, Training, and FORSCOM Pamphlets 135-3, Evaluation Guide, and 135-4, Reserve Component Commanders 1-

R Workbook. Readiness for mobilization is described in AR 220-1, Unit Status Reporting. Bowan's, A Total Force Model for Training the Army's Reserve Components, provides a useful view of how the current system could be improved. Incidentally, use of the National Training Center for post-mobilization training is recommended.

The Army's system of Combat Training Centers is outlined in FM 25-100 and regulated in AR 350-50, Combat Training Centers. The National Training Center, itself, is the subject of many publications. Halberstadt's, NTC: A Primer of Modern Land Combat, is a comprehensive look at the Center as a total entity. Many other magazine and periodical articles examine individual portions of the Center -- almost exclusively the applicability of its training environment to some aspect of combined arms warfare training.

CHAPTER 3

METHODS AND PROCEDURES

METHODOLOGY: This study is divided into four sections. The first section describes the structure of the thesis. It includes an introductory chapter, literature review and a chapter on methods and procedures used in the thesis. In this section are the background, purpose, assumptions, limitations, definitions and significance of the thesis.

The second section is a history of American mobilizations. It contains three chapters of roughly equal length. The first chapter reviews the history and lessons from mobilizations which occurred between 1775 and 1938. The major mobilization theories of Calhoun, Upton and Palmer are described and their influence can be seen in the historical accounts of the mobilizations.

The second chapter reviews the mobilization for the Second World War. As the largest mobilization in our history, the World War II mobilization has had a great effect on our current mobilization system. An important part of this chapter is the description of the Army Ground Forces Master Training Plan for mobilizing and deploying divisions.

The third chapter rounds out the history by covering the period from 1946 through 1989. The wars of the later twentieth century were far more limited than the Second World War but required some mobilization nonetheless. A major part of this chapter is a case study of the mobilization of the 29th Infantry Brigade (Separate) (HIARNG) during the Vietnam War. A brief examination of the Total Force policy and a section summary conclude the chapter and the section.

The third section explains current plans for training and mobilizing units and assesses their ability to meet the requirements for mobilization as determined by the lessons learned in the previous section. This section is organized into two chapters of approximately equal length. The first chapter lays out the current Army training doctrine for individuals, leaders and units.

The other chapter in this section lays out current US Army Forces Command plans for conducting mobilization and deployment of divisional units. Responsibilities of the various players in this process, procedures for units to follow and a likely scenario are included. A summary completes the chapter and the section.

The fourth and last section provides a possible solution to deficiencies in the current system as developed in the previous section. The section contains two chapters. The first discusses the Army's Combat Training Centers and their capabilities for unit training and evaluation.

Following the system description, the chapter focuses on the National Training Center at Fort Irwin, CA. It discusses the three legged stool for training and evaluation at the NTC. Trained observer-controllers, a skilled opposing force and a sophisticated electronic battlefield are all tied together with a lessons learned system which provides detailed performance feedback to units and general lessons learned to the Army.

The final chapter makes conclusions for the thesis and recommends a plan for use of the NTC during full mobilization to assist in the mobilization process. Rather than disband the NTC and scatter its components to the winds, it would make greater sense to retain and employ them to aid deploying units to rapidly raise their levels of training proficiency.

DEFINITIONS:

(a) Combat Training Center (CTC)⁴: Army training facilities and resources established to provide realistic joint service and combined arms and services training and feedback in accordance with Army doctrine. CTC programs are established at four separate locations and are designed to provide training units opportunities to increase collective proficiency on the most realistic battlefield available short of actual combat. There are four CTCs in existence. Only the National Training Center will be considered in this study.

The National Training Center (NTC) consists of Army training facilities and resources at Fort Irwin, CA. It is designed to train heavy combat brigade slices in mid- to high-intensity conflict scenarios. Feedback is provided by permanently stationed observer-controllers assisted by a sophisticated instrumentation system. A permanently stationed opposing force provides realistic threat portrayals to units in force-on-force training. Periodically, non-mechanized forces train with heavy forces at the NTC. NTC also includes live fire exercises.

The Combat Maneuver Training Complex (CMTTC) consists of Army training facilities and resources at Hohenfels Major Training Area (MTA), Germany. It provides an opportunity for United States Army Europe (USAREUR) forward-deployed battalions to train in a realistic environment against a skilled opposing force. Feedback is provided by permanently stationed observer-controllers assisted by a sophisticated instrumentation system.

The Joint Readiness Training Center (JRTC) consists of Army training facilities and resources at Fort Chaffee, AR. It provides training opportunities for non-mechanized battalion slices to train in low- to mid-intensity conflict scenarios. An observer-controller group and skilled opposing force are also present at the JRTC. Occasionally, JRTC training support may be exported to other training sites for selected exercises.

The Battle Command Training Program (BCTP) consists of Army training facilities and resources associated with BCTP program at Fort Leavenworth, KS. It is designed to provide division and corps commanders and their battle staffs with advanced combat training opportunities through the application of computerized battle simulations. The program incorporates a realistic training atmosphere with a full time observer-controller staff supported by advanced technology.

(b) Reserve Component Forces⁵: Personnel and units assigned to the Reserve Component (RC) of the Total Army Force. Total Army Forces are units and personnel in the employ of the Department of the Army. Total Army Forces are composed of the military components and civilians. The military components include personnel and units in the Active Army Forces and in the Reserve Component Forces. Reserve Component Forces are units and personnel in either the Ready Reserve, the Standby Reserve or the Retired Reserve. The Standby Reserve and the Retired Reserve consist of individuals who will mobilize as individuals and are, therefore, not included in this study.

The Army Ready Reserve is composed of military members of the Army National Guard (ARNG) or United States Army Reserve (USAR) organized in units or as individuals liable for recall to augment the Active Component Force. Ready Reserve individuals and units are available for call-up

with a Presidential declaration of national emergency.

There are three categories of Ready Reserve.

The Selected Reserve, often called the "Organized Reserve", comprises the bulk of the organized units and manpower within the ARNG and USAR. This study will focus on the Selected Reserve Forces. The Individual Ready Reserve (IRR) is a pool of individuals not assigned to units. This study will not examine their role. The Inactive National Guard (ING) are members of the National Guard on inactive status who are attached to a unit for administrative purposes but who are not required to with the unit. However, they are required to mobilize with the unit to which they are assigned and are, therefore for purposes of this study considered to be part of the Selected Reserve.

The Selected Reserve consists of units and individuals so essential to wartime missions that they have priority over all other Reserves. Unlike other Ready Reserve forces, they are available for call-up with the Presidential 200K call-up authority (see below). The Selected Reserve consists of units, individuals assigned to those units but undergoing training, and other designated trained individuals.

(c) Mobilization⁶: The act of assembling and organizing resources to support national security objectives in time of war or other national emergencies.

It is the process whereby all or part of the Armed Forces are brought to a state of readiness for war or other national emergencies. This includes activating all or part of the Reserve Component Forces as well as assembling and organizing military and civilian personnel, supplies and materiel. Federal law provides for a spectrum of mobilization options to give the President and Congress great flexibility when responding to a crisis:

Presidential Call-up of 200,000 Selected Reservists. The President may augment the Active Forces by ordering to active duty units and individuals of the Selected Reserve, up to 200,000 members from all services, for up to 90 days (with authority for an additional 90 days if required) to meet the requirements for an operational mission. Although this action calls Selected Reserve Forces to active duty, it is not considered a level of mobilization because of the brief duration of the authority and because there is no authorized increase in the end strength inherent in the authority.

Partial Mobilization. This is an expansion of the Active Armed Forces resulting from action by Congress (to any level short of full mobilization) or by the President (not more than 1,000,000 individuals for 24 months) to mobilize Reserve Component units, individual reservists, and retirees, as well as the resources needed for their support. The expansion meets the requirements of a war or

other national emergency involving an external threat to the national security.

Full Mobilization. This is an expansion of the Active Armed Forces resulting from congressional action, normally at the request of the President, to mobilize all Reserve Component units in the existing approved force structure, all individual reservists, and retired military personnel. It includes resources needed for their support to meet the requirements of a war or other national emergency involving an external threat to the national security.

Total Mobilization. This is an expansion of the Armed Forces resulting from congressional action, normally at the request of the President, to establish additional units or personnel, beyond the existing force structure. It includes resources needed for their support to meet the total requirements of a war or other national emergency involving an external threat to the national security.

Selective Mobilization. Although not a part of the mobilization spectrum, the selective mobilization authority provides for the augmentation of the Armed Forces to meet the requirements of a domestic emergency that is not the result of an external threat to the national security. It involves augmentation of the Active Armed Forces resulting from an action by Congress, the President or both to mobilize National Guard units and the resources required for their support.

(d) Deployment⁷: The process whereby an Army unit is given an operational mission in a theater outside the Continental United States, usually with the expectation that it will engage in combat.

SIGNIFICANCE: This study will aid the Army in developing plans for the training of units during mobilization. There are many pieces of the mobilization puzzle which must still be solved. This thesis is only focused on the training issues which develop as a result of the current mobilization doctrine.

If the total force policy is discarded or significantly modified this study will have far less validity. Calls to convert the National Guard to nothing more than a pool of trained manpower have been heard from Uptonians for many years. It is possible to go the other way too. Proponents of the Citizen Army have lobbied for a reduction in the size of the Regular Army and a transfer of their roles to the Reserve Component. The end of the Cold War makes future mobilization needs less likely and argues for reduction in the armed forces to obtain a "peace dividend". In either case, the premises of this study would have to be reviewed.

Many reasons other than poor prewar training and inability to maintain adequate levels of deployment-eligible manpower cause unpreparedness on the first battlefields of future wars. The Regular Army has made its

share of mistakes leading up to our wars. Inappropriate doctrine may contribute to the problem. In this case, no amount of highly trained and deployable reservists would matter because they would all have to be retrained anyway.

An overall inability of the nation to link political and military strategy with available economics may also invalidate this study. The military machine exists to carry out portions of political decisions. Yet, it is not so flexible that it can react to radical shifts in international situations. Moreover, the machine requires a certain amount of financial support to maintain itself at levels required to execute assigned tasks.

Finally, this study addresses only training and associated manpower issues as causes of mobilization delays. The equipment issue is a major problem which was not addressed by this thesis. Reserve component units which lack adequate stocks of modern equipment can never hope to prepare for mobilization. The time required to change from an old to a new model may well negate any advantage gained by adopting this thesis' proposals.

In short, this thesis is significant because it provides a reasoned analysis of past mobilizations and uses these lessons to critique the existing system. If the proposals of the thesis are adopted there will be a requirement for expansion of the National Training Center to prepare for mobilization. This thesis may also serve as an adjunct to a larger study which examines the entire mobilization

process or an even larger study which examines the Army's force structure for the twenty-first century.

ENDNOTES

1. Glynn C. Mallory Jr., MG, USA, "Combat Training Centers: Training the Force to Fight," Military Review, (October 1987): 2.

2. US Army Forces Command ODCSOPS, US Army Forces Command Mobilization and Deployment Planning System (FORMDEPS), Vol I, System Description, (Washington, DC: US Government Printing Office, 1986), p. A-2.

3. The status of the Reserve Component roundout brigades has changed since research began on the thesis. Three close-combat heavy roundout brigades were mobilized as a result of the President's 15 November, 1990 use of authority contained in the 200K callup legislation. All three reported to mobilization sites on or about 30 November and began post-mobilization training in accordance with pre-mobilization assessments.

These assessments proved to be invalid and the training programs of the brigades were revised. The revised training plans called for Regular Army units to provide training assistance teams to the mobilization site commanders and required the brigades' combat readiness to be validated at the National Training Center.

On 20 January, 1991 the President declared a partial mobilization and extended the brigades' active service obligations to two years. As of 15 February, 1991, two brigades continue post-mobilization training at Fort Hood, TX and the third continues training at Fort Irwin, CA. The NTC readiness validation is expected to take place upon conclusion of the training programs.

4. US Department of the Army, Combat Training Center Program, Army Regulation 350-50, (Washington, DC: US Government Printing Office, 1988), p.2.

5. US Department of the Army, Army Manpower Mobilization, Department of the Army Pamphlet 600-72, (Washington, DC: US Government Printing Office, 1990), p.11.

6. DA Pam 600-72, pp. 3-4.

7. FORMDEPS Vol I, p. X-29.

SECTION II

A HISTORY OF US ARMY MILITARY MANPOWER MOBILIZATION

"It can be said that the United States has never adequately and fully planned for a mobilization before it occurred."¹

INTRODUCTION

The United States has conducted significant mobilizations of military manpower for each of its nine major wars and many of the intervening crises. Most historical studies of these mobilizations agree with the above assessment. All have advanced a number of different reasons for this lack of preparedness. They have proposed an even greater number of solutions. All agree that the roots of the problem and the potential solution can be found in the lessons of past mobilizations.

Military manpower mobilization policy has changed over the years based on a number of factors -- military, political, economic and social. Correct mobilization policy has been the subject of much debate. As each mobilization occurs and is analyzed, the debate only grows louder. It is thought that a review of lessons learned from past mobilizations will yield insights into requirements for future mobilizations. The chapters in

this section will review lessons of major mobilizations of American military manpower with emphasis upon those of the twentieth century. The focus of this section is on the history of these mobilizations with respect to the individual, leader, and unit training readiness of the mobilized manpower.

Chapter 4 will survey the mobilizations and mobilization concepts of the eighteenth, nineteenth and early twentieth centuries. This period was marked by a reliance upon a large civil militia system to back up a small Regular Army capable of absorbing the citizen soldiers and expanding to the size required to fight the nation's war.

During this period, wars, except for the Civil and Great Wars, were limited in scope and size of the forces involved. Most mobilizations involved relatively small numbers of citizens and many of those mobilized belonged to an organized militia unit. Thus, they had received at least some basic military training prior to their induction. In any case, the skills required to be mastered by an individual soldier in these wars were relatively simple and, in many cases, related to the skills required of the civilian populace.

This was not the case with the tactical leadership skills required to maneuver and fight units on the battlefield or to support and supply them in the field. Nor was it true of the uniquely military skills required to employ equipment in the technical branches like artillery and

engineers. Militia units, even those which had conducted regularly scheduled drill periods during peacetime, required substantial training if they were to be committed on the battlefield with any chance of success. This problem can be attributed to the lack of a professional officer corps within the militia forces and to the lack of official training manuals, publications and programs to standardize the instruction of the militia units. Similarly, the dearth of technical skills may be attributed to a lack of prewar training and practice. Finally, all wars of this era featured periods either prior to, or during, the conflict in which the regular and militia forces were able to conduct leader, unit, and special skill training.

Chapter 5 focuses on the mobilization for the Second World War. This period was marked by an increase in the size of the Regular Army over that of the previous centuries and by a shift in expectations of the role of the militia forces. World War II was different than those of the earlier era with respect to scope, size of the force involved, amount of warning time prior to commencement of hostilities and complexity of required skills. The war was far larger in scope than those of the preceding centuries. World War II was global in extent and involved the mobilizations of millions of men and the entire national economy.

It required soldiers to possess military skills of far greater complexity than in previous wars. The weapons and tactics of modern wars had evolved to the point that lengthy, specialized training was required to acquire the skills necessary to operate and employ the tools of war. At the same time, this period was marked by a decrease in the overall military inclination of the general populace. Military skills were no longer required by the average citizen and the similarity between military and civilian job skills disappeared. Thus, longer periods of time were required to impart military skills to civilians inducted into the military service and the amount of effort required to retain attained skill levels increased.

As individual skills became more complex, so to did those required to employ units on the battlefield. Lessons learned from earlier mobilization failures led to the establishment of a professional school system to train leaders in these collective skills. At the same time, increased industrialization and consequent growth of managerial requirements in the civil sector tended to decrease the gap between military leadership skills and the skills learned and practiced in the civilian sector. As military leadership took on a more managerial aspect, it became increasingly similar to the style of leadership with which civilian militia unit leaders were familiar. Thus the trends in military leadership skill proficiency within

militia units was opposite that of the trends in individual skill proficiency of the same units.

Chapter 6 reviews the post-WWII mobilizations and summarizes the lessons of the history of American military manpower mobilization through 1989. These wars or emergencies demanded rapid response to crisis situations in the form of trained units capable of deploying and fighting on short notice. Lessons from these mobilizations were the basis for the development of the concepts, policies and procedures in force as part of current mobilization planning. Those current plans will be laid out in the chapters of Section III. An understanding of the history which led to these plans should provide a basis for evaluation current mobilization policy.

CHAPTER 4

THE EARLY YEARS (1775 -- 1938)

EARLY WARS. The military manpower mobilization policy of the United States has its roots in the militia traditions brought to America by the first British colonists. The concept of the citizen-soldier able to drop his plow and turn out to repel invaders at a minute's notice is part of every early history. These minutemen required little formal training. The marksmanship and fieldcraft skills demanded for frontier life had direct application to military skills required to defend ones home from marauding bands of Indians. The advantage of this system was that there was no need to maintain a standing Regular Army with the attendant costs and dangers to democracy that the colonists associated with professional armies.

The militia system was less a match when combat was required against organized British regulars. The militia soldiers were no less brave than the British soldiers but their units lacked the same discipline and training. During the Revolution and War of 1812, militia units lacked the training, professional leadership and specialized skills in technical skills to stand up to a professional foe. Militia units performed best when employed in

peripheral operations or when well integrated with the regular units of the Continental Line. After training, the militia units were able to perform as well as professional units, but that training took time.

As wars and the skills required to wage them became more complex, the need for specialized training became more acute. Following the poor showing of the militia forces assembled in the early days of the War of 1812, Congress approved a plan to base mobilization on the Regular Army. The "Expansible Army" concept, as Secretary of War, John C. Calhoun's plan was called, proposed to maintain a skeleton Regular Army during peacetime and to augment it with individual volunteers in time of war. The militia system would still exist and states could still maintain their own militia units. But, volunteers would enter the Regular Army as individuals rather than in their own militia units. It would be a benefit if the volunteers had received militia training prior to joining the Expansible Army, but this was not necessary.

The Expansible Army performed well in the next conflict, the Mexican War. There were some problems because the volunteers were initially enlisted for three, six, or twelve months -- instead of for the duration of the war as Congress had authorized. Additionally, most volunteers lacked any prior military training due to the deterioration of the militia systems in many states. Nonetheless, the Expansible Army was able to quickly absorb the new recruits

without too much difficulty. Training was effectively accomplished mainly because time was available and qualified instructors were on hand. Overall, the Expansible Army received high marks for its mobilization preparedness.

CIVIL WAR: The Civil War, however, was a war which utterly exceeded the capability of the Expansible Army. The militia system, ineffective during the Mexican War, had not improved in the interim and was not able to provide a pool of trained military manpower. Untrained volunteers swamped the recruiting stations and the small Regular Army was unable to expand fast enough to absorb them all. Training programs had not been developed and organized by the War Department during peacetime so that an adequate, uniform training program was unavailable for implementation at the beginning of mobilization. Instead of using the Regulars as a cadre whose training and experience could be used to stiffen the Volunteer units, they remained in their pre-war organizations. Keeping the Regular Army intact deprived the Volunteer Army of qualified leaders and instructors during the critical months of the initial mobilization. The result was a series of defeats for the Union Army which lasted through the first three years of the war.

Following the Civil War, the Army returned to its pre-war organization. Military reformers, chief among them, Brevet Major General Emory Upton, argued for a revitalization of

the Regular Army and a return to the Expansible Army concept. Upton also called for the militia system to be replaced by a system of universal military service through conscription. In his opinion, the militia system had failed to produce trained military manpower during the Civil War. Thus, it was not worth the expenditure to maintain a militia structure during peacetime if it did not contribute to wartime preparedness.

Upton preferred to place these resources in a larger Regular Army. Such an Army would provide three principal benefits, he argued. First, such an establishment was required to provide a base for expansion into a force structure far larger than Calhoun had envisioned fifty years earlier. The Civil War and recent European conflicts between Prussia and the Austrians and French had shown that huge armies, numbering in the millions, would be required to wage future wars. Secondly, the Regular Army had to be large enough to train the masses of conscripts annually inducted for their mandatory service training. The minuteman of the past would no longer be able to go to a war in which the military tasks he would be expected to perform would bear any great similarity to the tasks he had recently been performing in his civil employment. Thus, civilians would require as much as two years of military training during peacetime to prepare them for induction during wartime and a number of Regular Army soldiers would be required to conduct this training.

Finally, Upton recognized the growing technical complexity of modern warfare and the divergence of military science from that required to accomplish civil tasks. Specialized military services like engineering, artillery and logistics had a level of complexity and sophistication which was significantly different from civilian services. Soldiers required to perform these wartime services needed extensive training to accomplish these military tasks. Such training was of such a nature that it could not be accomplished in the two years of training allocated to conscripts under the plan Upton proposed. Therefore, the number of these specialists required in wartime would have to be maintained at full strength in the peacetime Regular Army.

Other reformers also proposed changes in the peacetime army. One problem recognized as a lesson of the war was the lack of professional small unit leadership among the volunteer officers in the militia formations. One solution was to include military tactics instruction as part of the curriculum offered at the nation's universities. On 2 July, 1862, President Lincoln signed the Morrill Act providing a grant of federal public lands to each state which were to be sold and the money thus derived was to be used to establish a fund to establish and maintain colleges. While the primary purpose of this legislation was to establish schools, the basic act did require that the program of instruction at the schools include military

tactics.² On 28 July, 1866, the Morrill Act's military tactics instruction provisions were implemented with the authorization for the President to detail up to 20 officers to the land grant schools to conduct tactics instruction.³ On 4 May, 1870, Congress authorized the issue of small arms and artillery for the instruction. On 5 July, 1876 the number of instructors was increased to 30 and, on 3 November, 1893, to 100.⁴

The problem of lack of expertise in military tactics was not as severe in the Regular Army units. However, as warfare became more complex, it was recognized that professional soldiers needed to study their craft both to retain proficiency and to improve. Such a tenet had long been accepted in Europe and many nations, chiefly Prussia, had extensive service school organizations.⁵ Under the leadership of Commanding General William Sherman, the first major strides were made toward establishing a system of American military schools.

These schools were intended to provide peacetime training for Regular Army soldiers and officers in the skills required for fighting wars. In 1881, Sherman established the School of Application for Infantry and Cavalry at Fort Leavenworth, Kansas. One lieutenant from each infantry and cavalry regiment was to be assigned to this school every two years, for the gradual dissemination of its precepts throughout the entire Army.⁶ Sherman's successor as Commanding General, Phillip Sheridan, continued to improve

the Army's school system. Following Sheridan's recommendations, Congress, on 29 January, 1887, ordered the establishment of "... a permanent school of instruction for drill and practice for the Cavalry and Light Artillery service of the Army at the United States" at Fort Riley, Kansas.⁷ The United States Engineer School was established at Willets Point, New York in 1890 and The United States Army Medical School was established at Washington D.C. in 1893.⁸

Congress refused to accept Upton's plans for a peacetime army. The huge cost of maintaining an Army of the size proposed by Upton was not acceptable as the nation sought to recover from the effects of the Civil War. Nor was the concept of peacetime conscription at all favorable. The democratic spirit of the country and distrust of the control such a system would give to the military made this alternative unthinkable. Finally, there was considerable enthusiasm among volunteer veterans that it was the militia formations rather than the Regular Army that actually won the war. While it was true that the militia had done most of the fighting for the North, it was also true that they failed to do any effective fighting until they had received extensive training from the regulars.

Upton's argument, and the argument of most of the Regular Army, was that the opportunity for training prior to the next war would be limited. This was the lesson from the mobilizations which had just occurred in Europe. They

argued that the militia had to be prepared prior to the start of the war or they would never get the chance to get ready. Nonetheless, the arguments did not set well with a Congress eager to get on with postwar expansion. No significant reforms were made to the militia system and the Regular Army was quickly returned to its prewar expandable size.

SPANISH-AMERICAN WAR. On the eve of the Spanish-American War, the Regular Army numbered 27,865 enlisted soldiers. Despite pleas from the Uptonian-dominated War Department to expand the Regular Army to 104,000, Congress still had ties to the romanticism of the citizen-soldier army which won the Civil War. On 19 April, 1898 they authorized the President to employ force to secure the independence of Cuba and adopted a compromise expansion plan six days later to enable him to do so. Congress authorized a Regular Army expansion through recruitment to raise each regiment from two battalions to three and to increase the number of companies in each battalion from ten to twelve. The expansion raised the Regular Army strength to 64,719 officers and men. At the same time, they authorized 125,000 volunteers in a move much like that undertaken by President Lincoln in the early days of the Civil War.⁹

In a break from previous mobilization disasters, this time there was sufficient qualified leadership available to officer the volunteer formations. The Civil War was not so

old that a sizeable pool of veterans was not available. Additionally, the Military Academy had produced more graduates than the peacetime army needed and these were recalled to active duty. The Morrill Act land grant colleges had not, however, lived up to their potential for providing trained officers for the militia formations. Manpower, too, was less a problem than in the early stages of previous conflicts. There were sufficient numbers of qualified volunteers to meet the requirements of both Regular Army expansion and volunteer formation. Despite these happy circumstances, the logistics support system, once again, was unable to accommodate the additional volunteers. Horror stories of nonexistent camp sanitation, rotten food, uniform and equipment shortages and appalling statistics of death through disease led to public outcry against the military.

Still, the mobilization for the Spanish-American War was an overall success. The Regular Army and several of the better trained volunteer and militia formation overcame initial difficulties and defeated the Spanish forces. This victory was largely credited to the expanded Regular Army. The principle combat force -- the Cuban Expeditionary Force -- consisted of 14,412 Regulars and 2,465 volunteers.¹⁰ An additional 5,000 volunteers arrived after the major fighting was over. Naturally, this poor showing by the volunteer and militia organizations was seized upon by

Uptonians as proof positive of the inferiority of the citizen army.

Another victory of sorts for the Uptonians was the continued conflict in the Philippines and the requirement for a large standing force to put down the insurrection. Congress authorized a peacetime Regular Army of 65,000 with an additional 35,000 long-term volunteers.¹¹ The peacetime army never again numbered less than 65,000 soldiers. Through the early years of the twentieth century, military leaders congratulated themselves on the success of the Uptonian principle of a large standing peacetime army. They felt extremely confident of their ability to expand the Army to meet any and every threat to the nation's security.

The War Department structured itself to fight a series of low intensity conflicts in remote regions of the world. They viewed the Civil War and its requirement for mass citizen armies as a thing of the past. In any case, they felt that the Expansible Army was large enough to meet any demands for future wars. They tragically failed to foresee the requirement to mobilize an entire nation to meet the demands of total war as it was to be waged in the twentieth century.

THE EARLY MOBILIZATIONS. Mobilization of American military manpower during the eighteenth and nineteenth centuries were notable for their lack of adequate planning prior to

their execution. Recurring training deficiencies exposed in these mobilizations occurred in the areas of leader and collective unit training. Individual training can be counted a strength of this period.

Militia unit leaders lacked the prewar experience and training required to maneuver and fight units and to support and sustain them in the field. Militia leaders were elected to their posts, often with little regard to their military acumen. Nor was there any organized system to provide them this training. The Morrill Act and its subsequent additional authorizations was an important first step in providing training to future militia leaders. So too was the evolution of a system of professional schools a measure destined to raise the military proficiency of militia leaders.

Collective unit training was a greater problem. The tactics of waging war became more complicated and the area over which battles were fought became greater. Units which were previously capable of being controlled through rote memorization of standardized drills were increasingly required to respond to rapidly changing battlefield situations in extended, non-standard formations. Units had earlier been able to master their military drills in the space of the village green over a period of a few days. Now, they had to master a number of increasingly complex collective tasks and they had no more area or time in which to attain this mastery.

Individual training was a great strength of the early mobilizations. Citizen soldiers often utilized the same fieldcraft and marksmanship skills in both military and civil life. The frontier environment which bred these skills decreased throughout this period, however and the likelihood that a citizen soldier would possess these skills upon induction into the military decreased. However, the militia system was able to sustain these individual skills among its members. This meant that most militia-trained soldiers were able to enter the military with little or no requirement for additional individual skill training. As the era progressed and individual military skills became increasingly complex, this advantage began to disappear.

Thus, mobilizations of this period were able to rely upon the militia for a pool of trained individual manpower. Unit and leader skills, however, were insufficient to permit an early use of militia forces on the battlefield. Training periods were required to be scheduled prior to the employment of militia units so that their proficiency could be raised to acceptable levels.

The Expansible Army concept was an attempt to capitalize upon the militia's individual skill proficiency while mitigating its leader and collective skill deficiencies. When wars were fought which did not require a force larger than that of an expanded Regular Army, the nation's defense was reasonably assured. When wars were fought which

required a larger force, time was required to bring the militia units to an appropriate level of preparedness.

MOBILIZATION REFORMS: Between the Spanish-American War and the Great War, federal legislation significantly altered the conditions of manpower mobilization readiness which had existed since the Militia Act of 1792. The first of the new laws improving the militia program was the landmark Militia Act of 21 January, 1903 (popularly known as the Dick Act after its sponsor, Ohio Congressman Charles F. Dick). The 1903 Act, as amended by the Militia Act of 27 May, 1908, provided federal aid to the states for maintenance and training of their militias and required the same organization, armament and discipline for the Organized Reserve (soon renamed the National Guard) as for the Regular Army. The Act also provided for regular inspection of National Guard units by the Regular Army, authorized joint maneuvers with the Regular Army and required National Guard units to achieve required training standards. The National Guard remained under state control and the training standards, while inspected, were not enforceable by the Regular Army. Nor were the standards expected to be the same as those required of the Regular Army.¹² In this manner, the War Department hoped to be able to improve upon some of the leader and collective training problems of the militia forces.

At the same time, Army Chief of Staff, Major General Leonard Wood, an advocate of the militia system, developed a reserve army plan which would build upon these improvements and make considerable use of the existing and traditional individual training strengths of the National Guard. His plan envisioned a small, well-equipped and immediately deployable Regular Army backed up by a well trained National Guard, less well trained but capable of rapid concentration to back up the regulars. Wood's 1912 War Department report on "The Organization of the Land Forces of the United State" made an historic departure from the Expansible Army concept by proposing a Regular Army, not skeletonized, but ready to fight immediately. Wood proposed to create:

A regular army organized in divisions and cavalry brigades and ready for immediate use as an expeditionary force or for other purposes for which the citizen soldiery is not available, or for employment in the first stages of war while the citizen soldiery is mobilizing and concentrating.¹³

The Volunteer Act of 1914 (the Hay Bill, after Virginia Congressman and Chairman of the House Military Affairs Committee, James Hay), took notice of Wood's recommendations and abolished the Expansible Army concept by requiring the President to call for volunteers only upon congressional authorization and only after National Guard units had been provided the opportunity to volunteer as complete units.

Wood retired from active service on 20 April, 1914 but continued his calls for training improvements in the National Guard. In 1915, he opened a summer camp at Plattsburg, New York, paid for by private contributions, to provide military training to business and professional men. Wood's idea quickly took hold and a number of similar camps were created in other areas of the country as war fever swept the nation. Wood was able to go so far as to propose introduction of conscription to support a call for universal military training of all able-bodied males. The so-called Preparedness Movement grew in stature when former President Theodore Roosevelt lent his support. Various pro-war Republicans joined in and the issue quickly took on political overtones.

In partial response to the political challenge and partially to assuage the Uptonian majority in the War Department, President Woodrow Wilson directed his administration to develop plans to prepare the Army for war. His Secretary of War, Lindley M. Garrison, produced a "Statement of a Proper Military Policy for the United States" which advocated a plan similar to that proposed by Wood but with a reduced reliance upon the National Guard. Garrison's Continental Army plan proposed to more than double the size of the Regular Army to 230,000. There would also be continued support for the National Guard but conscripted citizens would be placed in a federal reserve of trained individuals, obviously intended for a larger role than the National Guard.

Congressman Hay quickly proposed an alternative to increase the size of the Army without increasing the size of the Regular Army. On 11 January, 1916, Hay discussed his plan with Wilson. Hay's counter-proposal would strengthen the National Guard by increasing federal responsibility for it. The federal government would henceforth equip and train the National Guard and also pay them for their training periods. This would improve the collective skill proficiency of National Guard units. Hay also proposed that the federal government eliminate political patronage in the Guard by reserving the right to qualify and certify state officers for federal commissions. This would improve some of the leader training deficiencies. Finally, Guardsmen would swear a dual federal and state oath to respond with their entire units to federal calls for service anywhere in the world. This last provision assured federal control in wartime and ended constitutional arguments regarding the authority of the federal government to require militia service outside United States territory.¹⁴

Wilson proposed Hay's plan to Garrison who refused to compromise. Hay, too, refused to budge and informed Wilson that a compromise plan would not pass Congress. When Wilson, faced with the prospect of Hay's bill or no bill, chose Hay and the National Guard, Garrison resigned. His replacement, Newton D. Baker was better able to work with Congress. When the Hay bill passed by a vote of 402 to 2, it included authorization to increase the size of the Regular Army to 140,000. Further legislative lobbying by Baker, combined with the German

torpedoing of the liner, Sussex, and Pancho Villa's trepidations against Columbus, New Mexico, resulted in a House-Senate compromise to increase the Regular Army authorization to 175,000 over the next five years. The compromise bill authorized expansion to 286,000 in wartime.

The National Defense Act of 1916 also included Hay's plan for a strengthened National Guard under increased federal supervision. The strength of the Guard was to be gradually increased from 100,000 to over 400,000 in the same period as the Regular Army. The federal government would provide funds to pay for forty-eight armory drill periods each year, up from the previously state-funded, federally-required twelve. Standards would also be established for Guard officers and they would be certified by the Regular Army. The Act also provided for a Regular Army enlisted reserve and gave legal standing to the Reserve Officers' Training Corps which had evolved from the original Morrill Act provisions.

THE GREAT WAR: Despite the wrangling over war preparation, the United States Army was more prepared for war when it was declared on 6 April, 1917, than it had been in any peacetime period in its history. The strength of the Regular Army was 127,588 officers and men.¹⁵ Portions of the Regular Army had conducted large unit operations as part of Pershing's Punitive Expedition into Mexico. The National Guard had been mobilized in separate units and 80,446 Guardsmen were in federal service, most along the Mexican border. An additional 101,174 were federalized from state service. The Officers' and Enlisted Reserve Corps and the

separate Regular Army Reserve and Enlisted National Guard Reserve contributed approximately 21,000. Thus, the Army entered the Great War with a strength of about 330,000 officers and men with various levels of individual, collective and leader training readiness.¹⁶

Still, the improvements of the new legislation had not had time to have an effect upon years of confusion and neglect and had failed to keep pace with the manpower requirements of modern war. Mass armies of the Great War dwarfed those of previous conflicts. The Germans had entered the war with 1,750,000 first-line troops and several millions of second-line "territorial" troops to back them up. The French Army was comparable with over 1,500,000 first-line troops.¹⁷ And the casualties of the opening months showed all the European governments that they would need many times more men. America entered the Great War in April, 1917 with 133,111 men.¹⁸ That same month, the Nivelle offensive cost the French 120,000 casualties. Supporting British offensives cost another 250,000 casualties.¹⁹ Congress quickly authorized the President to call over one million additional men to the colors. By war's end, that number would approach four million. Clearly, the mobilization required for this war would exceed any prior effort.

At the start of the war, the Army planners estimated that they would have to send twenty 28,000 man divisions to France by 31 December, 1918. By July, the number required had been increased to thirty. Within a year, the requirement had increased again to eighty by 1 July, 1919.²⁰ By the time of the Armistice, 11

November, 1918, the United States had organized sixty-two divisions and shipped forty-three to France. The Army had added 3,884,417 untrained civilians to its ranks between 1 April, 1917 and 11 November, 1918. Whereas in the Civil War, only six percent of the soldiers in the Union Army had been supplied through the draft, the Great War Selective Service program provided sixty-seven percent.²¹

The Regular Army proved incapable of expanding fast enough to keep pace with the training demands placed upon it by the need to incorporate so many untrained civilians. The Regular Army's expansion plan called upon the existing regiments to accept 263,286 inductees. This expansion tripled the size of the Regular Army.²² Yet the expansion required to meet the War Department's revised troop basis would add over ten times that number to the Army rolls. The Army would have to expand by forming new National Army divisions by stripping cadres from existing regiments and adding draftees to the skeleton. Neither the Regular Army or the National Guard were prepared for an expansion of this magnitude.

Thirteen of the prewar Regular Army infantry regiments were deployed in garrisons outside the continental United States and, after their initial expansion, were unable to provide cadres for new formations.²³ Four of the remaining twenty-four infantry regiments (16th, 18th, 26th, and 28th) and three of the Army's six regular field artillery regiments (5th, 6th, and 7th) were hurriedly formed into the provisional 1st Infantry Division and dispatched to France prior to the induction of the first

draftee.²⁴ All other regiments were first drawn down to bring the deploying regiments to full war strength. Then they were expanded by volunteer enlistments based on the prewar plans. Finally, the expanded regiments were further stripped to form cadres prepared to train the new National Army units composed of draftees. Even so, fewer than 900 regulars were available for assignment to each 28,000 man National Army division.²⁵

Nor was the National Guard able to provide the solution. The National Guard was expected to provide enough regiments to constitute an equivalent of seventeen divisions but required 132,686 conscripts just to bring existing units to wartime authorization.²⁶ Expansion, like that of the Regular Army, was out of the question. And, of course, the National Guard regiments were unable to provide cadres for the National Army regiments. National Guard units, most called to service only in the last month, were unprepared themselves, let alone able to absorb new untrained recruits and cadre new units at the same. The Uptonians were vindicated. The National Guard's failure to provide sufficient quantities of trained individuals and units had, in their opinion, demonstrated that the citizen army was incapable of defending the nation.

The problems of expansion notwithstanding, the War Department, pressed by the European Allies to provide assistance on the fighting front, began shipping units to France as quickly as possible. Expanded Regular Army regiments, stripped of cadres for new National Army divisions, arrived in France full of trained individual replacements transferred from other Regular

Army regiments. While the individuals in these regiments were well trained, the regiments were woefully under-trained as units. The 1st (RA) Infantry Division regiments arriving in France between June and July, 1917, underwent a rigorous training program and did not even enter a quiet combat sector until October.²⁷ The next arriving divisions, the 2nd (RA), 26th (NG), 42nd (NG) and 3rd (RA) faced similar lengthy training periods. It was not until General Peyton March became Chief of Staff in May, 1918, that a plan was developed which stabilized personnel strength sufficiently to allow the division to conduct adequate collective training in the United States prior to deployment overseas.²⁸

If collective training programs were slow in developing, leader training programs were quickly implemented to rectify early deficiencies. As the Regular Army was dispersed to meet the training needs of the new National Army, it experienced a desperate shortage of trained officers and non-commissioned officers. To provide thousands more officers, the War Department expanded its Officers' Training Camps. Built on the model of Wood's original Plattsburg Camp, sixteen of these camps were in existence prior to the war. In the first five months of the war they produced 27,341 commissioned graduates. All told, the Officers' Training Camps (or Schools, as they were called after August, 1917) produced a total of 80,568 commissioned graduates during the war.²⁹

While the system was thus able to produce adequate numbers of junior officers, there was a decided shortage of trained staff and senior officer leaders. One of the major Allied objections to American efforts to establish the American Expeditionary Force as a separate field army was their concern that inexperienced American commanders and especially staffs would be unable to manage large numbers of men and complicated logistical problems. The Americans had to concede that this was hardly a groundless fear. After all, only General Pershing, the AEF commander had ever commanded a unit larger than a regiment.³⁰

Prewar Regular Army officers had a wealth of field but little staff experience. About one third had served in the Spanish-American War or the Philippine Insurrection and many others had seen arduous field service in Moro country and along the Mexican border.³¹ About half were graduates of the Military Academy but only 379 were graduates of the Staff College (successor to Sherman's School of Application of Infantry and Cavalry at Fort Leavenworth) or the Army War College. Of the senior AEF officers, nearly eighty percent were Academy graduates but more than half of these had received no formal post-commissioning schooling.³²

Pershing quickly established schools of the staff and line in France for officer training supplementary to that given by the Army school system in America. Corps schools were established to provide training for junior officers and non-commissioned officers. Still other schools were established to train instructors for the corps schools. There were special schools

for each staff and supply department and every branch of the service. The capstone school was the General Staff School at Langres, organized by Major General James W. McAndrew, who was to become Pershing's Chief of Staff.³³

The mobilized National Guard and Reserve Officers' Corps fielded about 6,000 officers with combat experience. But with much of that coming in the Spanish-American War, these officers were too old for service as company grade officers and possessed none of the staff experience required for higher level service. Virtually the entire senior echelon of the 26th (NG) Division had to be replaced after the Division fell apart during the counteroffensive against the Marne Salient. There are other examples of insufficiently trained National Guard officers wilting under pressures for which they had not been prepared.³⁴

But Pershing's measures paid off and proved the misgivings of the British and French allies to have been misplaced and excessive. If the Regular Army's prewar schools had produced too few trained officers, the war demonstrated that those few had been wisely selected and well instructed. These officers sustained a respectable level of ability and skill and their staff work rivaled and, occasionally, astounded their allies. The American plan to transfer troops and open the Meuse Argonne offensive while still conducting the Saint-Mihiel offensive remains a masterpiece of planning and coordinated staff work.³⁵

Part of the problem which required such lengthy periods of unit training either before or after units had arrived in France was that of individual training. One of the central tenets of the Pershing's plan to develop a trained AEF was a belief that the citizen-soldier inductees and National Guardsmen must look and act like regulars if they were to perform like regulars. There was no universal agreement on how long this process would take. Leonard Wood's prewar proposals for the conduct of regimental individual and collective training had assumed six months to complete both. Most professional soldiers believed that a year or, perhaps, two were required.³⁶

The War Department eventually decided that four months of individual training in the United States was the minimum to prepare an infantryman for transfer to a unit.³⁷ While this period provided a basic training in discipline, military life, tactics and weaponry, similar to that provided to enlistees in the infantry-dominated formations of the Civil War, it was just a start in the Great War. Specialists such as artillerymen had to progress to intensive training in the techniques of their arm or service.

Pershing, ever the Uptonian, insisted that even the infantryman needed an extremely intensive and notably prolonged period of additional training.³⁸ The basis for this insistence was a belief in the probability that tactics on the Western Front would soon transition from trench to open warfare. In this case, the AEF soldier would have to be proficient in the skills required in both sets of tactical circumstances. He must learn the

techniques developed in three years of trench warfare -- employing the machine gun, hand grenade, mortar, shovel and barbed wire with equal aplomb. He must also master the skills for proficiency in the employment of the rifle and bayonet and in the complicated tactical drills required for open, maneuver warfare. Finally, Pershing, the thoroughgoing Regular, expected his National Guard and National Army soldiers to learn military customs, courtesies and bearing just like the Regular Army soldiers. If the newcomers were to fight like regulars, they must first look, dress and carry themselves as regulars.

The War Department, recognizing the problem caused by the shortage of Regular Army cadres for the new divisions produced training aids on a grand scale. By February, 1918, The War Plans Division of the General Staff listed fifty-five training and technical publications. The motion picture also was utilized, for the first time, as a military training device. Eventually, seven training films were produced.³⁹ As these measures were implemented, and the various officers' training programs began turning out competent trainers to augment the regular cadres, individual training programs began to produce streams of citizen-soldiers.

The lessons of the Great War to provide interesting grist for the debates of military preparedness that were sure to follow in the inter-war period. Several conclusions seem clear. First, and perhaps foremost, is that military manpower was successfully mobilized in the United States for the Great War.⁴⁰ Second, that

selective service conscription followed by extensive individual and leader training had been required to convert that mobilized manpower into effective soldiers. Third, that the prewar establishment of the Army was inadequate, under an Expansible Army concept, to absorb and train the inducted manpower while simultaneously deploying to fight an overseas war.

From a training perspective, the Regular Army was able to respond to the crisis with trained individuals and leaders. Had the required expansion not been ten times that anticipated, the Regular Army would have been able to provide trained units as well. The National Guard was not so well prepared. Partially due to inadequate prewar training programs and in part due to their inability to recruit to wartime requirements, National Guard individuals, leaders, and units were, on the whole, not prepared for the war. If success in future wars would feature mobilizations like that required for the Great War, the lessons of this mobilization would clearly mandate some changes in the organization of the Army.

POSTWAR POLICIES: Although most of the world, including the Congress, viewed the Great War as the last of the world's wars, the War Department sought to build a force capable of ensuring that the mistakes of mobilization were not repeated. The largest area of unpreparedness had been the Expansible Army's inability to absorb the manpower required to wage the war. Acerbating this problem was the lack of prior military skill training possessed by this conscripted manpower. The War Department saw the

solution to this problem as a simple one. The General Staff proposed a peacetime establishment of 500,000 backed up by a reserve force consisting of all able-bodied male citizens who would receive three months compulsory peacetime training through a universal military service obligation.⁴¹ Congress, not surprisingly, balked at the proposal and responded by cutting the active force to less than 350,000.

The size of the armies required for modern, twentieth century war had doomed the Expansible Army. A Regular Army affordable in peacetime had proven capable of defending the nation's interests in far-flung territories and had provided the bulk of the forces initially deployed to France. Yet it was unable to split itself into enough pieces to simultaneously provide the basis upon which to build the massive manpower-intense structure needed to fight and win the conflicts likely to involve national security in the future.

Congress began hearings to design a force balanced between the requirements for preparedness and the demands of the economy. They invited Colonel John McAuley Palmer, who had commanded a brigade in the trenches and served on the AEF staff, to assist them. Palmer suggested a plan which called for a Regular Army fully manned and equipped to serve immediately in any military emergency short of one requiring mass mobilization. Additionally, Palmer proposed that the Regular Army devote a great deal of peacetime effort to training the National Guard formations of a Citizen Army. Palmer suggested that the Citizen

Army be recognized as the principal American Army. He used the Swiss Army as his model.⁴²

Palmer described three functions for which a Regular Army had to be maintained.⁴³ First, the regulars had to garrison strategic positions, such as Hawaii and the Panama Canal, where no reservists would be available. Second, within the United States, a limited number of active-duty divisions had to be maintained at full strength to handle minor emergencies and sudden deployments. Third, some other number of regulars would be required to provide training and administrative assistance to the reserve units. Palmer envisioned three components of the Army.⁴⁴ As already indicated, the Regular Army would be a limited force. The Citizen Army would then consist of the other two components. A National Guard, fully manned and trained under the aegis of the Regular Army, would provide most of America's defense. The Army Reserve would be manned as cadres of commissioned and noncommissioned officers to train volunteers and conscripts in the successors to the National Army units.

Palmer argued forcibly that his ideas were derived from the lessons of the Great War and had been proposed, even earlier by Washington and Knox. Washington's "Sentiments on a Peace Establishment" had advocated both a small Regular Army on the frontier and a well trained Reserve divided into a general militia of all citizens and a select, highly organized force of the youngest adult males. Such a force bore resemblance to that which Palmer was proposing. Since Washington had also called for a general militia service obligation, Palmer used this to

buttress his calls for universal military training. Finally, to trace his concept from the founding fathers lent an air of credibility to Palmer's proposals as he sought to convince the General Staff to support his plan.

Even though the General Staff continued to press for its Uptonian force built upon a German model, they shared several ideas in common with Palmer. Both saw a universal military service obligation as essential to the maintenance of a trained manpower base. Both saw the need for leader training programs to produce the junior officers and NCOs of the wartime establishment. And both believed that the logistics and technical services should be maintained pretty much at wartime strength in the Regular Army. Both also believed that the National Guard required regular training to maintain combat proficiency. The Uptonians believed this was best achieved by federalizing the formations and training them alongside the Regular Army; while the Palmerians thought readiness could be achieved part-time while keeping the National Guard and Organized Reserve divisions as part of a Citizen Army.

Typically, Congress adopted parts of both plans which supported neither. The National Defense Act of 1920 required nine Regular Army divisions and authorized the manpower to fill them. It also authorized the formation of nine corps areas, each manned by regulars in sufficient strength to maintain a training staff for two fully-manned National Guard and three cadre Organized Reserve divisions.⁴⁵ Progressive years saw the Regular Army's authorized strength dwindle to 150,000 in 1921; 137,000 in 1922 and 118,750

in 1927.⁴⁶ At the same time, the same nine divisions were required to be maintained. Palmer argued that the force should be reduced by abandoning some of the divisions so that the remainder would be fully manned. The Uptonians stubbornly refused arguing that all nine should be maintained at reduced strength and expanded in wartime. To maintain the existing divisions, the Uptonian-dominated War Department abandoned the organizations set up to train the National Guard and Organized Reserve divisions. The manpower thus saved was used to shore up the Regular divisions. The stage was set for the mistakes of the Great War mobilization to be repeated in the preparation for the next.

ENDNOTES

1. Marvin A. Kriedberg, LTC USA and Merton G. Henry, 1LT USA, History of Military Mobilization in the United States Army, 1775-1945, (US Department of the Army Pamphlet 20-212, 1955), p. 695.

2. US Congress, House, An Act Donating Public Lands to the several States and Territories which may provide colleges for the benefit of Agriculture and Mechanic Arts, Act of July 2, 1862, 37th Cong., 2nd Sess., 1862, p. 504.

3. Kriedberg and Henry, p. 145.

4. Kriedberg and Henry, p. 146.

5. Russell F. Weigley, History of the United States Army, (Bloomington, IN: Indiana University Press, 1984), p. 274.

6. Weigley, p. 273.

7. Kriedberg and Henry, p. 147.

8. Kriedberg and Henry, p. 148.

9. Weigley, p. 297.

10. Weigley, p. 306.

11. Weigley, p. 308.

12. John D. Stuckey, COL USA and Joseph H. Pistorius, COL USA, "Mobilization of the Army National Guard and Army Reserve: Historical Perspective and the Vietnam War," (unpublished report, Strategic Studies Institute, US Army War College, Carlisle Barracks, PA, 1984), p. 7.

13. Weigley, p. 304.

14. Weigley, p. 345.

15. Stuckey and Pistorius, p. 9.

16. Kriedberg and Henry, p. 227.

17. Weigley, p. 336.

18. Kriedberg and Henry, p. 221.

19. Weigley, p. 355.
20. Kriedberg and Henry, p. 375.
21. Weigley, p. 357.
22. Kriedberg and Henry, p. 247.
23. Kriedberg and Henry, p. 222.
24. Weigley, pp 356 and 372.
25. Weigley, p. 372.
26. Kriedberg and Henry, p. 247.
27. Weigley, p 356.
28. Weigley, p. 376.
29. Weigley, p. 373.
30. Weigley, p. 387.
31. Allan R. Millett, "Cantigny, 28-31 May 1918," in America's First Battles, 1776-1965, ed Charles E. Heller, LTC USAR and William A. Stoft, BG USA, (Lawrence, KS: University Press of Kansas, 1986), p. 154.
32. Millett, p. 154.
33. Weigley, p. 387.
34. Weigley, p. 387.
35. Weigley, p. 388.
36. Weigley, p. 372.
37. Weigley, p. 374.
38. Weigley, p. 374.
39. Kriedberg and Henry, pp 289-290.
40. Kriedberg and Henry, p. 309.
41. Weigley, p. 396.
42. Jonathan M. House, "John McAuley Palmer and the Reserve Components," in The Guard and Reserve in the Total Force, ed. Bennie J. Wilson III (Washington DC: National Defense University, 1985), p. 37.

- 43. House, p. 37.
- 44. House, p. 38.
- 45. Weigley, p. 400.
- 46. Weigley, p. 599.

CHAPTER 5

WORLD WAR II (1939-1945)

As the world again prepared for war in the late 1930s, the General Staff again fell back on its Expansible Army plan. The Regular Army was slowly expanded from 118,570 in 1934, to 147,000 in 1935 and 165,000 in 1938.¹ Still, on the eve of Hitler's invasion of Poland on 1 September, 1939, the Regular Army stood at just 187,893 officers and men.² And 50,002 -- nearly one-third -- of these were stationed in overseas possessions.³ The remainder were stationed throughout the United States at 130 separate posts, most of battalion size. Thus, the disposition of the Regular Army was nearly identical to its pre-Great War disposition.

The nine authorized Regular Army divisions had not been maintained at their required strengths. What is more, the authorized peacetime strengths of these divisions was 14,000, only seventy percent of their wartime authorization.⁴ Only the 1st, 2nd and 3rd were even close to war strength or had a divisional framework. The other six were understrength brigades at best.⁵ In addition, there were the 1st and 2nd Cavalry Divisions, a mechanized cavalry brigade and a few miscellaneous units (infantry,

tank, anti-aircraft artillery, or service regiments). All these were close to peace strength but well below wartime authorization.

The National Guard was organized into eighteen divisions (two per corps area) but, numbering about 200,000, was only fifty percent of its wartime requirement.⁶ The Guard's authorized forty-eight training nights and two weeks of field duty were rarely attained and not adequate to train the citizen force. The Regular Army corps training commands authorized to train the National Guard and Organized Reserve divisions had long ago ceased to exist. The Guard may have been a force in being, as Palmer had envisioned, but it required extensive training prior to introduction into combat. The professional soldiers, having abandoned their role in training the Citizen Army, expressed great skepticism about its value.

With the German invasion of Poland, the United States began to take its first small steps toward mobilization. Despite calls from new Army Chief of Staff, General George C. Marshall, to raise Regular Army strength to 280,000, the President, on 8 September, agreed to an increase of only 17,000 in authorized strength. This would bring the Regular Army to only 227,000, expandable to 280,000.⁷ The War Department immediately earmarked the increase to reorganize and bring its first five divisions to wartime manning levels. In the same Executive Order, the National Guard was authorized a 35,000 man increase to 235,000,

peacetime, and 320,000, wartime. National Guard armory drills were also increased to sixty per year and field training was increased to three weeks.⁸

Only 2,000 of the Regular Army's increased strength was allocated to the training commands, so the Guard's expanded training time was not as beneficial as it may have appeared. Also, there was considerable doubt that the Guard would be able to attain the authorized increase. The Chief of the National Guard Bureau noted that some of the new Guard units would be hard to form in any event, "... because of the lack of public appeal, unsuitability for state employment, and also because of the high cost of providing storage for certain types of equipment."⁹ Even so, the War Department's War Plans Division still assumed, for planning purposes, that the Guard's infantry divisions would be available for employment in defensive operations within one year of the date of their mobilization.¹⁰

As the Germans rolled through Europe, Congress was spurred to increase readiness of its armed forces. On 13 June, 1940, Congress approved funds to raise the Regular Army to its full statutory strength of 280,000. The Army used this additional 38,000 to bring three more triangular divisions (6th, 7th and 8th Infantry) and the 1st Cavalry Division to full strength.¹¹ The War Department then began planning to permit gradual expansion of the Regular Army in steps to 330,000, 400,000 and 535,000.¹²

This phased increase was consistent with the policy of the Chief of Staff and of the General Staff to request only as many new recruits as could be assimilated at one time in existing regiments. A gradually expanding Regular Army would furnish increasing numbers of trained cadres who could then be employed to expand the Army in preparation for the next incremental increase. It was exactly this kind of expansible progression which was envisioned by Calhoun and Upton.¹³ Marshall also included in his plans, a plea to Congress not to call the National Guard into federal service. Mobilization of the Guard prior to the outbreak of war was opposed because it was felt that the Regular Army personnel, material and time which would be necessary to train and equip the Guard could be better employed to train a larger Regular Army for future cadre use.¹⁴

But even as the War Department was pursuing an orderly progression towards a wartime Army, other political forces were at work to speed up that process. Voluntary enlistments were producing the number of new soldiers required by the expanding Regular Army but a number of energetic patriotic citizens felt that the entire nation must be into the war effort. The impetus for a peacetime draft had developed out of two dinners held in New York in May, 1940 by the "Executive Committee" of the Military Training Camps Association, an organization of participants and sponsors of the Civilian Military Training Camps (which

had developed from the Plattsburg Camps of the Great War).¹⁵ The War Department avoided endorsing the idea, but, on 20 June, 1940, a bill for peacetime selective service was introduced in both houses of Congress. The bill gained immediate support from Congress, the press and the public. The President was given no choice but to support it as well and the War Department endorsed it on 22 June.¹⁶

The War Department caveated their support with a call to mobilize the National Guard at the same time. The logic and justice of coupling the mobilization with the peacetime draft were unmistakable. The expansion of the Army faster than the Regular Army could provide cadres and equipment left only the National Guard to provide these essential items. Furthermore, if the Guard was to provide trained tactical units to backfill the Regular Army task forces being prepared for deployment, it was important that the Guard units receive the required unit training. Finally, it would have been extremely unfair to draft civilians into the service without at the same time calling to active duty the Guard whose members had volunteered for their quasi-military status.¹⁷

On 27 August, 1940, just less than one year after the war in Europe had begun, Congress voted to federalize the National Guard. On 16 September, they voted to also begin conscription under the Selective Service.¹⁸ On 30 June, 1940, the Regular Army stood at 264,118. By 30 June, 1941

these two bills would swell the Army's size by 1,191,447 untrained or partially trained citizens.¹⁹ Obviously the strain on the training system would be great. To solve this dilemma, the General Headquarters, US Army was created on 26 July.²⁰ GHQ was designated as the agency to supervise training with the view that it would ultimately lead those men in tactical operations. Brigadier (later Lieutenant) General Lesley J. McNair was named Chief of Staff of the GHQ.²¹

The Regular Army began to expand to absorb the new conscripts and to leaven and train the National Guard forces. The first four National Guard divisions (44th, 30th, 45th and 41st Infantry) were called to active duty on 16 September.²² They brought 57,770 members onto active duty but required an additional 13,726 draftees (or thirty percent) to bring them to full strength.²³ Results were better in succeeding months, though, and eventually less than ten percent of the strength of the Guard units was required to be filled through the draft. GHQ supervised training of the draftees and National Guard units proceeded quite well and at the end of fifteen months of prewar mobilization, the Army had attained a strength of thirty-six trained divisions. Twenty-nine were infantry -- 10 Regular Army, 18 National Guard and 1 Army of the United States (draftee). Five were armored (4 RA and 1 AUS) and two were cavalry (both RA). The total strength of the Army on 31 December, 1941 was 1,686,403.²⁴

This is not to say that there were no problems during the prewar mobilization. The first selective service inductees arrived at the reception stations prior to the time the centers were ready to commence basic individual training. These selectees were sent straight to expanded Regular Army and mustered-in National Guard units where they received their basic indoctrination training while most of the units were undergoing small unit training. In the National Guard units mobilized early in the summer, the federalization plans had not called the officers and noncommissioned officers to active duty prior to their units. So these men had no opportunity to receive, in advance, the training they would be expected to pass on to their men. The new draftees thus received their training from soldiers who were, themselves, only barely trained. The problem of the reception centers was corrected by the GHQ with the October callups.²⁵

The shortage of qualified officers and noncommissioned officers in the Guard units was a more difficult problem to solve. The National Guard cadres did prove useful for their organizational structure and their officers and men who had received at least some prior training. But the training of many of the men was minimal and many of the officers themselves knew so little that they had to be learning their own business while trying to teach their men at the same time. General McNair came from a training inspection

of one Guard division with an impression of "blind leading the blind, and officers generally elsewhere."²⁶

As in the Great War, the regulars deemed many Guard officers physically or otherwise unqualified for the rigors of modern combat. The regulars also decided that many Guard units required a wholesale reshuffling to break up local officer cliques.²⁷ The National Guard, indeed, had on its rosters many who, because of lack of adequate training, were not adept in either military skills or leadership. Some were over-age in grade or physically unfit; others were basically inept and had to be removed; but most eventually improved with training.²⁸ Elimination of inept junior Reserve and National Guard officers was a relatively simple administrative matter, and most were replaced from the Army's school system in short order. The elimination of higher ranking officers was more difficult because many of them had considerable political influence.²⁹ These senior officers had to be replaced with Regular Army officers, further diluting this scarce resource.

Army schools played a large role in supplying the numbers of trained junior officer required by the National Guard and the expanding Army. The Reserve Officers' Training Corps had produced large quantities of qualified officers during the interwar years. In December, 1940 GHQ G-1 estimated that 106,000 ROTC graduates were not assigned to National Guard units and were available for assignment to

the mobilizing divisions. They were found to be sufficiently disciplined and trained that they only required some small refresher training and physical conditioning in the training camps prior to becoming instructors themselves. A series of thirty day refresher courses was prepared at each Army service school for the incoming National Guard and Reserve officers. General Marshall was to call the pool of trained junior officers, "probably our greatest asset during this present expansion."³⁰ Specialist courses for officers and technical branch enlisted soldiers were also started up at the service schools. And, of course, the three month officer candidate schools were activated again as they had been in the Great War.

Training literature and methods of instruction employed by the Regular Army training cadres were of inestimable value in the eventually successful training programs. training regulations, technical publications, training manuals and field manuals were all developed and distributed in sufficient quantities to enable the cadres to instruct their new units in a greatly expanded fashion.³¹ Supplementing the written materials were a tremendous variety of visual aids. The Army service schools had, since the Great War, developed an ever increasing supply of charts, films, slides, film-strips, sand tables, mock-ups, models, pictures, battle courses and other devices designed to reinforce the spoken word through

visual appeal.³² These training aids were used extensively to supplement platform instruction and practical exercises in individual training periods. And their scale of issue was generous. By way of example, the 88th Division was activated at Camp Gruber, OK where there were five post movie theaters and an additional facility in each of the division's regimental areas.³³

while the individual training was well planned, and the leader training similarly well run after initial problems, unit training was not so easily conducted. Plans developed in the aftermath of Pearl Harbor called for the Army to consist of 213 divisions.³⁴ These plans were modified in the fall of 1942 to call for 100 and finally 91 divisions.³⁵ Of these, 72 were Regular Army or Reserve, derived from the combination of Regular Army cadres and conscripts. While the Expansible Army concept had not worked as Calhoun had envisioned -- that is the Regular Army divisions had not expanded themselves to accommodate the conscripts but had, instead, provided cadres upon which the new divisions were built -- the concept had worked better than in any of the previous conflicts. The 13 National Guard divisions were mobilized and trained without significant Regular Army augmentation but were not expanded to form new divisions.

The unit training program adopted by the Army for the National Guard and Reserve divisions provided the basis for mobilizing and training new divisions for overseas

deployment. It was called the "finest piece of large-scale planning I have seen in fifty years of army service", by Brigadier General John McAuley Palmer, recalled to active duty to assist in the massive mobilization.³⁶ The training period for a divisional-sized unit was thirty-five weeks long and conducted in three phases. The basic or individual phase comprised thirteen weeks and concentrated on individual and collective tasks up through squad level. The unit phase lasted eleven weeks and concentrated on developing collective proficiency in platoon, company and battalion tasks. The final, combined arms, phase lasted eleven weeks and concentrated on the entire regimental combat team complete with all supporting arms and, occasionally, close air support.

The training program commenced with the selection of a training cadre from a previously mobilized and trained division. (National Guard divisions had their own cadres and did not provide them for other divisions.) The cadre of 172 officers and 1,190 enlisted soldiers was chosen two to three months in advance of the expected activation date of the new division. Most were sent to the service schools for skill training in their anticipated duty assignment. This schooling took approximately two months. The designated commander and his staff completed schooling and arrived at the mobilization site thirty-seven days prior to the activation one week later, they were joined by the

remainder of the officer and enlisted cadre. During the next few days 452 junior officers provided by the War Department from the ROTC pool or from graduating OCS courses arrived to begin their initial training. In the week following the division's activation, the enlisted filler, 13,425 men, arrived from the reception station. In the meantime, the division would have received about fifty percent of its authorized training equipment. The remainder would arrive on a similarly detailed schedule to coincide with need determined by the progressive training schedule.³⁷

Lessons learned in the initial activations caused some modifications to be made to the system for future divisions. Officer strength of the cadre was increased from 172 to 185 in March and 216 in September. Principal changes included addition of assistant supply officers, increased motor maintenance officers and artillery liaison officers. The enlisted cadre was similarly increased from 1,190 to 1,460. Both moves sought to add experience to the administrative aspects of the new division. Principal additions were motor maintenance mechanics, clerks, stenographers and chaplain assistants.³⁸

Training of the cadres was improved by making it mandatory that all General Staff appointees be graduates of the regular Command and General Staff School course and be desiring that qualification of all principal staff assistants. The last was made mandatory in March. In the

spring of 1943, policies were instituted that required all command designates to have served an apprenticeship in an overseas assignment. Beginning in July, 1944, division commanders and their two assistants were assigned to new divisions brevetted to their authorized ranks and promoted after proving their qualifications in combat.³⁹

As cadres came largely from a single trained division, it behooved the gaining commander to coordinate closely with the division providing the cadre to ensure only quality personnel were so designated. Major General John E. Sloan, commanding the about-to-be activated 88th Infantry Division sent his assistant division commander to the 9th Infantry Division to interview all nominated cadremen. The qualifications of the cadre have been pointed to as one of the most significant factors in the 88th Division's record sixteen month completion of its training program. Sloan was quite pleased with the results and gave up a qualified cadre to the 11th Airborne Division when it was his turn to do so. The 11th was the only division to surpass the 88th's sixteen month record.⁴⁰

Individual or basic training began with the arrival of the enlisted fillers from the reception stations or from their armories. National Guard divisions were not exempt from this training phase. Many National Guard units required large numbers of draftees to fill their units to wartime authorized levels. Many soldiers, especially among

the senior noncommissioned officer ranks, were not eligible for overseas combat because of age or physical limitations. Often, these units would no more resemble their prewar composition than the skeleton Organized Reserve units. The 175th Infantry Regiment, a Baltimore, MD-based component of the 29th (NG) Infantry Division required 2,000 draftees to bring it to its 3,500 man wartime strength.⁴¹

The first order of business of the cadres in this phase was to get the draftees or citizen soldiers to look and act like regulars -- just as Pershing had insisted on in the Great War. Sweeping and mopping floors; making beds; close order drill; equipment layouts and inspections were all used to instill discipline. Very little of this training followed any formal program and it was exclusively instructed by the cadre NCOs or junior officers. Physical conditioning was a large part of the program. The initial Mobilization Training Program (MTP) prescribed a minimum of thirty-six hours of physical training and twenty hours of conditioning marches for each of the division's units. Infantry regiments were expected to do many more hours of both. Subsequent editions of the MTP would more than double the requirements.

The physical training program began with light calisthenics and short runs which progressively became longer and more difficult. On-duty athletics featured combatives and team sports and off-duty athletics stressed

team sports as well. Obstacle courses resembled the battlefield rather than the gymnasium. Soldiers were required, with a rifle and thirty pound pack to negotiate a 500 yard obstacle course in three and a half minutes. Specific requirements included scaling an eight foot wall, climbing a ten foot pole, leaping a flaming trench, crawling through a water main, swinging by rope over a seven foot ditch, walking a twenty foot catwalk and several other difficult tasks. Conditioning marches started with short distances and light packs and progressed from there. The 351st Infantry Regiment received recognition from General Marshall when it completed a sixty-two mile march in full gear in twenty-nine hours without a man falling out.⁴²

By the third week, the infantrymen were firing their M1s and artillerymen their howitzers. Every soldier, regardless of branch or job, was to qualify with his assigned weapon. Over 100 hours of training were devoted to basic rifle marksmanship. Individuals and crews progressed from lecture through demonstration, 'dry' fire, and a series 'live fire table' practice firing exercises to a qualification table fired for record. All infantrymen also familiarized with the BAR automatic rifle, .30 caliber Browning light machine gun and the 60mm mortar. Artillerymen familiarized with the 37mm anti-tank gun and .50 caliber Browning HB heavy machine gun.

During this phase, infantrymen received over 100 hours of tactics instruction in individual, squad and platoon tactics. This training, too, utilized the crawl-walk-run philosophy of progressive training. Lectures, demonstrations, 'walk-throughs' and practical exercises were utilized in succession to train the soldiers in the individual skills required to execute the collective tasks. Cover and concealment, inter-individual spacing, marching fire and covering fire were all instructed.

Other arms were not neglected in the division's training program. Engineers built floating and fixed bridges; erected and blew up obstacles; constructed field fortifications and emplaced and breached minefields. Signal troops laid wire, operated message centers and practiced morse code. Medical personnel gave shots, drew blood and splinted broken bones. Other elements of the division likewise blended technical instruction with practical application in the John Dewey principle of "learning by doing".⁴³

In addition to the outdoors training, there was also a requirement to conduct formal classroom training on several subjects. Military Courtesy, orientations (the "Why We Fight" series of films), Field Sanitation, First Aid, Sex Hygiene, Operations Security, etc. were all instructed at one time or another in this initial phase. Sixty hours were devoted to this training. Needless to say, the

soldiers thought poorly of the subject matter. Later MTPs reduced the amount of time spent in the classroom.

The last month of the basic period emphasized tactical field training. Units marched out to ranges and bivouac areas. The culmination of the period was an MTP test administered by the corps training staff. Although time and evaluator personnel limitations made it impossible to test all individuals in all units, enough were tested to provide a fair gauge of the division's proficiency. Squad tactical proficiency tests were administered to all infantry squads and firing exercises evaluated all artillery cannon crews.

The individual, or basic, period was followed by an eleven week unit training period. The purpose of the unit training period was "to develop each unit into a fighting team capable of taking its place in the division team and fulfilling its own role in battle."⁴⁴ The emphasis of this phase shifted from the training of individuals, squads and crews to the development of platoons, companies, battalions and regiments into teams. Unit training stressed instruction in the field and included little on-duty garrison training.⁴⁵

Infantry and cavalry soldiers were already familiar with the individual and squad skills required to cover by fire and advance by maneuver. During the first weeks of the unit training phase they began to practice these skills

within a platoon, one squad covering and one advancing by bounds. When squads were proficient, the drills were repeated with platoons covering for other platoons advancing.⁴⁶ Heavy weapons platoons at the company level were incorporated into these exercises and this portion of the unit training phase culminated in an evaluation of each platoon by the parent corps in the Ground Forces Platoon Combat Firing Proficiency Test.⁴⁷ As training grew more complicated, each platoon and company participated in a live fire attack of a mock-up fortified area.⁴⁸ Emphasis was also placed on night training. Each component of the division devoted a minimum of sixteen hours a week to night training.⁴⁹

Artillery and other support arms training similarly increased in scope and scale. Artillery batteries and battalions fired for record. The Army Ground Forces Battery and Battalion Proficiency Tests were administered by the army or corps staffs as live fire evaluations of all artillery units.⁵⁰ Medical, ordnance, signal and other support soldiers began to practice more complicated individual tasks and to integrate them within a unit framework. The Medical battalion practiced evacuation of simulated casualties over long distances through difficult terrain. Ordnance and quartermaster units began lengthy motor marches and bivouacs. The Engineer battalions constructed field fortifications on a battalion level. By the time unit training completed, all battalions and

regiments had trained to proficiency and been evaluated in all of their unit tasks

Unit training was followed by eleven weeks of combined arms training. The purpose of this phase was to "weld the several units of the division into a division team capable of acting as a concerted whole and maintaining itself under any and all battle conditions."⁵¹ The phase consisted of three complementary series of exercises. The first series was regimental combat team exercises which culminated in field maneuvers. The second series was division exercises and maneuvers. The final series was command post exercises.

The combined arms phase began with the regimental exercises in which a battalion of artillery fired in support of the infantry regiment. It concluded with free maneuvers of one division against another. Command post exercises were conducted in preparation for both the regimental and divisional field maneuvers. All except the regimental field exercises were evaluated by the next higher commander. The exercises took place day and night in all kinds of terrain and weather. All were followed by a thorough critique.

Command post exercises began with simple walk-through exercises on small terrain models. They progressed through complex division problems in which the officers walked extended distances as if their units were with them.⁵²

These exercises gave the officers of the several branches the experience of working together, improved tactical communications systems and procedures, and resolved problems with respect to command and staff interaction. Some command post exercises were specifically designed to rehearse actions in preparation for full-scale regimental and divisional exercises.⁵³

Regimental combat team exercises were the next step in the division's progressive training program. Attacks of enemy fortifications, river crossings, long distance unit movements and defenses of prepared and unprepared positions were practiced to coordinate infantry regiment and artillery battalion fires and various support functions.⁵⁴ Divisional maneuvers brought the entire team together and capped the combined arms training period. In several different exercises, the division controlled its regiments in umpire-controlled force-on-force exercises against simulated opponents or against one of its own regiment combat teams.⁵⁵ Exercises were conducted in day and night under all kinds of terrain and weather conditions and all were followed by a thorough critique.⁵⁶

Following the combined arms phase, the divisions were certified as combat ready and dispatched on maneuvers of an even larger scale. Here they exercised against other divisions in corps-level exercises controlled by umpires from the controlling army. The Louisiana maneuvers of the early 1940s are examples of these exercises. The field

exercises began with operations at the level at which the combined arms phase had concluded. Following about a week of divisional exercises, the divisions were pitted against each other in scripted problems rigorously controlled by the umpires. From here they progressed to free-play exercises between divisions and, later between several divisions. An example of such an exercise during the 1943 Louisiana maneuvers is the defense of a river line by the 88th Division against the 31st and 99th Infantry Divisions and the 11th Armored Division.⁵⁶

At the conclusion of the exercises, divisions received movement instructions and began preparation for overseas movement. Often, this period would feature additional individual and small unit training to correct deficiencies noted on the large unit maneuvers. During this period, as well, the division would receive its final issue of equipment for employment overseas. Sometimes, especially towards the beginning of the war, this would be equipment of a type that the division had not trained with previously. In these instances, the divisions would receive additional equipment-oriented training prior to departure.

There are several portions of the AGF-developed training program worth noting. First, the training was standardized for all units, regardless of the conditions of the unit's projected combat destination. This was, in large measure,

due to the fact that war plans changed so often during the unit's training period that it was nearly impossible to project the unit's destination until the weeks immediately prior to the actual deployment. There are several instances of a division dispatching some of its forward elements only to have their final destination changed to a completely different theatre.

Another problem lay with the inability of the War Department to accurately forecast the requirement for trained replacements for its deployed divisions. As casualties occurred as a result of combat overseas, divisions training stateside were required to release drafts of trained replacements for overseas replacement. The result was disruption to the training cycles at the very least. Often, divisions had to completely restart the training programs when so many of its individuals were released to fill overseas drafts. The 26th (NG) Division took eighteen more than its planned sixteen months to complete training and the 100th (OR) Division took eight additional months due to personnel turbulence. The problem was greatest in the divisions organized prior to 1942 and this problem was manageable by the time the 1943 divisions began training.

The training program was notable for containing so many checks to ensure that training progressed properly. Proficiency was progressively validated by tests for each unit prior to beginning any new phase of training.

Infantry units were evaluated at squad, platoon, company, battalion and regiment level. These evaluations occurred in the field under combat conditions using live fire to the maximum extent possible. Artillery crews, batteries and battalions were tested by the corps or army commander at the conclusion of the unit phase.

Battalions from other arms and services which would be attached to the division -- tank, anti aircraft, tank destroyer, etc. -- were trained and tested under the control of the responsible service school. Training and testing for the support units was no less rigorous than for the organic elements of the division. Combat proficiency and firing proficiency tests were administered to a common standard for each 'type' unit.

Overall, the mobilization and expansion was a success. The leadership was available from the Reserve Officers' Training Corps graduates augmented by an expanded Officer Candidate School system. The logistics supply system was able to keep pace reasonably well with the buildup. And, certainly, manpower was not a problem as over 10 million men served in the Army during the war. The sheer magnitude of the expansion was handled well and despite some shortcomings, the WWII military mobilization did not repeat many mistakes from previous mobilizations.

There are still some additional lessons to learn from this mobilization. The need for extensive individual training for conscripted manpower was revalidated. The Great War had shown that from twelve to sixteen weeks were required to transition an untrained citizen to a trained infantryman. The World War II experience was that this period was thirteen weeks.⁵⁸ This was the ideal and could be attained when the individual was trained as part of a unit under the supervision of trained cadre.

When the individual training was conducted for the express purpose of producing a infantry replacement, the required period was initially thirteen weeks.⁵⁹ North African combat experience showed this to be inadequate and the training period was increased to fourteen weeks. These periods were for individual training only and did not produce a soldier with the same level of proficiency in squad maneuvers as the similar program in the training divisions. To achieve this level of proficiency, it was thought, would take up to six months.⁶⁰ This policy made training divisions the only logical choice for replacements with the attendant problems described above.

The minimum training time for a new recruit trained at a replacement center was eventually reduced to seventeen weeks.⁶¹ Even so, comments from overseas division commanders indicated that no fewer than six months (twenty-four weeks) training time for individual replacements was desired.⁶² The significant lesson from this experience is

that the increasing complexity of modern combat and the decrease in the general level of military skill proficiency among the civilian populace demanded a lengthy training period to convert a civilian to a soldier. Individual military proficiency, a strength at the beginning of the nation's history, was becoming increasingly more difficult to achieve.

As a result, the same was true of unit training. Although unit proficiency had never been a strength of the Citizen Army, it was becoming increasingly difficult to attain. The relatively limited amount of peacetime training time available to the National Guard was devoted to developing and maintaining individual skill proficiency. When the units were mobilized they found that many of their trained individuals were ineligible for deployment and had to absorb large numbers of untrained draftees to make good on the loss. Additionally, since the remaining unit leaders had concentrated on individual training prior to the war, they had never been exposed to unit training. Consequently, they were not able to conduct it in the mobilized units. This further drained the Regular Army for cadres trainers and evaluators.

Leader training showed the opposite trend. The Reserve Officers' Training Corps had produced a large pool of trained junior officers prior to the war. These were able to step into the mobilizing National Guard and Organized Reserve divisions and, with only some training, begin

instruction in the basics of unit training. The army service school system also played a very important role in producing officers skilled in the various staff procedures required for modern combat. The Regular Army still provided the bulk of the principal staff for larger formations but, increasingly, citizen soldiers were able to perform as staff assistants and as primary staff officers at lower levels.

ENDNOTES

1. Russell F. Weigley, History of the United States Army (Bloomington, IN: Indiana University Press, 1984), p. 599.
2. Marvin A. Kriedberg, LTC USA and Merton G. Henry, 1LT USA, History of Military Mobilization in the United States Army, 1775-1945, (US Department of the Army Pamphlet 20-212, 1955), p. 548.
3. Kriedberg and Henry, p. 549.
4. Kriedberg and Henry, p. 549.
5. Kriedberg and Henry, p. 549.
6. Kriedberg and Henry, p. 550.
7. Kriedberg and Henry, p. 555.
8. Kriedberg and Henry, p. 555.
9. Kriedberg and Henry, p. 569.
10. Kriedberg and Henry, p. 569.
11. Kriedberg and Henry, p. 571.
12. Kriedberg and Henry, pp 572-574.
13. Kriedberg and Henry, p. 575.
14. Kriedberg and Henry, p. 576.
15. Kriedberg and Henry, p. 578.
16. Kriedberg and Henry, p. 578.
17. Kriedberg and Henry, p. 579.
18. Kriedberg and Henry, p. 580.
19. Kriedberg and Henry, p. 581.
20. Kriedberg and Henry, p. 582.
21. Kriedberg and Henry, p. 582.
22. Kriedberg and Henry, p. 588.

23. Kriedberg and Henry, p. 590.
24. Kriedberg and Henry, p. 597.
25. Kriedberg and Henry, p. 605.
26. Weigley, p. 428.
27. Weigley, p. 428.
28. Kriedberg and Henry, p. 605.
29. Kriedberg and Henry, p. 606.
30. Weigley, 428.
31. Kriedberg and Henry, p. 607.
32. Kriedberg and Henry, p. 608.
33. John Sloan Brown, Draftee Division (Bloomington, IN: Indiana University Press, 1983), p. 57.
34. Weigley, p. 436.
35. Weigley, p. 436.
36. Robert R. Palmer, et al, The Procurement and Training of Ground Combat Troops, Vol 2 of The War Department subseries III of The United States Army in World War II (Washington DC: Government Printing Office, 1948), p. 435.
37. Palmer, et al, p. 436.
38. Palmer, et al, p. 437-438.
39. Palmer, et al, p. 441.
40. Brown, p. 40.
41. Joseph Balkoski, Beyond the Beachhead (Harrisburg, PA: Stackpole Books, 1989), p. 20.
42. Brown, p. 69.
43. Palmer, et al, p. 445.
44. Palmer, et al, p. 446.
45. Brown, p. 73.
46. Brown, p. 73.

47. Brown, p. 74.
48. Palmer, et al, p. 446.
49. Palmer, et al, p. 446.
50. Palmer, et al, p. 446.
51. Palmer, et al, p. 447.
52. Brown, p. 75.
53. Brown, p. 75.
54. Brown, p. 76.
55. Brown, p. 76.
56. Palmer, et al, p. 448.
57. Brown, p. 78.
58. Palmer, et al, p. 481.
- NN. Palmer, et al, p. 384.
- NN. Palmer, et al, p. 384.
- NN. Palmer, et al, p. 204.
- NN. Palmer, et al, p. 204.

CHAPTER 6

THE TOTAL FORCE (1946-1989)

"The mobilization was the most efficient in the history of the country; however problems were revealed in the areas of personnel strength, ... and training levels."¹

COLD WAR PLANNING: There was little time to absorb the lessons of World War II before the Army's mobilization system would have to function again. Following the signing of the peace treaty on 2 September, 1945, the United States began to dismantle its war machine as quickly as possible. At over 8 million at the end of 1945, the active army shrank to less than 600,000 by the end of 1950.²

During the war the usual professional notion of disbanding the National Guard had gained support in the War Department. Problems of personnel availability and training were cited as the chief reason.³ Still, by the war's end, the National Guard had proven that it had some utility. The divisions mobilized in 1940 had many problems but not as many as if the Regular Army would have had to cadre that many new divisions. What is more, to anger the Guard by proposing its disestablishment would carry considerable political risk.

Therefore, the War Department drew up plans for a post war National Guard of some twenty-seven infantry divisions plus two armored divisions, several separate regimental combat teams, tank battalions, mechanized cavalry squadrons and enough logistical units to sustain them. The planned force was a relatively balanced grouping of combat and did not include many additional support units. The Army Air Corps had become a separate Air Force so an Air National Guard was added to the Citizen Army.

Once again, Congress had authorized more force structure than men to man it. General Marshall recalled now-Brigadier General John McAuley Palmer to active duty to assist with developing a plan to fill the authorized formations. Quickly, they decided upon a plan which included universal military training among its tenets. Popular support for the proposal came from the population, from university presidents and from local political leaders.⁴ President Truman proposed the plan to Congress, but they only agreed to so much as to extend the draft to 31 March, 1947 and set aside any plans for universal military training.

KOREAN WAR: The Korean War began for the United States on 25 June, 1950 and found the Army severely unprepared. The Regular Army, in classic Palmerian fashion, was small and deployed overseas. Yet, contrary to Palmer's precepts, it was grossly understrength. Only the 1st Infantry Division

in Germany and the 82nd Airborne Division in the United States were at full strength in personnel and equipment. The four divisions in Japan closest to the action (1st Cavalry and 7th, 24th and 25th Infantry) were at less than seventy percent in these areas and their training status was even worse. The remaining nine stateside divisions (2nd and 3rd Armored; 2nd, 3rd, 4th, 9th, and 10th Infantry and 11th Airborne) were at a comparable level of fill but at better levels of training.

The National Guard was organized into 4,863 units from company through division and reported a total strength of 324,761 or ninety-three percent of authorization.⁵ The Army Reserve listed another 184,015 in organized units and about 416,400 in various manpower pools.⁶ The Selective Service Extension Act of 1950 authorized the President to order these individuals and units to active duty for not more than 21 months. and beginning 14 August, 1950, President Truman exercised that power.

The Commander of the Army Field Forces, General Mark Clark, recommended the activation of six National Guard divisions based upon his estimation of training, equipment and personnel readiness. But the divisions were not geographically distributed evenly across the country and so was modified by President Truman. He authorized the federalization of 1,457 National Guard units including eight (28th, 31st, 37th, 40th, 43rd, 44th, 45th, and 47th Infantry) of the Guard's twenty-nine divisions. Strength

of these divisions available for federal service varied from 37 percent to 55 percent.⁷

Two divisions (40th and 45th) would eventually serve in Korea, arriving in early 1951 after nine months of preparatory basic individual, unit and combined arms training based on the AGF program. Two others (28th and 43rd) were sent to Germany following similar training to guard against a Communist attack there. The remaining four divisions were gutted to provide fillers for the four deploying divisions. Then they were used as training divisions to process replacements for service in Korea.⁸ Nine other Regular Army divisions (5th, 6th, 8th and 10th Infantry; 1st, 5th, 6th and 7th Armored and the 101st Airborne) were also activated and pressed into service as replacement training centers or strategic reserve forces. Overall, 465,000 citizens men processed through the replacement training centers. In addition to this total, 138,600 Guardsmen and 244,300 Reservists were directly placed into the replacement stream.⁹

While the Citizen Army provided a large number of the individuals and units for combat in Korea, the Palmer model army still failed to perform as designed. The Regular Army was provided a force structure adequate to perform its mission but not provided the manning to fill the force structure. The National Guard was provide with adequate structure and manning. Yet, when activated, so many individuals were exempted that the divisions required

almost as much training as if they had been formed from draftee levies.

The question of training is a difficult one to evaluate. The level of individual training of the activated reservists was quite high. This may be more attributed to the decision to place a priority on call-up of World War II veterans rather than any great individual training programs within the Guard units. Junior officers were, as they were in World War II, well trained. In fact over 43,000 Reserve officers served with Regular Army units during the conflict.¹⁰ Unit training remained a problem due to the inability of the Guard to mobilize with its pre-conflict organization intact. Despite high peacetime levels of fill, the divisions activated at only half of that level. There may have been unit training problems but they were not uncovered because the manpower situation dictated that training commence at the individual phase.

The Korean War reaffirmed the Palmerian notion that mobilization of the National Guard and other Reserve forces was as required in the nuclear age as it had been in the past. Two new lessons were learned in this conflict though. Full mobilization might not be required for the limited wars of the future. And there might be only a limited period of time available for training between activation and the need for deployment. Problems of personnel availability and training remained as they had in the previous conflicts.

Defense Department Secretary Wilson recognized this deficiency. He was particularly concerned that the Army would not be able to generate sufficient combat power rapidly enough to win a war in Europe. Additionally, the Guard and Reserves were very heavy in infantry units and, thus, not a good match for the expected armored enemy in Europe. Wilson indicated his readiness concerns in a 1953 report in which he stated, "...trained Reserve units must be available for deployment immediately, not 9 to 12 months later. We are not satisfied with the present capacity of our Reserve forces to meet these requirements. A greater state of readiness for our Reserve forces is essential...."¹¹

Reorganizations of both the National Guard and Army Reserve followed over the next year. But most of these changes were organizational and did not correct the underlying personnel and training problems. At the end of FY54, the National Guard was authorized 27 divisions (25 infantry and 2 armored) and 19 separate regiments. Five years later, the Guard still had 27 divisions (21 infantry and 6 armored) and 19 separate regiments or battle groups. A key change had been the reclassification of many soldiers into new skills to keep up with the changes in organization. For example, in 1955 alone, 60,000 Guardsmen switched from infantry- to armor-related skills.¹² The Army Reserve experienced similar problems. The changes in unit organization may have made the Army's plans to fight a

war in Europe look good; but they wreaked havoc on individual and unit training programs.

One change, almost unnoticed, as a result of the Korean War was the new requirement that all new recruits for National Guard or Army Reserve service attend six months of active duty basic training at a Regular Army reception and training station. The Reserve Forces Act of 1955 sought to solve some of the individual training problems which slowed a unit's mobilization.¹³ The theory was that mobilizing units had taken too much time progressing to the unit training phase. It was felt that these units had been required to devote much of their time bringing all individuals to a standard of proficiency sufficient to allow them to participate in the unit training.

COLD WAR CHALLENGES: The Berlin Crisis of 1961 was the next test of the mobilization system. This time, the Regular Army was organized and manned close to what Palmerians would have considered adequate. On 30 June, 1961, there were 859,000 soldiers on active duty--only 11,000 below authorized strength. These were organized into 14 divisions of which five were in Europe. Shortages were to be made up through the draft authorized by the Selective Service Act of 1951 and no plans were made to draw fillers from the manpower pool in the Reserves.

To back the Regular Army up, President Kennedy, in early October, ordered the federalization of two National Guard divisions (32nd Infantry and 49th Armored), one armored cavalry regiment (150th) and 141 other units. The Reserves contributed another division (100th Training) and 296 other units. The ARNG divisions were mobilized at 69 and 62 percent fill and required 3,850 and 5,500 fillers respectively. The USAR units averaged about 66 percent of TOE strength.¹⁴ All told, over 80,000 Guardsmen and Reservists were mobilized as part of their units and an additional 38,827 were required to bring those units to full strength.¹⁵ None of the Guard or Reserve units were deployed overseas. The 100th Training Division did train more than 30,000 of the draftees for service with the Regular Army.¹⁶

The decision to rely upon the Regular Army for crisis response was repeated in the Cuban Missile Crisis of 1962. Secretary of Defense McNamara was displeased with the readiness and performance of the mobilized forces during the previous crisis and had instituted measures to further reduce their strength. He also instituted additional reorganization exacerbating individual training deficiencies. He even went so far as to propose a plan for the merging of the National Guard and Army Reserve into a large manpower pool. This plan, announced on 12 December, 1964, proposed a mobilization plan which would have used the Reserve units solely as replacement pools.¹⁷

McNamara's plan sought to find a way around the personnel availability and unit training deficiencies found during previous mobilizations. The basic individual training authorized in 1955 amplified by periodic refresher training conducted in the individual's Reserve unit would be sufficient to maintain proficiency sufficient to mobilize that individual directly into a Regular Army unit. Junior leaders, too, would move directly to the Regular Army given their proficiency in leader skills attained in the ROTC program and maintained in their Reserve units.

No longer would the Army have to deal with problems of unit training in the Guard brought on by lack of trained individuals. These problems would have been anticipated and all Guard units would be expected to undergo a complete training program prior to deployment. McNamara's return to Uptonianism was stopped by a Congress sympathetic to the National Guard but also mindful that previous wars and present NATO commitments had demanded rapid buildups of combat units following the initial declaration of emergency. By deleting National Guard units from the structure, McNamara would remove forever the chance that they could deploy in sufficient time to affect the outcome of the war. McNamara's proposal to counter this criticism was to call for an increase in the size of the Regular Army. This call failed as it always had in the past.

VIETNAM WAR: Unlike the Korean War and the other recent crisis situations, the Vietnam War did not come as a great sudden surprise to the American military. US attention was drawn to the region in World War II and a gradual increase of involvement went on after that. But major American ground involvement began on 6 March, 1965 when President Johnson ordered two Marine Battalion Landing Teams ashore to perform base security missions for the Air Force bases near Da Nang. Army ground forces soon followed. The 173rd Airborne Brigade was deployed from Okinawa on 5 May. Brigades from three US Army divisions followed so that by the end of 1965 there were 184,314 servicemen in the Republic of Vietnam.

As that buildup was going on there were 695,000 soldiers on paid drill status in the Reserve forces organized into 23 divisions, 11 separate brigades and over 8,000 other units. The six month basic training requirement for the Reserve forces had been in effect for nearly ten years and had produced a total over one million men above the number on drill status. The Regular Army numbered 970,000 organized into 16 divisions and 18 separate brigades or equivalents.¹⁸

On 2 April 1965, the Joint Chiefs of Staff asked the Secretary of Defense for an increased ability to fight the war in Vietnam. The request included authority to begin preparations for mobilizing elements of the Guard and Reserves.¹⁹ After a series of consultations and a personal

visit to Vietnam, Secretary McNamara, on 20 July, asked the President for the authority to mobilize 235,000 reservists.²⁰ The President considered McNamara's proposal but declined to authorize a mobilization. Instead, he authorized an expansion of the Regular Army in a manner reminiscent of Upton's plan.

The President made this decision for a number of reasons, mostly political, domestic and international. In so doing, he reaffirmed his position of 'graduated response' to the crisis. Many historians point to this decision as a critical failure of the Johnson administration. It is not for this study to judge but many military leaders did voice their opinions at the time that the non-mobilization was a mistake.²¹ Even so, military leaders began making plans to renew their call for mobilization the following year.

The Selective Reserve Force (SRF) was implemented in October to increase readiness in key units to prepare them for mobilization. Initial SRF units included a brigade each from nine ARNG divisions organized into three divisions and six separate brigades. Total units in the SRF were 977 (744 ARNG and 233 USAR) with 150,000 trained soldiers (118,900 ARNG and 31,600 USAR).²² The SRF units were directed to accomplish a maximum of administrative preparation to satisfy any requirement for a quick mobilization.

Such a call did not come in either 1966 or 1967 although military leaders continued to call for one. President Johnson decided to meet calls for more troops by expanding the draft and, to accommodate the additional strength, the Regular Army. Cadres were taken from existing units and formed three new divisions and two additional separate brigades. Meanwhile, the SRF continued to organize and to improve its readiness by increasing quality and fill of personnel and stepping up individual and unit training preparation.

On 23 January, 1968 the North Koreans seized the intelligence ship USS Pueblo and two days later President Johnson responded by authorizing a partial mobilization.²³ No Army units were affected by this callup and most units were demobilized by year's end. On 31 January, 1968, only eight days after the Pueblo seizure, the North Vietnamese launched their Tet Offensive. General Westmoreland, American commander in Vietnam, called for reinforcements. On 12 February, President Johnson decided to send more troops from the United States but refused to authorize an additional mobilization for this new crisis.

By 13 March, with General Westmoreland calling for additional reinforcements, the President approved a mobilization in support of the Vietnam War. Actually, the decision was to have two mobilizations. One, in March, would be for 30,000 troops in support of the call for reinforcements. The other would be in May to reconstitute

the strategic reserve at seven divisions. This second mobilization would require mobilization of two and two-thirds ARNG divisions.²⁴

On 14 March, Secretary of Defense Clifford raised the total requirement for the first callup to 45,000 to include enough support troops to sustain the reinforcements and to prepare for the second callup. The President changed the plan so that only 24,500 would be mobilized in the first callup; and, on 20 March, cancelled the second callup. On 31 March, he announced the callup and signed the order to execute the plan on 11 April with an effective date of 13 May.²⁵

Of the 76 ARNG and USAR units activated on that date, 59 were from the SRF. Because of a number of requirements related to spreading the callup to as many states as possible, the SRF was not fully utilized.²⁶ The mobilized units were screened during the month preceding activation and a number of personnel changes were required. Exemptions and delays were authorized for several reasons. Branch and MOS qualifications were found to be a problem. Some 36 percent of the mobilized officers and a similar number of enlisted men were found not to be qualified for the individual skills required to perform the tasks they were assigned. Reasons advanced for this failure included recent reorganization of the unit, and a large number of 2LTs who had graduated from state OCS academies but had not yet attended the Regular Army service school branch officer

basic course. School quotas were rapidly requested for these individuals but a large number requested transfers and these were granted.²⁷ Another problem was that many senior officers and NCOs were included in unit strengths in excess of authorization. These were transferred to non-mobilizing units.

With these reductions, the actual mobilization strengths of the units was less than expected by the Department of Defense. Despite a peacetime authorization of 100 percent strength for SRF and 93 percent for all others; and despite reports indicating that these levels had been attained, the units reported to active duty requiring 3,492 enlisted and 152 officer fillers. These numbers represented approximately 11 percent of the ARNG and 18 percent of the USAR enlisted and 14 percent of the total; officer requirement.²⁸

One of the two activated infantry brigades was the 29th Infantry Brigade (Separate) from the Hawaiian National Guard. (The Kansas Guard's 69th Infantry Brigade was the other.) and its experience provides some interesting insights into the state of readiness of mobilized units. On 11 April, the date of its alert for mobilization, the Brigade stood at 94 percent of authorized strength. Most of the shortfall was in one of its infantry battalions (100/442nd) and aviation company (40th from the California ARNG).²⁹ By 12 May, the date of mobilization, the Brigade

had lost a total of 376 soldiers through delays or exemptions.

Personnel qualification was lower than expected too. Only 71 percent of the officers and 77 percent of the enlisted soldiers were qualified in their required skills.³⁰ Unqualified personnel were sent to appropriate courses for qualification. The shortages, exemptions and training deficiencies had further results. The Brigade Commander, BG Takamoto was replaced due to mandatory retirement.³¹ The new Brigade Commander, BG Schaeffer, took action to fill the brigade staff and key positions during the month between alert and actual mobilization. The brigade S1, S2 and S4 were replaced as were three of four battalion executive officers and two of four battalion S3s.³²

By 12 August, 767 fillers from the Individual Ready, Reserve (IRR) had arrived to bring the Brigade back up to 93 percent fill. By 17 October, 378 more had arrived to bring the Brigade to just over 100 percent. MOS qualification was reported to be 100 percent for officers, 97.7 for warrants and 91 for enlisted soldiers. Still, they were short personnel in several critical skills. Helicopter pilots and repair technicians and medical officers were the principal shortages.³³

Prior to alert and mobilization, the 29th Brigade had been an SRF unit for about three years. In a training memorandum issued in February 1967, the brigade had

outlined the mission and objectives for its summer training period and the training to occur prior to the summer encampment. As an SRF unit, the brigade was authorized 72 annual training periods -- half again as many as a normal Guard unit -- and the normal fifteen day summer encampment. The focus was to be on the training and readiness of its two organic infantry battalions (The 100/442nd was neither organic to the brigade nor an SRF unit). The directive planned training for both battalions from platoon through battalion levels of proficiency.

The brigade's battalions were rated trained at annual training tests in the summer of 1967. So was the 100/442nd after participating in Exercise Coral Sands II. All three battalions planned to spend the remainder of 1967 and all of 1968 conducting training to retain their battalion level of unit training proficiency. Upon alert, US Army Hawaii (USARHAW), the 29th's gaining command, reviewed the brigade's training status and informed the brigade that a 13 week unit training program would be instituted upon mobilization.³⁴ USARHAW developed a master training schedule and delivered it to the brigade in a Letter of Instruction dated 16 May. No reason was given for the discrepancy between the annual training evaluation and the USARHAW assessment.

The formal training program began for the 29th Brigade on 27 May. The two weeks following the actual mobilization had been consumed with resolving administrative and

logistical problems involved with processing units and establishing their areas at Schofield Barracks. Following guidance in the LOI, the infantry battalions conducted basic unit training from 27 May through 27 July to conduct weapons familiarization and qualification and to train squads in fire and maneuver drills. Training was based on a 48-hour work week. Other units followed similar training programs designed to establish individual, crew and squad proficiency.³⁵ Brigade-evaluated squad and platoon ATTs completed the phase.

On 22 July, the infantry battalions began a period of advanced unit training which was to last through 24 August. In this period, the training focus was on the integration of companies into battalion teams. Both of the 29th's infantry battalions passed their ATTs on schedule and the 100/442nd, due to its greater personnel turbulence, passed their ATT on 6 September. The other units passed ATTs between 6 and 17 September except for the personnel short 40th Aviation Company which did not pass until 14 December.³⁶

Following the completion of the bulk of the brigade's ATTs, USARHAW ordered it to prepare for an Operational Readiness Test (ORT) to evaluate the total brigade combat proficiency. Exercise Lepper Lapin I was conducted in November and December 1968 in three phases. Phase I consisted of a series of MAPEXs conducted by brigade and battalion staffs to prepare operations orders for

subsequent phases. Phase II started on 17 November as a Command Post Exercise (CPX) for the brigade, battalion and separate company headquarters. Phase III was a four day Field Training Exercise conducted 4-7 December for all elements of the brigade. Completion of the FTX terminated the ORT. The brigade was rated satisfactory by exercise controllers. Thus, nine months after they had been mobilized, the brigade was ready for deployment if the situation required.

After being rated combat ready, the brigade remained in the strategic reserve until December 1969 when the brigade was demobilized. During this period the brigade processed individual replacements and provided individual levies to deployed forces while conducting several field training exercises to maintain unit proficiency. Unit effectiveness suffered from personnel turbulence and morale problems stemming from their failure to be deployed into combat following their mobilization and lengthy preparation.³⁷

The story of the 29th Brigade may serve as a source for mobilization lessons from the Vietnam War. First, problems with personnel availability and training were again present at the start of the mobilization. The requirement to provide many fillers would not have been a serious problem if they had only been low-ranking soldiers. It is assumed that these could have been rapidly assimilated into the unit in the manner of the Expansible Army.

But the replacement of so many key officer leaders and the poor unit MOS qualification rate resulted in having to start unit training at the basic individual level as if no prior training had occurred. The brigade's additional drill periods and previous satisfactory ATT rating were invalidated by the personnel turbulence. The result was that unit and combined arms training periods had to be slipped back. The unit, part of the SRF, and supposedly ready for rapid overseas deployment was required to conduct training as if it had been only formed on the day of alert.

POST-VIETNAM PLANNING: By the time the Vietnam War ended with the withdrawal of US ground forces in 1972, there were only thirteen divisions in the Regular Army and eight divisions and twenty-one separate brigades in the reserve forces. Because of problems with organizing reserve divisions from the assets of several states, the separate brigades carried on the lineage of their former wartime divisions. The reserve forces had serious difficulty in maintaining even this reduced force. Conscription had ended with the war and popular support for the military was at a low ebb. Even with authorizations only 75 percent of requirements, the National Guard was short 100,000 soldiers.³⁸

General Creighton W. Abrahms, Army Chief of Staff in the post-Vietnam era believed that the Regular Army was not large enough to meet the challenges of deterring the Warsaw

Pact forces in Europe while still maintaining a credible response force for deployment to other crisis areas of the world. On 21 February, 1974, he announced plans to increase the size of the Regular Army to sixteen divisions. Congress refused to authorize a peacetime active Army strength beyond 785,000 soldiers so Abrahms was forced to improvise.

By reducing the size of divisional units, moving some others to corps and by assigning reserve force units to the division, Abrahms sought to field a force of the required size. Another reason behind Abrahms' strategy was to so closely link the active and reserve forces that one could not be employed without the other. This was a response to the non-mobilizations of the Vietnam War in which Abrahms felt popular support for the war effort was lost through a failure to involve the public by deploying their hometown units.

Abrahms' plan became the genesis for a "Total Force" policy which took its place alongside the "Expansible Army", "Continental Army", and "National Army" policies as a mobilization plan to properly integrate the Citizen and Regular Armies. There is no clear author of the Total Force policy. Abrahms and Secretary of Defense James Schlesinger both began promulgating the policy in 1974 as a milestone in the evolution of the National Guard and Army Reserve.³⁹

The policy's basic tenet is that the Guard and Reserve constitute the primary augmentation for the active component in any military emergency. Fully trained, adequately equipped and combat-ready Guard and Reserve units were to stand side by side with the Regular Army in any future conflict. In the Army, the Guard and Reserves were to provide the majority of the total Army requirement for logistics support units and a significant portion of the requirement for combat forces.

The total force was slow to build. The National Guard, particularly, was hard hit by the ending of the draft. But, as war memories dimmed and benefits became greater, potential soldiers began to come back in to Guard and Reserve recruiting offices. By 1984, the Reserve component provided forty-eight percent of the total force's manpower.⁴⁰ Readiness was not what it should have been, however. Only fifty-eight percent of the National Guard and forty-two percent of the Army Reserve units rated themselves at category C3, combat-ready, or better for readiness. This was down from sixty-five and forty-five percent respectively in 1982. Principal reasons for the deficiencies were equipment and MOS qualification.⁴¹ Some of this can be attributed to the beginnings of fielding plans for M1 tanks and Bradley Fighting Vehicles to some of the roundout units.

In 1989, the Reserves constituted fifty percent of the units in the total force. Of the eighteen Regular Army divisions, seven (1st Cavalry, 2nd Armored, 1st, 5th, 6th, 10th and 24th Infantry) had their three brigade structure rounded out by a National Guard brigade. Two more Regular divisions (4th and 9th Infantry) were slated for reorganizations which would require round out brigades for them as well.

That year also, fifty-eight percent of the combat support and seventy percent of combat service support units in the total structure were also in the reserves. The National Guard had 456,960 personnel in units and an additional 10,126 trained individuals. The Army Reserve added 319,244 in units and 274,558 trained individuals.⁴²

SUMMARY: Three overriding conclusions stand out in a review of the mobilizations from the Revolution through Vietnam. First, one is struck by the reliance the nation has placed in its citizen-soldiers to be ready for war on short notice. Initially a state operated militia, the Citizen Army became a federally-supervised National Guard and, eventually, a combination of National Guard and US Army Reserve units and individuals. Regardless of the national mobilization policy, Calhoun, Upton, Palmer, or Abrahms, the Citizen Army has been an integral part of ensuring the nation's defense. Mobilization of the Citizen

Army has been required in each of our wars and seems certain to be an important fixture in all future wars.

Second, the Citizen Army has never been prepared for its mobilization. There are several reasons for this but this study will only address those related to training. Of these, there are two. Inadequate personnel manning has prevented mobilizing units from entering federal service at a proper levels of training proficiency. Units may be manned at or near authorization during peacetime,; but if 20 to 40 percent of these personnel fail to mobilize with the unit, the figures are deceiving. Lack of MOS qualification and key personnel shortages contribute to this problem.

A second reason for the Citizen Army's lack of training readiness is the growing complexity of modern war and the limited time available for the units to prepare for it. As previously stated, individual skills required for combat have grown more complex and the gulf between these skills and those used during the course of civilian employment have widened considerably since the Eighteenth Century. Individual training is a prerequisite for unit training and deficiencies at this level reflect at the next.

Unit and combined arms training must be delayed to accomplish required individual training. Not even additional drill periods have provided a solution. The result has been that the Citizen Army units -- even those rated combat-ready in peacetime -- mobilize and find they

require additional unit training to prepare for deployment. Despite National Guard calls to "train to the level organized", there is little historical evidence that Citizen Army units can maintain a level of unit training proficiency higher than battalion.

Conversely, leader training has become less a problem over the years. As the skills of the military leader become more management oriented, they more closely approximate those used in the course of normal civilian employment. Additionally, the service school system, along with the ROTC program, has resulted in a surprisingly high level of military skill proficiency among the junior officers of the Citizen Army.

The final conclusion to be drawn from this historical review is that mobilization of the Reserve Component has never been adequately planned by the Regular Army. Again, there are several reasons for this. Among the leading causes has been the distrust of the Citizen Army by the regulars. The regulars have never had much faith that the citizens could mobilize properly that it has become a self-fulfilling prophecy. The General Staff has spent so much time agitating for a large Regular Army on the Uptonian model that it has not adequately planned to mobilize the Reserves.

With this distrust goes the Regular Army's inability to fill its requirements for manning the units intended to provide either forward defense, rapid reinforcement or

training cadres for expansion. To keep as many units as possible in the force structure, the Regular Army has allowed its force to become hollow and, in so doing, has created the paradox for the Reserves. When a crisis flares, the Regular Army draws individuals from non-deploying units to bring those that are up to strength. As a result, there are not enough trained units and personnel remaining to provide a strategic reserve. This necessitates a call for increases in end strength authorization. But, since there are not enough cadres available, the Reserves must be mobilized.

Readiness of the nation's armed forces is the cornerstone of a successful deterrence strategy. The nation's ability to go to war on short notice and win must be credible if deterrence strategy is to have a chance of working. It is a forgone conclusion that the Reserve Component plays a key role in this strategy because it, alone, can provide the Regular Army with the trained and ready backup for a credible deterrent. It must be adequately manned, trained, equipped and resourced in peacetime if it is to be used properly during wartime. Plans for mobilization of the Reserve Component must be thoroughly thought through and exercised during peacetime to demonstrate their capability for wartime use. Problems with previous mobilizations have cast doubt on the Army's ability to mobilize in future wars.

Any plan for mobilization must address these problems if it hopes to be successful. The Total Force policy attempts to do so but there are some doubts if it is the answer. If there are recurring problems within the policy there must be some changes made. Following chapters will evaluate the Total Force policy and its training and mobilization plans. If there are problems, other chapters will propose solutions.

ENDNOTES

1. US Department of Defense, Annual Report of the Secretary of Defense, FY62 p. 115 (hereafter, DOD Report, FY--).
2. Russell F. Weigley, History of the United States Army (Indiana University Press, 1984), p. 486.
3. Weigley, p. 486.
4. Weigley, p. 498.
5. John D. Stuckey, COL USA, and Joseph H. Pistorius, COL, USA, "Mobilization of the Army National Guard and Army Reserve: Historical Perspective and the Vietnam War" (unpublished report, Strategic Studies Institute, US Army War College, Carlisle Barracks, PA, 1984), p. 12.
6. Stuckey and Pistorius, p. 13.
7. Stuckey and Pistorius, p. 13.
8. Stuckey and Pistorius, p. 13.
9. Stuckey and Pistorius, pp 13-14.
10. Stuckey and Pistorius, p. 14.
11. DOD Report, FY53, p. 9.
12. Stuckey and Pistorius, p. 17.
13. Stuckey and Pistorius, p. 18.
14. Stuckey and Pistorius, p. 20.
15. Stuckey and Pistorius, p. 20.
16. Stuckey and Pistorius, p. 20.
17. Stuckey and Pistorius, p. 25.
18. Stuckey and Pistorius, p. 40.
19. Stuckey and Pistorius, p. 41.
20. Stuckey and Pistorius, p. 41.
21. Stuckey and Pistorius, pp 43-44.

22. Stuckey and Pistorius, p. 45.
23. Stuckey and Pistorius, p. 58.
24. Stuckey and Pistorius, p. 62.
25. Stuckey and Pistorius, p. 67.
26. Stuckey and Pistorius, p. 70.
27. Stuckey and Pistorius, p. 70.
28. Stuckey and Pistorius, p. 72.
29. US Army, Pacific, "The 29th Infantry Brigade (Separate), 1 January 1968 through 30 June 1970 (U)" (unpublished after action report, HQ, USARPAC, Schofield Barracks, HI, 1971), p. 6 (hereafter, AAR).
30. AAR, p. 9.
31. AAR, p. 2.
32. AAR, p. 9.
33. AAR, p. 14.
34. AAR, p. 33.
35. AAR, p. 35.
36. AAR, p. 38.
37. AAR, p. 46.
38. Weigley, p. 572.
39. Edward J. Philbin and James L. Gould, "The Guard and Reserve: In Pursuit of Full Integration," in The Guard and Reserve in the Total Force, ed. Bennie J. Wilson III (Washington, DC: National Defense University, 1985), p. 46.
40. US Department of Defense, Readiness Assessment of the Reserve Components. FY84, p. 10 (hereafter Assessment. FY--).
41. Assessment. FY84, p. 23.
- NN. US Department of Defense, Annual Report of the Department of Defense Reserve Forces Policy Board for Fiscal Year 1989, p. 12.

SECTION III

FORCE READINESS

"Readiness: The ability of military forces, units, weapon systems, or equipment to deliver the output for which they were designed."¹

CHAPTER 7

TRAINING THE FORCE

"Training: The instruction of personnel to individually and collectively increase their capacity to perform specific military functions and tasks."²

GENERAL: "Training", states Army Chief of Staff General Carl E. Vouno, in his forward to FM 25-100, "prepares soldiers, leaders and units to fight and win in combat -- the Army's basic mission." He then lays out three types of training and the outputs they are designed to produce. Individual training develops soldiers who are proficient in battlefield skills, disciplined, physically tough and highly motivated. Leader training produces bold, innovative, confident leaders who are both technically competent and tactically proficient. Unit training develops units prepared to execute combined arms and

services operations on the battlefield without additional training or lengthy adjustment periods.³

This last statement is key to this study. General Vouno acknowledges that past history has permitted a time buffer for the United States military "to mobilize and train to an adequate level of readiness before engaging in combat." As the mobilization history in Section II demonstrates, that buffer has diminished considerably. General Vouno declares "our nation's ability to deter attack or act decisively to contain and de-escalate a crisis demands an essentially instantaneous transition from peace to war preparedness."

If this is true, then an even greater emphasis must be placed upon peacetime training and mobilization preparedness than at any time in the past. The Army's deterrence strategy relies upon the Total Force policy of a small Regular Army charged with forward presence and rapid deployment capability backed by a Citizen Army consisting of National Guard and Army Reserve units and individuals capable of rapid mobilization and reinforcement. General Vouno declares that this strategy depends upon understanding, attaining, sustaining and enforcing "high standards of combat readiness through tough, realistic multi-echelon combined arms training designed to challenge and develop individuals, leaders, and units."

The current Army training doctrine is laid out in Field Manual (FM) 25-100, Training the Force, and its companion document, FM 25-101, Battle Focused Training. Both

documents apply equally to Active and Reserve Component forces. The development of these documents in 1988 through 1990 capped a lengthy period of discussion and theoretical debate over how Army training should be organized and conducted. The current doctrine traces its lineage from the earlier Army training system laid out in the FM 25-series of training manuals published in 1984 and 1985. Much of the earlier philosophy is evident in the current doctrine.

This chapter will review the Army's current training doctrine in each of its individual, leader, and unit components. The focus of the review will be on how these components apply to pre-mobilization training conducted by elements of the Reserve Components. Particular attention will be paid to the manner in which today's training doctrine addresses the deficiencies identified in the previous section's history. This analysis will dovetail with that of the next chapter which carries the analysis into mobilization and post-mobilization.

INDIVIDUAL TRAINING⁴: The first component of the Army's training doctrine is soldier training. Soldier training begins when a recruit arrives at an initial entry training (IET) site. Soldiers start their careers, receive their first orientation to the Army, participate in soldierization and learn basic skills at an IET site. This process begins either with basic training (BT) and advanced

individual training (AIT) or with one-station unit training (OSUT).

IET trains soldiers in selected basic Skill Level 1 (SL1) tasks of their military occupational specialties (MOSs). Tasks taught during this training are identified in the appropriate Trainer's Guide (TG) and performance is annotated on the soldier's individual training record which is transferred with the soldier when he reports to his unit. At the unit, the soldier completes his SL1 training. Unit personnel train the new soldier in the job tasks required for his new duty assignment and in the SL1 tasks which were not trained at the IET site.

The current Army program for IET training is derived from the historical practices of the past. These practices called for a soldier to receive basic training in simple, common skills at an institution. This basic training was followed by advanced training in the unit if the soldier was to be assigned to a job which required skills representative of a large portion of the unit. Advanced training for skills in a low density job was conducted at another institution prior to the soldier departing for his unit. For example, an infantry soldier would receive the advanced training in his unit while a cook might be sent to another school for a brief period following basic training to qualify in the skills required of a cook.

The period of time considered to be adequate for completion of basic infantry training has remained relatively constant over the years. The Army, in the Great War, found that it took twelve weeks to train a new soldier in the basic skills of soldiering. In the Second World War basic training continued for seventeen weeks although this period was shortened to thirteen weeks in emergencies. Today, the Army considers thirteen weeks to be the minimum requirement for an infantryman to complete basic training under the one-station unit training concept.

The fact that this time has remained so constant over time is somewhat surprising in light of the growing complexity of task skills and the increasing dissimilarity between military and civilian task skills. Possible explanations for this paradox are increasingly sophisticated training aids; improvements in instructor training techniques; and reduced emphasis on the discipline skills so desired by Pershing. Perhaps the largest reason for the basic training period remaining constant has been the shift in emphasis relative to training responsibility. The responsibility for training an increasing numbers of individual tasks has been shifted from the institution to the unit.

Lessons from both the Great War and World War II demonstrated that soldiers required less time to learn basic skills when they were trained in their own units rather than as transients in institutions. Following

completion of initial entry training, the new soldier reports to a unit to continue his training. Here, enlisted soldiers acquire the remaining skills and knowledge they need to do their jobs.

Individual skill proficiency is measured and standardization assured through implementation of the Individual Training and Evaluation Program (ITEP). The ITEP was established to formalize the role of individual training and evaluation in units and organizations throughout the Army. Training of the soldier is conducted for specified tasks in accordance with uniform conditions and standards. Following training, the soldier is evaluated to determine the effectiveness of the training. Those soldiers found deficient in a task are retrained and reevaluated.

Soldier training for the Reserve Components is conducted in the same manner as for the Active Component. Recruits for the Reserve Component are placed on active duty for a period of up to twelve months to receive initial entry training at an Active Component reception and training institution. When the soldier returns to his unit, he continues to receive training from unit leaders to develop and maintain required job skills. Reserve Component individual training conducted within the unit is governed by the ITEP as well.

Maintenance of individual skills within a Reserve Component unit is more difficult than in an Active Component unit. The most obvious reason is the lesser amount of time available to train on individual tasks in the Reserve units. This is partially offset by the fact that promotions, and hence the requirement to master new skills, are slower than in the Active force. Also, many individual skills may be practiced on off-duty time and a Reserve Component soldier may have some slight advantage in this respect.

Another drawback to maintenance of individual skill proficiency (or MOS qualification as it is measured in readiness reporting) is the problems associated with equipment and its availability. Reserve Component unit equipment pools are more difficult to access due to security, maintenance and geographical considerations. Thus, equipment-associated skill proficiency is harder to maintain through lack of opportunity to practice. Additionally, the Reserve Component undergoes relatively frequent reorganization and mission reorientation which result in the issue of new equipment and changes in requirements for associated skills. This problem was particularly evident in the 1960s and early 1970s as the entire Army sought to modernize its tactics and equipment.

This concept of individual training in a combination of IET and unit training continues during mobilization. Expansion and procedures for conducting this training are discussed in the following chapter.

LEADER TRAINING: The second component of the training system is leader training. Leader training begins with initial entry training just as soldier training does. Noncommissioned officers, promoted from the ranks, received initial entry training when they entered the service. Warrant officers receive entry training prior to receiving their warrants and most commissioned officers receive precommissioning training through either the Military Academy, ROTC, or OCS (including ARNG State OCS) programs.

Noncommissioned officers progress through leader training in the NonCommissioned Officer Education System (NCOES). NCOES is an integrated system of resident training in schools, NCO academies, supervised on-the-job training (SOJT), self-study, and on-the-job experience (OJE) which provides job-related leadership and skill training for NCOs throughout their careers. NCOES provides continuous training from Skill Level 2 (SL2) through Skill Level 5 (SL5) and is an integral part of the Enlisted Personnel Management System (EPMS) used to determine qualifications for advancement.

The objectives of the NCOES are to train NCOs to be trainers and leaders of soldiers, provide necessary job proficiency training, and to improve unit readiness through individual proficiency of the NCO and subordinate soldier. The system consists of four levels linked to SLs 2 through 5. These levels and associated Skill Level are: primary -- 2; basic -- 3; advanced -- 4; and senior -- 5.

NCOES begins after a soldier gains and demonstrates proficiency at SL1 following IET and individual training within his unit. Primary level instruction prepares soldiers to perform SL2 tasks and is the first developmental training given to soldiers who demonstrate potential for advancement to the NCO ranks. Leadership, supervisory and technical training is provided at a resident course of instruction at a local Primary Leader Course (PLC).

Basic level training prepares soldiers to perform SL3 tasks. The Basic NCO Course (BNCOC) prepares junior NCOs to conduct individual and collective training and to participate in platoon-level Army Training and Evaluation Program (ARTEP) tasks. BNCOC is a resident program of instruction conducted at selected NCO academies and service schools.

Advanced level training prepares soldiers to perform SL4 tasks. The Advanced NCO Course (ANCOC) prepares mid-level NCOs to conduct platoon- and company-level training within their units. This level broadens the NCO's base of skills

and knowledge to prepare him for positions of greater responsibility. It also provides merger training where several MOSs converge at SL4. ANCOC is a resident course conducted at selected TRADOC service schools.

Senior level courses (SNCOCs) provide training to support functional duty positions found at senior NCO levels. Many SNCOCs are conducted primarily or exclusively in an extension training mode. The capstone SNCOC is the US Army Sergeants Major Academy (USASMA) at Fort Bliss, TX.

Reserve Component NCOs receive NCOES instruction in either Active or Reserve Component schools. A three-level system for leader training (Basic level is combined with Primary) in the Reserve Component, in effect since 1980, is being phased out and all NCOES will be conducted in accordance with the Active Component system by the end of FY92.

Officers and warrant officers progress through similar leader education and training systems. Both the commissioned officer education system (OES) and the warrant officer education system consist of schools and courses offered in the training base combined with progression paths tied to rank, responsibility and training in units and on personal time.

The commissioned officer's training and education commences with precommissioning training in either the United States Military Academy at West Point NY; the Reserve Officers' Training Corps program at a civilian

college or university; or an Officer Candidate School program either at Fort Benning GA or in a State National Guard Academy. These precommissioning programs train and assess the leadership potential of an officer candidate or cadet. Further, these precommissioning programs qualify the cadets and officer candidates in the military technical and tactical skills required for proficiency in Military Qualification Standards level 1 (MQSI) and prepare them for commissioning as a Second Lieutenant (2LT) in either the Regular Army, US Army Reserve or Army National Guard.

Upon commissioning as a 2LT, all officers enter a branch Officer Basic Course (OBC). This course provides basic instruction in the technical, tactical and leadership skills required for service as a junior company grade officer. These skills constitute the knowledge and proficiency basis for Military Qualification Standard level 2 (MQSII). Upon completion of the OBC, 2LTs slated for service with the Regular Army are sent to active units for additional training and experience in positions of increasing responsibility. Their counterparts slated for service with the Reserves or National Guard are released from active duty and assigned either to a reserve component unit for additional training and experience or released to the Individual Ready Reserve (IRR) and are expected to maintain proficiency on their own time.

Officers return to the formal portions of their OES education when they are senior First Lieutenants (1LT) or Captains (CPT). They attend their branch Officer Advanced Course (OAC) to receive expanded training in technical, tactical and leadership skills relevant to their branch specialty and projected future duty assignments. This level of the OES may be achieved either in residence or through correspondence. Following OAC, officers return to units to continue their education and training.

The next OES level is the Combined Arms and Service Staff School (CAS3) at Fort Leavenworth, KS. This course trains all Army Captains in basic staff skills. Mandatory for all active duty captains, this course is currently expanding to permit non-resident instruction at satellite locations for captains on reserve duty. Officers receive this instruction either in preparation for or as part of their assignments as staff officers in units. As officers progress through the rank of Captain, they are required to demonstrate proficiency in Military Qualification Standard level 3 (MQSIII) tasks.

MQSIII proficiency is required before promotion to the rank of Major (MAJ). To assist Majors to progress beyond MQSIII and to prepare them for high-level staff assignments and possible battalion command, selected active and reserve officers are selected to attend one of the Department of Defense Command and Staff Colleges (CSCs). The Army's CSC is the Command and General Staff College at Fort

Leavenworth, KS. This course may be completed either in residence, through a local reserve course or through correspondence extension courses. Completion is a prerequisite for promotion above Major.

The final step in the formal courses of the OES is completion of one of the Senior Service College (SSC) courses. SSCs prepare active and reserve Lieutenant Colonels (LTC) and Colonels (COL) for positions of major responsibility to include brigade-level commands. The Army's SSC is the Army War College at Carlisle Barracks, PA. This course may be completed in residence or through competitive acceptance into a correspondence extension course.

Warrant Officers have a similar WOES consisting of progressive combinations of formal schooling in the training base and practical experience and training in units. Warrants are awarded following preappointment or Warrant Officer Candidate (WOC) courses. Warrant Officer Basic (WOBC), Advanced (WOAC) and Senior Courses (WOSC) fulfill much the same function for the warrants as they do for commissioned officers.

Together NCOES, OES and WOES combine to provide a formal training and education program for the leadership of the Army in both the Regular or the Citizen Armies. The formal portion of the education and training programs dovetails with the practical experience and training these leaders

receive while actually performing duties in active or reserve units and other organizations.

Leader training in units is based upon what leaders, soldiers and units will be required to do in wartime. The purpose of the training is to develop a leader's ability to train and lead units in combat. A unit's leader training program is designed to provide a series of situations in which the leaders can develop the skills and attributes to enable them to perform their leadership tasks, employ their units and make decisions.

A number of training exercises are available for incorporation within a unit's leader training program. Tactical Exercises Without Troops (TEWTs), Command Post Exercises (CPXs) and Field Training Exercises (FTXs) are all good vehicles for furthering the training and education of a unit's leaders. Well-designed exercises use appropriate doctrine, performance-oriented feedback to instill and sustain leader skill proficiency in their technical, tactical and leader tasks taught in the formal portions of their educations. These exercises emphasize hands-on, realistic training in a challenging, multi-echelon combined arms and services environment as required by current Army training doctrine.⁵

Leaders in units may also avail themselves of free time to participate in independent study programs. These programs begin with training extension course (TEC) lessons, correspondence courses or review of Army journals

and professional publications. Additional Army resident courses in special skills are available locally or at several Army posts or schools. Finally, civilian education in the form of local classes up to college or university degree-producing programs are available and encouraged to raise the educational level of Army leaders and are part of the leader training programs.

What is important in all of the Army's education programs are two things. First, they are progressive and professional. This is a long way from the rudimentary training in units received by leaders of earlier wars. This emphasis on a professional training and education for Army leaders began with General Sherman's post-Civil War schools and continues to this day. Building upon General Marshall's comments relative to the benefits of the body of ROTC graduates and General Pershing's praises for the CGSC graduates, today's programs are an exceptionally important part of Army training.

The second important part of today's education programs is that they are available for officers in both the Regular and Reserve Component. Leader training for leaders in mobilizing units is vital to the capability of those units to mobilize and quickly deploy in appropriate states of readiness. The emphasis upon including Reserve Component leaders in the Army leader training programs is vital if the Army hopes to avoid repetition of the wholesale

replacement of reserve officers in the Great and Second World Wars.

UNIT TRAINING: The final component of the Army's training doctrine is unit training. The training of units is understandably more difficult and complex than the training of individual soldiers and leaders. There is very little in today's unit training programs to compare them to the training programs of past eras. Weapons, tactics and battlefield conditions have changed substantially through the years in which America has fought its wars. So little value can be found in contrasting programs of different eras.

There is, however, a similarity in the themes and concepts used in the training programs. Successful programs in each of our wars have emphasized the development of teamwork between individuals and units. The AGF Mobilization Training Program of 1941 provided for progressive unit exercises of habitually associated teams from platoon through division level. Today's doctrine calls for training as combined arms and services teams.⁶ Further, it repeats the AGF tenets of multi-echelon repetitive training by calling for training to sustain proficiency using multi-echelon techniques.⁷

Pershing's successful 1917 AEF training program in France emphasized battle-seasoning through gradual introduction to the sights, sounds, and conditions of combat. Today's

doctrine tells unit leaders to train, as you intend to fight emphasizing battlefield realism in all training.⁸ Pershing also emphasized that soldiers must be trained to employ their weapons in drills and exercises which required the soldiers to actually use the weapons. Today's doctrine emphasizes performance-oriented and challenging training using all training assets and resources.⁹

Again, the successful AGF training program of WWII emphasized standardization of tactics, techniques and procedures among the training forces. It emphasized periodic evaluation of training standards by qualified, impartial evaluation teams from higher headquarters. Today's doctrine requires training using appropriate doctrine based upon standard approved tasks, conditions and standards.¹⁰ It also requires assessment of all training using trained evaluators providing feedback on unit performance. Evaluators are required to be technically and tactically proficient in the tasks evaluated, knowledgeable of the evaluation standards and trained as facilitators to conduct after-action reviews.¹¹

Applying these tenets, today's training doctrine demands a "Battle Focus" on all unit training. Battle Focus is a concept which calls for unit commanders to design peacetime training programs based upon anticipated wartime mission requirements. Battle Focus also enables unit commanders to structure programs which balance non-mission related requirements while focusing on mission essential training

activities by recognizing that units cannot attain proficiency to standard in every task due to limitations of time or other resources. By narrowing the Battle Focus, unit commanders are urged to concentrate on those few tasks essential to wartime mission accomplishment while training to a lesser standard on less essential requirements.¹²

Using the Battle Focus concept, Army training doctrine says that design and execution of unit training programs begins with the identification and selection of assigned unit tasks. These tasks are selected from both war plans and external directives. From the total list of tasks, the unit commander applies Battle Focus to select just those tasks which are critical to the unit's wartime mission. The compilation of tasks forms the units Mission Essential Task List (METL).¹³

The METL development process is the same for active and reserve units. The recognition that reserve component units have less than 20 percent of the training time available to active component units demands that reserve units closely adhere to the process. Army training doctrine demands that all training in the reserve component (less necessary state-required training for the Army National Guard) be devoted to wartime mission readiness training.¹⁴

Further acerbating the reserve component problem of lesser amounts of available training time is their operation in two different chains of command -- wartime and

peacetime. That is to say that most reserve units are assigned to one organization in peacetime; reporting to that headquarters and are assigned to a completely different -- often active component -- headquarters for the execution of wartime tasks. Quite naturally, both headquarters have valid mission and training requirements to levy upon the reserve unit. The problems for the reserve unit commander in deciding which master to serve are easily imagined.

To solve this dual chain of command problem, the Army established the CAPSTONE alignment program on 6 December, 1979. Ordered in Army Regulation 11-30, the Army CAPSTONE Program and implemented in FORSCOM Regulations 11-30, The Army CAPSTONE Program: Program Guidance, and 350-4, Training Under CAPSTONE, this program dictates active and reserve component unit wartime alignments and requires the development of training programs to be primarily developed to support unit wartime missions. The regulations provide emphasis to this charge by requiring reserve component unit METLs and training programs to be approved by their wartime chains of command.

Following selection and approval of a unit's METL, training doctrine requires unit commanders to develop training objectives containing supporting conditions and standards for all tasks.¹⁵ Standards for most unit collective tasks are contained in universal Mission Training Plan manuals. Conditions are selected based upon

those expected in the anticipated theater of wartime operations. Subordinate unit METLs and Battle Tasks, the most important subunit METL tasks which are absolutely critical to the accomplishment of the higher unit's METL, are identified and developed from the higher unit's METL.

To begin planning his training program, a unit commander next assesses his unit's current level of proficiency in each of the unit's METL tasks. In addition, the commander projects unit proficiency based upon considerations such as skill decay and unit personnel turnover. Determining a unit's proficiency in each task is necessarily a relatively subjective judgement based upon objective data. Commanders are expected to utilize their personal experience and the broad skill and knowledge of key subordinates to make this determination.

Based upon the assessment of the unit's proficiency, the unit commander, assisted by his staff, designs a strategy to accomplish each training requirement. This includes attaining or improving proficiency in some tasks while sustaining proficiency in others. The training strategy enables the commander to develop priorities for each task so that the plan being developed will be consistent with available resources. The strategy address each mission essential task which will be performed during the upcoming planning period.

From the training strategy, the commander conceives and issues a training vision which provides guidance to subordinates to be used in the development of long-range, short-range and near-term training plans intended to implement the strategy. Active and reserve units define the time periods covered by these plans differently but the intent of the plans is the same. Active component division commanders, for example, develop long-range plans to cover a period of one year and project two years into the future. Their reserve component counterparts develop long-range plans which cover a two year period and project five years into the future. Short-range and near-term plans are similarly different in the time period addressed but in all other ways are the same for active and reserve component units.

Units then execute their commanders' training plans applying the training principles found to be successful in the Army's historical training experiences. Key to successful execution of training is assessment of its effectiveness. Evaluation of training measures the demonstrated abilities of individuals, leaders and units to perform required tasks in specified conditions against detailed standards.

Evaluation training and techniques are discussed at length in training publications and are considered to be as important to the success of the plan as the actual training. All training is expected to be evaluated by a

trained, doctrinally proficient evaluator. Evaluations can be informal, formal, internal and external or any combination.¹⁶

Informal evaluations are those a unit commander makes every time he visits or observes training. The fidelity of these evaluations may suffer from the leader's inexperience, involvement with the training process and impartiality. The advantages are that it is absolutely cost-effective, provides real-time performance feedback to the unit or individual, reinforces leadership roles and assists the commander in instantaneously revising his estimates of unit training environments or proficiency.

Formal evaluations are resourced with dedicated personnel for evaluators and opposing force role players. The cost of formal evaluations in terms of time and other resources is offset by its advantages in objectivity and impartiality. Often it is difficult for a commander to evaluate the performance of his own unit because it reacts to his instructions and orders. Hence, the commander, himself, may unknowingly contribute to unit deficiencies. Formal evaluations enable the commander to participate in training while still ensuring the evaluation is conducted.

Internal evaluations are planned, resourced and conducted by the unit undergoing evaluation. External evaluations are planned, resourced and conducted by an echelon higher in the chain of command than the unit under going the evaluation. The advantages and disadvantages of internal

and external evaluations are about the same as those which apply to informal and formal evaluations.

Active component units conduct evaluations under the supervision of their wartime chains of command. At least once each year, all active component battalion-size units are required to be evaluated on all of their unit wartime tasks under the provisions of the Army's Training and Evaluation Program (ARTEP). These evaluations are usually formal, external evaluations conducted by the battalion's parent division headquarters using personnel from another active component battalion. Increasingly, entire brigades are being evaluated as complete entities using personnel from another active component brigade.¹⁷

Once during each active component unit commander's command tour, his unit will receive a formal external evaluation at a Combat Training Center (CTC). These evaluations are especially beneficial to the unit because of the unique training opportunities available at a CTC. CTCs are prime examples of organizations which provide combined arms and services battle-focused training that is externally supported. CTCs provide training events which are based upon a unit's METL requirements and are conducted under realistic battlefield conditions. CTCs are more fully discussed in the next section

Reserve component units undergo a somewhat different experience in unit training evaluations. While the same types of evaluations -- informal, formal, internal and

external -- are used, the formal, external evaluations, which provide the most objective assessments are not performed as often as they are in the active component. Part of this is a function of the reserve units training only 39 days per year in contrast to the active component units' over 240 days. Another part is the system in place to conduct the evaluations.

Army training doctrine makes every effort to acknowledge the difficulties reserve component units have as a result of the lesser availability of training time. FMs 25-100 and 25-101, the Army's overall training manuals, make repeated references to the reduced training time of reserve units and provide examples of how to deal with the difference. Yet, as individual and unit skills become more complex, it becomes a more difficult proposition to maintain training proficiency in the reserve component.

To assist the reserve component units in managing their training time and in maintaining currency with current doctrine and tactics, the Army established Readiness Groups at many active duty installations. Readiness Groups are assigned to one of five numbered Continental US Armies (1st through 6th, except for 3rd). The CONUSAs are assigned to the US Army Forces Command (FORSCOM), a specified command, headquartered at Fort McPherson, GA.

This organization bears some resemblance to that proposed by Palmer in the post-Great War reorganization. The CONUSAs fill something of the role that Palmer envisioned

for the Corps Area commands. The Readiness Groups are composed of Regular Army soldiers detailed for the specific purpose of assisting the reserve component maintain readiness through training. A critical difference, as we shall see in the next chapter, is that this relationship does not continue after mobilization as Palmer would have wished.

In their pre-mobilization role of providing training assistance to ARNG and USAR units, Readiness Groups travel to reserve unit training assemblies to oversee and provide advice on the conduct of training. They are able to assist in the preparation of unit METLs, training strategies and plans. The reserve unit commander is ultimately responsible for the actual development of these documents, the conduct of the training and the conduct of internal evaluations. Readiness Group personnel can provide assessments through informal external evaluations but do not have the personnel to conduct formal evaluations.

Formal external evaluations are coordinated by the Readiness Groups and conducted by Regular Army units detailed for that purpose. In contrast to the Regular Army requirement to have a formal external evaluation at least every year, the Reserve Component requirement is once every three years. Additionally, active units are often evaluated annually at brigade level, while reserve units rarely receive evaluations above the battalion level.

Finally, few reserve units are able to receive evaluations at a Combat Training Center.

Following the formal evaluations, reserve unit commanders, assisted by their Readiness Groups advisors, assess the readiness of their units in the same manner as active units. While an active unit commander takes the assessment and is immediately able to consider the latest assessments in his development of training plans; the reserve unit commander is unable to make a similar impact.

The reserve unit commander's training plans are less able to be changed than those of his active component commander because training resources are more constrained for the reserve commander. Reserve commanders program training to correct identified deficiencies but the danger remains that an untrained METL task may remain untrained at mobilization. To prevent the unit from being mobilized and deployed with untrained METL tasks, the reserve component commander also prepares a plan to correct deficiencies after mobilization.

Following the evaluation and assessment, the reserve unit commander prepares a Form 1-1-R listing his assessment of unit training status in each METL task. With this assessment is a post-mobilization training strategy to correct deficiencies in post-mobilization training. The 1-R is counter-signed by the Readiness Group commander and the active component unit commander who conducted the evaluation of the reserve unit's readiness. The form is

placed on file for use if the mobilization occurs prior to another evaluation.

SUMMARY: Current Army training doctrine seems to have dealt effectively with the lessons learned from past pre-mobilization training. There are some outstanding examples of improvements made to the system over time. Individual and Leader training programs have been standardized throughout the Army. They have matured considerably since General Sherman began the Army school system after the Civil War.

Individual training begins with individual arrival at a Reception Station and Training Center and progresses through Initial Entry Training following a standard program of instruction on a well thought-out list of individual tasks. It continues in the unit as the individual continues to learn individual tasks and, more importantly, receives practical exercise in the integration of those tasks into the unit tasks.

Large numbers of training aids and devices are utilized in the institution and the unit to assist trainers in teaching these skills. The program is standard throughout the Army and applies equally to active and reserve component individuals. At the time of graduation from the institutional IET program, there is no difference between the Regular and Citizen soldier.

Within the unit, individual training in either additional tasks or in the integration of those tasks is necessarily more difficult in the reserve component unit than it is in the active component unit owing to the lesser training time available. There is also the increased likelihood of individual skill decay in the reserve unit owing to the greater period of time between task repetitions and because of the growing gap between civilian and military job skills.

Offsetting these drawbacks to a degree is the individual's relative longevity in a reserve unit in contrast to his active component counterpart. This argues that the reserve component soldier is more familiar with unit operating procedures and that this will enable him to sustain proficiency longer. This study will not examine the possibility that individuals in reserve component units are less well trained than their active component counterparts. However, the conclusion is somewhat inescapable that the trend of increasingly lower individual skill proficiency in reserve component units continues over time.

In marked contrast, the trend seems to continue that leader skill proficiency in reserve component units becomes greater. The leader education and training programs follow a well laid out path from preliminary training through increasingly more complex training over time. The

opportunities for leaders to receive formal instruction in institutions and then to receive practical experience in units has become well refined over the years.

The professionalism of the junior officer graduates of ROTC programs has been remarked upon as a great benefit during the pre-WWII mobilization. The availability of correspondence and extension courses has increased the opportunities for reserve component leaders to maintain proficiency in leader skills. The increasing use of simulations as leader training aids has made training of unit leaders far more cost effective than the resource intense field maneuvers of the past.

So too, has the increasing similarity between civilian and military leader job skills enabled the reserve component officer to retain proficiency to a greater degree than in the past. Overall, the Army's leader training program for active and reserve component unit leaders seems to have addressed the problems of past pre-mobilization training.

Unit training, however, has not progressed as far. There is much to be positive about in the current training doctrine; but reserve component unit training still suffers from deficiencies as a result of the lesser time available to conduct training and from some systemic disconnects in the evaluation process. Current training doctrine recognizes the lack of training time and support resources

in the reserve component. The Battle Focus concept and the implementing METL and CAPSTONE programs have made reserve component unit training programs easier to develop.

Although the training programs may be easier to develop, increasing battlefield complexities have made the programs more difficult to execute. The trend that shows increasing time to train units to proficiency in combat argues that more time should be required to enable reserve units to attain and maintain proficiency in battle tasks. This may be partially offset by battle focus efforts but both the AEF and AGF standard programs focused training on essential battle tasks. These programs took from six months to a year of focused training to prepare units for combat. The reserve component still has only the 39 training days per year that they had prior to WWII.

Another aspect of unit training doctrine not applied equally in active and reserve component units is the conduct of evaluation and assessment. Although doctrine considers the commander's assessment to be essential to the Battle Focus concept, the reserve component commander does not play the same role as does his active component commander. The reserve component commander is assisted in his assessment by the Readiness Group commander and staff. His external evaluations are conducted informally by Readiness Group personnel and formally by other active component forces under the auspices of an active component headquarters. Neither the Readiness Group, nor the active

component unit, nor the CONUSA is necessarily charged with assuring the unit's readiness upon mobilization. This lack of accountability will be more thoroughly discussed in the next chapter.

In sum then, current training doctrine has had a generally favorable impact on identified reserve unit readiness trends from previous mobilizations. Individuals are better trained when they arrive at the reserve component unit but problems with sustaining that proficiency continue. Leader training improvements have made reserve component unit leaders more proficient in leader skills and have continued to improve the professionalism within the units.

Battle Focus has somewhat eased the growing complexity of attaining and maintaining proficiency in increasingly complex unit tasks. Improved leader training and the resulting professionalism have also aided in improving unit task proficiency. The Readiness Group assistance teams and external evaluations have partially implemented Palmer's call for Regular Army involvement in National Guard and Reserve unit training. The maintenance of plans to conduct post-mobilization unit training on previously identified deficiencies is also a great step forward.

Still, the battlefield is becoming increasingly complex. Consequently, the number and sophistication required for proficiency have increased. The dissimilarity between

civilian and military job skills at the individual level applies equally at the unit level in combat arms organizations. Yet no more peacetime training time has been made available to the reserve component units. The continuing greatest difficulty in maintaining reserve component combat unit proficiency remains the limited amount of time available to conduct this training.

CHAPTER 8

MOBILIZING THE FORCE

"Mobilization: The process by which the Armed Forces or part of them, are brought to a state of readiness for war or other national emergency."¹⁸

GENERAL: The Army training system described in the previous chapter governs Army training during peacetime. In the event of war or other national emergency, the success of the peacetime training programs will be measured by the amount of time required to bring units from a peacetime state to that considered acceptable to permit deployment to combat. Past wars and mobilizations have permitted the Army the luxury of a period of time in which to train to an adequate level of readiness prior to deployment. As Army doctrine acknowledges, this time buffer will probably not be available in the "come as you are war" likely to characterize future conflicts. This places an increasingly large premium upon a rapid peace to war transition.

This chapter will focus on the procedures for mobilizing the four National Guard heavy divisions which are the subject of this study. The previous chapter laid out the peacetime procedures for preparing the unit for

mobilization and deployment. Essentially this involved individual and leader training in institutions tied together and integrated with unit training through a battle-focused unit training program. Deficiencies in the unit training program identified through evaluations and assessments are planned for post-mobilization correction.

Assuming, for purposes of this study, that the procedures for peacetime training are the best possible preparation for combat. Assuming further, again for purposes of study, that the procedures are followed as designed and that they correctly identify deficiencies in the peacetime program, the measure of success of the peacetime training should be measured by the relative shortness of the post-mobilization training program.

FORMDEPS: The US Army plan for mobilizing forces for war is outlined in AR 500-5, The Army Mobilization and Planning System (AMOPS). This plan establishes US Army Forces Command (FORSCOM) as its executive agent for development and oversight of an Army plan for mobilization and deployment of reserve component force units. The FORSCOM Mobilization and Deployment Planning System (FORMDEPS) provides planning guidance and instructions to other major Army commands, Continental Armies, Installations, and Reserve Component headquarters for the execution of FORSCOM missions. It summarizes the guidance contained in the Army

Mobilization and Operations Planning System (AMOPS).

FORMDEPS consists of four volumes.¹⁹

FORMDEPS Volume I (System Description) provides an overview of mobilization, support of deployment, and deployment planning. It describes processes and relates them to the organizations that plan and execute FORSCOM missions. It also addresses concept of operation, command and control procedures, and automated support systems.

FORMDEPS Volume II (Mobilization Troop Basis Stationing Plan (MTBSP)) describes the steps force planners take in establishing the size and composition of the mobilization force package. It describes the Active Army and Reserve Component elements of the mobilized Army and how they interact. Finally, it contains an explanation of the systems that station the mobilized force in the United States. It is classified SECRET.

FORMDEPS Volume III (Mobilization and Deployment Planning) consists of seven parts and contains the basic guidance for the mobilization of units, their equipping and training, validation of mission readiness and deployment. The parts provide guidance for equipment and personnel redistribution, installation support, financial management, and command and control. They also include the FORSCOM Mobilization Plan, a Reserve Component Unit Commander's handbook, a STARC/MUSARC and installation commander's handbook and formats for plans. Part 2 (Deployment Guide) is classified SECRET.

FORMDEPS Volume IV (Emergency Operations) consists of two parts and describes the HQDA crisis management organization, prescribes HQ FORSCOM crisis action procedures and staffing and includes the FORSCOM Wartime Plan. It describes the decision support systems within FORSCOM and the information requirements of key staff officers. Part 2 (Crisis Action System) is classified For Official Use Only.

PROCESS: Prior to alert, reserve units conduct preparations for alert. This is FORMDEPS Phase I -- Preparatory. Depending upon the world situation and likelihood of mobilization, the units continue or intensify their peacetime training programs. Units plan, train and prepare to accomplish assigned mobilization missions as determined by their CAPSTONE wartime chains of command. They also prepare mobilization plans and files; attend mobilization conferences; provide required data to mobilization stations and conduct mobilization training as directed by their peacetime chain of command.

During this phase, unit commanders are expected to screen personnel, identify those who fail to meet mobilization criteria and take action to discharge or transfer them as appropriate. This is an annual requirement in both AR 135-133, Ready Reserve Screening, and NGR 600-200, Enlisted Personnel Management System. Individuals are identified as key employees, ministry students, medically

disqualified or those whose mobilization will result in extreme personal or community hardship are identified as belonging to this group.²⁰ Proper completion of this outprocessing will ensure that unit strength reports approximate anticipated mobilization strengths.

Each unit should accomplish as much administrative, personnel and logistics processing as possible prior to being ordered into federal service. This includes planning actions for the following phases and movement planning. Current planning assumes that this phase may be very short. In the case of the 29th (HIARNG) Brigade in 1968, this period was approximately three months.²¹

Upon declaration of full mobilization, ARNG heavy divisions are alerted by their peacetime chain of command and alert their subordinate units. Phase II -- Alert commences with the receipt of the alert order and finishes with the effective date of the unit's orders to active federal service. The unit takes specific actions to transition from Reserve Component to Active Component status.

Among these actions are those to transfer or discharge additional personnel who do not meet mobilization criteria. Among the individuals who should be transferred during this phase are Simultaneous Membership Program participants affiliated with ROTC programs, high school students, cadets enrolled in ARNG OCS programs, and selected individuals who are in IET, Active Duty for

Training (ADT) or Full-Time Training Duty (FTTD) programs.²²

The unit begins to implement actions with available personnel, facilities, and emergency activities to complete the processing actions begun in Phase I. This phase, also, is assumed in current plans to be relatively short -- perhaps as little as eighteen hours. The longer the Phase I notice, the less the impact of the shortness of this phase. The 29th Brigade had one month to complete this phase.²³

Phase III is Mobilization at Home Stations. This phase begins with the entry of the unit on federal active service and ends when the unit departs for its mobilization station or port of embarkation. During this phase, the unit takes actions to speed its transition to Active Component status. Included in these actions are those required to separate or transfer unit members who may meet mobilization but not deployment criteria. All told, there are 35 different categories for deferral. Many of these categories contain several sub-categories.²⁴ Due to the length of the first two phases, the 29th Brigade did not conduct this phase. Current plans assume that this phase will last only a few days for the divisions in this study.

Phase IV -- Movement to Mobilization Stations begins with the units' departure from their home stations and ends when the divisional brigades are closed at their mobilization stations. Most units are expected to self-deploy using

organic transportation assets. This phase is expected to last only two or three days.

Phase V -- Operational Readiness Improvement begins when the mobilized unit closes at its mobilization station and ends when the unit is evaluated as operationally ready for deployment. Because the other phases are assumed to be very short and filled with other activities, this is the period in which most of the post-mobilization training assessed as required will occur. The goal of all units is to complete this training and achieve operational readiness in the shortest possible time.²⁵ It is the process of attaining operational readiness which will be the subject of the remainder of this chapter.

POST-MOBILIZATION UNIT TRAINING: Following declaration of mobilization, CONUSAs gain command of the mobilization stations in their areas. They organize their Readiness Groups into mobilization assistance teams (MATs). Most MAT personnel are supplied from IRR personnel activated for this purpose. As the divisions are federalized, they leave their peacetime chains of command and come under the command of the mobilization stations.

During his preparatory phases, the division and subordinate commanders will update their post-mobilization training plans on FORSCOM Form 319-R, Postmobilization Training and Support Requirements (PTSR) which includes the assessments of METL task proficiency on the FORSCOM Form 1-

1-R. Mission Essential Task List. These plans are then executed under the supervision of the unit commanders with minimal assistance from the MATs.

The CONUSA commanders and their subordinate mobilization station commanders, not the unit commanders, are charged with the responsibility of assessing and validating unit preparedness for deployment. The executives for execution of these assessment and validation responsibilities are the MATs. The MATs validate deployment readiness by certifying only those tasks indicated as requiring training on the 1-Rs. Other tasks are assumed by virtue of the unit commander's signature to be trained to standard.

OTHER POST-MOBILIZATION TRAINING: Historically, mobilized reserve units have done so with less than their pre-mobilization assigned strengths. This situation should be anticipated in the future. Individual and leader training programs are altered or activated to provide fillers for mobilizing units. Often, reserve units and personnel are mobilized for the specific purpose of conducting this training.

The training base can expect to expand in accordance with approved force packages for the various levels of mobilization. At full mobilization, all USAR training base units will be ordered to active duty to provide this expansion. All training will accelerate to a 10-12 hour

day, six-day training week. Student-to-equipment and student-to-instructor ratios will increase.

To offset these disadvantages, training aids and simulations will be used with greater frequency. Peer instructors will be involved in more instruction. Course scheduling will use multiple shift operations. Administrative cycle breaks will be discontinued. Non-military and contract facilities, instructors and equipment will be pressed into service. Programs of instruction in the leader training programs will be conducted using shortened mobilization timetables. Even greater expansion will be planned to prepare for total mobilization.

Training Divisions exist in the USAR force structure to provide instructors for individual training. Personnel from the 87 USAR schools and IRR replacements will augment or replace Regular Army personnel at the TRADOC service schools and in the ROTC programs. Replacement personnel will be trained to the maximum extent possible in accordance with the new manning system. This will permit maximum assignment flexibility by providing units, teams, fillers and individual replacements.²⁶

ANALYSIS: The plan for post-mobilization training and preparation for deployment fails to adequately deal with many of the lessons learned in previous mobilizations. Assuming that unit pre-mobilization training doctrine is correct, the current post-mobilization system fails to

provide adequate time and resources to conduct training to properly correct deficiencies.

Existing personnel excuse policies and differences between pre- and post-mobilization service criteria assure the mobilizing units that personnel available for peacetime training will be unavailable in wartime. Additionally, post-mobilization training programs may not produce individual replacements with the proper qualifications for wartime service.

The Army's training doctrine for peacetime places a great deal of emphasis on the unit commander's responsibility for conducting evaluations of his subordinate units. FM 25-100 demands that commanders be trainers and involve themselves personally in the training of their subordinate units.²⁷ Peacetime training for reserve units somewhat eliminates this role for unit commanders by providing the Readiness Group assistance teams. An undue reliance on the assistance teams may well cause the commander to abrogate his role as the principal trainer of his unit.

CONUSAs are charged with preparation, planning, and supervision of reserve component exercises in peacetime. Additionally, they are required to provide support for ARTEP external evaluations of the units. Responsibility remains with the unit commander.²⁸ Nonetheless, the commanders gain no peacetime experience in these exercises and evaluations.

Unit commanders may be able to rely upon the Readiness Group assistance teams to assist in planning and conducting training during peacetime but these are unavailable during post-mobilization training. If unit commanders have not practiced their role as trainers during peacetime, it is unlikely that they will be able to perform this function during the post-mobilization training phase.

Army doctrine also demands that commanders be responsible for the evaluation and assessment of the status of their subordinate units' training proficiency. Again CONUSAs and Readiness Groups are charged with providing assistance in the performance of these functions during peacetime training.²⁹ As with training preparation and conduct, these resources are quite scarce during mobilization and unit commanders, unpracticed in the performance of these tasks are unlikely to demonstrate immediate proficiency in the rush of post-mobilization events.

Even as unit commanders struggle to adjust to a role in mobilization training that they had not had with peacetime training, they will have to deal with a unit whose mobilization training strategy was based upon the performance of personnel who may no longer be with the unit due to inability to satisfy mobilization or deployment criteria. Thus, commanders' previous assessments of unit readiness may well be invalid at the very time they are expected to provide the best idea of training status.

The experience of the 29th Brigade's mobilization shows that despite a pre-mobilization strength of 94 percent of authorization, the Brigade lost an additional 8 percent through attrition during Phase I and were a total of 22 percent below their authorized strength.³⁰ Another 312 persons, or 7 percent of the Brigade were authorized delays for up to three months.³¹ Replacements and fillers arrived from several different sources to bring the Brigade back to 100 percent within four months of mobilization but obviously this was not the same Brigade that had trained prior to mobilization.

Acerbating the personnel shortage was the lack of qualification of those on hand. Despite having had 72 MUTA periods per year for the past three years, the Brigade only had 77 percent of their on-hand personnel qualified in their military specialty. An unknown number, but probably quite high owing to the personnel shortages, were qualified in their specialty but not in the specific job they were slated to perform.

As an example, a battalion commander was not mobilized because he was within seven months of mandatory retirement. He was replaced by his executive officer. In turn, the exec was replaced by the battalion operations officer; who was replaced by a company commander; who was replaced by his executive officer; who was replaced by a platoon leader; who was replaced by his platoon sergeant; who was replaced by a volunteer from another unit. In all,

due to one personnel exemption, seven persons were moved to new jobs. Even if all were qualified in their specialties, they had not been previously trained in their jobs. Nor had the unit trained with those individuals in those positions. Any training ratings based on previously conducted training was, to some extent, invalid.

In conclusion, today's plan for post-mobilization training based upon pre-mobilization assessments may be impossible to execute. Unit commanders do not receive the proper peacetime experience in training and evaluation to accomplish these tasks without post-mobilization assistance. The personnel and individual skill qualification shortages cause changes in the units' composition so that the post-mobilization units no longer resembles the pre-mobilization units casting doubt upon the validity of the training assessment. Finally, individual replacements arrive with the expectation that their training will continue in the collective training environment under the tutelage of trained non-commissioned officers. Personnel turbulence causes these NCOs to fill positions of higher responsibility. They are replaced with junior soldiers who are asked to fill training positions which require skills greater than their qualifications permit. Thus, the individual replacements are required to be trained by soldiers, equally untrained, but with only a slightly longer period of service.

ENDNOTES

1. US Department of Defense, Office of the Joint Chiefs of Staff, The DOD Dictionary of Military and Associated Terms, JCS Pub 1-02 (Washington, DC: Government Printing Office, 1988), p. 333.

2. US Department of the Army, Training the Force, Field Manual (FM) 25-100 (Washington, DC: Government Printing Office, 1988), p. Glossary-7.

3. US Department of the Army, "Army Training" in Army Command and Management: Theory and Practice (Washington, DC: Government Printing Office, 1988), p. 24.

4. Most of the information in the individual and leader training sections was taken from US Department of the Army, Unit Training Management (Washington, DC: Government Printing Office, 1984), Chapter 1.

5. FM 25-100, pp 1-3,4.

6. FM 25-100, p. 1-3.

7. FM 25-100, p. 1-4.

8. FM 25-100, p. 1-3.

9. FM 25-100, p. 1-4.

10. FM 25-100, p. 1-4.

11. FM 25-100, p. 5-2.

12. FM 25-100, p. 1-7.

13. FM 25-100, p. 2-3.

14. FM 25-100, p. 2-6.

15. The description of the development process following selection of unit METL is from FM 25-100, Chapters 2 and 3.

16. FM 25-100, p. 5-1.

17. FM 25-100, p. 3-9.

18. JCS Pub 1-02, p. 325.

19. US Army Forces Command ODCSOPS, System Description, Vol I of US Army Forces Command Mobilization and Deployment Planning System (FORMDEPS) (Fort McPherson, GA: Government Printing Office, 1986), p. 1-2 (hereafter FORMDEPS I)

20. US Army Forces Command ODCSOPS, RC Unit Commander's Handbook, Part 3 of Mobilization and Deployment Planning, Vol III of US Army Forces Command Mobilization and Deployment Planning System (FORMDEPS) (Fort McPherson, GA: Government Printing Office, 1986), p. 2-5 (hereafter FORMDEPS III,3).

21. US Army Pacific, The 29th Infantry Brigade (Separate), 1 January 1968 through 30 June 1970 (U), (Schofield Barracks, HI: HQ USARPAC), p. 1 (hereafter AAR).

22. FORMDEPS III,3, p. 2-7.

23. AAR, p. 2.

24. FORMDEPS III,3, p. 2-1-1.

25. FORMDEPS III,3, p. 3-5.

26. Army Training, p. 20.

27. FM 25-100, p. 1-5.

28. US Army Forces Command, Reserve Component Training, FORSCOM Regulation (FR) 350-2 (Fort McPherson, GA: HQ FORSCOM, 1989), p. 2-5.

29. FR 350-2, p. 2-7.

30. AAR, pp 7-8.

31. AAR, p. 9.

SECTION IV

POSSIBLE IMPROVEMENTS

CHAPTER 9

COMBAT TRAINING CENTERS

"Training for possible combat must be the number one priority for the US Army, and finding new and innovative ways to accomplish this training is a never-ending endeavor."¹

GENERAL: The focus of this study is on the National Training Center (NTC) and its possible role at full mobilization. The NTC was approved in 1979 and began its first operational rotational training in 1981. Since that time, the NTC has incrementally increased its capacity for training to its current state of offering 14 annual 14-day rotational training exercises to all 12 active and 4 reserve close-combat (heavy) brigades in the CONUS-based deployable force. Plans to increase the NTC's capacity to train three-battalion brigades at the rate of 12 per year in 16-day rotations is approved in the Army's master plan for the future.

The remainder of this chapter will consider how the NTC assists in the training and evaluation of these units during peacetime training. Since the National Training Center is disestablished at full mobilization when this study begins, an examination of the pre-mobilization use of the NTC may prove useful in determining what, if any, the NTC may be in addressing some of the post-mobilization training problems identified in earlier chapters.

THE CTC TRAINING CONCEPT: In January 1987, General John Wickham, the Army Chief of Staff, approved and directed the implementation of an Army-wide concept for combat training centers. The concept provides multi-echelon training and evaluation opportunities for heavy, light and special operating forces. The concept is intended to prepare both Active and Reserve Component forces to fight in a joint and combined environment at tactical and operational levels of war.

Combat Training Centers (CTCs) are Army training facilities and resources established to provide realistic joint service and combined arms and services training and feedback in accordance with Army doctrine. CTC programs are established at four separate locations and are designed to provide training units opportunities to increase collective proficiency on the most realistic battlefield available short of actual combat.

The training environment at each CTC is developed to maximize training benefits to the specific type and size unit intended to be trained at the CTC. A realistic battlefield pits the training unit against an opposing force (OPFOR) replicating the expected wartime threat within the context of a doctrinally correct scenario. Battlefield replication is enhanced through the use of a variety of state-of-the-art simulator and aids designed to portray conditions in the unit's expected wartime deployment area.

The CTC commander controls the elements of the training environment through exercise design using the minimal essential controls required to ensure unit training objectives are met. An instrumentation system is used by the CTC commander to assist in exercise control and to collect objective data on unit performance. Higher and adjacent headquarters are provided by CTC elements to portray the entire command and control atmosphere that the training unit could anticipate in a wartime situation.

The entire CTC experience depends upon the inter-relationship between the training unit and three aspects of the CTC. Central to the operation of all CTCs are three pillars of advanced collective training. The first is a dedicated, doctrinally proficient Operations Group containing impartial observer-controller personnel. The second is a dedicated, realistic OPFOR. And the last is a training facility which closely replicates combat

conditions and a system of instrumentation designed to unobtrusively collect objective data for feedback and analysis.²

There are four CTCs in existence. The National Training Center (NTC) consists of Army training facilities and resources at Fort Irwin, CA. It is designed to train heavy combat brigade slices in mid- to high-intensity conflict scenarios. Feedback is provided by permanently stationed observer-controllers assisted by a sophisticated instrumentation system. A permanently stationed opposing force provides realistic threat portrayals to units in force-on-force training. Periodically, non-mechanized forces train with heavy forces at the NTC. NTC also includes live fire exercises.

The Combat Maneuver Training Complex (CMTTC) consists of Army training facilities and resources at Hohenfels Major Training Area (MTA), Germany. It provides an opportunity for United States Army Europe (USAREUR) forward-deployed battalions to train in a realistic environment against a skilled opposing force. Feedback is provided by permanently stationed observer-controllers assisted by a sophisticated instrumentation system.

The Joint Readiness Training Center (JRTC) consists of Army training facilities and resources at Fort Chaffee, AR. It provides training opportunities for non-mechanized battalion slices to train in low- to mid-intensity conflict scenarios. An observer-controller group and skilled

opposing force are also present at the JRTC. Occasionally, JRTC training support may be exported to other training sites for selected exercises

The Battle Command Training Program (BCTP) consists of Army training facilities and resources associated with BCTP program at Fort Leavenworth, KS. It is designed to provide division and corps commanders and their battle staffs with advanced combat training opportunities through the application of computerized battle simulations. The program incorporates a realistic training atmosphere with a full time observer-controller staff supported by advanced technology.

NTC TRAINING PREPARATION: The National Training Center, as a CTC, plays no special role in Army peacetime training in the sense that it is not viewed as a goal or step in attaining readiness. Instead, it is viewed as an assist to commanders in obtaining a better assessment of their units' training status by participating in a challenging exercise on a realistic battlefield observed and provided feedback by trained impartial doctrinal experts. FM 25-100 calls a CTC rotation a "unique training opportunit[y]." ³

So, the NTC does not require unit commanders to do anything different to prepare for an NTC rotation than for any other formal external evaluation. Commanders utilize the Battle Focus concept to prepare their unit METLs. They assess unit individual and collective task proficiency and

develop a strategy to correct the deficiencies and sustain the strengths. Finally, they develop long- and short-range and near -term plans to implement that strategy.

When an NTC rotation is made available to a unit commander, he is normally notified several years in advance. He uses this advance notice to refine his strategy to take advantage of the unique training opportunity. Approximately one year in advance of the scheduled rotation, the commander's division commander coordinates with the NTC to use the unit METL and assessment of proficiency to begin development of a scenario which will assess and assist in the development or maintenance of proficiency.

Meanwhile, the brigade commander has been training his unit in accordance with his strategy to correct as many deficiencies as possible prior to the rotation. Often this involves incrementally greater emphasis on battle skills by conducting frequent field training exercises of increasing complexity. Approximately six months prior to the rotation, the brigade personnel status is fixed at 100 percent of authorized fill.

NTC OPERATIONS⁴: As previously stated, Combat Training Centers rest upon three pillars of advanced collective training. These are the observer-controllers, the OPFOR and the instrumented battlefield. The National Training Center employs each of the pillars in a manner designed to optimize benefits to the training brigade.

The NTC Operations Group is a permanently-stationed, doctrinally proficient, impartial group of observer-controllers. Training unit missions and tasks, OPFOR counter-missions and tasks and the overall scenario are examined by Operations Group scenario writers and a training, evaluation and unit feedback plan developed. This plan will provide a framework within which the field training exercise will be conducted and controlled.

Support for this plan is the basis for the Operations Group organization and operation. The NTC training evaluation and feedback plan requires an environment for free-play force-on-force maneuver using instrumentation and tactical engagement simulations. The Operations Group must be configured to control the exercise while providing evaluation and feedback to the training unit. The design structure provides for an organization to do this.

The Operations Group is designed with horizontal and vertical integration of unit tasks and functional systems in mind. A field observer-controller team for a battalion/task force consists of forty-seven persons in the NTC model. This team is organized for vertical evaluation

of unit execution of tasks. A good rule of thumb for this team is one observer-controller per staff section or platoon. Horizontal integration of the combined arms functional areas is conducted by the members of the centrally located training, analysis and feedback team. This team consists of twenty two persons under the NTC model. A good rule of thumb is one analyst for each functional system at the battalion/task force level and one or two analysts to evaluate all functional areas in each of the companies and separate platoons. Between the teams, most of the training, evaluation and feedback plan is executed.

Other parts of the Operations Group are required to fully execute the plan. Mobile video teams capture real time records of battlefield activities and critical command and staff functions. Field after action review (AAR) teams set up and facilitate the conduct of end-of-mission AARs which highlight key events and isolate problems for correction. Field support teams are organized to provide food fuel and repair parts to the observer-controller teams and to repair on-site training support equipment required for realism in training.

Size, composition and organization of the training unit; missions, tasks, conditions and standards and the scenario determine the requirement for an opposing force. This second consideration -- a dedicated realistic opposing force sized, organized, equipped and trained to portray a

doctrinally correct Threat force -- is a product of the training brigades' Battle Focus. The National Training Center currently trains close-combat (heavy) brigades and battalion/task forces with a wartime mission of combat in a mid- to high-intensity environment -- most likely Central Europe or Southwest Asia. The doctrine in Army field manuals establishes the requirement for an opposing force (OPFOR) ranging in size from a motorized rifle company when a US battalion has its most deliberate attack missions to a motorized rifle regiment when a battalion has its most difficult defense missions. Analysis of the conditions under which the training unit most expects to go to war leads to organizing and equipping the NTC OPFOR using a Group of Soviet Forces Germany (GSFG) model.

The Threat community within the TRADOC developed the initial organization of the NTC OPFOR and oversees its operation to ensure that it remains current in accordance with unclassified estimate of the Group of Soviet Forces, Germany (GSFG). As an example, when the SA7 was removed from the GSFG motorized rifle squad and organized as a separate squad under company control so also was it done in the NTC OPFOR. Equipping the OPFOR is also done in accordance with the most recent unclassified information available on the GSFG.

Training the OPFOR is done in much the same manner as is done with standard US units. Doctrine -- in this case Soviet doctrine -- is examined for critical missions,

tasks, conditions and standards. From this list the counter- missions and tasks are selected which counter those the US training units consider critical. The result is an OPFOR handbook and other training support literature which provides both the "what to" and the "how to" train to be an OPFOR unit. Individual, collective initial and sustainment training is conducted in the same manner as for the US units.

Combat Training Centers are distinguished from other training opportunities by superior training facilities comprising unrestrictive maneuver areas, near-real simulation of battlefield conditions and a system of instrumentation designed to unobtrusively collect and record battle events for replay and analysis. The NTC is no exception. The NTC uses equipment and technology which is on the leading edge of development but is rarely, if ever, the testing or proving ground for that new technology. CTCs also include live fire exercises if at all possible and the NTC does so. While the training facility is important and to most observers is the single element which most distinguishes the NTC, it is clearly a product derived from and in support of the requirement to train brigades.

The mission and task lists of both the training brigade and the OPFOR demand a training area of a certain size. The annual number and the length of a training unit's rotation dictate the required acreage. The desire to avoid

repeated use of the same terrain to minimize terrain familiarity as an advantage requires additional acreage. Environmental concerns may place additional restrictions on portions of the land area and require even greater expanses of terrain and may require changes to be made to the training, evaluation and feedback plan. The NTC occupies over 1,000 square miles of the Mohave Desert in south-central California midway between Los Angeles and Las Vegas, NV. In acreage, it is larger than the entire state of Rhode Island.

The near-real battlefield condition requirements are determined from the training unit and OPFOR task list. Of primary importance is a tactical engagement system which enables an unbiased assessment of engagement outcomes. Presently direct fire weapons and a limited number of missiles are outfitted with the Multiple Integrated Laser Engagement System (MILES) and Air Ground Engagement System/Air Defense (AGES/AD) systems. Soon, all personnel, weapons and vehicles at the NTC will be outfitted with these systems. Area weapons effects of indirect fire weapons, mines and NBC munitions are under development in the Simulation of Area Weapons Effects (SAWE) program. Smoke generators, radio electronic jamming, interception and deception capability and tactical close air support also contribute to battlefield realism.

A sophisticated instrumentation system enables Operations Group analysts to electronically "see" and "hear" the battle from a central location. The system automatically records the events for later replay and analysis. Thus training unit leaders are able to replay and critique their actions during field after action reviews immediately following the action. They are also able to review the records as often as they like once they have returned to home station. This enables them to better prepare and conduct corrective or sustainment training. Another benefit of the instrumentation system is its utility to the Center for Army Lessons Learned (CALL) which use the instrumentation-collected data to force changes into Army doctrine, organization, material, training and leadership products and to provide "quick fire" tips to units in the field emphasizing successful tactics, techniques and procedures.

Other service support to the National Training Center is essential. Not only do the other services benefit from the training their organizations receive but the Army also benefits from their participation. At the NTC close air support (over fifty percent of all CAS sorties flown by CONUS-based Tactical Air Command units are flown at the NTC) and tactical air reconnaissance directly support the ground forces and Army aviation. Plans are underway to more fully involve the Air Force and to link the NTC with existing USAF training at Nellis AFB. In addition to the

benefits to the training Army and Air Force units, lessons learned -- Army, Air Force and joint -- can be derived from other service participation in NTC training exercises.

Live fire exercises have come to be another highly regarded feature of the National Training Center experience for brigades and below. A realistic OPFOR is provided in this case by a sophisticated targetry layout which behaves as a doctrinally correct threat force. Targets rise and fall to create the illusion of forward and rearward movement. Controlled from a central facility the target arrays pause and detour to avoid obstacles, occupy hasty defense positions or exploit weaknesses in training unit plans. The instrumentation system records the target actions in the same manner as during the force-on-force battles. Plans are ongoing to provide the targets with a "shoot-back" capability to add further realism to the live fire exercise.

POST-ROTATION TRAINING: Following the NTC rotation, the brigade returns to its home station and reassesses its METL proficiency in light of the NTC feedback. Training strategy is revised accordingly and adjustments are made to plans for future training. The brigade then commences remedial training to establish proficiency in all METL tasks deemed to require training as a result of the post-rotation assessment.

This is exactly the procedure demanded by FM 25-100 as a result of any training evaluation and assessment. In fact, many units actually take advantage of some opportunity training time in the middle of an NTC rotation to conduct some training to correct deficiencies before resuming the exercise scenario. In short, the NTC drives no changes to the normal course of events following any other formal external evaluation. Its chief benefit is that it is the most thorough, complete and realistic formal external evaluation that the brigade will ever receive.

One thing does distinguish NTC evaluations from all others. That is, as a result of having fixed unit assigned strength at 100 percent six months prior to the rotation, all those personnel moves were put off until return from the rotation. Additional personnel transfers result from the need to bring other division units to full strength in anticipation of their own upcoming NTC rotations. Thus, the brigade just completing NTC training is stripped to provide personnel for the brigade about to undergo NTC training.

SUMMARY: There can be no doubt that the National Training Center, in particular, and the Combat Training Centers, in general, have made an important positive impact on training readiness of the forces which use them. As peacetime training and evaluation centers, they fit in well with the Battle Focus training concept of current doctrine. There

are two concerns, though, with NTC training procedures which relate to those identified as problems with reserve forces training.

Reserve commanders are routinely assisted by Readiness Groups and this was identified as a post-mobilization training concern for reserve units. The concern was advanced in the previous chapter, that the reserve unit commanders would be unable to perform training and assessment tasks after mobilization if they had not been required to practice performing those tasks prior to mobilization. The same problem does not exist with active force commanders as a result of the NTC rotation training. The problem may exist with respect to the commanders of reserve-roundout NTC users, but this is a function of the Readiness Group system in general and not the NTC in particular.

While it is true that NTC personnel do develop the exercise scenario and they do conduct the formal evaluation at the NTC, there is much that the rotational unit commander has to do to prepare for the rotation that requires him to perform the same functions. Preparation and post-rotation training exercises and assessments are planned, prepared and conducted by unit commanders without assistance from NTC staff. There is no real chance that these unit commanders will not receive practice in the training and assessment tasks which are their responsibility.

The problem of personnel turbulence is not so easily explained away. The problem was identified in the previous chapter that an assessment of collective proficiency is only valid as long as the unit remains composed of the same individuals. Just as a reserve component unit which loses a large percentage of its personnel at mobilization must revise its assessment of unit proficiency, so to must an active component force reassess its METL proficiency following its post-rotation personnel loss.

Thus, post-rotation personnel turbulence and its related proficiency assessment problem seem to be counter to the thrust of the FM 25-100 doctrine. Additionally, they run counter to the CTC program purpose of "increas[ing] unit readiness for deployment and warfighting."⁵ Nonetheless, unit commanders, trained in readiness assessment and training to correct deficiencies should be able to implement plans to correct these deficiencies with new personnel as they are assigned through the normal personnel rotation system.

Personnel turbulence does not work against; and may actually assist the Army attain two other CTC purposes intended to "train bold innovative leaders through stressful exercises." and to "embed doctrine throughout the Total Army."⁶ As these personnel rotate through other units, their NTC experience should serve to assist in the distribution of NTC lessons and should, over time, increase readiness in the active force.

In conclusion, then, the National Training Center is an excellent training and assessment vehicle for the active force during peacetime. With the exception of those few units, just returned from a rotation and not in receipt of personnel replacements, the NTC should improve active force readiness for deployment and warfighting. The fact that the NTC disestablishes at full mobilization should not prove to be a problem for the active force.

The reserve-roundout forces which are mobilized at partial mobilization will benefit from the NTC during this period. The problems of reliance upon the Readiness Group for assistance will not be mitigated by the presence of the better-prepared NTC staff. Personnel turbulence will remain a problem for those units but NTC rotations for units with turbulence-related problems can be delayed until those problems are corrected.

CHAPTER 10

CONCLUSIONS AND RECOMMENDATIONS

The question posed by this thesis was what should the National Training Center's mission be under conditions of Full Mobilization. As stated in Chapter Nine, current plans call for the NTC to be disestablished during Full Mobilization. The conclusion of this study is that there is a pressing need for a final assessment of a mobilized unit's combat readiness prior to deployment. Since these assessments are routinely conducted at the National Training Center for Active Army units, it is inescapably logical that the Training Center should continue to perform this mission under conditions of Full Mobilization.

The findings of this study demonstrate that the current plan for peacetime training and wartime mobilization of the National Guard close-combat (heavy) divisions falls short of its goal of providing combat-ready forces on short notice. The historical pattern of readiness in the Citizen Army has been one of increasing unpreparedness to wage a modern war without additional post-mobilization training. The measures instituted to redress these shortcomings attempt, but are unable, to reverse these trends. Therefore the Army must prepare to conduct this required

post-mobilization training in as rapid and efficient manner as possible following mobilization. The National Training Center has a significant assessment role to play in this post-mobilization training. This chapter will summarize the status quo and propose a solution.

From the analysis in Section II, three conclusions can be drawn from an historical review of past mobilizations. First, the nation has placed an increasingly greater reliance on its reserve forces to buttress the national defense. As modern wars have occurred with increasingly less warning, the demands for readiness in this Citizen Army have been commensurately greater.

The second conclusion of historical review is that this reliance has never been completely justified. Personnel manning is a growing problem in a peaceful democratic society. Training prowess has become harder to maintain as tasks and equipment become more complex. The steadily increasing gap between civilian and soldier job skills has acerbated the task of attaining required proficiency levels. Leader training has been the sole exception to this downward trend.

A third conclusion of historical review is that past mobilizations have not been adequately planned. This criticism seems to have been honestly addressed and vigorously countered in current mobilization planning. Nonetheless, it is an historically recurrent theme that

each mobilization has identified problems with preparedness and each has yielded solutions which were touted as providing the solution to those problems. Currently proposed solutions must be critically scrutinized to ensure that they have, indeed, adequately addressed and dealt with past problems.

Today's plan for training and mobilizing the National Guard close-combat (heavy) divisions that are the subject of this study is based upon a peacetime training doctrine designed to reduce post-mobilization training requirements to a bare minimum. Key components of this doctrine are the Battle Focus concept; CAPSTONE alignment program at the unit level; and well developed, comprehensive individual and leader education systems. Training of units, individuals and leaders has improved with the introduction of these initiatives. However, particularly in the area of unit training, these initiatives have not raised readiness to levels required for short-notice mobilizations. Well-intentioned as these improvements are, they do not solve all the readiness problems in the studied units.

As outlined in Section III, the evaluation process, central to the Battle Focus concept of training, is imperfectly executed in support of Reserve Component training. Reserve Component unit commanders do not participate in evaluations to the same extent as do their active counterparts. Formal evaluations are conducted by

Active Component unit leaders under the auspices of the assisting Readiness Groups. This evaluation assistance vanishes at mobilization, leaving the Reserve Component commander without this vital capability at his most critical period.

By the time National Guard close-combat (heavy) divisions are mobilized at Full Mobilization, the rapidly deploying Regular Army has already departed for combat. In place of the skilled evaluations provided prior to mobilization by the commanders of Regular Army units, the Reserve Component unit is evaluated by other recently activated reservists whose knowledge of doctrine is suspect. Any post-mobilization training which needs to occur based upon the 1-R assessment must take place, in a manner reminiscent of General McNair's WWII observations, under conditions of the partially trained training the partially trained.

In summary, then, all previous mobilization preparation plans have claimed to correct the deficiencies of previous mobilizations -- only to prove inadequate at the hour of greatest need. Critical examination of current preparations provides no greater degree of confidence. The best efforts of trainers and training developers notwithstanding, it must be concluded that claims of mobilization readiness are as inflated today as they have been prior to each past mobilization.

Given that the peacetime preparation of studied units will be inadequate without additional, post-mobilization training, a means must be sought to provide this training in as rapid and efficient manner as possible. The remainder of this chapter will address several recommendations for the role of the National Training Center in this process.

The National Training Center provides outstanding peacetime training opportunities for its Active Component and Reserve Component roundout unit users. Potentially, it can serve as an ideal pre-deployment readiness assessment for units alerted for overseas combat. Without much change to its normal operating procedure, it can also function to provide some remedial post-mobilization training to units alerted during Partial Mobilization.

However, the National Training Center is not currently available for assisting the National Guard close-combat (heavy) divisions alerted at Full Mobilization. Not only does the National Training Center disestablish at Full Mobilization, but its normal operating procedure would not process the alerted units in a timely fashion. Even assuming that the Training Center could remain in existence at Full Mobilization, its operating procedures would have to change to assist in the conduct of unit training as opposed to simply facilitating training through the conduct of training assessments as it is currently chartered.

Current rotations provide two-battalion brigade-size training experiences. These experiences assess training proficiency over a fourteen-day rotation with an approximately fourteen-day inter-rotation period for equipment maintenance. At this rate, the four studied divisions would take five rotations each to assess their ten battalion force structure. Thus, the four division force which is the subject of this study would require eighty weeks -- or nearly one and one-half years -- merely to have their readiness assessed.

Even if the Training Center's capacity is adjusted to a three-battalion brigade, the force requires a full year for readiness assessment. Reducing inter-rotation maintenance periods to one, instead of two, weeks enables the force to deploy in thirty-nine weeks -- still not an encouraging prospect. A means other than "business as usual" must be found to utilize the National Training Center if deployment is to occur in a timely fashion. Five alternatives are proposed below.

NTC AS POST-MOBILIZATION TRAINING ASSESSMENT: This alternative proposes to utilize the National Training Center as a readiness screen for deploying brigades. It would require no change to the Training Center's personnel manning levels but would alter the rotation schedule. Three-battalion brigades would rotate through a one week rotation immediately upon mobilization.

Results of the rotation would be used to confirm the 1-R evaluations and would provide the basis for any further post-mobilization training. With a one week maintenance period between rotations, this check would require twenty-six weeks to assess the studied divisions. Reducing the maintenance period to less than one week would require the addition of a duplicate set of equipment for the rotating units.

The principal advantage of this alternative is that the NTC would require little alteration between Partial and Full Mobilization. The Training Center normally performs an assessment function. Reducing the rotation period to one week would degrade the ability of the Center to perform that function. However, with training scenarios developed to assess specific METL tasks, there should still be sufficient time to verify the 1-R assessment.

Additional study needs to be conducted to determine the efficacy of shortening the maintenance period between rotations. Additional unit sets of equipment may prove a viable alternative. Another consideration is maintenance of non-unit equipment. Target mechanisms on the live fire range needs maintenance and replacement. So too does the instrumentation system. OPFOR equipment also requires periodic maintenance.

Another consideration is that of personnel maintenance. The Operations Group and OPFOR need time between rotations to recover from the grueling pace of rotational training.

This is probably the largest drawback of this accelerated program. Even so, perhaps the rotations could be conducted with the brigade rotations divided among two or three groupings with personnel and maintenance breaks in between.

Another key advantage of this alternative is that it provides the Reserve Component unit commander with a much more accurate assessment of his unit's combat proficiency than is available from the 1-R. The Training Center is a far better environment for this assessment than the unit's annual training site.

The OPFOR provides a very realistic threat which is normally not available to units in annual training. The sophisticated instrumentation system provides an extremely accurate record of unit performance which can be utilized to identify and correct deficiencies. Tapes from the instrumentation system can be studied following the unit's departure from the Training Center to evaluate problems and measure progress throughout the post-mobilization training period. Finally, the Operations Group is far more skilled at conducting the training assessments than are the Regular Army units detailed for that purpose during annual training.

Additionally, the 1-2 will probably not be indicative of the Reserve Component unit's true combat capability. Personnel who participated in the annual training period, and on whom the assessment is based, will not mobilize with the unit. The replacement personnel will likely not be as

skilled as the personnel they are replacing in unit positions. In any case, they will be unfamiliar with unit operating procedures and will not be completely integrated within the unit framework. This will skew the 1-R assessment by providing a more generous assessment than is probably the case.

The assessment provided by the Training Center will provide a more recent picture of unit readiness. And, because it is also conducted by trained observers, in conjunction with a skilled OPFOR and sophisticated instrumentation system, it will be a more accurate picture. Mobilized brigades will be better able to focus required post-mobilization training following an assessment at the Training Center.

While this alternative does provide an excellent means of assessing the accuracy of the 1-R, it fails to address the conduct of post-mobilization training to correct the identified deficiencies. Reserve Component unit commanders, unfamiliar with the training system under the current mobilization plan, are no more familiar with the system in this program. They are simply presented with a different, albeit more accurate, view of their units combat proficiency. They are not provided any additional assistance in correcting the identified deficiencies.

NTC AS PRE-DEPLOYMENT READINESS ASSESSMENT: This alternative proposes to use the National Training Center as a readiness screen of unit proficiency immediately prior to the unit's departure for overseas ports of embarkation incident to employment in a combat theater. It requires no change to current levels of manning but would alter the rotation schedule. Three-battalion brigades would rotate through a one week rotation immediately prior to movement to the planned point of embarkation. If the unit passed its certification at the NTC it would proceed to the port as scheduled. If it failed to pass the certification, it would be scheduled for retraining--and perhaps recertification--as required.

Assuming no requirement for recertifications, this alternative would be similar to the previous one in terms of resource demands on the NTC. That is, a one week maintenance period between rotations would permit the studied divisions to be completely certified within twenty-six weeks. Since the post-mobilization training time mandated by individual unit 1-Rs is unknown, it is impossible to estimate how many days would elapse between the declaration of Full Mobilization and the start of the twenty-six week period.

The principal advantage of this alternative, like the previous one, is that there is little need to change the manner in which the NTC currently operates. This alternative further provides a much better assessment of

the units' true combat potential because it is conducted closer to the period of commitment to combat than any of the other alternatives.

The chief disadvantages are the imprecise nature of the timeline for planning and the inability to project skill decay if the unit remains inactive at the port of embarkation or in the combat theater. The imprecise nature of the timeline relates to the fact that different brigade units will complete 1-R training at different times. Thus, divisional brigades may be ready for final certification at radically different times. This may require the division to deploy in a piecemeal fashion or to delay movement of its better-trained brigades to maintain unit integrity.

Additionally, as brigades become ready for assessment, they may begin to queue up waiting for NTC training rotations. Conversely, the NTC may lay fallow for a period of weeks or months awaiting a unit to become ready for assessment. Both of those options indicate an improper use of the resource represented by the NTC.

The potential of skill decay between assessment or certification and a unit's employment in combat is also difficult to predict. It stands to reason that the greater the amount of time between the unit's certification and its employment in combat, the greater the opportunity for skill decay. The unit will certainly make use of that time to continue training. But the accuracy of the certification then becomes a function of the unit's ability to conduct

training and not a measure of the actual proficiency as assessed at the NTC. If the certification is not required to be definitively accurate, it serves no purpose to conduct the certification in the first place.

EXPORTABLE OPERATIONS GROUP: This alternative proposes to send the Operations Group to unit mobilization sites to provide readiness assessments and training assistance to Reserve Component units. Due to the cost of exporting the entire Training Center system, this alternative assumes that the instrumentation system would remain in place at Fort Irwin. Also, the OPFOR would deploy under conditions of Full Mobilization as currently planned in FORMDEPS.

The principal advantage of this alternative is that it provides follow-on training assistance to mobilizing units after their readiness has been assessed. This overcomes the objection of the first alternative that Reserve Component units were assessed and then left to their own devices to conduct post-mobilization training.

In this alternative, the Operations Group first assesses the unit then provides training assistance in the form of a detailed road map for corrective training. The time required for completion of the unit assessments remains the same as in the previous alternative. The only maintenance consideration is the personnel rest required for Operations Group personnel. Thus, the mobilized force could be completely assessed in as little as three or four months.

The completed assessments, too, can be deceiving. Without the OPFOR and the instrumentation system, the assessments will not be as complete as they would have been had they occurred at the Training Center. To provide a better assessment, unit soldiers would have to be detailed as OPFOR which would further degrade their training readiness. The follow-on training, too, would not be as realistic if it were not conducted on the basis of correcting deficiencies highlighted by their display on the instrumentation system.

While this alternative does provide some training assistance to the Reserve units undergoing post-mobilization training, it does not provide this assistance in a timely fashion. Following the provision of the assessment, the Operations Group moves on to conduct the next assessment. It is unavailable to return until all twelve mobilizing brigades have been assessed.

It will be approximately sixteen weeks between the time the first unit is assessed and the time the Operations Group can return to assist in the training of that same unit. This disadvantage may be mitigated to some extent by structuring the Operations Group schedule somewhat so that it assesses an entire division's brigades and then returns to provide training assistance to the same brigades. Following completion of the training assist, the Operations Group could then move on to the next division set.

This alteration better addresses the need of the Reserve Component units to have training assistance in addition to training assessment. However, this method simply shifts the time required to complete post-mobilization training from one unit to the next with little or no overall reduction in the time required between declaration of Full Mobilization and actual deployment of the entire mobilized force.

OPERATIONS GROUP AS TRAINING CADRE: This alternative assumes that the Operations Group is divided among the four mobilizing divisions to provide training assistance in the manner of Emory Upton's Expansible Army. Each of the NTC Operations Group's four battalion evaluation teams would go to a single mobilizing division. Either used as a roving team to provide assistance to battalion or brigade sets; or divided among the brigades as training assistants to the unit commanders, the Operations Group provide the leavening of professional training advice Upton foresaw for his Regular Army cadres.

This alternative has the advantage of providing the training assessments and training assistance as soon after mobilization as possible. Yet the assessments are even more suspect than in the alternative which exports the Operations Group as an entity. In that alternative, the lack of the trained OPFOR and instrumentation system lessened the fidelity of the evaluation. In this

alternative, the assessment is conducted by one third less personnel and still without the other three pillars of the Training Center.

Probably, the Operations Group personnel attached to the division need to forego the assessment and rely upon the 1-R as a means to assess readiness. Of course, this reliance suffers from the same problems as the current system when it uses a 1-R based upon a different unit personnel structure. This may be somewhat mitigated by the personal observations of the Operations Group personnel who can concentrate assessment efforts on areas of identified change.

The alternative's greatest advantage is that it provides the training assistance directly to the unit. Working from the pre-mobilization 1-R, the Operations Group personnel can assist unit commanders in the preparation and conduct of their training programs. Personal and continuous interaction between unit leaders and the training experts will enable the post-mobilization training process to proceed as smoothly and quickly as possible.

The length of time between mobilization and deployment under this proposal is impossible to quantify in advance. It depends upon factors like unit pre-mobilization readiness, personnel turbulence and the unit's acceptance of the training advice offered by the Operations Group. Also, changes to the force structure which increase the

number of divisional brigades -- to say nothing of non-divisional brigades -- would render this system unworkable.

NTC TRAINS READINESS GROUPS: This alternative calls for periodic training sessions at the National Training Center for the Active Component personnel charged with the task of assessing and assisting the Reserve Component during peacetime and mobilization. Under this alternative, Readiness Groups and Mobilization Stations would receive periodic training in the techniques of assessment utilized at the National Training Center.

The knowledge and experience thus gained would be directly applied to the tasks of these groups during mobilization. This would be only a minor modification of the NTC's present mission and its impact on that mission must still be considered. If this training was planned to occur during the Partial Mobilization period, it might prove to be no detriment to the NTC's mission and capabilities.

This alternative could then be used in conjunction with the first alternative to prepare units for deployment. Reserve Component brigades would proceed from their Mobilization Stations directly to the National Training Center for a verification of their 1-R. Their Readiness Group partners would accompany them and participate in the assessment. The unit would then return to the Mobilization Station or some other training site to correct deficiencies

and prepare for deployment. Both the best available training assessment and a better-trained training assistance team would be utilized to ensure the greatest advantage to the mobilized units.

RECOMMENDATIONS: This study is long on analysis and short on recommendations because choice of the best alternative depends upon many more factors than were considered in this study. Any recommended solution must address the issues of adequacy of pre-mobilization readiness assessments and the requirements for post-mobilization training assistance. It is felt that blending the first and fourth alternatives provides the best theoretical answer.

This hybrid calls for periodic training by the National Training Center of personnel anticipated to be used in the post-mobilization training assistance teams. This NTC training should provide a skilled cadre of experienced trainers at the Mobilization Stations who can provide needed assistance to mobilizing Reserve Component units. It will also provide an indirect benefit of better pre-mobilization training and assessment.

With these higher quality pre-mobilization 1-R training readiness assessments, the NTC can conduct better post-mobilization assessments and return the mobilized unit to its Mobilization Station with a much more focused idea of its training requirements. Then this training plan can be utilized by the Mobilization Station personnel to assist

the mobilized unit in the conduct of its post-mobilization training. To incorporate parts of the second proposal, the unit could, if deemed necessary, return to the NTC for a final certification immediately prior to movement to the port of embarkation.

Obviously, this proposal requires additional study and a cost effectiveness analysis to determine its feasibility. However, it does show promise as a means of correcting many of the mistakes of past mobilizations which have been institutionalized in the current mobilization system.

ENDNOTES

1. Glynn C. Mallory Jr., MG USA, "Combat Training Centers: Training the Force to Fight" in Military Review (October 1987), p. 2.

2. US Department of the Army, Combat Training Center Program, Army Regulation (AR) 350-50 (Washington, DC: Government Printing Office, 1988), p. 3.

3. US Department of the Army, Training the Force, Field Manual (FM) 25-100 (Washington, DC: Government Printing Office, 1988), p. 1-2.

4. Much of the description of National Training Operation comes from Hans Halberstadt, NTC: A Primer of Modern Land Combat (Novato, CA: The Presidio Press, 1989).

NN. AR 350-50, p. 3.

NN. AR 350-50, p. 3.

GLOSSARY

AEF.....American Expeditionary Force
AFB.....Air Force Base
AGES/AD....Air Ground Engagement System/Air Defense
AGF.....Army Ground Forces
AIT.....Advanced Individual Training
AMOPS.....Army Mobilization and Operations Planning
 System
ANCOC.....Advanced NCO Course
AR.....Army Regulation
ARNG.....Army National Guard
ARTEP.....Army Training and Evaluation Program
ATT.....Annual Training Test
BAR.....Browning Automatic Rifle
BCTP.....Battle Command Training Program
BNCOC.....Basic NCO Course
BT.....Basic Training
CALL.....Center for Army Lessons Learned
CAS.....Close Air Support
CAS3.....Combined Arms and Services Staff School
CGSC.....Command and General Staff College
CMTC.....Combat Maneuver Training Complex
CONARC.....Continental Army Command
CONUS.....Continental United States
CONUSA.....Continental US Army
CPX.....Command Post Exercise
CSC.....Command and Staff College
CTC.....Combat Training Center
DOD.....Department of Defense
EDRE.....Emergency Deployment Readiness Exercise
EPMS.....Enlisted Personnel Management System
FM.....Field Manual
FORMDEPS...FORSCOM Mobilization and Deployment System
FORSCOM....US Army Forces Command
FTX.....Field Training Exercise
FY.....Fiscal Year
GSFG.....Group of Soviet Forces, Germany
IET.....Initial Entry Training
IRR.....Individual Ready Reserve
ITEP.....Individual Training and Evaluation Program
JRTC.....Joint Readiness Training Center
LOI.....Letter of Instruction
MAT.....Mobilization Assistance Team
METL.....Mission Essential Task List
MILES.....Multiple Integrated Laser Engagement System
MOS.....Military Occupational Specialty
MQS.....Military Qualification Standards
MTP.....Mobilization (or Mission) Training Plan
MUSARC.....Major US Army Reserve Command

NCO.....Noncommissioned Officer
 NCOES.....Noncommissioned Officers' Education System
 NG.....National Guard
 NGR.....National Guard Regulation
 NTC.....National Training Center
 OAC.....Officer Advanced Course
 OBC.....Officer Basic Course
 OCS.....Officer Candidate School
 OES.....Officer Education System
 OJE.....On-the-Job Experience
 OPMS.....Officer Personnel Management System
 OPSGRP.....Operations Group
 OPFOR.....Opposing Force
 OR.....Organized Reserve
 ORT.....Operational Readiness Test
 PLC.....Primary Leadership Course
 PTSR.....Pest-mobilization Training and Support
 Requirements
 RA.....Regular Army
 RC.....Reserve Component
 RG.....Readiness Group
 ROTC.....Reserve Officers' Training Corps
 SAWE.....Simulation of Area Weapons Effects
 SL.....Skill Level
 SNCOC.....Senior NCO Course
 SOJT.....Supervised On-the-Job Training
 SRF.....Selected Reserve Force
 STARC.....State Area Command
 TEC.....Training Extension Course
 TEWT.....Tactical Exercise Without Troops
 TRADOC.....US Army Training and Doctrine Command
 USAF.....US Air Force
 USAR.....US Army Reserve
 USAREUR.....US Army Europe
 USASMA.....US Army Sergeants Major Academy
 WOAC.....Warrant Officer Advanced Course
 WOBC.....Warrant Officer Basic Course
 WOC.....WOC Warrant Officer Candidate
 WOSC.....Warrant Officer Senior Course

BIBLIOGRAPHY

- Austin, COL Lee, ed. The Anthrope Factor in Warfare: Conscripts, Volunteers, and Reservists. Washington DC: National Defense University, 1988.
- Balkoski, Joseph. Beyond the Beachhead: The 29th Infantry Division in Normandy. Harrisburg, PA: Stackpole Books, 1989.
- Barnhill, Anthony L. "Train As You Will Fight: Factors Affecting Development of a Strategy to Train National Guard Units to the Level Organized." Unpublished MMS thesis, USA Command and General Staff College, 1990.
- Binkin, Martin. "US Reserve Forces: The Problem of the Weekend Warrior." Staff Paper for the Brookings Institute, 1974.
- Brown, John Sloan. Draftee Division. Ann Arbor, MI: Indiana University Press, 1984.
- Dupuy, T.N. and Dupuy, R.E. Military Heritage of America. Fairfax, VA: HERO Books, 1984.
- Cooper, Matthew. The German Army, 1933-1945. Chelsea, MI: Scarborough House, 1978.
- General Accounting Office. "Unit Training: How it is Evaluated and Reported to Congress, GAO/NSIAD-86-94". Washington DC: US Government Printing Office, 1986.
- Greenfield, Kent Roberts, Palmer, Robert R., Wiley, Bell I. The Organization of Ground Combat Troops, Vol 1 of The War Department, Sub-series I of US Army in World War II. Washington DC: US Government Printing Office, 1947.
- Haffa, Robert P. The Half War: Planning US Rapid Deployment Forces to Meet a Limited Contingency, 1960-1983. Boulder CO: Westview Press, 1984.
- Heller, Charles E. and Stofft, William A. ed. America's First Battles, 1776-1965. Lawrence, KS: University Press of Kansas, 1986.
- Johnston, Edward S. Building an Army. Harrisburg, PA: Telegraph Press, 1941.

- Kreidberg, LTC Marvin A. and Henry, 1LT Merton G. History of Military Mobilization in the United States Army, 1775-1945. Washington DC: US Government Printing Office, 1955.
- Mallory Jr., MG Glynn C. "Combat Training Centers: Training the Force to Fight." Military Review, OCT 1987.
- Matloff, Maurice, ed. American Military History. Washington DC: Government Printing Office, 1969.
- Palmer, Robert R., Wiley, Bell I., and Keast, William R. The Procurement and Training of Ground Combat Troops, Vol 2 of The War Department, Sub-series I of US Army in World War II. Washington DC: US Government Printing Office, 1948.
- Rich, Michael, Cohen, I.K., and Pyles, R.A. "Recent Progress in Assessing the Readiness and Sustainability of Combat Forces." Unpublished Report for the Rand Corporation, 1987.
- Reese, Timothy J. Sykes' Regular Infantry Division, 1861-1864. Jefferson, NC: McFarland Company, 1990.
- Stuckey, COL John D., and Pistorius, COL Joseph H. Mobilization of the Army National Guard and Army Reserve: Historical Perspective and the Vietnam War. Unpublished Report for the Strategic Studies Institute, US Army War College, 1984.
- US Congress. House. An Act Donating Public Lands to the several States and Territories which may provide colleges for the benefit of Agriculture and Mechanic Arts. Act of July 2, 1862, 37th Congress, 2d Session, 1862.
- US Department of the Army, US Army Pacific. "The 29th Infantry Brigade (Separate), 1 January 1968 through 30 June 1970 (U)". (Unpublished after action report). Schofield Barracks, HI: HQ, USARPAC, 1971.
- , US Continental Army Command. "Mobilization Production Times, TOE and TD Units as of 15 January 1960". (Unpublished letter of instruction). Fort Monroe, VA: HQ, CONARC, 1960.
- , Office of the Assistant Chief of Staff for Force Development. Mobilization of Reserve Forces, 1968 (U)". (Unpublished after action report). Washington DC: OACSFOR-OT-UT, 1968.

US Department of Defense. Annual Report of the Secretary of Defense, FY53. Washington DC: US Government Printing Office, 1953.

----- Annual Report of the Secretary of Defense, FY60.
Washington DC: US Government Printing Office, 1960.

----- Annual Report of the Secretary of Defense, FY62.
Washington DC: US Government Printing Office, 1962.

----- Annual Report of the Secretary of Defense, FY68.
Washington DC: US Government Printing Office, 1968.

----- Annual Report of the Secretary of Defense, FY72.
Washington DC: US Government Printing Office, 1972.

----- Annual Report of the Secretary of Defense, FY82.
Washington DC: US Government Printing Office, 1982.

----- Readiness Assessment of the Reserve Components, FY 84. Washington DC: US Government Printing Office, 1984.

----- Readiness Assessment of the Reserve Components, FY 86. Washington DC: US Government Printing Office, 1986.

----- Readiness Assessment of the Reserve Components, FY 87. Washington DC: US Government Printing Office, 1987.

Weigley, Russell F. The American Way of War. Bloomington, IN: Indiana University Press, 1973.

----- History of the US Army. Bloomington, IN: Indiana University Press, 1984.

Wilson III, Bennie J., ed. The Guard and Reserve in the Total Force: The First Decade, 1973-1983. Washington DC: US Government Printing Office, 1985.

VITA

The author, Edward Donnelly is a Regular Army Armor officer. He is a 1978 graduate of the United States Military Academy, where he received a Bachelor of Science degree with concentrations in History, Political Science and International Relations. From 1987 to 1990, he was an Assistant Professor of Military Science at Boston University in Boston, MA and an Associate Professor of Military Science at Bentley College in Waltham, MA.

In 1991, he received a Master of Arts degree in Management from Webster University of St Louis, MO. He is currently a candidate for a Master of Public Administration in Organizational Behavior at the University of Missouri in Kansas City, MO and for a Juris Doctor from Suffolk University in Boston, MA.

Major Donnelly is a graduate of the United States Armor School's Armor Officer Basic and Armor Officer Advanced courses; the United States Army Infantry School's Basic Airborne, Ranger and Pathfinder courses; the United States Army Air Assault School; and the US Army Combined Arms and Services Staff School. He holds several military awards and decorations including the Meritorious Service Medal w/2OLC; Army Commendation Medal w/2OLC; Army Achievement medal and the Expert Infantryman's Badge.

He is presently a student at the US Army Command and General Staff College at Fort Leavenworth, KS enroute to an assignment with the 24th Infantry Division (Mech) at Fort Stewart, GA.

INITIAL DISTRIBUTION LIST

1. Combined Arms Research Library
US Army Command and General Staff College
Fort Leavenworth, KS 66027-6900
2. Defense Technical Information Center
Cameron Station
Alexandria, VA 22314
3. COL Howard W. Kietzman
Combat Training Centers Programs Directorate
Combined Arms Command -- Training
Fort Leavenworth, KS 66027-7000
4. LTC Anthony L. Barnhill
Army National Guard Advisor
Combined Arms Command -- Training
Fort Leavenworth, KS 66027 -- 7000
5. LTC(P) August W. Smith
c/o Development Dynamics
PO Box 26026
Austin, TX 78755