USAWC MILITARY STUDIES PROGRAM PAPER

THE FEASIBILITY OF A CADRE APPROACH TO MOBILIZATION

AN INDIVIDUAL STUDY PROJECT



by

Lieutenant Colonel William E. Carter, Infantry

Commander G.E. Blum, USN Project Adviser

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U.S. Army War College Carlisle Barracks, Pennsylvania 17013 1 May 1990

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ABSTRACT

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Over the past several months remarkable changes have occurred in world affairs which have had a significant impact on the United States. These changes have, in turn, affected the future of the U.S. Army. No longer can it afford to focus primarily on its role as the defender of Central Europe and the containment of Soviet expansion. If it is to survive as a viable element in the nation's defense, it must make drastic changes. One of the primary factors in this process will be a more dedicated effort toward the Total Army Concept. As budgets plummet, personnel strengths decline, and new strategies, concepts, and doctrines emerge, how can the Army best meet these demands and still retain an effective fighting force? This paper concerns one possible alternative, a cadre approach to force structure for meeting future mobilization and mission needs. It focuses on the future of the Army, addresses problems of the existing reserve component system, examines other nations which employ the cadre system, and finally, considers the possible use of this system by the U.S. Army.

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A CADRE APPROACH TO MOBILIZATION

CHAPTER I

INTRODUCTION

Since the end of World War II, the Army's role in the nation's affairs has been one of containment of Soviet expansion and the defender of Central Europe. To meet the demands of the past forty-five years, the nation has maintained the largest peacetime Army in its history. Many feel that the Cold War has been won and is in the process of validating this victory by proposing various cost savings measures in the United States' military structure. The Army's role will specifically be altered and the impact will focus on drastic cutbacks in both manpower and funding. It is crucial that the Army not only reassess its role regarding national defense, but give serious consideration to force restructuring. With more responsibilities being given to the Reserve Components, readiness and the ability to quickly mobilize are prominent areas of concern. The existing reliance is inadequate, but with some modifications and proper long range planning, the Army can emerge from the impending cuts a stronger, better structured, more effective force. Utilizing a cadre system in conjunction with the Reserve Component forces to help resolve readiness and manpower problems would be a somewhat different, but necessary change.

Foreign nations utilizing a cadre system to meet mobilization requirements offer several variations, but all contain certain basic characteristics. Designated divisions are maintained during peacetime with a small central core of regular army officers and non-commissioned officers. Upon mobilization these units are brought up to full wartime fighting strength by reservists. This simplistic approach is deeply rooted in military history, but still has relevance in the armies of today. It improves readiness, upgrades training, maintenance, administration and logistics, while reducing mobilization times, manpower levels, and defense funding. The cadre system offers solutions to many of the changes which will be demanded of the Army. It is evident that the current Reserve Component system is inadequate for meeting both current and future requirements. With political leaders proposing a reduction in military manpower based predominantly on budgetary instead of national strategic concerns, the Army should view this as an opportunity to press for force structure changes. It should define the size force needed to meet the national strategic demands and propose a long-term program for force restructuring. Although benefits would be realized across the spectrum from manpower and training to maintenance, logistics and readiness, the emphasis would focus on cost savings. By incorporating certain aspects of the cadre system, both the Active and Reserve Components will benefit and for the first time embrace the "Total Army" concept.

BACKGROUND

For the past several months, numerous newspaper and magazine articles, as well as television news reports have been covering the democratic reform movements in the European eastern block countries and Gorbachev's overtures of dismantling the Soviet military to boost a sagging Russian economy. This, in turn, has led to discussions questioning the necessity of NATO; an issue more prevalent from American sectors than European. It even prompted a former U.S. Ambassador to NATO to write an article that enumerated six key points specifically delineating the need for NATO's continued existence.¹ Still other reports indicate that U.S. intelligence capabilities can now provide the Pentagon with a one to three month warning of a full scale Soviet attack in Europe instead of the previous wartime planning figure of fourteen days. Secretary of Defense Cheney said recently that the risk of a Soviet attack is the lowest since World War II.² Even the arms negotiations talks in Geneva reflect an optimistic and confident air with the recent announcement that two joint verification exercises would begin well before a strategic arms reduction treaty is signed. 3

These changes, in addition to a heightened concern by the U.S. over the national debt and its realignment of governmental priorities, have not only impacted on the nation, but on the Army as well. One news source indicated that Army officials were planning to deal with the anticipated cuts in

American and Soviet troops in Europe by reshaping itself into a fast-reaction force that would primarily be based in the United States.⁴ Another source said the Army would be reduced from a 28-division force to a 23-division "contingency Army." Most of its forward-deployed Pacific forces would be maintained and the two corps headquarters in Europe would be reduced to one consisting of two divisions and two armored cavalry regiments. The requirement to have ten divisions in Europe in ten days would be changed to having six or seven divisions within about 15 days.⁵

Further changes will see a budget cut in FY 92-94 totaling \$180-billion in addition to a 17% reduction in personnel. This includes approximately 135,000 active duty troops, 135,000 reserve component troops, and 60,000 civilian personnel. Since the Army that would remain intact by 1994 has already been modernized, continued modernization reductions are unavoidable. The Army has already proposed stopping the production of the M-1 tank, and reduced procurement of the TOW, Hawk, and Hellfire missiles.⁶

Now the Army is faced with the problem of maintaining a highly trained force which can deploy earlier than now required and be able to focus on a variety of contingency missions while still retaining its combat effectiveness. Basically, it is being asked to do more with less, a lot less.

THE FUTURE

One can't help but be concerned about future changes. Questions of primary concern remain yet to be answered. What will be the future role of the Army and how can it best meet and maintain the desired readiness levels with severe manpower cuts? What military strategies will be derived from the national strategies and how will the Army respond to needed structure changes? Although democracy is making notable gains worldwide, there is much political instability and the global defense requirements of the U.S. still remain.

A recent study conducted by the Rand Corporation for the Army addressed the possible alternatives facing today's force regarding its future role. Some of the challenges facing the leadership were identified as:

> •The role of military capabilities may be less in waging war (or in deterring the threat of war) and more in deliberate activities to prevent or limit war and to

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maintain the peace.

- •The active military forces are likely to shrink, perhaps significantly.
- •Conventional forces for major, sustained conflicts are likely to be deferred to mobilization rather than maintained for readiness.
- •Forward basing may decline, if not disappear--possibly suddenly.
- •Ready forces committed into combat are likely to be smaller and more mobile, designed for quick insertions as tokens of political commitment or outrage, and limited to tasks that can be accomplished rapidly and decisively and/or with minimum casualties.
- •The meaning of national security is likely to expand from its prior focus on military means for containing communism to dimensions beyond military power, and from a few, traditional points of "vital interest" to the world at large.⁷

In response to these challenges, eight possible future visions for the Army were discussed and evaluated. The study narrowed its final assessment to an Army that is centrally based in the United States and performing "general military service," or a greater focus on national domestic issues.⁸ This includes the indirect, as well as direct provision of combat power. Basically, its execution of military duties is no longer primarily linked to the battlefield, but would expand in other areas such as:

Advising members of foreign countries.
Providing intelligence and medical support.
Patrolling and protecting the nation's borders.
Performing construction projects under adverse conditions.

•Protecting the environment.9

The force structure could consist of either active forces according to one vision or reserve forces as depicted by another. Even if a reliance on an active force structure was decided upon, there would have to be a more concerted effort made to mobilize reserve forces should a national emergency arise. Regardless of the vision, the Army the study predicted for the future was a smaller Army.¹⁰ There will be an absolute necessity for a well trained force that can mobilize quickly without the need for a major train-up period. The National Guard and Army Reserve will obviously continue to play a significant role. The question is, if the Army refuses to heed advice from such studies and rejects change, how effective will it be in meeting future demands under the current system?

ENDNOTES

¹ David M. Absire, "Don't Muster Out NATO Yet," <u>Wall Street Journal</u>, 11 December 1989, p. A-14.

² Michael R. Gordon and Stephen Engelberg, "Europe's Changes Mean Earlier Word of Attack," <u>New York Times</u>, 26 November 1989, p. 18.

³ "Arms Negotiators, Friendly and Confident, Announce Agreements," <u>New</u> <u>York Times</u>, 9 December 1989, p. A-10.

⁴ Michael R. Gordon, "The Military Math of Peace in Our Time," <u>New York</u> <u>Times</u>, 17 December 1989, p. 1-E.

⁵ Benjamin F. Schemmer, "Army Volunteers 5-Division Cut by 1994, to be Remolded as a 'Contingency Army," <u>Armed Forces Journal</u>, January 1990, p. 14.

6 Ibid.

⁷ John Setear, Carl Builder, and Melinda Baccus, <u>The Army in a Changing</u> <u>World: The Role of Organizational Vision</u>, Rand Corporation, p. vi.

⁸ <u>Ibid.</u> p. 61.

⁹ Ibid. p. 29.

¹⁰ Ibid., p. 75-76.

CHAPTER II

THE CURRENT RESERVE COMPONENT SYSTEM

It is quite evident, change is on the Army's horizon. But to what extent will its planners be able to implement force structure initiatives that will satisfy future strategic requirements? The Reserve Components are at the very heart of this issue. One needs to understand not only the past political efforts and resolutions regarding Reserve Component matters, but also their present problems. Without this basic understanding, mistakes of the past will be repeated, resulting in the situation remaining unchanged. This history should be studied and applied to the future with new solutions sought. During today s climate of change, the Army should study the force structures of other armies to determine how it can best meet its global requirements with minimum active forces. A cadre system of force structuring, as explained in Chapter I, is one feasible alternative.

A HISTORICAL PERSPECTIVE

Since the beginning of our nation's history, the purpose of the National Guard, or militia as it was originally called, was one of national defense. Washington urged its formation in 1783 because he realized the country was not ready for a regular active army. His intent was for a national militia, and although it would be based in each state, he clearly intended it as a defense for the new country. It was to be well disciplined and trained twelve to twentyfive days a year in squad through brigade drills.¹

Anti-Federalists felt a regular Army under direct federal government control could become an instrument of tyranny. To prevent this from happening, they advocated that control of the militia should be retained by the states. Eventually a compromise was reached whereas the Constitution provided for the states to train the militia, but Congress would have the authority to organize, arm, and prescribe its training. With the Constitution establishing a sound basis for a militia system, legislation was now required to structure and organize the force. Subsequently, the Militia Act of 1792 was passed and after being heavily amended, failed to give the nation an organized militia that was trained, equipped, and required to meet national standards. Congress refused to follow the plans of Washington and the Federalists, and as a result, placed the nation's defense at risk.²

The following century brought little change. States failed to muster and train their units and some abolished their militia. In 1812, 1848, and 1861 several governors refused the call for militia troops due to their disagreement with the President over the perceived threat to the country. Even the legality of using militia forces outside the United States was questioned.

Thus, several legislative acts were passed between 1903 to 1933, which formulated the National Guard as it is known today, and was more in compliance with the concepts of Washington and the Federalists of the 1790's. Realizing there would be continuing problems with sending the National Guard outside the continental United States, Congress established the National Guard of the U.S. in 1933, which was identical to the states' National Guard. The National Guard of the U.S., known today as the Army Reserve, became another component of the Army's reserve force.³

Since 1933, the United States has had three components to its Army's land force: an active component, the National Guard, and the Army Reserves. A very politically charged atmosphere evolves when state governors veto training missions in opposition to Presidential policies. Today, as in the past, controversy has arisen over a governor's power to withhold National Guard troops from peacetime training in Central America. In April 1989, the Supreme Court rejected an appeal by Massachusetts which objected to sending members of its National Guard on foreign training missions. A similar case by Minnesota will receive a ruling in July 1990.⁴ This controversy is one which has reached a boiling point several times in the nation's history and is unlikely that the July ruling will be the last. It not only questions the effectiveness of the national system, but if a veto were ever successful, it would undermine the very foundation of the national defense system. 7

A POLITICAL LESSON LEARNED

As indicated by recent history, one solution to this issue would be to merge the two separate Reserve Components into one. After all, a single reserve element works well for the Navy and Marines. It would streamline the Reserve Component organization, assist in standardization, simplify administration, reduce costs, expedite modernization, improve quality, more effectively integrate force structure changes, and greatly enhance mobilization. Although this may be true, one must remember the political realities of the situation. The merging of the Reserve Components is politically distasteful.

This issue originally surfaced in 1948, by the Gray Board, which was a committee headed by Assistant Secretary of the Army Gordon Gray. It studied the complexity of having both a National Guard and an Army Reserve. The board concluded that to serve satisfactorily in its accepted national role, "the National Guard must be directly under federal control."⁵ It was highly critical of the National Guard despite its performance in World War II. This success, according to the Gray Board, was due to its being under federal control and having two years to prepare prior to entry into combat. Needless to say, the report suffered an untimely death due to the resentment by the National Guard and the inevitable political barrage that ensued.⁶

Again during the mid-1960's, Secretary of Defense Robert S. McNamara resurfaced the issue which he had originally obtained from former President Eisenhower.⁷ This attempt to merge the Reserves into the National Guard involved a combined manpower cut of 60,000 personnel with a \$150 million a year savings.⁸ The frustration of this effort was best expressed by a former White House staff member:

> "Eco-political involvements are nowhere more clearly visible than in the status of the National Guard and Reserve programs...These citizen soldiers are so solidly entrenched politically that no one in Washington dares challenge them frontally."9

In order to successfully implement any change to the existing structure, it must not ignore the political factor or undermine either element of the Reserve Components. To neglect politics, as discovered by the Gray Board and the former Secretary of Defense McNamara, is to guarantee failure.

RESERVE COMPONENT PROBLEMS

It is without question that the Reserve Components are far better off today than prior to the Vietnam War. Critical areas such as manpower have seen both qualitative and quantitative increases. Equipment shortages have been improved and training opportunities greatly expanded. Despite these efforts, much remains to be done.

Problem areas exist and some critics question whether or not many of the roundout units could meet their deployment schedules when mobilized, and if so, could they then accomplish their assigned mission?

When questioning a unit's effectiveness, one of the tools utilized is the readiness report. Ratings are given in the areas of personnel strength, individual skill qualifications, equipment on-hand, equipment condition, and unit training. Each area receives a rating of C-1 (fully combat ready) to C-4 (not combat ready). Using this as a basis, one can ascertain any significant problem areas. The following table shows the percentage of Reserve Component units receiving a C-3 or higher rating during 1983 versus 1987.¹⁰

Percentage of Units in Category C-3 or Above

Component/Resource	<u>1983</u>	<u>1987</u>
•Army National Guard		
Composite	62	76
Personnel strength	72	83
Individual skill qualification	75	80
Equipment on-hand	56	86
Equipment condition	79	85
Unit Training	89	95
•Army Reserve		
Composite	41	56
Personnel strength	52	65
Individual skill qualification	53	69
Equipment on-hand	50	71
Equipment condition	76	76
Unit training	84	90

By Army Component Fiscal Years 1983 & 1987 Both components show a vast improvement in the four year time span, especially the National Guard. Over 76% of its reporting units received a readiness rating of C-3 or higher with no appreciable deficiencies. The Army Reserve still has significant areas of concern regardless of an overall improvement of 15%. Unit training can be particularly misleading especially when 90% of the Army Reserve units report a C-3 or higher rating in training when the other areas are considerably lower. A few other issues should be addressed regarding readiness.

- •Reserve units are at a much lower level of readiness than National Guard units, yet many of them are required to deploy earlier than National Guard units because of their Combat Support (CS) and Combat Service Support (CSS) roles in support of active units.
- •Assuming that 76% of the National Guard units in fact have a C-3 or higher rating, their exact rating will have a major impact on the amount of training time required to bring them up to standards following mobilization.
- •Although Army Reserve units could meet the M+60 deployment schedule, there would be a 37% shortfall of combat units and 31% shortfall of CSS units during the first month.

Individual skill qualifications, in conjunction with unit deployment schedules, are another critical factor. In 1986, of the 1,656 National Guard battalion size and smaller units, 202 (12%) were rated not combat ready due to lack of qualified personnel, of which 62 were scheduled for deployment by M+30 days. Of the 1,772 Reserve battalion and smaller units, 643 (36%) were rated as not combat ready due to lack of qualified personnel. Of these 643 units, 228 (35%) were slated for deployment in the first 30 days.¹¹

Equipment shortages have always been a problem to Reserve Component units. Historically, the active Army has done a poor job in equipping them, taking a "we versus they" attitude, feeling that an upgrade of reserve forces would be a detriment to the readiness of the active force. The present policy of "first-to-fight, first-to-be-equipped" is a definite improvement.

Much of the equipment which Reserve Component units will deploy with during full mobilization is non-compatible with its Active Component counterparts. Three examples: (1) The Reserve Component inventory has four different tanks, with four different major weapons systems, and four different logistical support requirements, compared to three in the Active Component inventory. (2) Communications problems were highlighted in a recent REFORGER Exercise when it was discovered that Reserve Component and Active Component communications equipment would not net. (3) In 1987, only 62% of the National Guard equipment was compatible with the Active Component supply and maintenance system; for the Reserves, less than 50%.¹²

An easy resolution to many of the problems affecting the Reserve Components is to increase the quantity and quality of training time. Such a move was initiated by selecting certain National Guard units to attend exercises at the National Training Center (NTC), but this initiative had some drawbacks. In a study conducted following the rotation of the first seven National Guard units, it was found that attrition was 29% higher than that of comparable units not attending the NTC. Causes for attrition were family conflicts, employer problems, loss of income, and physical conditioning, performance, and attendance standards. The study also found that unit training was enhanced, there were improved standards for recruitment, reenlistment, promotion, and an improved relationship with the Active Component affiliated units.¹³

Faced with the dilemma of attrition versus improved training in the reserve sector, what then is the answer? Some of the study's conclusions advocated: NTC rotations approximately every three years; the length of rotations for the National Guard should be shortened slightly; recognize the fact that more training time is needed than the normal 39 annual training days; implement a monetary compensation plan to offset lost civilian income; and ensure advertising reflects a new image of the National Guard as a vital military organization that has an important role in the nation's defense.¹⁴

Perhaps the greatest problem plaguing the National Guard and Reserves outside the realm of military issues, is that of politics. Since World War II, there has been a considerable amount of political ignorance exercised concerning mobilization efforts during the Korean War, the Berlin Crisis and the Vietnam War.

The most prevalent and damaging political example was the Presidential decision in 1965 to rely on the draft rather than the reserves for the expansion of the U.S. effort in Vietnam. That decision not only sent the wrong message to the enemy, underscored America's reluctance for a quick

resolution to the war, but attached a stigma to the reserves that still has damaging effects today. The overriding political consideration was that if mobilization occurred, it would detract from the Great Society program and underscore an already questionable determination of the American public regarding the war.¹⁵

It is imperative that more resolve be exercised in the future by invoking the War Powers Act to attain national will and Congressional committment. This will not only express U.S. purpose, but demonstrate needed confidence in the Reserve Components.

A CLIMATE OF CHANGE

Despite the various forces which shaped the reserve system and the many problems it faces today, revitalization efforts are ongoing. These include personnel, training, equipment modernization and Presidential Callup authority.

The 1970's saw conscription end and with it a decline in manpower quality and quantity. From 1972 to 1979 high school graduates in the reserves dropped from approximately 90% to 45%. The number of reserve members scoring in the lowest acceptable mental category increased from 10% to 25% By the end of the decade the Reserve Component was short approximately 133,000 soldiers.¹⁶ Training was still hampered by a lack of facilities and proper equipment and the Presidential Call-up only provided an authority to activate 50,000 members of the Selected Reserves for a period not to exceed 90 days without a declaration of war or national emergency.

Change began gradually, but became much more prevalent in the following decade. Presidential Call-up authority was expanded to 100,000 reservists in 1980 and doubled again in 1984 to 200,000. Significant increases in pay and benefits authorized by Congress saw the personnel strength of the Reserves increase to 145,000, the percentage of high school graduates reached 96%, and the below average aptitude category drop to 5%¹⁷

The 1980's had clearly been a turning point for Reserve Components. Great strides had been made in recruitment, training, equipment, call-up authority, and one other area seldom discussed, a dramatic growth in the number of full-time cadre. The National Guard advisors increased from 29,000 in FY 1980 to over 54,000 in 1987. The Army Reserve advisors grew from 17,000 in FY 1980 to 25,600 by FY 1987.¹⁸ To date, the Army has resisted efforts to increase the number of active duty soldiers serving with reserve units. If the Army is to truly embrace the "Total Army" Concept it should seriously explore this 'cadre" option. If done, then such a move will have a favorable impact on the resolution of every Reserve Component problem addressed in this chapter.

ENDNOTES

¹ Samuel J. Newland, "The National Guard: State Versus National Control," <u>Reserve Components: Organization, Roles, and Current Issues</u>, 1990, p. 56.

² <u>Ibid.</u>, p. 60-62.

³ <u>Ibid</u>., p. 64.

⁴ James Rubin, "Justices to Weigh Foreign Training for Guard Troops," <u>Patroit-</u> <u>News (Carlisle, Pa.)</u>, 9 January 1990, p. A-3.

5 S.L.A. Marshall, "McNamara's Latest Reform," <u>The New Republic</u>, 23 January 1965, p. 14.

6 <u>Ibid</u>.

⁷ Henry L. Trewhitt, <u>McNamara-His Ordeal in the Pentagon</u>, p. 111.

⁸ Martin Binkin and William W. Kaufman, <u>U.S. Army Guard & Reserve:</u> <u>Rhetoric. Realities, Risks</u>, pp. 32-33.

⁹ Douglass Cater, <u>Power in Washington: A Critical Look at Today's Struggle to</u> <u>Govern in the Nation's Capital p. 41</u>.

¹⁰ Martin Binkin and William W. Kaufman, <u>U.S. Army Guard & Reserve:</u> <u>Rhetoric. Realities. Risks</u>, p. 93.

¹¹ <u>Ibid., p. 95.</u>

¹² Ken Strafer, LTC, "A Commentary on the Army Reserve Component," <u>Military Review</u>, May 1989, p. 71-72.

¹³ David W. Grissmer and Glenda Nogami, <u>Retention Patterns for Army</u> <u>National Guard Units Attending the National Training Center</u>, pp. 38-39, 64.

14 <u>Ibid., pp. 65-67.</u>

¹⁵ Martin Binkin and William Kaufman, <u>U.S. Army Guard & Reserve: Rhetoric,</u> <u>Realities, Risks</u>, pp. 50-62.

16 <u>Ibid.</u> pp. 65-70.

17 Ibid.

18 Ibid.

CHAPTER III

THE CADRE SYSTEM

It is evident that the United States Army will soon experience significant changes. With the Soviet threat diminishing and optimism prevalent at the arms negotiations in Geneva, the result will be an Army facing sizable personnel, budgetary, and modernization cuts. Although there is no clear vision, as yet, on the future missions and structure of the Army, one facet remains clear. There will be an increased need for Reserve Component elements that are properly manned, equipped, trained, and can mobilize quickly without a major training period prior to deployment. The current system has serious shortfalls, but with minor changes, these can be eliminated. One potential solution is the "cadre system" of force structure which will also improve mobilization. When one examines history and sees its application in today's armies, there is no doubt as to it being a viable alternative for the "Total Army."

A LOOK AT THE PAST

A cadre approach to force structure, which in turn greatly assists mobilization, is not a new or innovative idea. It is one which has existed for quite some time and has a sound historical basis. Perhaps the best historical example of this system dates back to the Prussian Army.

One area in which this Army's general staff excelled was the mobilization of its forces. The preliminary process established in preparing the Army for war was almost mechanical in nature. Several goals were to be achieved by the Prussian Army when the mobilization order was given. Initially, the alert and call-out of the reserve elements and horses were conducted, followed by the distribution of men and equipment among the various corps, and finally the creation and completion of staffs and different services of supply. This entire process was minutely planned and regulated by the General Staff so that once an alert was given, the operation was expeditiously executed in a matter of days. No regiment ever departed its unit location until complete readiness had been accomplished.¹

This ability to mobilize so quickly was attributed to the cadre system which was employed by the Prussian Army, the details of which were kept secret. As an example, the war fighting strength of a company was 240 soldiers; however, during peacetime it was maintained at 50 % or 120 men. Each year the company discharged forty men into the reserves and would receive the same number of new recruits. Once a mobilization announcement was made, it was the duty of 120 reservists who had previously served with the unit to report to their company headquarters, usually within three days.²

The company commander maintained a roster and a complete new set of equipment for each soldier. Upon arrival, they were medically checked by a doctor, drew equipment, and reported to their posts. The completed company was now manned at a wartime level with each soldier assigned specific responsibilities. No one, from general to bugler, was assigned more work than could possibly be performed in the allotted time.³ This ensured that the entire mobilization procedure was promptly and efficiently completed.

This cadre system, whereby reservists brought active duty peacetime units up to wartime manning levels, proved very successful and its principles were widely copied. One should not assume that this was a mobilization of small proportions. In 1866, for example, the King of Prussia mobilized the Army to bring it up to a wartime fighting strength of 326,000 men. This was accomplished in phases from 3-12 May in preparation to fight Austria.⁴

CADRE SYSTEMS OF TODAY

Some feel that a cadre system utilized so long ago would have questionable value today. To dispel this attitude, all one has to do is look at the modern nations which employ the cadre system, both in a peacetime and a wartime environment. In satisfying this requirement, the German Democratic Republic (GDR) and Israel offer excellent examples.

For many years following World War II, little attention was paid to the GDR's army since it was so ill equipped and primarily augmented the Soviet forces stationed in East Germany. However, in the early 1970's, a transformation began which converted it into a mainstay of the Warsaw Pact 16

alliance in Central East Europe. Its forces today are kept in a state of alert that rivals the most elite of Soviet forces.⁵ It is important to note that its peacetime forces are among the smallest in the Warsaw Pact, yet possess significant military power.⁶ The source of the transformation is obvious. What comes into question is the sustaining element that ensures the army maintains its quality, professionalism, and readiness.

One of the primary reasons it can maintain a small peacetime contingent, yet convert itself into an army of considerable military might is its use of the cadre system. The reserve force composes 65% of the GDR's total army force of 619,000. A core of full time military professionals are engaged in training draftees for 18 months, and while actively serving, constitute approximately 60% of the active force. Should mobilization occur, this cadre would augment the four additional reserve divisions and supporting units.⁷

After 18 months of service, the soldier is discharged and required to report within four days to one of the 218 Wehrkreiskommando headquarters. He then becomes a member of a reserve collective made up of 10 to 100 reservists and is required to participate in three months of annual training per year until a total of 24 months has been accumulated. In addition, exercises lasting up to eight days are conducted to maintain the speed, readiness, and the secret nature of the reserve mobilization system. Another group of 250,000 men also have a reserve commitment until age 50.8

The active force supports reserve organizations by providing instructors and equipment in addition to designating fourteen military district commanders. They have the responsibility not only for training, but for preparing reservists for duty. To ensure their officer cadre members receive the necessary attention, extensive training and education is provided in the Soviet Union. More attend Soviet schools from the GDR than any other Warsaw Pact country.⁹ It is a comprehensive system that is highly effective and is considered a model of mobilization preparedness.

Perhaps the best known nation in modern times using the cadre system is Israel. It came about as no mistake, but evolved from necessity. Its proponents in the late 1940's were David Ben-Gurion and Yigel Yadin. Their task was to convert an underground militia into a regular army. The dichotomy of the problem was creating an army of sufficient strength to defend Israel, but not so large as to be a drain on the limited manpower. 17

The model settled upon was that used in Switzerland. The first Chief of Staff of the Israeli Army, Yigal Yadin, was very impressed by the Swiss system and stated: "Before I was appointed Chief of Staff in 1949 I spent a few months in Switzerland on behalf of the army, and was surprised to find that the system which we had in mind was being successfully practiced there with some variations."¹⁰ Thus it was decided that the army would consist of three components:

> Keva-Permanent service corps consisting of a small cadre of career officers and non-commissioned officers, responsible for the army's leadership and training and war preparations, and the development and implementation of new weapons systems and the maintenance of the military's resources.
> Hova-Compulsory service into which everyone is

conscripted upon reaching age eighteen.

•Miluimm- Consists of a large body of standing reserves which includes those soldiers who have completed compulsory service. This is the army's main body.¹¹

The uniqueness of this structure lies in the fact that the reserve forces were not merely an extremity of the regular army, but comprised its most important operational component.

Each reserve brigade has a small permanent regular staff to do administrative details, oversee logistical matters, maintain equipment and serve as the nucleus for mobilization. An assigned liaison officer maintains close contact with assigned reservists as well as with the battalion commander, who is also likely to be a reservist. It is not uncommon for the latter to personally verify the addresses of his personnel to ensure they are properly registered so the call-up teams can readily locate their assigned residences.¹²

There are two primary methods of mobilization, either publicly through the use of television, radio, press, and cinema, or secretly. If done publicly, code words may be used that identifies which units are to assemble. Once mobilization occurs, it is a very systematic process much like that of the Prussian Army. The reservists report to their mobilization center where rations, equipment, small arms and crew-served weapons are drawn. Once completed, unit transportation arrives and they are moved to a concentration area where their unit is consolidated and briefed.¹³ Most reserve brigades are ready for deployment in less than twenty-four hours.¹⁴

The success of this mobilization system is not only the small core of active duty cadre, but also the overall quality of the soldier in Israel. Once a soldier's eighteen months of active service is fulfilled, he becomes a member of the reserves and is subject annually to a period of training, usually 31 days, plus a period of additional duty which is determined by his unit. Upon reaching age thirty-nine, which may vary by unit, the yearly training requirement drops to fourteen days. At age forty-five he has the option to either remain with his unit or become a Home Guard. If he elects the latter, he is asked to perform these duties for an additional ten years 15

Although there are some varying differences in the GDR and Israeli cadre systems, both are highly effective and warrant study. Manpower levels are achieved, training standards are maintained, readiness is not impaired, research and development continues, and defense spending is greatly reduced.

PROPOSALS FOR TODAY'S ARMY

When discussing the best method of structuring an army to achieve mobilization, thus insuring a viable deterrent force, it helps to have an appreciation of several factors. One should possess a vision of tomorrow's Army, understand the political climate, and have an appreciation of mobilization history. There should also be an awareness of existing Reserve Component problems, with an open acc-ptance toward both old and new resolutions. With this in mind, there are several options to consider in resolving the manpower mobilization problems facing the Army.

The first of these would be the federalization of the National Guard which was attempted by the Gray Board in 1948, and ended in abject failure. This option would, in essence, give the United States a single reserve force and avoid many of the problems of duplicity that plague today's Army. In addition, the shortfalls addressed in 1948 by the Board were still prevalent in 1965 and continue to exist today. Six of the key findings were:

> •Authority over the National Guard is at times in direct conflict with where responsibility ultimately lies. In essence, the President has ineffective control over the Guard, but is held responsible for national security.

- •The Army has no positive means of control over the National Guard. If an officer is unsatisfactory, it cannot exercise initiative to supply a satisfactory one, but only withhold his federal recognition.
- •The Army can approach the state governors only through the National Guard Bureau. Questions regarding control. organization, and training are resolved by informal agreements between state and federal officials. They have no legal basis and may be negated by a governor at will.
- •These expedients, resulting from dual control, produce a constant turmoil of bickering, recrimination, factionalism, and stalemate.
- •Any state governor can abolish or disorganize the National Guard by a number of executive acts.
- •The federal government is without authority to take the initiative to restore any damage.¹⁶

Perhaps the Gray Board was closer to a solution than many would give it credit. If federalized, many of these problems would be resolved. However, the issue today is as politically volatile as it was in 1948. If ever resurfaced, it would again meet as much opposition from the National Guard Association and state governments as it did originally. This option, while a political liability for any advocate, if addressed in a different manner, could have positive effects in long-term planning. Its feasibility of adoption, however, is poor.

A second option, like the first, has already been attempted in the past and involves a consolidation of the two Reserve Components. Its major difference is that it would entail combining the Army Reserve into the National Guard, an idea proposed by McNamara in 1965. It is obvious that the views of the Gray Board and those of the former Secretary of Defense are diametrically opposed. Whereas the National Guard vehemently rejected the proposals of the Gray Board for federalization, it embraced McNamara's proposal, for it would give them added prestige and power. The merits of such a merger according to the Department of Defense were:

> •It would create a single chain of command through the National Guard Bureau, as opposed to two.

> •Approximately 200,000 paid drill spaces in unnecessary

units would be eliminated at a considerable cost savings.

- •The manning level of the remaining units would be increased.
- •Due to reduced drill strength, future retirement costs would be reduced.
- •Equipment levels in the retained units would be increased as equipment was transferred from abolished units.
- •Personnel assets in the full-time support force of the Reserve Components would be redistributed among fewer units, which would improve readiness.¹⁷

The Reserve Officers' Association objected to the merger and countered the position of the Department of Defense with the following arguments:

- •The claim of increased manning levels was false, the only increase would be in the state headquarters.
- •The command structure would not be simplified, as the merger would place assets under fifty different commanders (state governors).
- •The proposed number of divisions was inadequate to meet the threat; it was based on cost savings and not enemy capabilities.
- •It was ill-advised to reduce the Reserve Components when troop commitments were being increased in Vietnam.¹⁸

This option has as many flaws today as it did in 1965. In order for it to be adopted, it would have to undergo major legislative revisions regarding the authority over the National Guard, its state versus national responsibilities, and the amount of control to be exercised by the active Army. This option is not only another political liability that would attract significant opposition, especially from the Reserve Officers' Association, but has no short nor longterm possibilities. Its feasibility of adoption is poor.

A third option involves the adoption of a cadre system similar to that used in the Armys of the German Democratic Republic and Israel. There would of course be some modifications due to the different roles, responsibilities, and missions to which the U.S. Army must respond to as a global power. Assuming that the Army's role in the near future will change and orient more on a contingency force, then the number of active duty divisions could be designated to compose such a force on each coast. The remaining number of Active and Reserve Component divisions which Congress decides to maintain will adopt the cadre system. These divisions would be manned at approximately one-fourth strength by the Active Component and complimented by the reserve force upon mobilization. This would require greater Active Component augmentation to Reserve and National Guard units and not entail the movement of any units or changes to their structure. As proven by the German Democratic Republic and Israeli Armies, this would greatly enhance mobilization, increase training effectiveness, simplify administration, logistics, supply, and maintenance, ensure a greater cost savings, and orient the "Total Army" toward one standard.

In the early 1970's, this approach was advocated and there was serious discussion on the need for change. General William C. Westmoreland in his final report to the President on the status of the Army said that only Regular Army forces could achieve the required levels of readiness. He recommended that the Regular Army be considered a cadre that could be expanded when needed for national emergencies.¹⁹

In 1972, General (Ret.) Hamilton Howze, a former commander of the XVIII Airborne Corps proposed a cadre system where reserve divisions would be manned with an active force of no more than 25% of the authorized division strength. In his article he stated, "The 2,500-man cadre plus the reservists should come to a minimum of 115 percent TOE strength The cadre should include the division commander or the assistant division commander and a generous proportion of the general staff, at least one brigade commander, several battalion and many company and battery commanders, and key NCO's and specialists-particularly communicators and boss mechanics."²⁰

Although two of the proposals are from the past, both have aspects which can be applied today and contain lessons in how to avoid some political pitfalls. The solution to the problem confronting mobilization of the U.S. Army is not as simple as selecting one of the options. With an overall view of the Reserve Components' history, an awareness of today's political situation, and how the visionaries see the Army of tomorrow, what course would meet the Army's needs? One fact remains clear, to carry this dual Reserve Component system into the 21st Century would be an injustice to the nation.

ENDNOTES

¹ Spenser Wilkinson, <u>The Brain of an Army: A Popular Account of the General</u> <u>Staff</u>, p. 22.

² <u>Ibid</u>.

³ <u>Ibid.</u>, p. 23.

⁴ Ibid.

⁵ Jeffrey Simon, <u>NATO-Warsaw Pact Force Mobilization</u>, p. 14.

6 Ibid., p. 183.

⁷ <u>Ibid.</u> p. 188.

⁸ <u>Ibid.</u>, p.189.

⁹ <u>Ibid., p. 194</u>.

10 Samuel Rolbant, The Israeli Soldier, p. 85.

11 Reuven Gal, <u>A Portrait of the Israeli Soldier</u>, pp. 11, 30.

12 Samuel Rolbant, The Israeli Soldier, p. 83.

13 Ibid., pp. 84-86.

14 Edward Luttwack and Dan Horowitz, The Israeli Army, p. 180.

15 Interview with Lior Risin, LTC, Israeli Army, Carlisle Barracks, Pennsylvania, 15 February 1990.

16 S.L.A. Marshall, "McNamara's Latest Reform," <u>The New Republic</u>, 23 January 1965, p. 14.

17 Richard B. Crossland and James T. Currie, <u>Twice the Citizen</u>, pp. 170-171.

18 Ibid., p. 171.

19 Ibid., p. 216.

²⁰ Hamilton H. Howze, Toward Real Reserve Readiness: The Case for the Cadre System, <u>Army</u>, 12 August 1972, p. 16.

CHAPTER IV

CONCLUSION

The proposal most feasible for meeting the national security strategy and military strategy of the 21st Century is the cadre system. If adopted, it should be properly modified to accomplish the future role and missions of the U.S. Army. In addition, it should be implemented in a well thought out, planned, and phased procedure over a designated period of time.

The initial segment would require the U.S. Army to assume a more positive role in determining its future. It should identify a definitive direction based on the nation s strategic needs in the coming years, be detailed, and strictly adhered to by the Army's leadership.

Obtaining Congressional approval for the changes required in adopting the cadre system will be difficult at best. The past lessons of the 1948 Gray Board and McNamara's proposal in the mid-1960's, will provide some guidance. Political factors favoring the new system would be cost savings, an improved defense posture, cost effective troop reductions in Europe, ,equipment standardization, and a force structure that will not only compliment mobilization, but the currently proposed U.S. based contingency force as well. Congress should also be made aware of the fact that the cadre system will negate the need for future reductions in force since it can demobilize its manpower as swiftly as it was mobilized. Under the cadre system, manpower demobilization will have no adverse effect on the overall readiness posture of the Army.

As proven in the past, the political system will not allow any quick, drastic changes in the Reserve Components' structure. The transition should allow for this and have the change gradually phased over a period of ten to twenty years. The first phase would be the placement of active duty soldiers into the Reserve Component units. This phase would allow time for the Army to decide on the proper cadre structure and percentage of mix. Initially, only combat units would be affected, followed by expansion into other units in the maintenance, logistics, transportation, and medical fields. Objections will undoubtedly be voiced by the National Guard and Army Reserve, but the Total Army" concept should serve as the guiding light. If they are serious players in the concept, then their support will be gained. Many times since World War II the Active Component has undergone reorganization which it did not totally agree with, but supported nevertheless.

Reserve Component concerns will encompass many issues ranging from command, promotion, schooling, regionalism of units, and ongoing support programs. None of these will be affected in Phase I with the exception of the gradual phasing out of some of the civilian support programs. Active Component augmentation would extend no further than battalion level. Duties initially performed by the Active Components include key staff functions with heavy emphasis in the personnel, training, logistics, and maintenance areas.

The second phase addresses the federalization issue of the National Guard which will ultimately be geared toward consolidating it with the Army Reserves. Further refinement of Phase I initiatives, and designating key reserve roundout units for Active Component command at the brigade and division levels will also be accomplished.

Advantages offered by the cadre system are improved mobilization and readiness, a streamlined force with a definitive structure and chain of command, and improved training, personnel administration, recruitment, retention, logistics, and maintenance. The Active Component assigned as cadre would resolve many of the internal problems in reserve units and also help alleviate excessive demands on a reservist's time. Perhaps the most attractive feature for Congress would be the realized cost savings inherent in such a system.

Now is the time to initiate change. The U.S. Army should look to the models of the German Democratic Republic, Israel, and Switzerland and modify them to meet its needs. The future demands and changes in warfare clearly identify a need. Time will be of essence and if the War Powers Act is ever evoked, the United States must have a force structure that will allow for swift mobilization. To continue with the current Reserve Component structure will not be adequate. A new direction needs to be taken that will offer simplicity, efficiency, and speed. A cadre system, properly modified to meet the nation's needs, is entirely feasible and will compliment mobilization efforts.

BIBLIOGRAPHY

1. Abshire, David M. "Don't Muster Out NATO Yet: Its Job Is Far From Done." <u>The Wall Street Journal(New York)</u>, 11 December 1989, p. A-14.

2. "Arms Negotiators, Friendly and Confident, Announce Agreements." <u>New York Times</u>, 9 December 1989, p. A-10.

3. Binkin, Martin, and Kaufman, William W. <u>U.S. Army Guard &</u> <u>Reserve: Rhetoric, Realities, Risk</u>s. The Brookings Institution, Washington, D.C., 1989.

4. Cater, Douglass. <u>Power in Washington: A Critical Look at Today's</u> <u>Struggle to Govern in the Nation's Capital</u>. Random House, 1964.

5. Crossland, Richard B., and Currie, James T. <u>Twice the Citizen</u>. Office of the Chief, Army Reserves, Washington, D.C., 1984.

6. Duncan, Stephen M. Assistant Secretary of Defense for Reserve Affairs. Memorandum for the Secretary of Defense, 7 December 1989.

7. Edwards, Robert C., LTC. <u>ARNG Premobilization Combat Readiness:</u> <u>Training for Mobilization and Training for Combat</u>. Thesis. Carliste Barracks: U.S. Army War College, 21 February 1989.

8. Gal, Reuven. A Portrait of the Israeli Soldier. Greenwood Press, 1986.

9. Gordon, Michael R. "The Military Math of Peace of Our Time." <u>New</u> <u>York Times</u>, 17 December 1989, p. 1-E.

10. Gordon, Michael R., and Engelberg, Stephen. "Europe's Changes Mean Earlier Word of Attack." <u>The New York Times</u>, 26 November 1989, p. 18. 11. Grissmer, David W., and Nogami, Glenda. <u>Retention Patterns for</u> <u>Army National Guard Units Attending the National Training Center</u>. Alexandria, Virginia, Army Research Institute, 1988.

12. Hampton, David R., Colonel. <u>Society and the Army Reserve</u>. Thesis. Carlisle Barracks: U.S. Army War College, 27 February 1973.

13. Howze, Hamilton H.. "Toward Real Reserve Readiness: The Case for the Cadre System." <u>Army</u>, Vol., 12 August 1972, pp.12-16.

14. Luttwak, Edward, and and Horowitz, Dan. <u>The Israeli Army</u>. Harper and Row Publishers, 1976.

15. Marshall, S. L. A. "McNamara's Latest Reform." <u>The New Republic</u>, Vol 152, 23 January 1965, pp.13-15.

16. Newland, Samuel J. "The National Guard: State Versus National Control." <u>Reserve Components: Organization. Roles. and Current Issues</u>, 2 January 1990, p. 56.

17. Risin, Lior, LTC. Israeli Army. Personal Interview. Carlisle Barracks, Pennsylvania: 15 February 1990.

18. Rolbant, Samuel. <u>The Israeli Soldier-Profile of an Army</u>. South Brunswick, 1970.

19. Rubin, James. "Justices to Weigh Foreign Training for Guard Troop." Patroit-News (Carlisle, Pa.), 9 January 1990, p. A-9.

20. Schemmer, Benjamin F. "Army Volunteers 5-Division Cut by 1994, to be Remolded as a 'Contingency Army,'" <u>Armed Forces Journal</u>, January 1990, p. 14.

21. Setear, John; Builder, Carl; and Baccus, Melinda. <u>The Army in a</u> <u>Changing World: The Role of Organizational Vision</u>, The Rand Corporation, 1989. 22. Strafer, Ken, LTC. "A Commentary on the Army Reserve Component." <u>Military Review</u>, May 1989, p. 71-72.

23. Trewhitt, Henry L. <u>McNamara-His Ordeal in the Pentagon</u>. Harper & Row, Publishers, 1971.

24. Turner, C.K., Colonel. <u>A Mobilization Concept for the Future</u>. Thesis. Carlisle Barracks: U.S. Army War College, 28 April 1989.

25. Tyler, Patrick E., and Smith, R. Jeffrey. "Bush Alerted in May to Soviet Military Cuts." <u>Washington Post</u>, 11 December 1989, p. A-1.

26. Wilkinson, Spenser. <u>The Brain of an Army: A Poplar Account of the</u> <u>General Staff</u>. Westminister Archibald Constable & Company, 1895.