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ALTERNATIVE APPROACHES TO ORGANIZING, TRAINING AND ASSESSING ARMY AND MARINE CORPS UNITS

Part I: The Active Component

John C. F. Tillson
Steven L. Canby

November 1992

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This study comprises two parts. Part I develops alternative approaches to organizing the active component of the Army and Marine Corps in the face of anticipated budget cuts. Part II develops alternative ways of organizing, manning, and training reserve component combat forces.

Part I: One way to improve training readiness in active component units is to change Army and Marine Corps policies and keep people together in units longer. The Unit Stability Program is designed to achieve that goal. Ready Standby Organization provides a way for the Army and Marine Corps to preserve active component force structure and training readiness in the face of budget cuts.

Part II: The training readiness of reserve component combat maneuver units can be improved and their post-mobilization deployment times can be reduced. This will allow them to contribute more effectively to a short warning wartime scenario. Reserve readiness can be improved even further by improving simulator training of reserve units, especially in the key areas of battalion and brigade operations.

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PREFACE

This task was performed by the Institute for Defense Analyses for the Office of the Assistant Secretary of Defense for Force Management and Personnel, in fulfillment of Task T-L6-1057, Alternative Concepts for Organizing and Training the Army and Marine Corps.

This paper was reviewed by Dr. Herschel Kanter, IDA, and Mr. John Brinkerhoff, former Deputy Assistant Secretary of Defense for Reserve Affairs in the Office of the Secretary of Defense.

CONTENTS

APPENDICES

Appendix A: The Army COHORT Program
Appendix B: Glossary

FIGURES

TABLES

SUMMARY

This study comprises two parts:

- Part I suggests alternative approaches to organizing the active component of the Army and Marine Corps in the face of anticipated budget cuts.

- Part II suggests alternative ways of organizing, manning, and training reserve component combat forces.

Training readiness[1] is key to both parts:

- Success on the battlefield demands high training readiness.

- Some personnel practices limit the ability to achieve high training readiness in active units.

- Budget cuts threaten to further reduce training readiness.

- The mix of active and reserve combat units is often determined by the speed with which reserve units can deploy and that speed is a function of perceptions of their training readiness.

- While training readiness is perhaps at an all-time high, there is no comprehensive, objective measure of training readiness in routine use by the Army or the Marine Corps to measure the training readiness of combat maneuver units.

PART I

One way to improve training readiness in active component units is to revise some Army and Marine Corps policies in order to build more personnel stability in units and keep people associated with units longer. The Unit Stability Program is designed to achieve that goal. It is built around these concepts:

- Keep units together longer.

- Employ a "Regimental system."

- Exchange the individual replacement system for a unit replacement system.

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[1] Training readiness is a measure of a unit's ability to perform its mission-essential tasks to a defined standard.

- In wartime, return former unit personnel to their unit to act as fillers and combat replacements.

Ready Standby Organization appears to provide a way for the Army and Marine Corps to preserve active component force structure and training readiness in the face of budget cuts. Ready Standby Organization is built around these concepts:

- Create fully equipped "Standby" units that are manned in peacetime by fully trained people who have other peacetime assignments or who have left the active component.

- In a crisis or war, recall the members of the unit to the unit and, following limited refresher training, send the unit to war.

Both the Army and Marine Corps could react to budget cuts by placing approximately 25% of their active component force structure into Standby status.

The Unit Stability Program and Ready Standby Organization could be implemented together or singly.

PART II

This study indicates that the training readiness of reserve component combat maneuver units could be improved and their post-mobilization deployment times reduced. This would allow them to contribute more effectively to a short warning wartime scenario. Ways to reduce post-mobilization deployment times fall into 6 major areas:

- Reduce the number and difficulty of the tasks reserve units are expected to be able to carry out;

- Improve the skill levels of personnel serving in reserve units;

- Provide additional training time;

- Use more effective training techniques;

- Reduce administrative impediments to effective mobilization;

- Train in the combat theater where possible.

Preliminary analysis of one of these approaches—the use of more simulator training—suggests a potential for making significant reductions—between 20% and 40%—in current estimates of post-mobilization deployment times of reserve combat units.

Review of simulator training concepts and technologies indicates a potential for further improving simulator training of reserve units, especially in the key areas of

battalion and brigade operations. This new approach to simulator training involves the merging of virtual and constructive simulation—SIMNET and Janus—and the use of both local and wide area data transmission networks.

This report represents an initial effort to define new organizational and training approaches for the Army and the Marine Corps. Work to date on the concepts described in both Part I and Part II describe possibilities for making significant improvements in the training readiness of both the Active and Reserve Components of the Army and the Marine Corps and for preserving Active Component force structure and training readiness in the face of impending budget cuts. Implementation of these concepts would require the Services to develop detailed plans and cost estimates. Much of the data needed for these more detailed plans and cost estimates is available in Army and Marine Corps records such as those of the Army COHORT experiment and the Marine Corps Unit Deployment Program. Reorganizations and reductions already underway can provide opportunities for testing some of these concepts in the near term.

I. OVERVIEW OF THE STUDY

A. THIS STUDY HAS TWO GOALS

- Develop alternative approaches to organizing the active component of the Army and Marine Corps that will allow both Services to preserve force structure and training readiness despite anticipated cuts in resources and OPTEMPO (Part I).

- Develop and analyze alternative ways of organizing, manning, and training reserve component combat forces that will allow them to better serve the nation's needs (Part II).

B. CHANGES IN THE WORLD MAKE THIS STUDY IMPORTANT

- The defeat of communism, the end of the Cold War, and the end of the Soviet Union call for new approaches to organizing and training U.S. forces to obtain the best return for the increasingly scarce resources that will likely be available.

- Future battlefields will be very challenging and U.S. forces must be organized and trained for success on those battlefields.

C. FUTURE BATTLEFIELDS WILL LIKELY BE CHARACTERIZED IN THE FOLLOWING WAYS

- The scale of future battlefields will be smaller than what we planned when the Soviet Union was our main enemy, but the intensity will likely be the same.

- Highly complex, nonlinear operations will require high levels of individual and collective skills in operating individual weapon systems and in synchronizing the operations of a large number of small units and complex battle systems.

- High intensity combat—24 hour per day operations with 2 or 3 times as many combat "pulses" per day as in WWII—and the need to sustain operations for a period of days or even weeks (the plans for the Gulf War envisioned a period of intense combat for several weeks) will place extreme physical and psychological stresses on individuals and units.

- Increasingly capable reconnaissance and fire systems will force ever greater dispersion on the battlefield and will call for small unit excellence in order to overcome the isolation and decentralization that comes with dispersion.

- The fluid, compartmented nature of war will place a premium on sound leadership, competent and courageous soldiers, and cohesive, well-trained units. Decision making will be decentralized and subordinate leaders will be expected to act on their own initiative within the framework of the commander's intent.[1]

D. THE FUTURE BATTLEFIELD HAS IMPLICATIONS FOR TRAINING AND ORGANIZING U.S. FORCES

- Any U.S. forces committed to a future battle must be at the highest level of training readiness possible.

- American maneuver warfare doctrine (Army AirLand Operations, USMC maneuver war) demands the very highest possible combat abilities in units at the point of main effort and allows for follow-on forces that are less capable.

- Combat operations that involve greater dispersion, decentralized decision authority, and the ability to concentrate forces at the point of main effort lead to increased demands upon individual soldiers, combat vehicle crews, squads, platoons, and companies.

- Orchestrating and coordinating greater numbers of small units and decentralized decision making require more all-arms integrated training and greatly increased synchronization skills for commanders and staffs.

- The number and complexity of tasks that forces will be asked to perform will continue to increase.

- Some forces must be trained and ready to fight and win the first battle of a war that comes with little warning.

- There must be sufficient total forces to meet potential worldwide demands for U.S. forces—the need for overwhelming force.

- The forces must have the staying power, with or without conflict, to remain in place for long enough to achieve their objectives.

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[1] FM 100-5, Department of the Army, 1986, pp. 4,5.

E. UNDERSTANDING TRAINING READINESS IS KEY TO REACHING THE GOALS OF THIS STUDY

- Training readiness is a measure of a unit's ability to perform mission-essential tasks in increasingly difficult conditions to predetermined standards.

- Current measures of training readiness are primarily subjective.

- Evidence from Army field training exercises using tactical engagement simulations (TES)[2] indicates that the odds of a successful attack are dramatically increased when the attacker has a significant advantage in his level of training.[3]

- Current practice calls for units to be at a minimum acceptable level of training readiness before deployment.

    — Active component combat units are assumed to be at minimum acceptable level at virtualy all times.

    — Reserve component combat units must demonstrate their ability before deployment.

F. CONSTRAINTS ON ACHIEVING HIGH LEVELS OF TRAINING READINESS

Both Services do the best training they know how to do within their systems. Both seek to train their units to standards that are achievable by units that must operate within their systems. These systems are characterized by important constraints:

- Both Services will have increasingly limited resources to support training and maintain OPTEMPO. They must find ways to make the best possible use of these resources.

- Both Services use a replacement system that places higher priority on individuals and on individual development than on units and unit development. This system continuously moves trained people out of units and replaces them with people who are unfamiliar with and untrained in the

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[2] TES can include a number of different types of simulations whose most important characteristic is the use of a sentient opposition force that provides immediate reward and punishment tactical performance through real-time casualty assessment. TES can be used to train units in the field with actual military personnel and vehicles, or in computer-based virtual simulation (SIMNET) with actual military personnel or on a computerized battle simulation to train commanders and staffs. The use of Observer/Controllers is also key to successful TES.

[3] Roland J. Hart & Robert H. Sulzen, "Comparing Success Rates in Simulated Combat," *Armed Forces and Society*, Vol 14, No. 2, Winter 1988. The odds of success for a platoon attack were increased by 30 to 1 when the attacker was relatively well trained compared to the defender.

unit. In essence, this system creates new units every year or so and these new units must begin their training cycle over and over again.[4]

- Both Services must maintain high operational tempos in their combat units in order to train their units to minimum acceptable standards.

- All units have limited time available for training. This is especially true in the reserve component.

G. THE STRUCTURE OF THIS PAPER

This paper addresses a number of alternative ways to organize and train U.S. Army and Marine active and reserve combat forces. These alternatives are designed to allow them to adjust to cuts in resources and to reach and maintain levels of training readiness that are appropriate to the demands facing the Army and Marine Corps.

Chapter II provides an analysis of the concept of training readiness and the training strategy that the Army and Marine Corps employ today. It also addresses major organizational and operational concepts that are important to the study. This chapter serves as a base for the analysis that follows in Parts I and II.

Part I focuses on the Army and Marine Active Component and comprises Chapters III, IV, V, and VI. Chapter III describes an approach to the organization of military forces that is designed to enhance the stability of personnel within units and, thereby, to enhance their training readiness. Chapter IV describes a new organizational concept that is designed to allow the Army and Marine Corps to preserve force structure despite anticipated cuts in funding. Chapter V describes specific ways these concepts can be applied to the Army. Chapter VI describes how they can be applied to the Marine Corps.

Part II describes a number of potential ways to improve the training readiness and reduce the deployment times of Army National Guard combat maneuver units and, by implication, a full range of other reserve units. Part II repeats Chapters I and II and includes Chapters VII and VIII. Chapter VII suggests a number of changes in policies and practices that should enhance the ability of ARNG units to improve their level of

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[4] When soldiers and Marines in combat maneuver battalions move from job to job within a battalion-size unit or move from unit to unit, the impact of this movement is called turbulence. ARI research has shown turbulence of 8 to 10 percent per month in units that return from a training experience at a Combat Training Center (CTC). The impact of this turbulence is that the unit capabilities that are built at CTCs are rapidly lost and the greatest training value of the CTCs is for individuals rather than units.

training readiness and to reduce the time it takes them to deploy overseas in an emergency. It also suggests ways to use simulation and computer-aided instruction to assist in training RC units and makes an initial assessment of the potential impact of such training on improving pre-mobilization training readiness and reducing post-mobilization training times. Chapter VIII suggests a new approach to using distributed, interactive simulation to improve the training of ARNG battalion, brigade, and division staffs.[5]

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[5] Chapter VIII describes hardware and software solutions to the new Battle Command Staff Training concept developed by LTG F. D. Brown in an IDA study currently underway. IDA paper, forthcoming.

II. TRAINING, ORGANIZATIONAL, AND OPERATIONAL CONCEPTS SUPPORTING TODAY'S FORCE

Understanding the training, organizational, and operational concepts that both Services operate under is key to understanding the issues addressed in this study. These concepts affect the world view of Service leaders and affect their decisions. This chapter discusses some of these concepts. Parts I and II that follow this chapter are designed to be consistent with the Services' training and operational concepts while it suggests changes in their organizational concepts that are intended to help both Services adjust to the needs of the post-Cold War world.

A. TRAINING THEORY

Since the Vietnam War, both the Army and the Marine Corps[1] have undergone a revolution in their approach to training combat units. From before WWII until shortly after the Vietnam War, both Services provided training that was demonstrably inadequate for the needs of combat units.[2] The dramatic changes in training began in the 1970s when both Services recognized that something had to be done.

The use of repetitive tactical engagement simulations (TES) in field training has been central to the improvements in training. Both Services have research showing that combat units accomplish more missions, sustain fewer casualties, and inflict more casualties when they conduct repetitive field training using TES. Evidence from 237 Army platoon battles conducted using TES over a period of 10 years demonstrated that the odds of a successful attack were 30 to 1 when the attacker was relatively better trained in the offense than the defender was trained in the defense.[3]

Other evidence indicates similar but less dramatic impact at higher organizational levels. In 58 battles conducted by combined arms (company) teams of equal size," the

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[1] While most of the specific references are to Army training, our information is that Marine Corps training suffered from many of the same problems and began its revolution at about the same time.

[2] Gen. Paul Gorman (Ret.), *The Secret of Future Victories*, IDA P-2653, February 1992.

[3] Roland J. Hart & Robert H. Sulzen, "Comparing Success Rates in Simulated Combat," loc. cit.

teams receiving more TES training had a 15 to 1 greater chance of successfully attacking a combined arms team receiving less training." In 428 battles at the National Training Center (NTC) where the opposition force (OPFOR) was always considered to be the better trained force and the attacker always attacked with a 3 to 1 advantage, "the TES-trained OPFOR motorized rifle regiment had a 5 to 1 greater chance of attacking and defeating a less-well-trained Army (battalion) task force than the Army task force had of successfully attacking and defeating an OPFOR unit."[4]

Today the Army and the Marine Corps both place top priority on using TES in the field and in computer simulations. The Army is continuing to make major investments in both forms of TES. Although hard evidence is scarce on the impact of TES in computer-based virtual simulation, the Army is making a major investment in the Close Combat Tactical Trainer (CCTT) for training heavy forces.

In addition, both Services conduct performance-oriented training that demands actual performance on key tasks. Both Services focus on training units to perform tasks that are part of each unit's Mission Essential Task List (METL). Most units have a demanding set of tasks they are required to be able to perform. For example, the Army manual for the tank and mechanized infantry company and company/team lists 7 distinct missions and 55 tasks that could be part of the unit's METL. Both Services call for units to train in these tasks in increasingly difficult conditions such as day and night, good and bad weather, and increasingly difficult terrain and competent enemies. And they both have prescribed minimum acceptable performance standards to which their units train and against which a unit's performance is evaluated.[5]

Both Services recognize that training readiness varies over time. Figure I-1 is a picture of the Army's view of this phenomenon.[6] It shows training readiness varying as units go through a training cycle designed to sustain some level of proficiency. The picture compares a vision of the traditional training strategy that arguably allowed units to vary greatly in their training readiness—peaking at major training events and implicitly dropping to unacceptable levels at other times—with the current Army strategy that calls

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[4] Col. Robert H. Sulzen, "Winning with Tactical Engagement Simulation," *Military Review*, May 1987, pp. 8-19.

[5] These standards are both objective and subjective. For example, the standards for a tank/infantry team attack are," 1. Main body is not surprised or fixed; 2. No more than 20% casualties or 50% vehicles lost; 3. Accomplish assigned task within commander's intent; 4. 100% enemy KIA, POW or forced to withdraw; 5. No fratricide."

[6] Army Field Manual, "Training the Force, FM 25-100.

for sustaining a level of training readiness which varies only marginally and, for active component forces at any rate, should never allow a unit to drop below a minimum standard of training readiness.
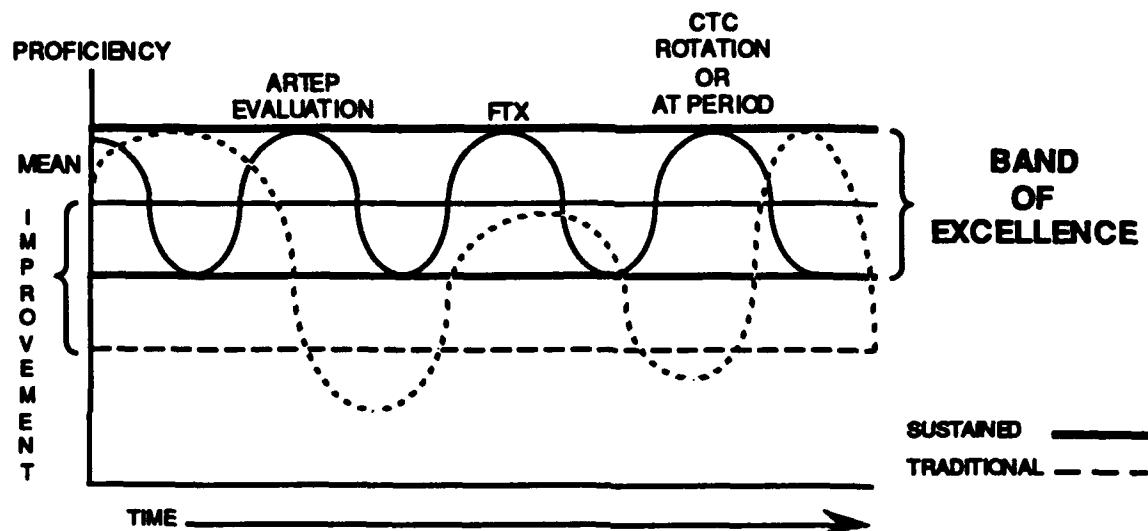
Figure II-1. The Army's View of Training Readiness

The discussion of this schematic in FM 25-100 describes the Army's training strategy as intended to provide training in key skills often enough "to prevent skill decay and to train new people." However, the manual does not describe how this will be accomplished by units within the time and resources available, while adjusting to typical levels of personnel turbulence, and whose new members are not fully trained in their individual skills. Nor does it describe the meaning of the "Band of Excellence." Since outside evaluations of unit training readiness are generally made only during prime training events such as at a Combat Training Center (CTC) or formal readiness evaluation, it is difficult to demonstrate that the current strategy leads to less fluctuation in training readiness than does any "traditional" strategy.

In addition, while the Combat Training Centers provide excellent training, that training does not necessarily cover all the tasks on a unit's Mission Essential Task List. Indeed it seems likely that units preparing for a CTC training period will not train on

tasks they do not expect to be covered during their CTC rotation.[7] As a result, units that may be well trained in tasks that are trained at the CTC may be untrained in other important tasks. The high level of turbulence that units traditionally suffer upon returning from a CTC is also likely to reduce unit training readiness levels.[8]

Both Services recognize that combat operations, particularly combat maneuver operations, are extremely complex. Accordingly, both have established systems for conducting formal readiness evaluations. The Army's system is called the Army Training and Evaluation Program (ARTEP); the Marine system is called the Marine Corps Combat Readiness Evaluation System (MCCRES). Both systems include a pass/fail system for evaluating a unit's ability to perform each of its assigned tasks. Units that perform to these standards are declared "trained" and units that do not are "untrained or partially trained." Both Services provide evaluations of training that include a "trained-untrained" assessment associated with specific tasks, but the evaluation process is primarily intended and employed to provide diagnostic feedback that will enhance and reinforce the training experience. Nevertheless, the ARTEP and the MCCRES do give each Service the ability to state with assurance that a unit has demonstrated a capability to perform its mission-essential tasks to a minimum acceptable standard.

There are four main problems with both evaluation systems:

- They are tied to performance standards that lead to risk averse behavior, i.e., the "school solution;"

- They are applied infrequently and, because of personnel turbulence, represent an accurate picture of a unit's capabilities for only a short period of time;

- They measure only minimum acceptable capabilities; and

- They are only partially based on objective, or measurable, standards.

In addition to these problems, neither Service employs its training evaluation system to compare one unit with another, either within a component or across components. Both Services argue that comparisons of units are inappropriate. They further argue that no fair comparison can be made because the METL for units are

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[7] Analysis by the Army Research Institute on the determinants of combat performance indicates that the most successful units tend to be those that limit training to a small percentage of their METL tasks. ARI newsletter, October, 1992.

[8] The Army might demonstrate the effectiveness of its training strategy by returning a unit to the NTC without warning some 3 to 6 months after it completed its last rotation and evaluating the changes in training readiness that occur over that time. A complete evaluation might include some tasks that were trained at the CTC and some that were not.

further argue that no fair comparison can be made because the METL for units are different, because the conditions under which the tasks are performed are different, and because the standards call for subjective judgments that cannot be applied evenly from unit to unit because the skills and focus of the evaluators vary greatly.

The Army also makes no systematic effort to evaluate one unit against another in the Army's combat training centers, such as the National Training Center. In the NTC where tasks and evaluators are more likely to be consistent over time, the Army varies conditions in order to provide the best training to units, depending on their level of training when they arrive at NTC—thus making comparisons invalid. The Army also argues that comparison of units would reduce the training value of the experience. The Army does have data that would allow for such a comparison.[9]

The only Service-wide comparison in use is the unit readiness report that assesses training readiness by having unit commanders subjectively rate their unit's capabilities to perform a unit-specific set of METL tasks and estimate the additional training necessary to be prepared for combat.

The net result of current practice is that neither Service has an accepted way for making comparisons of the training readiness of active and reserve units. Nor do they have a way of objectively determining the time or resources needed to improve an untrained unit or to say how much a unit's training readiness could be improved with additional training.[10] The only data available are derived from the experiences during the Gulf War mobilization of 3 ARNG brigades. While these data are a useful historic example, they are insufficient to provide an objective way to compare pre-invasion AC and RC training readiness or to compare post-invasion AC and RC training experiences. Many members of the ARNG consider the data derived from the mobilization of the three

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[9] This discussion has described the Army and Marine Corps approach to tactical training of combat units. It does not describe their approach to gunnery training. Unit performance in gunnery is objectively evaluated, scores are compared across units, and units that perform well are rewarded. Training standards in gunnery are rigorously adhered to for both crews and platoons. Gunnery training involves extensive training on simulators, such as the Conduct of Fire Trainer (COFT), followed by training on gunnery tables with fixed conditions and on which performance to standards is carefully measured. Gunnery training standards, like tactical training standards, are set to a minimum acceptable level—Table VIII—but the gunnery training and evaluation system does allow for measurement of performance that greatly exceeds those minimum standards. Gunnery simulators provide one of the best ways for evaluating master level performance.

[10] When reading evaluations of both active and reserve component units and discussing the issues with experts, the IDA analysts have been struck by the similarity of the comments regarding the problems of both active and reserve units.

ARNG brigades as biased and unreliable. Among the factors that lead to this judgment are:

- The standards for deployment were changed from C-3 to C-1 without warning.

- The units were put into a "lock-step" training program unrelated to pre-mobilization plans on training.

- There was little or no "evaluation" until the end of the training process.

- Many training events were required, regardless of the demonstrated competence of the units.

- The post-mobilization training was conducted by active component personnel unfamiliar with the units or their capabilities.

It is a fact that during the mobilization for Operation Desert Shield, active component units were assumed to be ready for deployment and reserve component units were required to demonstrate that they were ready. During the mobilization, both the Army and the Marine Corps found themselves conducting ad hoc evaluations of the training readiness of the RC combat maneuver units they mobilized and then developing ad hoc plans for post-mobilization training. The Marines provided minimal training for their RC combat units and then deployed them. The Army changed its policy that had called for combat units to be deployed when they met C-3 standards and required them to meet C-1 standards before deployment. Given this change in policy, the Army then had to develop a plan for training the ARNG units to the new standard. After reviewing the experiences of RC units in both Services, it appears that determinations of training needs can be a function of the need a Service has for the unit in question as much as it might be a function of an objective measure of a unit's training readiness.[11]

Both Services are working to improve their training and evaluation systems. The Army has a number of programs under way to identify the training that its units need to undergo in order to be competent in a range of common tasks (this program is known as the Combined Arms Training Strategy (CATS)). The Army also has programs to

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[11] In planning for a worldwide war with the Soviet Union, for example, plans called for reserve component units to train until the time came for them to deploy—less than 60 days for most RC brigades and even some divisions. In the Gulf War, the Marines had specific needs for their RC infantry and tank battalions and deployed them overseas with relatively little training. The Army had an immediate need for the two RC artillery brigades and deployed them rapidly to the combat theater. It had no immediate needs for the three RC maneuver brigades it mobilized and decided to assure they met a high training standard before validating them for overseas deployment.

improve the training readiness of reserve units (these programs are collectively addressed under the title "Bold Shift") and to develop a way of providing an objective comparison of the training readiness of like units regardless of their component (this program is known as Operational Readiness Exercise (ORE)).[12]

The Marines also are working on a number of initiatives to improve training readiness. They are developing a "Mission Essential Training Strategy" that will identify specific training needs of Marine units. They also are making changes in the Selected Marine Corps Reserve to improve its training readiness.

If these programs are successful, both Services should have better trained units, they should know that they are better trained, and they should be able to differentiate between units based on their training readiness. These are ambitious goals and success is not assured. Even with these improvements in training, a number of problems will remain:

- Neither the Army nor the Marine Corps will know if there is a practical limit to improving training readiness or for saying how good a unit can be.

- Neither Service is likely to be able to set a training goal beyond the minimum acceptable level.

- Neither will have a theory for describing the impact of different levels of training readiness on successful implementation of Army AirLand Operations or Marine maneuver warfare doctrine.

- Neither will have a theoretical basis for determining if the new concepts and changes in policy and organization described in Parts I and II below will improve their training readiness or decrease their post-mobilization deployment times.

B. ORGANIZATIONAL AND OPERATIONAL CONCEPTS

The Army and Marine Corps today are undergoing dramatic changes due to the end of the Cold War. The nature of many of those changes is still to be determined. Many changes will involve reductions in the size of the active and reserve components of both Services. No dramatic new organizational or management changes are visible at this time. The organizational and operational concepts that are particularly important to this

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12 Evidence to date indicates an ORE focuses more on input than output or performance measures.

study are listed below. The key elements and the importance of each concept are described.

1. Maneuver Warfare

Although both Services have changed their operational concept from attrition or linear warfare to maneuver warfare, neither Service has changed its organization or its personnel management system in any major way to align with the change. Both Services expect all combat units to meet the same minimum acceptable standards. Both retain the traditional hierarchical structure. Neither has specifically recognized a need to have some units that are trained to much higher standards at the point of main effort. This study describes ways to improve the training readiness of some units significantly. It also argues that not all AC or RC units need to meet the same standards.

2. Total Quality Management

Both Services have adopted the concept of Total Quality Management for managing their peacetime activities. TQM can be described as the peacetime equivalent of maneuver warfare. Both Services seek to loosen the hierarchical bounds of existing management structures and to empower the lower levels of the organization to make their own decisions. As in maneuver warfare, neither Service has realized the full implications of TQM. For example, neither Service has yet decentralized the personnel system or eliminated the "zero defects" approach to the management of combat units. This study suggests a TQM approach to personnel management.

3. Individual Replacement System

Both Services base primary reliance on an individual replacement system in peace and war. Commanders and personnel managers appear to be more concerned about "equity" for individuals than for units. In Korea and Vietnam, they supported a 12-15 month tour despite the impact it had on the war-fighting capabilities of units. In the Gulf War, the Army made an ad hoc effort to use crew replacement rather than individual replacement. The Marine Corps planned to use individual replacements. Although both Services have often acknowledged the damage to units that is caused by the current system, they have allowed it to continue in most instances in both peace and war. This study proposes the elimination of the major elements of this system.

4. Overseas Deployments

Planning for overseas deployments has dominated the personnel and training systems in both Services. As overseas deployments decline, the impact on personnel and training should decline. This study proposes that overseas deployments be supported by unit rotation.

PART I
THE ACTIVE COMPONENT

III. THE UNIT STABILITY PROGRAM

This chapter describes a Unit Stability Program (USP) whose adoption by the Army and the Marine Corps could allow both Services to improve their combat power and enhance their training readiness. The basic principles incorporated in this concept are not new; they have been used at one time or another by either American or European military forces. Some are already in use by some American units.

The Unit Stability Program is designed to be consistent with maneuver warfare doctrine in both the Army and Marine Corps. It's goal is to enhance human performance in combat units to the point where they can take full advantage of the physical advantages that American technology provides. The USP is built around these concepts:

- Exchange the individual replacement system for a unit replacement system for combat and combat support units for both war and peace.

- Keep units together longer so unit members have time to learn a full range of METL tasks thoroughly.

- Employ a "Regimental system" that allows career personnel to serve successive operational tours in the same unit—battalion, brigade, or division.

- In wartime, return former unit personnel who are still in active service, or who retain a military obligation, to their unit to act as fillers and combat replacements.

A. THE IMPORTANCE OF UNIT STABILITY

The shift from attrition warfare to maneuver warfare places new emphasis on the fighting power of individual units. The fighting power of a unit conducting maneuver warfare cannot be measured by referring only to the capabilities of a unit's weapons. Fighting power is at least as much a function of human as of materiel performance.[1] The Unit Stability Program is designed to include provisions for adjusting to these human factors.

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[1]   "In war, the moral is to the physical as three to one." Napoleon Bonaparte.

History has provided many examples of military units that demonstrated far higher combat power than an inventory of its equipment would have justified and far higher combat power than similarly equipped units have demonstrated. In his analysis of the impact of human factors on combat power, Martin Van Creveld[2] draws a number of conclusions about the combat power of German and American units in WWII that are relevant to the issue of unit stability:

- An army's worth as a military instrument equals the quality and quantity of its equipment multiplied by its fighting power. Fighting power is defined as the sum total of mental qualities that make armies fight and its manifestations are in discipline and cohesion, morale and initiative, courage and toughness, the willingness to fight and the readiness, if necessary, to die.[3]

- Quoting another expert, Van Creveld argued. "The Germans consistently outfought the far more numerous Allied armies that eventually defeated them....On a man for man basis, the German ground soldiers consistently inflicted casualties at about a 50 percent higher rate than they incurred from the opposing British and American troops under all circumstances."[4]

- "The secret of the German Army's fighting power was that it was built around the needs, social and psychological, of the individual fighting man. It systematically and consistently sent its best men forward to the front, consciously and deliberately weakening the rear. In matters of pay, promotion, decorations, and so on, its organization was designed to produce and reward fighting men."[5]

- "The German Army's system of organization reflected a deliberate choice to maintain at all cost that which was believed to be decisive to the conduct of war: mutual trust, a willingness to assume responsibility, and the right and duty of subordinate commanders at all levels to make independent decisions and carry them out."[6]

- To these ends the German Army maintained a system that focused on the individual as a part of a unit. Their system was characterized by unit training and unit replacement, by refreshment for individuals and units that had been in combat for a long time, by promotion from within by local commanders,

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[2] Martin Van Creveld. *Fighting Power, German and U.S. Army Performance 1939-1945*, Greenwood Press, West Port, Connecticut, 1982.

[3] Van Creveld, op cit., p 3.

[4] T. N. Dupuy, *A Genius for War*, London, 1977, pp. 234-35.

[5] Van Creveld, op. cit., pp. 164-165.

[6] Ibid, p. 165.

by recurring assignment to the same unit, and by returning recovered wounded to their old units.

Van Creveld argues that the U.S. Army did none of these things and suffered the consequences:

> "The U. S. Army, backed by a gigantic productive engine, chose to regard war not so much as a struggle between opposing troops but rather as one whose outcome would be decided largely by machines. Rather than concentrating on fighting power, therefore, it aimed at confronting the enemy with the greatest possible firepower. ... This approach tended to turn men into adjuncts of their machines and largely explains the gulf between the army 's "mechanical" efficiency and the scant attention it paid to social and psychological problems."[7]

History also provides many examples of units that have continued to fight effectively after taking enormous casualties that would normally have been expected to render them combat ineffective. The units that have most successfully fought on despite large scale casualties have been units characterized by high degrees of stability and cohesion.

> "In the case of long-service British regiments in the early months of the First World War, where morale was high, even extremely heavy casualties had a less devastating effect than might have been expected. At the battle of Neuve Chapelle in March 1915, the Second Scottish Rifles attacked with 700 men. Losses during the day numbered 469, yet the battalion did not lose its cohesion. On the evening of the second day a second lieutenant gathered the remnants into position for a second attack...."[8]

> "In the battle for Mersa Matruh in June 1942, the 21st Panzer Division of the Afrika Corps led the attack with 23 tanks and 600 combat effectives in the motorized infantry. The 90th Light Division consisted for the attack of about 1000 men. These two units compelled the withdrawal of five of the demoralized divisions of the British Eighth Army and captured 9600 prisoners."[9]

> At Cassino in March 1944, the 3rd Regiment of the 1st German Parachute Division, under the same commander since 1941, fought for eight days until the attacking New Zealanders broke off the attack. By the end the regiment had lost all unit identity and had consolidated into a single group, "daily being compressed further into a shrinking defended sector. Nevertheless, the paratroops were reported as undaunted and their spirits

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[7] Ibid, p. 167.

[8] Leonard Wainstein, *The Relationship of Battle Damage to Unit Combat Performance*, Institute for Defense Analyses, IDA P-1903, April 1986. p. 15.

[9] Ibid, p. 69.

high. The German commander would not hear of replenishing their ranks with other second rate troops that were available to use."[10]

Recent Israeli successes in wars where Israeli forces have been greatly outnumbered also provide an indication of the importance of unit stability. In his book, *A Portrait of the Israeli Soldier*,[11] Reuven Gal argues that these successes are due to the "fighting spirit" that is imbued in the Israeli military. Among the most important contributors to this fighting spirit is the personnel stability of the Israeli Defense Force's combat units, "the fact that the Israeli combat soldier has served with the same team from the beginning of his military service—and at times (in the reserve units) has been with them for many more years and through several wars—all make the unit a major factor in combat motivation."[12]

A study of psychiatric casualties following the 1973 Arab-Israeli war showed the impact of unit stability on casualties. The study compared two samples of reserve soldiers, one group of psychiatric casualties and another random selection from a reserve paratroop unit. Table III-1 shows that "many of the men suffering from battle shock did not serve with their usual reserve unit or had poor relationships with their peers and commanders. They also reported low unit morale and low self-esteem as combatants. In contrast, a great majority of the soldiers who were not psychiatrically impaired served with their usual unit and team, had good relationships with their peers, trusted their commanders, and had high self-esteem."[13]

There is also American evidence of the importance of stability.

Data from the Vietnam war covering 34 maneuver battalions in 5 Army divisions and separate brigades in the years 1965 and 1966 indicate that, "maneuver battalions under experienced commanders (6 months or more in command) suffered battle deaths in sizeable skirmishes at only 2/3 the rate of units under battalion commanders with less than 6 months in command.[14] These findings are consistent with the peacetime Army policy that requires commanders to remain in command for longer periods of time and with conventional wisdom that commanders improve over time as they learn their jobs. The implications for the lives of American soldiers are profound. In looking just at

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[10] Ibid.

[11] Reuven Gal, *A Portrait of the Israeli Soldier*, Greenwood Press, New York, 1986.

[12] Ibid. p. 149.

[13] Ibid. p. 217.

[14] Thayer, Thomas C. editor, *A Systems Analysis View of the Vietnam Way 1965-1972, Volume 8 Casualties and Losses*, OASD/PA&E, February 1975, DTIC #ADA051613. page 225.

commanders who were in command for more than six months, the study found that the overall casualty rate per month for those battalions was reduced by 32% per battalion commander month after 6 months of command. In other words, stability in battalion commanders led to fewer casualties in battalions. The study found similar but less dramatic results with regard to infantry company commanders. There were no examples of battalions with both stable battalion and company commanders.

Table III-1. Unit-Related Factors as Experienced by Two Groups of Combat Soldiers

Factors	Groups	
	Combat Reaction Group	Control Group
1. Perceived unit's morale during combat as low	72%	0%
2. Experience loneliness	76%	29%
3. Felt no trust toward immediate command	42%	5%
4. Served during this war within the original unit	57%	88%
5. Changed teams in combat	63%	15%
6. Low self esteem about own professional military knowledge	42%	5%

Experience with stabilized COHORT[15] and non-stabilized, non-COHORT platoons using the Army's tank gunnery simulator, the UCOFT, provides another example of the value of stability. Figure III-1 shows a comparison of the scores obtained by two groups of tank platoons where the scores labeled "Group 2" are the lowest scores and those labeled "Group 5&6" are the highest. The figure shows a significant difference between the scores of the stabilized platoons and non-stabilized platoons. Nearly 75% of the stabilized platoons had average scores in the top group, while only 15% of the non-stabilized platoons met this standard.[16]

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[15] COHORT stands for Cohesion, Operational Readiness, Training.

[16] Unpublished ARI study on the determinants of combat performance.
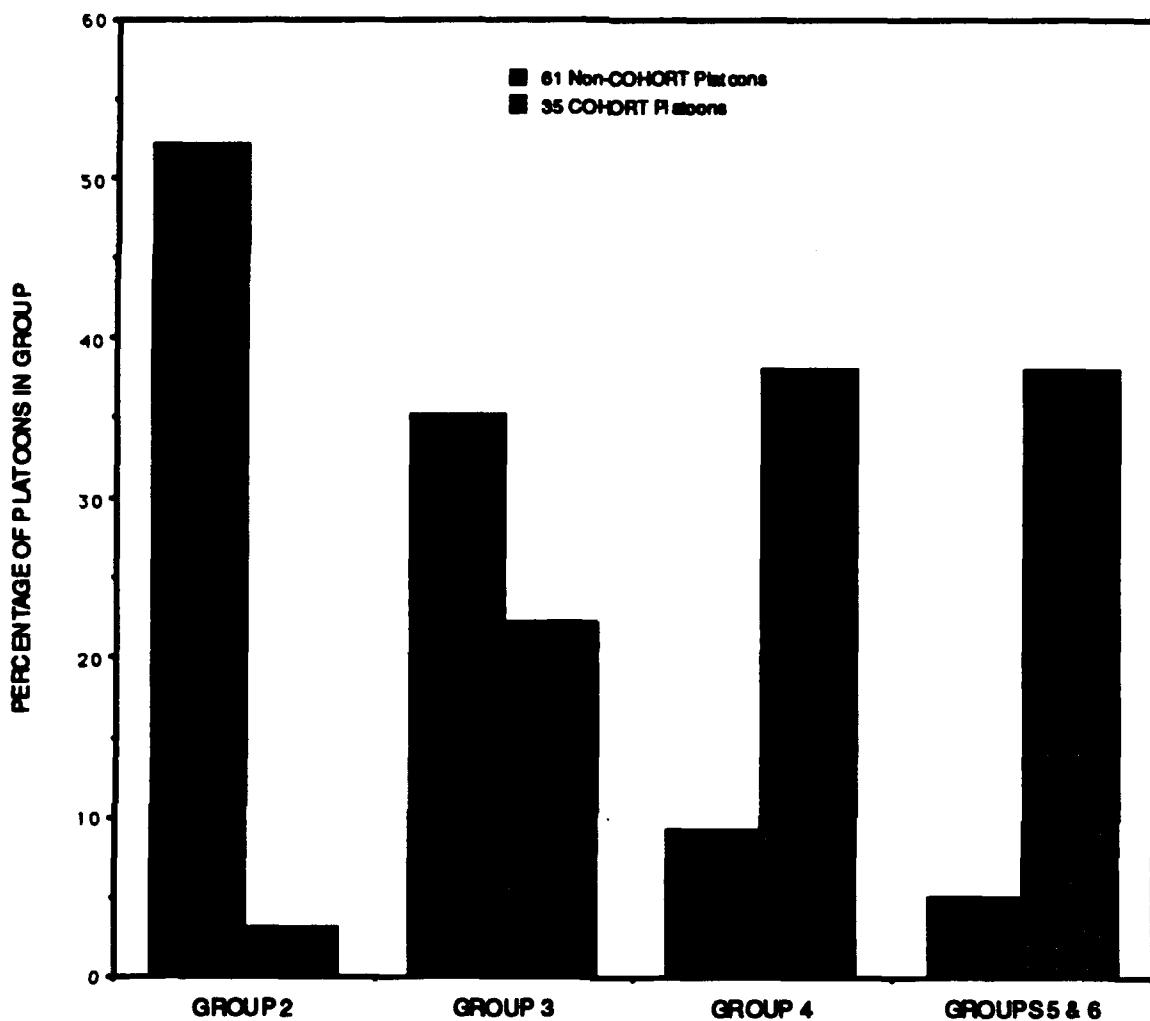
Figure III-1. Impact of Stability On Tank Crew Performance

A final example of the impact of stability and the negative impact of providing combat replacements to a unit without undertaking the training necessary to integrate them into the unit comes from an Army test designed to compare the effectiveness of a traditional 5-tank platoon and a 3-tank platoon.[17] The two platoons were placed in a defensive posture and attacked by an enemy that outnumbered them by 4:1. "To minimize differences in leadership or experience, and to compensate for the lack of doctrine for the 3-tank version, the test design provided that at the end of the first week,

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[17] Gen. Paul Gorman (Ret.), *The Military Value of Training*, IDA Paper P-2515, December 1990, pp. 10-11. General Gorman's paper reports on a test conducted by the TRADOC Combat Analysis and Test Agency.

the tankers of the 5-tank platoon of Week One sent two of their crews and vehicles back to their parent organization, and assumed the 3-tank role for Week Two, while the 3-tank platoon of Week One was reinforced with two new crews to assume the 5-tank platoon role for Week Two."

The test failed in its goal of comparing the effectiveness of the two type of platoons, but did show the value of:

- what we call stability in this report, but what was identified then as "experiential learning"; and

- the dangers of providing replacements without integrating them into the unit.

In the second week of the test, the new 3-tank platoon that had been together for the first week of the test "had become quite expert, manifesting not only cohesion, confidence and tactical ability but innovative technique...In the initial defensive mission in Week One, all their vehicles were destroyed, but in their final defense in Week Two, they killed all the attackers without losing a single tank." The new 5-tank platoon, which was not given an opportunity to train its new tank crews, was less successful. It was "demonstrably encumbered by its two neophyte crews: their two tanks were reported as among the first lost for all missions, and their shooting was markedly inferior to that of the better experienced crews."

The Unit Stability Program is intended to enhance the performance of American units by providing them many of the same benefits of stability that were afforded British and German units in WWII, that are common in Israeli units today, and that have been demonstrated in some American units.

B. THE INDIVIDUAL REPLACEMENT SYSTEM AND UNIT EFFECTIVENESS

The individual replacement system focuses on the individual and gives little consideration to the unit. Individual soldiers and marines are moved from place to place, from assignment to assignment in ways designed to serve their individual needs or the needs of the Service. The needs of the unit come last. The personnel turbulence caused by the individual replacement system directly affects the peacetime training readiness of Army and Marine units.

In order to understand how today's system affects training readiness, consider Figure II-1, which shows a schematic of the Army's view of how training readiness varies over time. Unstated in the Army training manual, FM 25-100, but implicit in the figure

itself is the concept that a unit reaches a peak of training readiness and then begins an inevitable decline.

There are two major reasons for the decline in a unit's training readiness. First, unit members forget the details of complex tasks and lose their edge over time.[18] Second, unit members may be replaced with new people who do not know their jobs. The latter factor is clearly the most important. While unit members do forget the specifics of tasks they may have learned some time ago, in general they can restore their skills relatively quickly with retraining, especially when they are with people they know. When untrained individuals are placed in a unit, they must be taught both individual and collective skills and the unit must stop or slow its own training to conduct this new training.

Thus, the turnover and turbulence caused by the movement of individuals limits a unit's ability to develop its full potential and minimizes the impact of the improvements the Services have made in training. This is especially true when individuals arrive in the unit less than fully trained in their individual skills.[19]

The replacement system forces combat units to devote a major portion of available training time to training both individual skills and the most basic unit skills. With a period of intense, highly focussed, and expensive training, the unit is able to build a minimal acceptable level of skills that are adequate for events such as those staged at the NTC. Despite the focus on collective training at a Combat Training Center and because of the high level of turbulence that typically follows a CTC cycle, the primary value of the CTC is in training individuals rather than units.[20] Because the unit loses large numbers of people upon completing such an event, it must begin its training cycle over again or, at least, retrain the new members in the skills that the departed members had already acquired. With high levels of turbulence, the unit must continually train new members and never has the opportunity to develop higher level skills whose attainment require soldiers and marines to stay together for long periods of time.

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[18] Data from tests in Europe indicate that tank crews can lose 25% of their speed and accuracy over a period of 3 months. Gorman, op. cit., p. III-33.

[19] The Army trains most soldiers to less than 100% of their individual skills in initial entry training and expects both active and reserve component soldiers to obtain the rest of their individual training in their units. This is a cost minimization policy of the Army's training command. The Marines attempt to train individual Marines in all of the individual skills they need before arrive in their units. For example, initial entry training for Army combat soldiers is about 14 weeks. Initial training for Marine infantrymen is 22 weeks.

[20] Army leaders have long recognized this fact.

Both Services have long recognized many of the problems with the system in peacetime and have retained it despite these problems. The major argument for the system is that it assures individual equity and the development of individual proficiency. Opponents of the system have argued that its retention is primarily a sign of the power of the entrenched personnel bureaucracy.

The system has had a devastating impact on Army units in wartime. The wartime system treated soldiers as anonymous spare parts from the day they arrived in their replacement training centers, through their training and deployment to a combat theater, to their assignment to a unit on line (often in contact with the enemy), during their treatment by the medical system once they became a casualty, and in reassigning them to a different unit when they returned to the combat theater.

These concepts have been at the heart of Army planning since World War I. This was the time when large-scale casualties caused by attrition warfare and "the novelty of the assembly line exercised a heavy influence on planners."[21] In this system, men became spare parts to be produced on an assembly line. Once trained, they were to be inserted in combat units as needed. But assignment to a unit did not mean that the soldier would have the time to learn about that unit or that the unit would have the time to build its collective skills. In addition, the system of levying one unit to supply personnel for a higher priority unit, such as one that was about to board ship or to move to the front, meant that units in training in the United States or in France were unable to build unit skills. This system and the unanticipated demands of the war conspired to produce units of semi-trained individuals barely adequate to conduct the relatively simple tactics called for in that war. The combat power of these units that led to success in defeating the German Army came primarily from their advantage in numbers and came at the cost of much higher rates of American casualties.[22]

The replacement system designed for WWII was built on the principles developed for WWI. Once again soldiers were considered interchangeable spare parts and replacements became a class of supply to be managed in the same way as any other class of supply. General Marshall believed that the success of the American Army in World War II lay in its ability to keep divisions "up to strength daily by trained men from the

[21] Peter W. Kozumplik, "Wartime Manpower Replacement: 1795-1945," 1987, unpublished paper.
[22] Ibid, p. 9.

replacement pool."[23] It was this concept that led to the fundamental organizational and operational decisions that still dominate today.

> "The conception under which the United States fought World War II was that a minimum number of divisions [89 Army and 6 Marine] would be used and these divisions would be kept continuously in combat and maintained at effective strength by a steady flow of replacements....The decision to fight the war with a minimum number of divisions precluded rotation of divisions from combat to inactive areas. It was only in theaters where action was intermittent that divisions could get any rest."[24]

In other words, the concept called for maintaining the combat power of forces in contact with the enemy by a constant flow of supplies, to include individual replacements as well as new equipment, spare parts, and munitions.

One study of the Army replacement system in WWII described the experience of a typical replacement in this way:

> "On the "supply" side, replacements were "managed" as individual parts on an assembly line throughout reception, training, and shipment. The philosophy is illustrated by the initial medical examination wherein the replacement moved down a queue with one doctor examining his head, another his limbs, a third his abdomen, etc. Once classified, the replacement was uniformed and shipped individually to the appropriate training center. There, he was assigned to a training unit for basic and specialist training by trainers who lacked affiliation with the combat units that used their products. The trained soldier was then "stored" until shipment. He received only casual supervision and no further training from this point until he arrived at his combat unit.
>
> The replacement travelled alone at every step. The training center amalgamated him with other individuals into a shipment draft and sent him to a port of embarkation where he was reprocessed and reassigned to a holding company. As shipping was available, he was alphabetically sorted to travel under whatever leaders happened to be going his way. At each stage, he was subtracted from the records of his former organization and added to those of his new one. This increased the accounting burden and contributed to the individual soldier's sense of not belonging to anything in particular.
>
> The traveling formation with which the soldier sailed was disbanded when it arrived in theater and he was assigned randomly to a company in the rear depot. He could remain here indefinitely as part of the reserve stockage, especially if he held a low density specialty. Chronic depot cadre shortages meant that no effort was made to continue or refresh his

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[23] Hearings before the Defense Subcommittee of the Appropriations Committee, House of Representatives, 79th Cong., 1st Session, *Military Establishment Appropriation Bill for 1946*, p. 9.

[24] Center of Military History, *The Personnel Replacement System in the United States Army*, CMH Pub 104-9, USGPO, 1954, p. 477.

training. He lived in poor facilities and he had little to occupy his time. He might even be transferred to another depot if the original one overfilled.

The replacement soldier eventually was detailed to a new *ad hoc* traveling formation for movement to a forward depot whose stockage had been drawn down. The traveling formation was dissolved on arrival and he was assigned to a holding company there, remaining an Army reserve asset until a combat unit had an unfilled requisition for his specialty. Once this occurred, his dilatory progress through the system speeded up. He was shipped forward—again as an individual amongst strangers and usually sorted alphabetically by rank and specialty—until he arrived at his unit. There, he was quickly assigned to a company, platoon, and squad—whose members often regarded his inexperience as an unwarranted burden. The fact that combat commanders often had to ignore his particular specialty made mockery of the highly-structured system that had brought him so far. It also gave him a sense of grievance that inhibited his socialization.

By the time the replacement finally arrived, his condition often had deteriorated to the point where he was incapable of performing and he soon had to be evacuated. The time available to integrate him depended entirely on what the unit was doing at the time. It was not unheard of for replacements to arrive at night, to "zero" new weapons on live Germans, and to die before they learned the names of their squad leaders. The average replacement in Italy spent eight weeks in transit from his training center—eight weeks with minimal exercise in which to forget superficially-acquired skills—but he was committed to combat within three days of joining his unit. At the very moment when he most needed support, the new soldier could not find it because the veterans had not yet accepted him. The greatest percentage of casualties in any combat unit always occurred among replacements.

Provided that the replacement survived to become a veteran, the lack of provision for enlisted rotation meant that he remained in his unit for the duration or until he finally became a casualty. This further detracted both from his commitment and from the unit's cohesion and its impact was magnified by periodic rotation of regular officers so that all could get experience. Not only was institutional support lacking to support the commander's cohesion-building efforts, the institutional structure itself actively impeded him."[25]

By failing to recognize the human factors that lead to unit effectiveness, the replacement system contributed directly to the low levels of unit training in many American units and to their high level of casualties.

Low levels of unit training cannot be a result of lack of time for unit training. For example, the 18 National Guard divisions activated in 1940 and 1941 had an average of

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[25] Kozumplik, op cit., pp. 14-15

29 months of training before they deployed overseas.[26] The problem was that divisions in training were constantly hit with levies that took away their most qualified soldiers and replaced them with untrained soldiers—12% of 14 infantry divisions in 4 months of 1943, and 30% of 17 infantry divisions (including 10 of the previous year's 14 divisions) in 6 months of 1944. The largest shortages were in infantry platoon leaders. The official Army history describes the problem in this way.[27]

> "While all the divisions had a year or more in training, the younger divisional organizations were hardly more than loose frames in which successive installments of infantrymen were processed for service overseas as individual replacements. When they were sent overseas, these divisions, far from being groups of individuals welded by a year's collaborative training into smoothly functioning teams, were to a regrettable extent crazy-quilt conglomerations hastily assembled from sundry sources, given only a minimum of training and loaded on transports."

Another expert identifies the problem and its cause in this way:

> "Documentary evidence from the ETO shows that American psychiatric casualties fell into two basic types. The first comprised green troops, usually replacements, who went to pieces within five days or so of seeing combat. The other were seasoned troops who cracked after about four months of combat. Everything in our inquiry so far leads us to think that the first kind were the victims of the replacement system and the faulty cohesion of American units; whereas the second kind were brought down by the unlimited tours of duty."[28]

The Army's historical study of the personnel replacement system provides another description of the problem American units faced:

> "The absorption of so many men with no combat experience was difficult for units almost constantly in combat and the losses among new men were high. Both at Cassino and at Anzio the replacement system was blamed, not only for undue losses among new and unseasoned men but also for the weakening of good outfits which deteriorated during long periods in the line."[29]

During the Vietnam War, the Army suffered from many of these same problems.[30] The one year tour for individuals, even in the absence of high casualty rates,

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[26] Gorman, op cit., p. II-36.

[27] R. R. Palmer, Wiley, B.I. and Keast, W.R. *The Procurement and Training of Ground Combat Troops*, United States Army in World War II: The Army Ground Forces, Washington, D.C., pp. 481-482.

[28] Van Creveld, op. cit., p. 96.

[29] Center of Military History, op. cit., p 421.

[30] One of the authors of this report commanded an Armored Cavalry Troop in Vietnam and well remembers the impact of the replacement system on his unit. The arrival of replacements one day and

created very high levels of turbulence and the practice of keeping units in the field for long periods of time militated against the development of well-trained units. As General Paul Gorman has written:

> "Experience levels among leaders of the squad was low; early in the war, one experienced NCO per squad was usual, but toward its end, one experienced NCO per platoon was normal. By 1970, some rifle platoons were composed entirely of men who came into the Army in the same year; the second lieutenant from OCS, those draftees who were sent through a leadership training course in route to Vietnam—known to the troops as 'shake and bake' NCOs—and the draftees who became riflemen, none of whom could expect to remain long enough to be promoted to a senior rifleman position."[31]

In all three wars, the replacement system undercut the combat power of U.S. units. It caused personnel turbulence and the inability to integrate replacements. It caused cohesion to break down. In Korea and Vietnam, unit effectiveness and cohesion were affected both by the impact of casualties and by the 12-month rotation system.

The Army demonstrated it's recognition of these problems in some of the ad hoc provisions it made for replacing combat casualties during the Gulf War when it planned to replace individuals with group replacement in the form of crews and squads. Although the innovation was not tested because of the relatively few casualties the Army suffered, this is an indication that the Army is ready to change.

C. THE UNIT MANNING SYSTEM

For the last decade the Army has been operating a model of a unit stability program called the Unit Manning System (UMS). This system was specifically designed to reduce the "unacceptably high level of personnel turbulence, especially in combat arms units. The driving force behind the UMS was the need to keep soldiers and leaders together in units longer."[32] The UMS included plans for stabilization of soldiers in units, unit movement overseas, regimental affiliation, and homebasing of soldiers. It did not

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their loss the next is an especially poignant memory. The turbulence and the constant commitment to combat operations meant that the overall training level was low. The entire troop, to include its commander, depended on the expertise of a small number of dedicated NCOs who either stayed with the troop for more than one tour or who found ways to return to the troop for a second tour. The practice of removing troop and platoon leaders after 6 months had an especially pernicious effect on the troop.

[31] Gorman, op. cit., p. III-20.

[32] HQ U.S. Army Training and Doctrine Command, *Assessment of the Unit Manning System*, Fort Monroe, Va., March 1989, p. 1.

address the problem of combat replacements. The program was implemented in a piecemeal fashion and has undergone many changes over the years since its inception in 1981.

TRADOC conducted an assessment of the program in 1989[33] that identified both the problems with the design and implementation of the UMS and the positive impact of the UMS. Some of the key findings were:

1. The most successful of the COHORT models was the non-deploying Battalion on a 3-year fixed life cycle. This model offers the highest potential payoff to readiness of any model yet tried. This model has the potential to facilitate the conduct of routine TDY battalion deployments to the Sinai or to USAREUR should the need arise to reduce dependent presence in Europe.

2. The Walter Reed Army Institute of Research (WRAIR) found that most senior commanders believed COHORT units to be more technically and tactically proficient, more synergistic and cohesive, more psychologically resistant to the potential shock of initial combat, and more willing to fight than non-COHORT units.

3. WRAIR also found that the process of recruiting first term soldiers for the same COHORT unit, training them together in one station unit training (OSUT), and keeping them together for their entire first enlistment is potentially a powerful and effective combat multiplier. This process molded COHORT first termers into a cohesive, synergistic combat force whose potential could be exploited by trained leadership.

4. The bonding among COHORT leaders was generally stronger than among non-COHORT leaders. Leader bonding was not as strong as first termer bonding because leaders were not as stabilized. The bonding between first term soldiers and their leaders was generally stronger in COHORT units than non-COHORT units.

5. With a proper battalion-level COHORT training program in place, one might expect commanders to conduct more efficient individual training because all first term soldiers are at the same level of training proficiency at the same time, and commanders do not have to repeat training tasks frequently to accommodate the continued trickle of new faces. One might also expect that individual skills would improve because of the more stable and consistent interface between soldier and mentor. Additionally, collective training should be progressively more complex, challenging, and realistic in the stable COHORT unit.

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[33] Ibid, pp. 28-41.

(See Appendix A for a more comprehensive extract of the assessment.)

The study made a number of recommendations for the future. TRADOC Commander General Max Thurmond recommended and, in January 1990, Army Chief of Staff General Carl Vuono accepted recommendations to continue the COHORT system for the Army's light divisions, to further evaluate the effectiveness of COHORT for those divisions, and to test COHORT in the entire 1st Armor Division. Before the light division evaluations or the 1st Division test could be begun, Iraq invaded Kuwait and the evaluations were canceled. The UMS remains in limbo today, with only light divisions participating.

D. READINESS OF USP UNITS COMPARED TO STANDARD ARMY UNITS

1. Readiness of COHORT Units

Despite the ten year experience with COHORT units, there is no hard empirical evidence regarding the potential for improving training readiness with a USP system.[34] This should not be surprising since, as is discussed in Chapter II, the Army has no objective way to evaluate training readiness in its units. There is anecdotal evidence that bears attention, however. Most of this evidence can be found in the reports on the COHORT system made by the Walter Reed Army Institute of Research (WRAIR). Although the WRAIR was not charged to measure the impact on training readiness, their investigators did pick up some evidence. In their Technical Report #2,[35] the WRAIR investigators reported on comparisons between all-COHORT battalions and battalions with both COHORT companies and regular companies:

> "In two brigade-level commands, intra-brigade competitions made it possible to assess the relative training performance of sub-units in all-COHORT as compared to company-COHORT battalions:
>
> In one brigade-level command, the all-COHORT battalion placed two of its squads in the top three in a brigade-wide Best Squad Competition. The same battalion qualified 145 men for the Expert Infantry Badge within 7 months of its activation.
>
> In another brigade-level command, a company of the 10-month-old all-COHORT battalion won the award for the best company in the brigade.

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[34] Assessment of the Unit Manning System, op. cit., p. 31.

[35] Department of Military Psychiatry, Walter Reed Army Institute of Research, Washington, D. C. "New Manning System, Field Evaluation, Technical Report No 2," p. E-3.

Observations and questioning of cannoneers in six artillery batteries revealed that most of them possessed the requisite knowledge to function as gunners, and that many of those in the all-COHORT battalion also demonstrated the ability to function as section chiefs.

One battery in the all-COHORT artillery battalion completed its ARTEP within 90 days of activation; all three companies in an all-COHORT infantry battalion completed ARTEPs within 90 days of activation.

These findings suggest that all-COHORT battalions achieve higher levels of individual and unit training proficiency in shorter times than do the company-COHORT battalions. There were no non-COHORT units with which to compare these achievements."

In their fifth report, the WRAIR investigators reported:[36]

"The commander of a newly formed infantry battalion observed, "When our battalion finished squad ARTEPs it was better prepared for combat than the best units I has seen at Fort Campbell just a few years ago." Another battalion commander remarked, "We reached the skill level of a conventional unit in 60 to 90 days and just kept going up.""

2. Training Readiness of USP Units

In the absence of specific empirical data, we describe an approach to measuring the potential for achieving higher training readiness with USP units. Let us take as an idealized reference point for training readiness a unit that has performed all its required training in the previous year and has had no personnel turnover. We can say that this unit's personnel will have accumulated $1.0T$ man-days of training in the unit in the last year. If the unit stays together for a second year without turbulence, it will accumulate $2.0T$ man-days of training by the end of the second year and $3.0T$ man-days by the end of the third year. We will compare this idealized unit with typical Army units and with potential USP units. We take the perspective that what matters for the training readiness of a unit is the amount of training its personnel have accumulated in that unit. While we recognize that new training techniques and technologies increase the quality of training for all units, regardless of its quality and all other things being equal, as T increases the unit's training readiness increases. Figure III-2 is a representation of the potential training readiness of a USP unit compared with two possibilities for current units.

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[36] Ibid, Technical Report #5, p. 23.
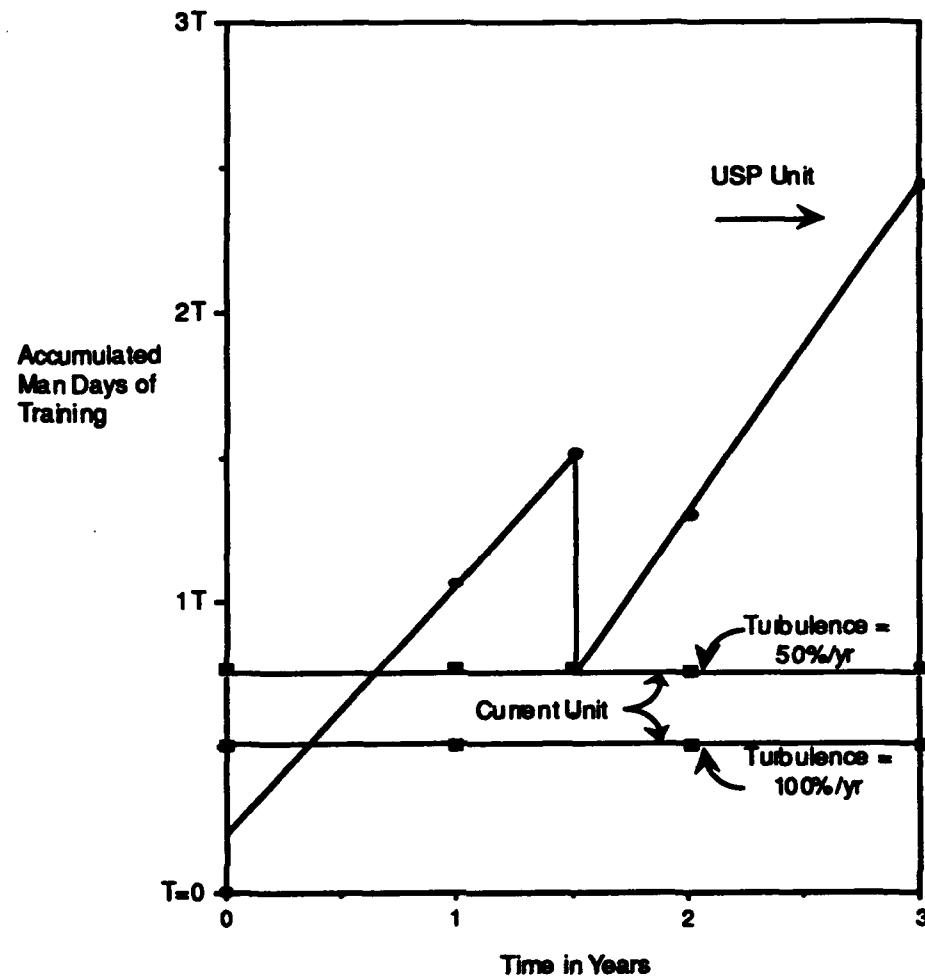
Figure III-2. Training Readiness of USP vs Current Units

Annual training is spread throughout a year. Company-sized units in the Army face turbulence of 8 to 10% per month for enlisted men, 6 to 10% for NCOs and 10% for officers.[37] This means that the average unit changes over 100% of its personnel each year and must commence its training cycle roughly on an annual basis. This turbulence and the requirement to begin a training cycle over again limits the number of tasks a unit can train, the severity of the conditions it can train in, and the standards to which it can train. Turbulence also will limit the development of collective skills and unit cohesion.

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[37] ARI data are on non-cohort units 6 months before and 3 months after an NTC rotation where turbulence is a function of personnel moving within a company as well as leaving the company. The Department of the Army staff collects data indicating a "turnover rate" of about 12 percent per quarter where turnover is a measure only of people leaving a battalion-size unit. ARI research indicates that there are approximately 2.7 internal moves for every external move in a combat unit. This is roughly equivalent to a turbulence rate of 10 percent per month.

If training is spread out relatively evenly over a training year, then personnel in the average unit will have accumulated about 0.5T man-days of training in any given year—and they will have accumulated that training in the presence of a continually changing group of unit members.

In other words, the average unit will be about 50% trained in the tasks for which it is possible to train in one year compared to the reference unit and, because unit members are constantly leaving, will never reach a training level much better than the 50% level. The episodic nature of training and the high levels of turbulence mean that, at any given time, some units may be trained in gunnery but not in tactical skills while others may be trained in some aspect of tactical operations but not in gunnery. Units preparing for a Combat Training Center will train intensively for a few months, go to the CTC and, upon their return, lose many of the unit members who trained so intensively. On the average, therefore, even this unit will not be much better than the 0.5T level. For all units, once a particular training event is completed and the unit's competence in that area is measured, the impact of turbulence begins to reduce the unit's ability to perform that task to an acceptable standard.

Should turbulence at the unit level be reduced to 50% per year vice 100%, then the average unit will be able to accumulate about 0.75T man-days of training. It stands to reason that such unit should be able to train in more tasks to a higher standard.

Since the USP incorporates a unit replacement system, units will be formed as recruits move through initial training. Some of the unit's officers and NCOs will join as the unit moves through its training process. These units will begin their USO cycle with a significant number of collective skills and a degree of unit cohesion already developed. The typical unit will begin its cycle at 100+% manned with all of its first term soldiers having spent initial entry training together. The unit will be expected to complete its first year of training nearly fully manned.[38] Therefore, the unit will begin its first year at a level above zero, will complete its first year at least at the 1.0T level, and the average unit will be at a higher training level than either of the current units portrayed in Figure III-2. The average first year unit's overall ability as a unit should be higher for three reasons:

> (1) the first term members of the unit will have been together for initial entry training plus the first half of the year;

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[38] Although the unit's losses, scheduled and unscheduled, will be replaced only once, at the mid-point of the ready cycle it will be possible to replace key individuals at other times. A tank company that loses its master gunner, for example, will either train its own replacement or the parent unit will assign a replacement.

(2) all of the officers and NCOs will have been together in that unit for an average of 6 months and many of them will have served together before in other USP units in the division; and

(3) the unit will have been able to conduct progressively more demanding training without having to disrupt its training to make adjustments for new personnel in the unit.

These three factors would also lead to a higher level of cohesion than that of the standard unit. Moreover, since higher commanders will be aware of the scheduled arrival of a new unit, they will likely schedule an intensive unit training period shortly after the unit joins its parent. In any case, at the end of the first year the unit will be manned at approximately 100% with soldiers who have undergone 1.0T man-days of training together in the unit.

In the second year, the standard unit starts its training cycle over again and, once again, never reaches a steady state greater than about the 0.5T level for a unit with 100% turbulence and 0.75T for a unit with 50% turbulence.

The USP unit, on the other hand, will now be in its second year. It will start at the 1.0T level and begin to increase its training readiness beyond that level. During its second year the unit will continue to train in many first year tasks but in more difficult conditions and to higher standards. The unit also will train in new tasks to which it was unable to train in the first year. At the mid point of the second year, the average unit will have conducted training in many of the basic first year tasks and will have trained in a number of new tasks. The unit might be said to be at a 1.5T training level. Its personnel will have performed 150% of a year's man-days of training in the unit. At this point, some unit members may depart for other assignments in order to open promotion opportunities within the unit and to provide the Service with somewhat more flexibility than a fixed 3-year ready assignment would provide. The number of individuals leaving the unit could be minimized by allowing the unit to promote qualified individuals within the unit in excess of the positions available. Alternatively, the number of career personnel can be limited and first term personnel can be assigned to positions that would normally be filled by career personnel in a standard unit. In either case, a batch of replacements will arrive to replace these individuals and others who have left during the preceding 18 months. If this batch of replacements totals half of the manning of the unit (a conservative assumption), it will lower the training readiness of the unit to perhaps the 0.75T level, but the impact should be reduced:

(4) because of the skills of the unit members who are left;

(5) because the unit, receiving its replacements all at once, will be able to integrate its new members into the unit and rapidly train them in their tasks; and

(6) because the first term replacements will have already trained together in initial entry training.

At the end of its second year, a unit that lost 50% of its members at the halfway point will be at the 1.25T level of man-days of training, $2T(0.5) + .5T(0.5) = 1.25T$.

In the third year, the unit will add another 1.0T man-days of training and will increase its training readiness to 2.25T man-days of training. In other words, at the end of the third year the members of the unit have the ability to accumulate over 4 times the man-days of training in the unit as a typical units in today's Army. This advantage in training as a team should make these units the units most appropriate for immediate deployment in a contingency and for conducting tasks at the point of main effort in Army AirLand Operations. In Army "crawl, walk, run" terminology, a third year unit could be considered a potential championship runner.

Since USP units will have additional training days, the Service must develop appropriate training for their higher level of competence. If current training plans are *appropriate for standard units*, then they are likely to prove inadequate for USP units. Army and Marine leaders and trainers will have to devise training methods and tasks, conditions, and standards that are appropriate for USP units. The ability to provide challenging training will have a direct impact on the level of training readiness that these units can reach. Failure to challenge these units could lead to serious morale and performance problems and could negate the value of USP units.[39]

E. THE UNIT STABILITY PROGRAM

This section describes the main elements of a Unit Stability Program designed to overcome the peacetime and wartime problems discussed above. These elements are simple in concept but would require the Army or Marine Corps to make significant changes in their current personnel procedures. These changes do not appear to have significant costs.

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[39] This was one of the major problems with the Army's COHORT units.

In Peacetime

- Keep first term soldiers and marines together in initial entry training and throughout their first assignment to a combat, combat support, or combat service support company or battalion.

  — Design initial entry training to indoctrinate new soldiers and marines into membership in their parent unit.

  — Assign some of the leadership cadre to the unit while it is still in initial training.

  — Keep units together for at least 3 years.

- Keep officers and NCOs in the new unit as long as possible and, in general, keep them in the same parent unit for most of their career.

  — Parent units could be Regiments as in the British model. They could be divisions—perhaps a more appropriate echelon for the U.S. Army. They could be composite units such as all the armored cavalry regiments or all the artillery units at Fort Sill.

  — Assign career soldiers and marines to a "homebase" where they will perform the bulk of their assignments in operational units and to which they will return after non-operational assignments.

  — Soldiers and marines with technical skills may have a "homebase" with a combat unit or with a technical unit or school.

- Station units overseas that are in the USP or periodically deploy USP units overseas for training.

In Crisis or War

- Units will be responsible for managing their own manning but will call for outside support when necessary.

- Key unit personnel who are temporarily assigned to the non-operational part of the Service will be available for recall to their units.

- Retirees and members of the Individual Ready Reserve will be available for recall to their units or to replace unit members in the non-operational force.

- The CONUS-based, administrative headquarters of each parent unit, e.g., division or regiment, will organize, train and deploy replacement sub-units e.g., battalion, company or platoon, to the combat theater. This administrative headquarters may be staffed largely by recalled retirees or reservists.

- Units will be rotated in and out of combat and will not be kept permanently in contact with the enemy.

- Units will rotate out of combat in order to reconstitute[40] and/or to rest and recuperate after extensive periods of combat.

- Units will generally not receive combat replacements until they can be moved to the rear for reconstitution.

- Units will retrain prior to returning to combat.

- Replacement sub-units will be assigned directly to the parent unit in the combat theater and used either to replace losses in other sub-units of the same parent unit, to relieve their sister units from combat duties or, in extreme circumstances, to meet the needs of other divisions.

  - Replacement sub-units may be broken into their component companies or platoons but not into smaller groups.

- Reserve component units may be used as replacement units, especially for their associated active component units.

- Individuals will be managed by the parent unit.

  - Parent units will manage the flow of individual casualties, trainers, and combat veterans.

  - Individual replacements will be used to meet special needs.

Implementing a Unit Stability Program

- Both Services would have to become serious about the implications of Total Quality Management and allow lower levels to take on much more responsibility, authority, and accountability in personnel management.[41]

- The Army and Marine leadership at all levels would have to understand the increased demands that are placed on leaders to train and manage stabilized units and would have to train leaders in necessary leadership techniques.[42]

- Both Services would have to train and manage units according to a schedule that would meet the needs of operational commanders in peace and war.

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[40] Reconstitution is the process whereby a unit restores its combat effectiveness and prepares to return to combat. Reconstitution actions include replacement of losses, personnel and materiel, and retraining.

[41] One of the advantages of the information revolution is that Service headquarters can maintain centralized databases and information systems that give it the ability to set policy and assure compliance while allowing subordinate units much more independence.

[42] COHORT units demand much more from their leaders than do standard units. When soldiers stay together for long periods of time, leaders must be able to devise increasingly challenging training. In traditional units with high turbulence, the training cycle is simply repeated over and over again. The Army found that many officers and NCOs had difficulty with COHORT units because they could not keep up with their soldiers.

— The personnel system would have to learn how to manage units while continuing to manage a small number of single individuals.

— The training system would have to train units and not just individuals in initial entry training.

• Army and Marine operational commands would have to build overseas deployment schedules around the life cycle of stabilized units.

• Army and Marine personnel managers would have to develop a way to manage personnel, both career and first term, to meet the demands of USP.[43]

Both Services have significant experience in managing units that have some of the characteristics of the USP.

• The Army already has evidence of the effectiveness of a unit stability program. See Appendix A.

• The Army is already operating a COHORT system in its light infantry divisions. Implementing USP in the Army would essentially call for implementation of this system Army-wide.

• The Marine Corps has managed a very successful unit deployment program for over a decade and has managed stabilized units in the past.

F. IMPLEMENTING THE UNIT STABILITY PROGRAM

1. Changes In Enlistment Practices

There are four changes in enlistment practices that are needed to implement USP in the Army and Marine Corps:

1. The Army has already implemented the concept of variable length enlistments for COHORT units in which soldiers enlist for initial training plus the three year COHORT cycle. This concept needs to be expanded in both Services to cover all initial service in USP units. Regardless of the length of initial training, such a provision would assure 3 years of service in a USP Army or Marine unit. Reenlistment contracts should also be structured so that a Service member could reenlist for a USP cycle.

2. The Army has developed a Selected Reserve Augmentation (SRA) concept to solve some of the problems with its RT12 program by adding to the standard enlistment contract the requirement that each soldier serve 12 or 18 months in a Selected Reserve Augmentation category following the initial period of active component service and

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[43] During the last decade Army personnel management for COHORT has been done off-line and by hand.

preceding service in the Individual Ready Reserve (IRR). The Army's intent in this program is to replace members of the IRR who can not be called to active duty unless a partial mobilization is declared with members of the Selected Reserve who can be called to active duty without declaring a partial mobilization. The SRA concept can be implemented simply by adding to each individual's enlistment contract a requirement to spend one year in this Selected Reserve category and then the rest of his[44] obligation in the IRR. This concept is directly applicable to the USP and could be applied immediately to current enlistment and reenlistment contracts. It could also be implemented immediately by recruiting soldiers and marines leaving active service to enter SRA rather than IRR status.

When employed as part of the USP, a soldier or marine leaving active component status would be a Selected Reserve Augmentee and would remain associated with his old unit. This status could be similar to the Selected Reserve IMA category that does not require weekend training but may require two weeks annual training. The SRA member could be paid only for training actually conducted or he could be paid a monthly stipend.

Alternatively, the SRA member could be allowed to train with a normal Selected Reserve unit (USAR or ARNG or USMC). He would receive regular Sel Res pay for such drills. In a mobilization he would be expected to mobilize with his former unit but could be released to mobilize with his Selected Reserve unit. Following 12-18 months in this status, the soldier or marine would revert to IRR status but his old unit would continue to keep track of him and would plan on recalling him following a partial mobilization. Alternatively, should he remain in a Selected Reserve status with a Selected Reserve unit, he would be dropped from the rolls of his active component unit.

An SRA member training with a Selected Reserve unit but retaining a commitment to his former active component (AC) unit should not count against end strength limits applied to an entire Reserve Component or a state, or even a unit. The costs of this program would have to be borne by the AC. Such a program could prove to be beneficial to reserve component (RC) efforts to recruit prior service personnel since virtually all individuals leaving active component service with a good record would be in the Selected Reserve and, given this membership, would be more likely to seek out a unit where they could train in order to receive compensation for their service.

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[44] The authors understand that Service members are both female and male and use male pronouns for ease of reading only.

3. Although both Services plan on using personnel whose 8-year Military Service Obligation places them in the Individual Ready Reserve following their active service, neither Service has a way to use Service members whose active service uses up their entire Military Service Obligation. These individuals, generally those who complete two enlistments and are among the best trained small unit leaders in both Services, are effectively lost to the Service unless they join a Selected Reserve unit. The military could preserve its access to these people if it included in its reenlistment contract, in addition to the provision of one year in SRA status, a requirement for service of perhaps 2-3 years in the IRR. In this way the military could assure access to people between their 8th and their 20th year of service—between the end of their Military Service Obligation (MSO) and when they can retire. This concept could also be implemented immediately by recruiting soldiers and marines leaving active service who have completed their MSO to enter SRA or IRR status.

2. Changes in Officer and NCO career planning

The USP could be implemented with minor changes in officer and NCO career planning. For example, it would be possible to keep both officers and NCOs on the individual replacement system. Such a decision would be likely to limit the level of expertise that USP units could reach. Army experience with COHORT, for example, indicates that unit performance is enhanced when officers and NCOs are also stabilized.

A preferred approach for the USP would be to keep officers and NCOs in units long enough to assure better trained and more cohesive units and to schedule movements of officers and NCOs in and out of stabilized units at predetermined times. Although the Services would not have the total flexibility under the USP that they have today, they would have the same access to these individuals except that this access would only be at set times. Officers and NCOs could spend the same proportion of their careers in operational and non-operational assignments as they do today. They could continue their professional development in the same manner as today but would return to their parent units for their operational assignments and would do so in accord with the schedule of the unit they were to join.

More dramatic changes in officer careers are possible. Since the demands for officers in units declines dramatically in the field grade ranks, provisions could be made to reduce the number of officers who remain associated with operational units. For example, the best commanders could be identified and placed on a special command track that would return these specially selected officers to successively higher levels of

command within their parent unit. Specialists in operations and logistics, etc. could also be selected and their careers managed in this way. These officers would remain associated with their parent units for the rest of their career—they would, of course, have assignments outside their parent unit but would expect to return again and again to their parent unit. Other officers would be made available for non-operational jobs or could leave the active component entirely. Such a decision could:

- Allow the Army and Marine Corps to stabilize commanders and special staff officers for longer periods and thus assure they have the necessary experience in their USP unit.

- Reduce the number of officers who could look forward to command but increase the average skill level of commanders.

- Reduce the number of command experienced, active component officers available for a major expansion of the force in the face of a world-wide war.

- Lead to more officers leaving the active component at roughly the ten-year mark and thereby assure the availability of more company grade combat replacements from the RC[45].

- Lead to a reduction in the total number of active component field grade officers.

- Reduce the "up or out" pressures on officer careers that contributes greatly to the high levels of turbulence in officer assignments.

- Lead to increased stability for officers in non-operational assignments.

3. Scheduling Unit Deployments

The Marine Corps has had considerable success for over a decade in using a unit deployment system for most of its overseas commitments. Most Marines are enthusiastic supporters of the concept. The Marines need make no changes in their concept to implement USP or RSO.

The Army would have to adopt a unit deployment concept such as that currently used for deployment of COHORT units to the Sinai Peninsula or as they used with COHORT deployments to Korea.

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[45] Both Services have more flexibility with officers and can require officers leaving active service to remain in a SRA status or an IRR status for as long as necessary.

4. Changes in Combat Training and Replacement Systems

The goal of keeping units fully manned in combat continues to drive the combat training and replacement systems. The current systems in both Services are based on delivering individual replacements to units as part of normal combat "resupply" in order to keep them as fully manned as possible. Many of the faults of this system have been detailed elsewhere.

This system will change with the USP. Combat units would receive their replacements from either or both of two sources:

- They could communicate directly with their CONUS administrative headquarters to schedule training and replacement actions, or

- They could receive replacement units from within the combat theater. For example, they could be assigned RC units—platoons, companies or even battalions and brigades—for integration into the unit.

This could lead to efficiencies such as eliminating the centralized Army replacement system in favor of a decentralized system with less administrative overhead. Administrative overhead might be further reduced as combat units are directly linked to the training base. The Theater Army Personnel Command may be unnecessary if combat units are no longer to be kept fully manned at all times and if combat replacements are to be managed by individual units.

The USP will also allow parent units to provide for rotation of individuals to and from their combat units and for efficient return of individuals to their combat units from the medical system.

G. COSTS OF THE UNIT STABILITY PROGRAM

Comparison of the Unit Stability Program with the current system reveals no areas where the USP would, of necessity, add additional costs to the management of Service personnel. The following considerations apply to the issue of the cost of the USP:

- Will applying the principles of TQM to pass responsibility, authority, and accountably downward, lead to reductions in the size of centralized personnel staffs?

- Will parent units be able to manage their personnel without major increases in management personnel?

- Will the need to schedule the arrival of personnel, both first term and career, to the startup time of new units lead to greater amounts of costly personnel "dead time"?

- Will the USP have an impact on first term attrition?

- Will USP units be able to maintain the same average manning levels as current units without having to have expensive amounts of over manning at the beginning of the USP cycle?

- Will USP units demonstrate greater unit effectiveness than current units at comparable manning levels?

H. RECOMMENDATIONS

Experience with the Army's COHORT program provides sufficient data that both the Army and the Marine Corps should be able to identify the steps that need to be taken to implement the USP in the near term. A decision to implement a Unit Stability Program could be made in the near term and could be implemented as the Army reduces its endstrength over the next few years. Among the steps that could be taken are:

- The Army decided in 1990 to implement COHORT in an entire heavy division. This could be a first step in initiating the USP.

- Army light forces could go back to the three-year COHORT concept that serves as the model for the USP.

- Experiments can be conducted as the Army reorganizes and reduces. Ways to keep track of former unit members who enter the SRA or the IRR can be developed.

- Efforts to recruit former unit members to join an SRA status can be undertaken.

- Designs for unit-level personnel management can be developed.

- Management information and data base systems under development can be redirected to a unit-oriented system.

- Reductions in overseas deployments can be done on a unit basis in order to provide experience in making overseas unit rotations.

IV. READY STANDBY ORGANIZATION

This chapter describes a new approach to organizing military forces whose adoption by the Army and the Marine Corps could allow both Services to preserve force structure and training readiness despite resource reductions. The Services would accomplish this goal by creating fully equipped standby units that are manned by fully trained people who have other peacetime assignments or who have left the active component. We have called this concept Ready Standby Organization (RSO).

A. ORGANIZING PRINCIPLES OF RSO

1. Maintain 12 active component Army divisions and 3 Marine divisions despite resource reductions that require a reduction in active component operational end strength of about 25%.

2. Make more productive use of fully trained soldiers and marines by keeping them available longer and by keeping them associated with units in which they have previously served.

3. In a crisis or war, plan to make large-scale transfers of people from the peacetime, non-operational organization to meet the needs of the wartime, operational organization. Where necessary replace these people in the non-operational force with reservists or retirees.

B. RSO FOR COMBAT UNITS

The Ready Standby Organization is intended to provide a way for all the Services to adjust to potential reductions in resources while preserving active component force structure and preserving or even increasing training readiness. RSO can be implemented using the individual replacement system but will be much more effective if it is implemented in conjunction with the Unit Stability Program described in Chapter III. This section will first describe a version of RSO that incorporates the USP, and then, a version of RSO using the current replacement system. Figure IV-1 is a schematic of RSO.

Year 1	Year 2	Year 3	Year 4				
Full Time	Full Time	Full Time	Full Time Double Hatted	Year 5	Year 6	Year 7	Year 8
				Full Time Double Hatted	Full Time Double Hatted	Full Time Double Hatted	Full Time Double Hatted
			SRA/Ret	IRR/Ret	IRR/Ret	IRR/Ret	IRR/Ret

Mid Point Turnover

Losses to New Ready Units
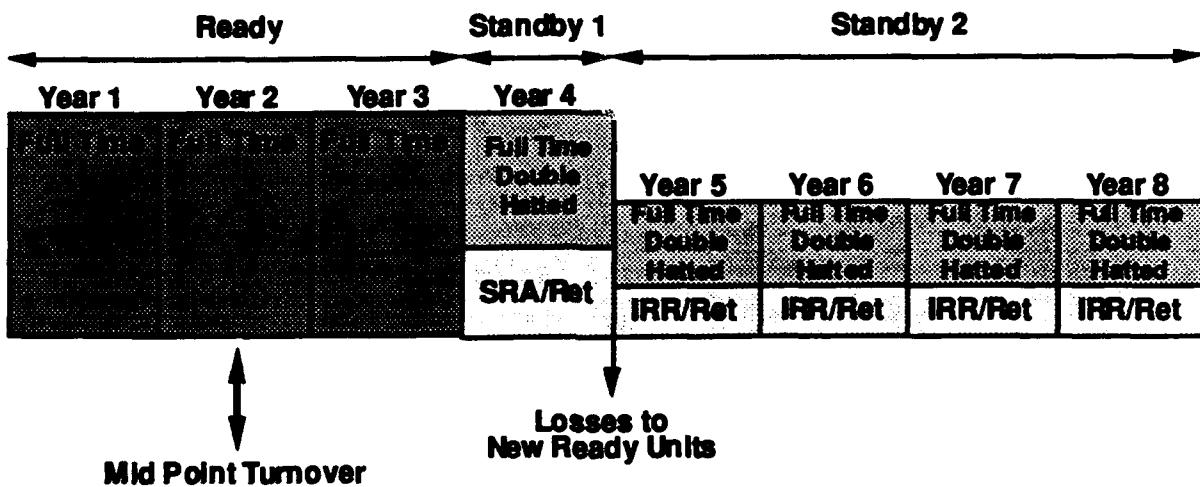
Figure IV-1. Unit Life Cycle in Ready Standby Organization (Combat Unit Variant)

Ready Standby Organization can be thought of most easily as an extension of the Army's COHORT concept—the first 3 years in Figure IV-1. In that concept, a battalion's first term soldiers are trained together and, at the completion of their initial entry training, are formed into a COHORT battalion where they join a group of officers and NCOs to form the battalion. The first term soldiers and some of the leadership cadre will stay together for a 3-year period. With a Unit Stability Program in place, the arrival of new officers and NCOs would not be as disruptive as in the current system because these new individuals would generally be members of the division or regiment, would know the standards and procedures that were unique to that unit, and would be known to the unit. Thus new leaders would be integrated more rapidly into the unit.

A standard Army COHORT battalion ends its life after 3 years and a new battalion is formed. In RSO, the battalion would not end at the 3-year point. Instead, it would transfer from Ready status to Standby status—year 4 in Figure IV-1. We will call this a Standby 1 or S1 unit. As the figure shows, the creation of an S1 unit provides a way to put 1 of 4 battalions, or 25% of the active component, into Standby status.

This period of Standby 1 status would last for perhaps 12 months. As the unit shifts from Ready to Standby 1 status, the unit members would go on to other assignments or would leave the active component. Unit members leaving the active component could be in the Selected Reserve Augmentation category described in Chapter III, in the Individual Ready Reserve, or retired. During the unit's time in Standby 1

status, all the active duty members of the unit would hold a mobilization assignment to the unit regardless of their actual assignment. In an emergency and following a decision to recall the non-active members to active duty and a short period of retraining, the unit would reemerge as a highly ready combat unit with most of its personnel in the same positions they occupied when the unit entered S1 status.

The equipment for Standby units would be maintained in storage in unit sets similar to POMCUS equipment and would be ready for immediate use. Since the unit would be returning to its own equipment and would maintain ownership of the equipment during its S1 status, this might provide for more rapid mobilization of S1 units. This equipment could be organized in a number of ways. As a unit moves from Ready to Standby status it could put its equipment in storage for the period of its S1 status. At the end of that period some of the equipment could be reassigned to a new Ready unit and some could remain in storage for S2 units that are described below.

Alternatively, and in order to provide maximum flexibility for employing both Ready and Standby units, each Ready unit could turn in its equipment as it enters Standby status with the expectation that, upon mobilization, it would be assigned a set of equipment from storage or from a Ready unit that deployed to equipment sets stored overseas or afloat. In order to provide this equipment, each Service might maintain equipment configured in unit sets in the CONUS in addition to the equipment they maintain in storage overseas and afloat. These equipment sets could be used by either Ready or by Standby units as appropriate.

One important point about an S1 unit is that its members must be able to return to the unit from wherever they are assigned during the S1 year. This means that active component members cannot move directly from one ready unit to another and that each Service must make provisions for replacing S1 unit members who hold key jobs in the non-operational part of the force. Ways to accomplish this will be discussed below.

After 12 months in S1 status, many individuals in the active component would be assigned to a new Ready unit and would become unavailable to their S1 unit. But many would remain in non-operational assignments for longer periods and many non-active members would still be available for recall. Members of the IRR would remain in this status for as long as their Service obligations lasted. Retirees could be kept in this status for as long as the unit remained in S2 status. These individuals could then be formed into Standby 2 or S2 units—years 5-8 in Figure IV-1.

S2 units would be smaller than the S1 units—companies might be consolidated into platoons and battalions into companies—but they would still be composed of individuals who had trained together in the Ready cycle and who would still retain many of the skills and much of the unit identification and cohesion they built up during their Ready cycle. While S1 units would be used in place of standard active component units on a one for one basis, depending on the needs of the Service, S2 units could be consolidated and used in place of standard active units, or they could be used to provide fillers and combat replacements for their associated battalions, or they could be used as cadres to form the base for new units. The use of S2 units in place of Ready units would allow more of the active component to be placed in Standby status.

When used to provide fillers and combat replacements for their associated battalions, the S2 units would not contribute directly to enlarging U.S. force structure in terms of discrete units. Instead, they would be a source of instantly available and generally willing fillers for sister units. These individuals already identify with and are acknowledged members of the unit and could most easily fit into its operations. For fillers, this concept is similar to the Army concept of using members of the IRR who have left the active component within the last 12 months (so called RT-12) except for the improvement that these individuals are returning to units they already know and identify with.

As a source of combat replacements, S2 units could provide platoon- and company-size replacement units that could meld into existing units in the combat theater. In both cases, the individuals in the S2 unit would be fully trained, would need only refresher training and, most important, would be joining a unit that they already know and that already considers them a member.[1]

If S2 units are used as cadres to form new units, they might be made responsible for providing basic and advanced individual training to the new soldiers added to the unit. This use of S2 units would provide fully manned units but would take a longer period of time as the new unit members and the unit itself would have to be fully trained before the unit could be declared ready.

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[1] One of the problems the Army faced in the mobilization for the Gulf War was that individual fillers and replacements had difficulty being accepted in their new units. Many members of the IRR who had just left the Active component were treated as if they knew nothing and were forced to endure retraining in the most basic of their military skills. U.S. Army Research Institute, *Individual Ready Reserve Call Up*, Research Report 1595, June 1991.

It is possible to implement RSO at a number of organizational levels—company, battalion, or brigade—but the unit that would move through the Ready Standby cycle would be either a company or a battalion. Figure IV-2 portrays four possible ways of implementing RSO in Army or Marine combat organizations.

The first three figures represent using S1 units to replace standard active units and using S2 units for other purposes. The fourth figure represents using both S1 and S2 units to replace standard active units.

C. RSO FOR COMBAT SUPPORT AND COMBAT SERVICE SUPPORT UNITS

Under RSO, combat units and some combat support units such as artillery and engineers would form at a given time, move through the cycle just described, and then disband. Other units would never disband. Aviation and maintenance units, for example, have many different types of skills that take long periods of time to train. These units usually want to keep skilled personnel, e.g., pilots, in the unit as long as possible. Individuals assigned to these units would go through the cycle depicted in Figure IV-3. During their first terms, the individuals destined for these units would go through their initial training followed by specialized technical training. Upon completing their training, these individuals would go through a cycle in which they would be in Ready status while on active duty with the unit, and in Standby status afterwards.

The dark-shaded blocks in Figure IV-3 depict not three units, but the members of a single unit that are serving in their first, second, third, or even forth or fifth year, respectively, as full-time members of that unit. (We rounded the corners of the blocks in Figure IV-3 to differentiate them from the rectangles in Figure IV-1 and thus underscore the point that they represent "year cohorts" within one unit.)

Similarly, the lighter-shaded blocks in Figure IV-3 depict other members of the same unit who have completed active-duty service with that unit. Some have moved on to other full-time jobs in the Service but remain "double hatted" in that they will return in the event of emergency. Others have left active service and retired or entered either the SRA or the IRR; they, too, will rejoin this unit in the event of emergency.

I. Using Companies

Each year a company moves to standby status

Hq & Support
A Company
B Company
C Company

Replacement companies arrive annually

Ready Units
Standby Units

D Company
Hq & Support Slice

Soldiers leave standby unit and return to a new ready unit or move to less ready S2 unit after 12-18 mos

II. Using Battalions

Each year a battalion moves to standby status

Hq & Support
1st Bn
2nd Bn
3rd Bn

Replacement battalions arrive annually

Ready Units
Standby Units

4th Bn		
A Co	B Co	C Co
Hq & Support Slice		

Soldiers leave standby unit and return to a new ready unit or move to less ready S2 unit after 12-18 mos

III. 4-Brigade Division

Each year a battalion from each brigade moves to standby status

Div Hq & Support
1st Bde
2nd Bde
3rd Bde

Replacement battalions for each brigade arrive annually

Ready Units
Standby Units

4 Bde		
1st Bn	2nd Bn	3rd Bn
Div Hq & Support Slice		

Soldiers leave standby unit and return to a new ready unit or move to less ready S2 unit after 12-18 mos

IV. 3-Brigade Division

Each year a battalion from each brigade moves to standby status

Div Hq & Support
1st Bde
2nd Bde

Replacement battalions for each brigade arrive annually

Ready Units
Standby Units

3rd Bde	
1st Bn S1	2nd Bn S1
Div Hq & Support Slice	

3rd Bn S2

Soldiers in S1 units return to a new ready unit or move to less ready S2 status after 12 mos

Figure IV-2. Ready Standby Organization Using the Unit Replacement System

IV-6

Up to 2 Years	1st Year	2nd Year	3rd Year	4th Year	5th Year	6th Year
Entry Level and Skills Training	Full Time	Full Time	Full Time	Full Time / Full Time Dbl Hatted / SRA/IRR/Ret	Full Time / Full-Time Dbl Hatted / SRA/IRR/Ret	Full Time Dbl Hatted / SRA/IRR/Ret
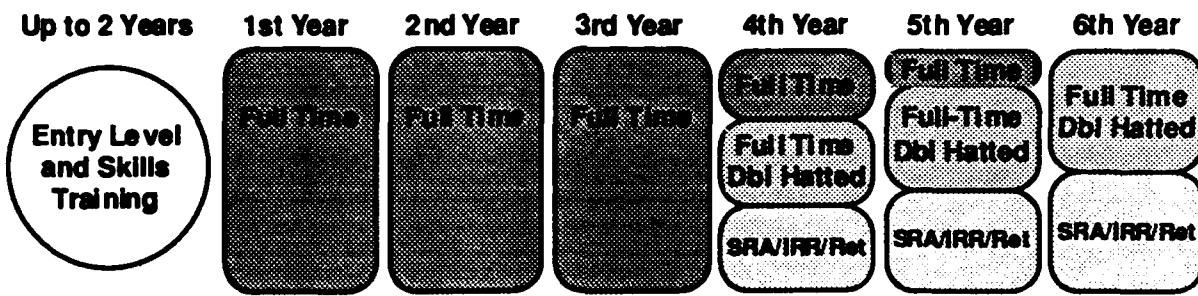
Figure IV-3. The Support Unit Variant of Ready-Standby Organization

This form of Ready-Standby Organization has several advantages for many units. First, many units are composed of specialists whose training requires anywhere from 6 months to almost 2 years. Thus, it is virtually impossible for all members of these units to serve together from entry-level training through the time they are assigned to operational units. Second, the in-unit stability allows these units to build the collective skills and cohesion that are important in all units but are ignored more often for CS and CSS than for combat units. Finally, these units have to cope with a higher operating tempo in wartime and need more personnel to do so.

With the manning pattern just described, these units could be sized to handle peacetime demands most of the time and to expand to meet the increased demands of wartime service in the event of mobilization. One of the advantages of using RSO for these units is that it effectively assures that the best trained people in the unit—those who have completed a recent assignment with the unit—will be with the unit when it goes to war.

D. RSO USING THE INDIVIDUAL REPLACEMENT SYSTEM FOR COMBAT UNITS

It is also possible to implement RSO even if a Service decides to retain the individual replacement system for combat units. A number of possible options are displayed in Figure IV-4.

I. Using Companies

Individuals Flow to Standby Units

| Hq & Support | A Company | B Company | C Company |

| D Company |
| Hq & Support Slice |

Individual Replacements

Ready Units / Standby Units

Soldiers leave standby unit and return to a new ready unit or move to less ready S2 status after 12-18 mos

II. Using Battalions

Individuals Flow to Standby Units

| Hq & Support | 1st Bn | 2nd Bn | 3rd Bn |

| 4th Bn |
| A Co | B Co | C Co |
| Hq & Support Slice |

Individual Replacements

Ready Units / Standby Units

Soldiers leave standby unit and return to a new ready unit or move to less ready S2 status after 12-18 mos

III. Using Brigades

Individuals Flow to Standby Units

| Div Hq & Support | 1st Bde | 2nd Bde | 3rd Bde |

| 4 Bde |
| 1st Bn | 2nd Bn | 3rd Bn |
| Div Hq & Support Slice |

Individual Replacements

Ready Units / Standby Units

Soldiers leave standby unit and return to a new ready unit or move to less ready S2 status after 12-18 mos

IV. Using A 2-Brigade Division

Individuals Flow to Standby Units

| Div Hq & Support | 1st Bde | 2nd Bde |

| 3rd Bde |
| 1st Bn | 2nd Bn | 3rd Bn |
| S1 | S2 |
| Div Hq & Support Slice |

Individual Replacements

Ready Units / Standby Units

Soldiers leave standby unit and return to a new ready unit or move to less ready S2 status after 12-18 mos
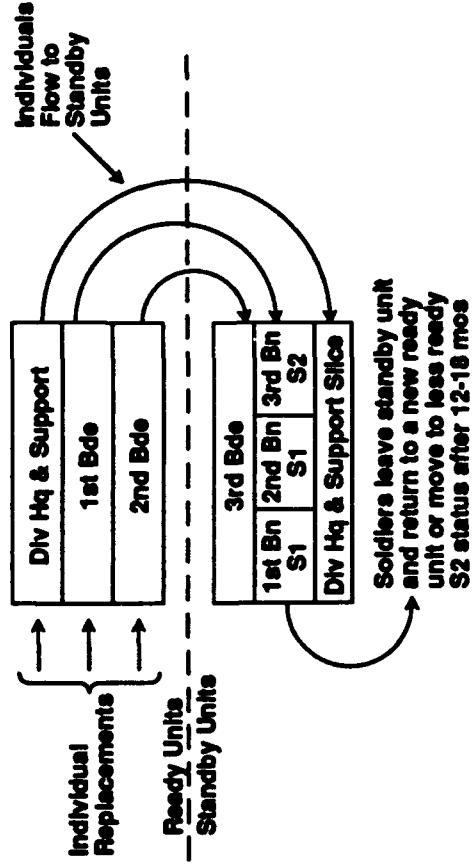
Figure IV-4. Reedy Standby Organization and the Individual Replacement System

The figures reflect the flow of individual replacements into Ready units and out to Standby units. Since the flow of individuals would be the same as in current units, there would be no R1, R2, and R3 units. In this concept, all Ready units would have the same readiness as current units. Standby units would be manned by individuals who had recently completed a tour in an associated Ready unit. If it is possible to limit turnover in battalions to about 33% per year, it should generally be possible to maintain one S1 unit for every 3 Ready units and to man the S1 unit primarily with people who had completed their assignment in a Ready unit within the last year. One advantage of using the individual replacement system is that available individuals can be kept in the S1 unit as long as necessary to maintain the unit at the appropriate manning level. While unit members in the AC may have to move on to new units, retired members can be kept as long as necessary, and members of the IRR can be kept in the S1 unit until their obligation expires.

The negative aspects of this system are that Ready units are identical to current units. They have the same degree of turbulence and have no opportunity to be more ready than current units. Standby units will be less ready than Standby units in a system that uses unit replacement because the members of the unit will have much less experience working together. If the outflow from three Ready units is combined into one Standby unit, then, at most, only one-third of the S1 unit members can have worked together before. For example, if three Ready battalions flow into one Standby battalion, only 1/3 of the members of the Standby battalion can have been from the same Ready battalion, only 1/9 from the same company, and only 1/27 from the same platoon. Since the replacement process goes on throughout the year, and even with no turbulence within a Ready unit, members of a Standby unit would also be separated from other members of their Ready unit by the time factor. In other words, the S1 unit based on the individual replacement system would be little different from a unit put together on an ad hoc basis from a group of trained individuals in the non-operational force and the IRR.

E. READINESS OF STANDBY UNITS

The readiness of standby units is a function of:

- the level of training readiness the unit reached before entering standby status and the length of time the unit has been in standby status,

- the rate at which the individual and collective skills deteriorate,

- the speed with which such skills return with refresher training.

Figure IV-5 below is a repeat of Figure IV-1 that shows the potential training readiness of Ready units but adds additional years to represent a period in Standby status. The figure includes two possible deterioration rates for the training readiness of Standby units and compares that outcome with the training readiness of current units.
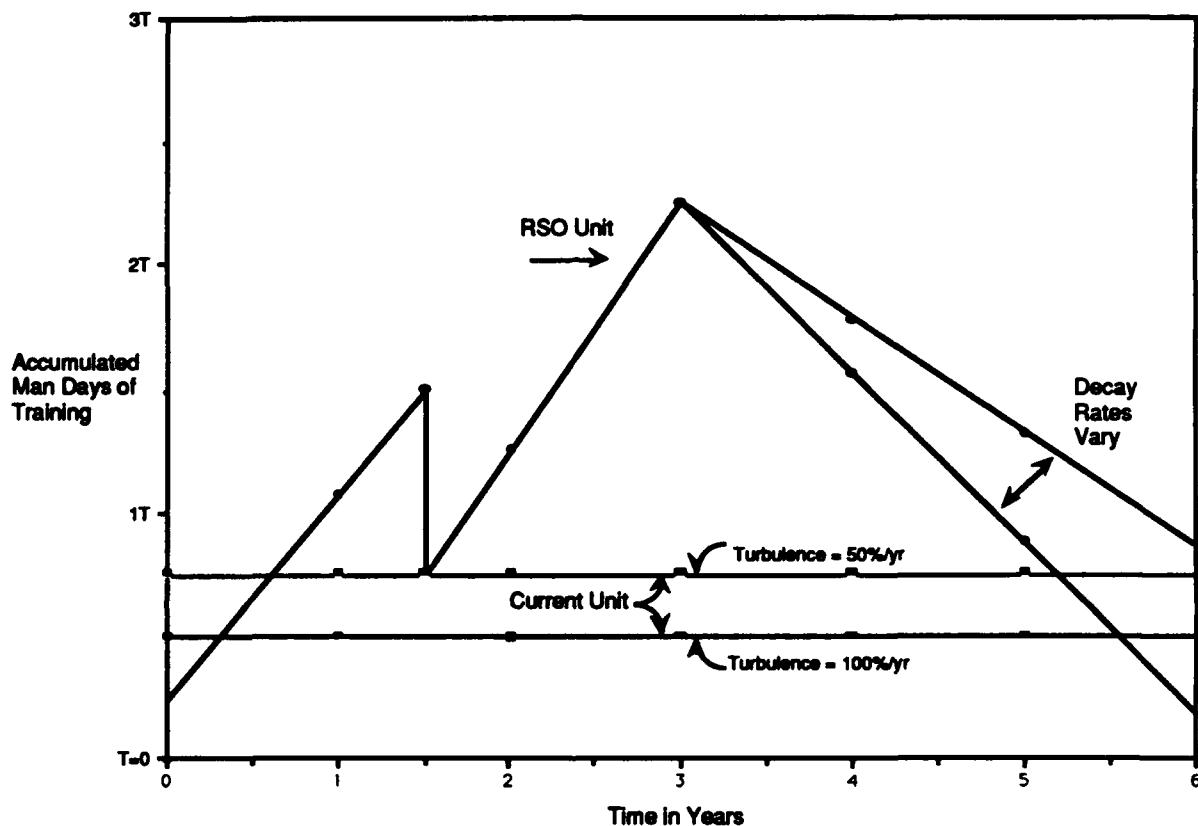
Figure IV-5. Training Readiness of RSO vs. Current Units

As the figure shows, a Standby unit that has just spent three years in Ready status can be expected to be at a high level of training readiness. At the beginning of its status as an S1 unit, it will be fully as capable as the R3 unit it just was—with 2.25T man-days of training in the unit. At the end of its period in S1 status, it should still be a highly competent unit with a high level of individual and collective skills that may need a short period for refresher training. If unit skills deteriorate at the rate of 50% per year, for example, the S1 unit will be roughly equivalent to a Ready unit with personnel who have 1.125T man-days of training in the unit. If unit skills deteriorate at only a 25% rate, the

S1 unit will be roughly equivalent to a unit with personnel with 1.7 man-days of training in the unit.

Following a short retraining period, the average S1 unit should be capable of performing more tasks in more difficult conditions to a higher standard than either the average Reserve Component unit or the average active component unit in today's Army. This is because the S1 unit will have trained to a higher level of training readiness when in Ready status than the average RC or AC unit will ever be able to train to. In a mobilization, the average S1 unit may be able to reach an acceptable level of training readiness faster through retraining than the average RC unit will be able to reach because the average RC unit will never have reached that level of training readiness before. Although it will not be ready immediately, the average S1 unit, because it was previously at a higher level of training readiness, may be able to reach a higher level of competency than the average AC unit can reach in the short period of time following the initiation of a crisis.

The training readiness of an S2 unit also will be a function of the decay rate. If the 50% per year rate of skill deterioration continues in the second standby year, for example, then the S2 unit might have a level of training readiness associated with 0.6T man-days of training in the unit. At the 25% decay rate, the S2 unit will be at the 1.2T level. Both levels compare favorably with a current unit. In any case, the S2 unit will be composed of individuals who have previously developed high levels of individual and collective skills and who have closely identified with their parent unit. Once they return to their parent unit and begin the retraining process, their high level of individual and collective skills will allow them to coalesce more rapidly in a unit with high levels of training readiness. Their identification with the parent unit will help to assure their willingness to return and their rapid integration into an effective unit. Personnel from S2 units might also be combined with personnel from the parent unit's associated training unit.

As units, although S2 units will be less ready than an S1 unit, they will have a number of advantages over units that are created from scratch. An S2 unit will be made up mainly of people who have previously served in that parent unit and have previously reached a high level of training readiness in an R3 unit. Readiness problems can be minimized if the parent unit manages S2 manning by consolidating units as personnel become unavailable.

As combat replacements, members of S2 units will allow their sister units to reconstitute more rapidly and to restore higher levels of combat readiness than will be the case for units that are provided replacements through an individual replacement system. Personnel from S2 units will likely be available for use as replacements more rapidly than they will as entire units.

F. AVAILABILITY OF PERSONNEL FOR STANDBY UNITS

1. Considering Existing Personnel Inventories

One of the key factors that makes RSO possible is that all Services have large numbers of fully trained people at any given time who are not assigned to combat units. These people can be found in the non-operational part of the force, in the IRR and the retired reserve. Table IV-1 below provides an example of the number of soldiers potentially available for standby infantry units. The table shows the number of soldiers and officers that might be cut from the operational force if 25% of the active component infantry force were put into standby status and compares that number with the number of infantry soldiers and officers potentially available from today's non-operational force, the IRR and the retired reserve. The table shows that the number of soldiers and officers potentially available varies from over 3 times the number required for the most junior soldiers, to a significant surplus of senior officers and NCOs. While the number of soldiers available in the future would decline with a reduction in the number of Ready units, this preliminary analysis suggests that sufficient personnel can be made available to man the standby units at the 25% level.

2. Modeling the Flow of Personnel in RSO Units

Another way to address the question of the availability of personnel to man Standby units is to simulate the flow of soldiers through an RSO system and to compare that flow with the current system. We made such a comparison as part of an earlier IDA study on the Total Force.[2] In order to make this comparison, we developed the Unit Personnel Tracking Model (UPTM) to simulate the flow of people under RSO and the Unit Stability Program and under the current system.

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[2] Tillson, Hoyler, et al., *Alternative Concepts for Organizing the Total Force*, IDA Report R-378, 1990.

Table IV-1. Potential Availability of Infantry Soldiers for Standby Units[3]

Grade	Oper Force	Demand 25% in Standby	Supply Non-Oper Force	IRR	Retirees[1]	Tot Pers Available	As% of Standby
E1-E3	18,700	4,675	2,300	15,000		17,304	370
E4	19,400	4,850	1,800	20,000		21,800	450
E5	8,200	2,050	1,600	5,000	1,600	8,200	400
E6	5,400	1,350	4,000	1,000	3,900	8,900	650
E7-E9	3,000	750	4,000	1,300	24,000	29,300	3900
O1-O2	2,400	600	1,000	1,700		2,700	450
O3	1,400	350	1,800	1,700		3,500	1000
O4	600	150	1,000	900	3,400	5,300	3500
O5	200	50	800	400	2,800	4,000	8000

[1] Approximately 20% have been retired < 5 years and 20% between 5 and 10 years.

We developed the UPTM to assess the consequences of organizing the Services along USP/RSO lines. We wanted to be able to compare the effect of new approaches with those of the current system in such areas as the need for recruits and the feasibility of creating a 50-50 mix of Ready and Standby units—a more demanding criterion than the current study which suggests converting only 25% of the force to Standby—under various conditions of re-enlistment and first-term attrition. The balance of this section describes the UPTM structure and results; see the earlier IDA study for further detail.

a. Model Structure

The UPTM can be thought of as an accounting tool that shows how various dimensions of a manpower system would change over time. To use this tool, the user specifies values that describe a group of military personnel and a set of units at the outset of the simulation. (Values that describe units include their number and strength, the number of senior personnel in them broken down by term-of-service, and so on. Values that describe the group of military personnel include the number of full-time personnel

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[3] Data provided by Logistics Management Institute, OASD, Reserve Affairs, and Defense Manpower Data Center. IRR data are May 1992. All other data are September 1991.

that are not assigned to units but could be so assigned if needed.) The user also specifies parameter values that are used in calculating how the number and composition of units would change over time. (These parameter values include the peacetime attrition rate, the re-enlistment rate at the end of each term of service, and the fraction of senior personnel required in newly forming units.)

Given user-input values of the sort just described, the model performs a series of calculations to determine the values that would describe the personnel and units one year later. To simulate the passage of a year for personnel, for example, the UPTM:

- Applies peacetime attrition factors to determine the number of personnel that leave the Service and will not return (e.g., those that die or are discharged as unfit).

- Calculates the number and grade of people needed to form the desired number of units.

- Calculates the number of people that should therefore be assigned to units.

- Updates personnel records to reflect one more year of service for all Service personnel, and to determine the numbers that transfer to SRA/IRR status or retire.

To simulate the passage of a year for units, the UPTM computes:

- The number and strength of the units that could be formed from available personnel.

- The "Familiarity Index" (FI) for the unit (i.e., the average period of time that each pair of individuals in the unit have trained together to date, summed over all possible pairs).

The Familiarity Index can be viewed as a proxy measure of unit cohesion and is similar to the man-days of training "T" measure discussed above.

b. Model Results

We used the UPTM to simulate the operation of the current system and USP/RSO given that each was to produce 12 readily mobilizable units. The results showed that the current system could achieve this objective across the range of cases we examined—first-term re-enlistment rates varying from 25% to 75%, and first-term, in-unit attrition ranging from 5% to 20%, annually. The results also showed that, regardless of the first-term attrition re-enlistment rates considered, USP/RSO could achieve the 25% Standby

objective. It could not achieve a 50% Standby objective if the first-term re-enlistment rate was 25%, but could if that rate was 50% or 75%.

Results with respect to unit strength showed a similar pattern. Current system units in all cases were able to maintain full strength (1,000 in our UPTM runs); Ready and Standby 1 units nearly achieved the same level except in the admittedly extreme case of 20% annual first-term attrition. (In that case, Standby 1 unit strength was a little under 900 personnel per unit.)

We also wanted some means of making an objective assessment of each system's prospects for building cohesive units. Figure IV-6 depicts UPTM results concerning the Familiarity Index. These results depict a striking contrast between the two systems. UPTM runs show that the *lowest* FI levels achieved by USP/RSO units are roughly double the *highest* levels produced by the current system. Since cohesion and fighting effectiveness depend on the degree to which the men in a unit know each other and have served together, these FI results suggest that—other things equal—USP/RSO could produce significantly more effective units than does the current system.
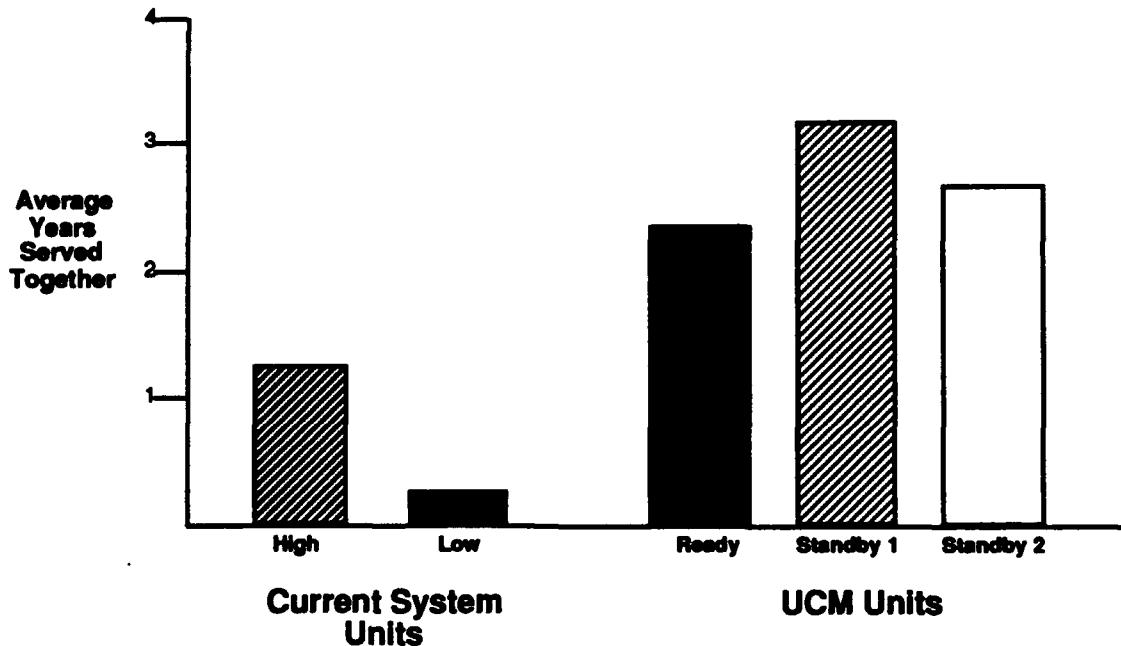
Figure IV-6. Familiarity Index Comparison

G. IMPACT OF RSO ON AVAILABILITY OF FILLER PERSONNEL AND USE OF IRR FOR COMBAT REPLACEMENTS

The use of RSO should greatly reduce the need for traditional cross leveling and use of fillers. Units organized according to RSO will have different options:

- In a minor contingency when mobilization is inappropriate, RSO units will call on the active duty members of their associated S1 or S2 units or, if only R3 units were needed, they could call on their associated R1 and R2 units to provide the people they need.

- In a more serious crisis when both S1 units and Selected Reserve units are mobilized but a national emergency is not declared and IRR members cannot be mobilized, RSO units can call on their associated S2 units to provide fillers from the active component and the retired reserve.

- In a partial or full mobilization, RSO units will use the full range of S2 personnel to meet their needs for fillers.

H. PERSONNEL FLOW: DAY-TO-DAY THROUGH UNITS AND CAREER PROGRESSION

Personnel in RSO units could be managed by a regimental headquarters, by the division, or by the personnel command. Regardless of the headquarters chosen, it would be responsible for managing the personnel in three Ready units, one Standby 1 unit, and, perhaps, one or two Standby 2 units. The headquarters would work to a schedule of unit activations and deployments. It would work within the personnel system to assure career soldiers were available to meet the needs of the new Ready unit as that unit, manned initially with new recruits, moved through initial training and prepared to join its parent unit.

The headquarters would keep track of people who leave each Ready unit through attrition or other personnel actions. It would make determinations as to whether to keep these individuals on the roster of unit members available for mobilization; it would schedule personnel to join each Ready unit at the mid-point of its Ready cycle; it would plan for the transition of each unit from Ready to Standby status and from Standby 1 to Standby 2 status; it would keep track of individuals who are not assigned to any of the parent unit's Ready or Standby units but are available for use as fillers or replacements.

In wartime, the headquarters would be responsible for keeping track of all parent unit personnel, for managing any cross leveling required among the units of the parent unit (inserting S2 personnel into Ready or Standby 1 units, for example), for organizing

new units, and for organizing unit personnel into sub-units for replacements for combat casualties. In other words, cross leveling and use of IRR for combat replacements would continue but would be restricted to within the parent unit.

Officers and NCOs would rotate in and out of RSO units at set times. For 3-year units, the rotation points would most likely be at the beginning, middle, and end of the cycle. The parent unit or the personnel command would manage this process to assure equity and availability of personnel in S1 units. The people who leave at the half-way point could go to a new Ready unit. They might go to fill a vacancy in another Ready unit at its halfway point and go into standby status with that unit. They might go directly into Standby status and be available to meet the needs of their parent unit as it forms S2 units. Some first term soldiers who join the unit at the half-way point could have a 2-year active obligation and go directly into Standby status as a SRA. These soldiers would be available for recall for the next 6 years. Some might have a longer obligation and would be used in the non-operational force for their S1 year. Unit members who fail to complete a term satisfactorily could be dropped from the unit or, if the reason is temporary, could be kept associated with the parent unit and be used as needed. In every case, the parent unit would keep track of its members and would keep them associated with appropriate sub-units.

Officer and NCO career progression could be substantially unchanged. Although individual movement might appear to be limited by the adherence to a unit schedule, overall movement would be smooth. In other words, although individuals could only be taken from a unit at a predetermined time, once the personnel command and the individual Service members became accustomed to the RSO system and schedule, the flow of personnel from units to other assignments could become even easier than today's system. Service members would know their unit's schedule and they and their families would be able to plan their lives in advance. The schools would know when both trainers and trainees would become available. Initial entry training would be organized around the RSO schedule.

One potential change of significance to many Service members would be the use of the parent unit or home base concept. Using this concept, officers and NCOs would be assigned repeatedly to the same parent unit, e.g. division, for their operational assignments. This would allow Service members and their families to establish a home from which they could deploy as necessary with the expectation of returning. It would

also assure that career Service members would be able to develop the deep understanding and knowledge of each other that is essential for effective AirLand Operations.

RSO could be implemented in essentially the same way even if the kind of major changes in officer personnel management that were suggested in Chapter III were made. Enough command and staff field grade officers would be available in the non-operational force to meet the needs of Standby units. Perhaps a majority of the company grade officers in Standby units would be in an SRA or IRR status.

I. IMPACT OF MOBILIZATION ON THE NON-OPERATIONAL FORCE

A mobilization will call many Service members in the non-operational part of the force from their peacetime jobs to return to their parent unit where they will rejoin their S1 or S2 units. This movement from the non-operational to the operational force has always happened in a crisis, but in an ad hoc manner. During Operation Desert Shield, for example, many Service members fought to get to an operational unit so they could participate more directly in the crisis. Others were caught by cross leveling or filling actions that took people from the non-operational force and used them to fill holes in the operational force.

With RSO, this movement will be more structured and will involve significantly more people. Services will have to review their non-operational structure to determine which functions must continue in a crisis and which can be terminated or reduced. They will have to rethink concepts of wartime operations that, in most cases, are based on plans to conduct a multi-year war with the Soviet Union. They will have to make plans for using Selected Reserve units, individual reservists, retirees, and civilians to maintain essential functions when the normal workers have returned to their operational units. They will have to identify jobs which are so important that they cannot be occupied by personnel with a commitment to return to a Standby unit.

None of these changes need be seen as militating against RSO. Most European NATO nations and Israel have planned for years to send large portions of their non-operational force to war. Israel has demonstrated this capability many times.

Although initial analysis indicates there should be sufficient personnel spaces in the non-operational force and the SRA to meet the needs of RSO, actual practice may find some shortfalls such as in the ranks of junior NCOs. These shortfalls could be alleviated by:

- converting civilian positions to military positions in the Army's non-operational force.

- replacing senior NCOs with junior NCOs in the non-operational force.

J. RECOMMENDATIONS

Major elements of Ready Standby Organization can be tested in the near term as the Army eliminates Active Component units. Among the steps that could be taken are:

- Some units could be placed in Standby status rather than being eliminated.

- Unit members could be tracked individually. Possibilities for their recall could be determined.

- Unit members leaving active duty could be recruited into Selected Reserve Augmentation status. Necessary inducements for such duty could be identified.

- Equipment storage concepts could be tested.

- Actual recall/retrain tests could be conducted.

V. THE UNIT STABILITY PROGRAM AND READY STANDBY ORGANIZATION FOR THE ARMY

This chapter describes a number of alternative organizational approaches for the Army based on the Unit Stability Program and Ready Standby Organization.

A. UNIT STABILITY PROGRAM

The Army COHORT and Regimental programs already contain most of the elements of the Unit Stability Program. These programs can be expanded to include the entire active component and to include those aspects of the USP that are not now part of existing programs. The major changes that would have to be made in the current system are in the personnel management system and the wartime replacement system. The changes in the wartime replacement system were discussed in Chapter III.

Among the changes that would likely be necessary in the personnel system are:

- Accept TQM principles and pass responsibility, authority, and accountability downward;

- Maintain a centralized policy-making and review capability;

- Maintain a centralized personnel database that allowed for decentralized execution and centralized review of such things as assignments and promotions;

- Devise a way for managing and promoting personnel in the non-operational Army and in both operational and non-operational joint and combined functions.

B. RSO ON A REGIMENTAL BASIS

Ready Standby Organization can be incorporated into the Army in a number of ways. This section will describe one way that is consistent with the current Army Base Force concept and that allows for the use of the Army Regimental Concept as well. In this example, the regiment becomes the basic building block for organizing the Army active component. Table V-1 shows a regiment with 3 Ready and 3 Standby battalions. Each battalion in the regiment would go through a 6-year life cycle starting as an R1

battalion and ending 6 years later as an S2 battalion. For example, in year 1, the 1st Battalion is an R1 Battalion. In year 2, it is an R2 Battalion. In year 4, it is an S1 Battalion and in years 5 and 6 it is an S2 Battalion. In any given year, the regiment has 6 battalions—R1 through S2.

Table V-1. 1st Armored Regiment (A TDA Headquarters)

	1st Bn	2d Bn	3d Bn	4th Bn	5th Bn	6th Bn
YEAR 1	R1	R2	R3	S1	S2	S2
YEAR 2	R2	R3	S1	S2	S2	R1
YEAR 3	R3	S1	S2	S2	R1	R2
YEAR 4	S1	S2	S2	R1	R2	R3
YEAR 5	S2	S2	R1	R2	R3	S1
YEAR 6	S2	R1	R2	R3	S1	S2

The Army could create regimental headquarters as administrative headquarters responsible for managing the flow of people in the regiment. A decision in favor of this alternative would be appropriate if the Army were to decide to enhance the Regimental system. The regiment might be based at a training center where it could also be involved in training initial entry soldiers who are about to enter the regiment and in training combat replacements for the regiment. Each regiment could exist within a single division or it could be entirely outside the division structure and could send its battalions to different divisions as needed.

C. RSO ON A DIVISION BASE

The division might be given the main role in managing the RSO system. Given the division orientation of the Army, a division orientation might be the most appropriate level for managing personnel. This would also support a decision to home base soldiers. Non-divisional organizations such as Armored Cavalry regiments could manage their own flow of personnel either within the regiment or within a group of regiments.

Table V-2 shows how a division might be organized using RSO and a Round Up brigade from the Army National Guard. The figure shows how division units could be managed by separate regimental headquarters. The division has three Ready brigades, an S1 brigade, an S2 brigade, and a Roundup brigade. The five Ready and Standby brigades could all be organized alike or, as in the actual division and in Table V-2, could retain the five tank and four mechanized infantry battalion structure of a typical armored division. In either case, the sub-units of each brigade fall under an administrative chain of command—the regimental headquarters—that is responsible for managing the Ready Standby process for each regiment.

Table V-2. Ready Standby Organization for a Heavy Division

Regimental Headqtrs	Standard Division			Additional Brigades		
	R1 1st Ready Bde	R2 2d Ready Bde	R3 3d Ready Bde	S1 Standby 1 Bde	S2 Standby 2 Bde	RU Round Up Bde
1st Armor Regt	1/1 Armor Bn	2/1 Armor Bn	3/1 Armor Bn	4/1 Armor Bn	5&6/1 Armor Bn	Armor Bn
2d Armor Regt	1/2 Armor Bn	2/2 Armor Bn	3/2 Mech Bn	4/2 Armor Bn	5&6/2 Armor Bn	Armor Bn
1st Mech Regt	1/1 Mech Bn	2/1 Mech Bn	3/1 Mech Bn	4/1 Mech Bn	5&6/1 Mech Bn	Mech Bn
1st Arty Regt	1/1 Arty Bn	2/1 Arty Bn	3/1 Arty Bn	4/1 Arty Bn	5&6/1 Arty Bn	Arty Bn
1st Avn Reg	1st Avn Bn	2d Avn Bn	3rd Avn Bn	4th Avn Bn	5&6 Avn Bn	Avn Bn
Div Cav Sqdn	Cav Trp	Cav Trp	Cav Trp	Cav Trp	Cav Trp	Cav Trp
1st Spt Regt	Spt Bn	Spt Bn	Spt Bn	Spt Bn	Spt Bn	Spt Bn

Alternatively, the regimental headquarters could be eliminated and the division itself could manage all the personnel assigned to the division. The division administrative headquarters would be responsible for maintaining stability in the Ready units, for keeping track of the personnel in Standby status, for assuring the manning of Standby units, for assuring the training readiness of the associated ARNG brigade, and

for organizing the wartime replacement process. The division might also be responsible for managing the training of initial entry soldiers and for the refresher training of Standby units.

Although the division in this example has 6 brigades, it would not be expected to employ all 6 brigades in a war. Instead, some of these brigades could be assigned to a standby division or, as shown below, to a division headquarters in Europe that has no brigades permanently assigned. This organization would give the Army the flexibility to employ its divisions in a number of ways. It could employ a standard division without mobilizing either Standby brigades or ARNG roundup brigades. It could employ some mix of all 6 brigades in two divisions. It could employ one division and have some of the additional brigades available for secondary missions and for unit replacements.

D. RSO FOR THE BASE FORCE

Table V-3 shows a way to organize the active component heavy divisions of the Army base force into five Ready divisions and three Standby divisions. Each of the Ready divisions could have three Ready brigades and one reserve component Roundup brigade. Each of the Standby divisions would be made up of a mix of S1, S2, and Roundout brigades. The differences between this structure and the Army base force include the creation of five, vice four, fully structured heavy divisions; the conversion of 5 Base Force brigades to Standby status; the creation of 3-4 additional Standby brigades, and, the conversion of three division headquarters from Ready to Standby status.

Table V-3. Ready Standby Organization for the Eight Heavy Divisions

Ready Divisions	#1	#2	#3	#4	#5	
	R1 Bde	R1 Bde	R1 Bde	R1 Bde	R1 Bde	
	R2 Bde	R2 Bde	R2 Bde	R2 Bde	R2 Bde	
	R3 Bde	R3 Bde	R3 Bde	R3 Bde	R3 Bde	
	RU Bde	RU Bde	RU Bde	RU Bde	RU Bde	
Standby Div #1	S1 Bde	S1 Bde	S1 Bde	S1 Bde	S1 Bde	Standby Div #2
Standby Div #3	S2 Bde	S2 Bde	S2 or RO Bde	S2 Bde		

The Army's active component light divisions can be organized in a similar way as shown in Table V-4. The Standby division would be made up entirely of S1 brigades: one air mobile; one airborne; and one light infantry. Three S2 brigades also could be maintained. These S2 brigades could form a second Standby division or could be used to provide combat replacements to their parent units.

Table V-4. Ready Standby Organization for the Four AC Infantry Divisions

Ready Divisions	#1	#2	#3
	R1 Bde	R1 Bde	R1 Bde
	R2 Bde	R2 Bde	R2 Bde
	R3 Bde	R3 Bde	R3 Bde
Standby Division	S1 Bde	S1 Bde	S1 Bde

Using this organization for light and heavy divisions, the Army would have eight highly ready and fully structured divisions available for instant deployment in a crisis. It would have 2-2/3 active component S1 divisions, 1-1/3 S2 divisions, and five Roundup ARNG brigades. All of these latter units, or some combination of them, would be ready for a second phase of a crisis.

There are two alternative ways of providing division headquarters for the four Standby divisions. One solution would be for the major TRADOC posts to take responsibility for a division—e.g., Benning for a light division, Knox, Leavenworth and Sill for the three heavy divisions.[1] An alternative for the heavy divisions that would also provide a solution for maintaining the key elements of a Corps in Europe and a division in Korea is shown in Table V-5.

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[1] The German Army used this concept in WWII and continues to plan on using its training establishment to meet combat needs.

Table V-5. Ready Standby Organization for the Eight Heavy Divisions with Overseas Unit Rotation

CONUS Divisions	#1	#2	#3	#4	#5
	R1 Bde	R1 Bde	R1 Bde	R1 Bde	R1 Bde
	R3 Bde	R3 Bde	R2 Bde	R3 Bde	R2 Bde
	S1 Bde	S1 Bde	R3 Bde	S1 Bde	R3 Bde
	RU Bde	RU Bde	S1 Bde	RU Bde	S1 Bde
	S2 Bde	S2 Bde	RU Bde	S2 Bde	RU Bde
European Div #1	R2 Bde (CONUS Div #1)			R2 Bde (CONUS Div #4)	Korean Div
European Div #2	R2 Bde (CONUS Div # 2)			RO Bde	

In this example, the Army would maintain 8 heavy division headquarters with 5 fully structured divisions in the CONUS, 2 division headquarters in Europe, and 1 in Korea. Brigades would rotate from their CONUS homes for TDY training in Europe and Korea. During each Brigade's R2 year, for example, the entire brigade, or elements of the brigade, could move overseas for field training without dependents and then return to its CONUS home.

Figure V-1 provides a schematic of what such a European corps could look like. At any one time there would be a corps headquarters and two division headquarters in Europe, but there would only be one or two brigades. In a European crisis, the Army could rapidly move the rest of the corps to Europe; this corps would have the great advantage that virtually all of its people would have trained in Europe in the same units within the last year or two.

In a similar manner, the Army could fill out the Korean division with at least one R3 brigade and a third R1, S1, or R0 brigade.

For a crisis elsewhere, the Army would have two fully structured heavy divisions and three light divisions immediately ready for deployment. For a second phase of the crisis it could consolidate Ready brigades in the CONUS into full strength divisions, or it could return R2 brigades from Europe to form full strength divisions (perhaps replacing them with S2 or ARNG brigades), or it could mobilize S1 and ARNG brigades.

Corps Hq In Europe					
Corps Troops					
Div Hq (—) In Europe			Div Hq (—) In Europe		
Division Troops			Division Troops		
Bde R2	Bde R3	Bde R3/S1/R1	Bde R2	Bde R3	Bde R3/S1/R1
EUROPE	CONUS	CONUS	EUROPE	CONUS	CONUS
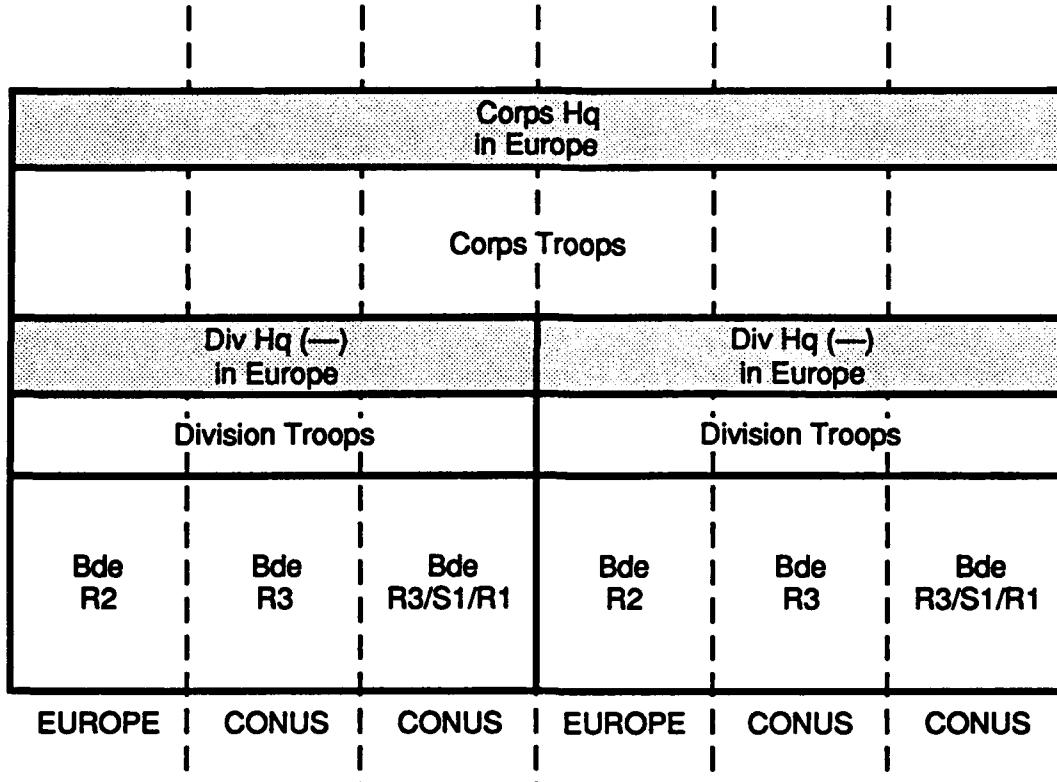
A 2-Division Corps with only 1/3 the soldiers in Europe
* R2 Bdes and associated Div/Corps slice train in Europe for 4 - 8 months
* R3 Bdes and associated Div/Corps slice ready for instant return
* R1/S1 Bdes return next

Figure V-1. Maintaining U.S. Army Corps In Europe With Reduced Manpower

The development of practical techniques for unit rotation to Europe and Korea could also have the benefit of improving the Army's ability to move forces quickly in a crisis and could provide an opportunity for ARNG forces to train in Europe and Korea on a regular basis.

E. RESPONDING TO BUDGET CUTS

Applying some mix of these concepts to the active component forces in the Army Base Force would allow the Army to respond to budget cuts by making a 25% reduction in AC end strength associated with TO&E units, without cutting structure. RSO could be limited to combat units or could include combat service support units. This second option would allow for adjusting to even larger budget cuts.

VI. THE UNIT STABILITY PROGRAM AND READY STANDBY ORGANIZATION FOR THE MARINE CORPS

This chapter describes a number of alternative organizational approaches for the Marine Corps based on the Unit Stability Program and Ready Standby Organization.

In recognition of the unique role and practices of the Marine Corps, we developed a specific Marine-oriented approach to these concepts. Recognizing also the long term desire of Marine leaders to reduce the turbulence in their units and to increase their cohesion, we have called the overall concept the Unit Stability Program (USP). In this chapter, we fold RSO into the USP and provide only options that include a unit replacement system. The USP consists of three sub-programs—the Unit Cohesion Training Program (UCTP), the Unit Deployment Program (UDP), and the Unit Standby Program (USBP). Although our examples are provided in terms of infantry and artillery units, we believe the USP is applicable to most of the Marine Corps, either in this form or as a Marine variant of the CSS example described in Chapter IV.

A. THE UNIT COHESION TRAINING PROGRAM

The Unit Cohesion Training Program, Figure VI-1, organizes Marine recruits into units from their first day of Basic Warrior Training. These units include Marines who will stay together for the entire USP and Marines who will leave the unit at some point during their initial entry training. Figure VI-1 shows a company-size infantry unit, H-2-5 for example, that is created in Basic Warrior Training and whose members remain together through the entire basic training period. Upon the completion of this training, those members of the unit who are to be basic infantrymen go on to the School of Infantry as H-2-5. Other members of the unit who will rejoin the company as it joins its parent unit in the UDP go on to Marine Combat Training and other MOS training. Marines who will not be in the battalion at the completion of the UCTP will also go on to Marine Combat Training and will then go on to specific MOS training and ultimate assignment to other units.
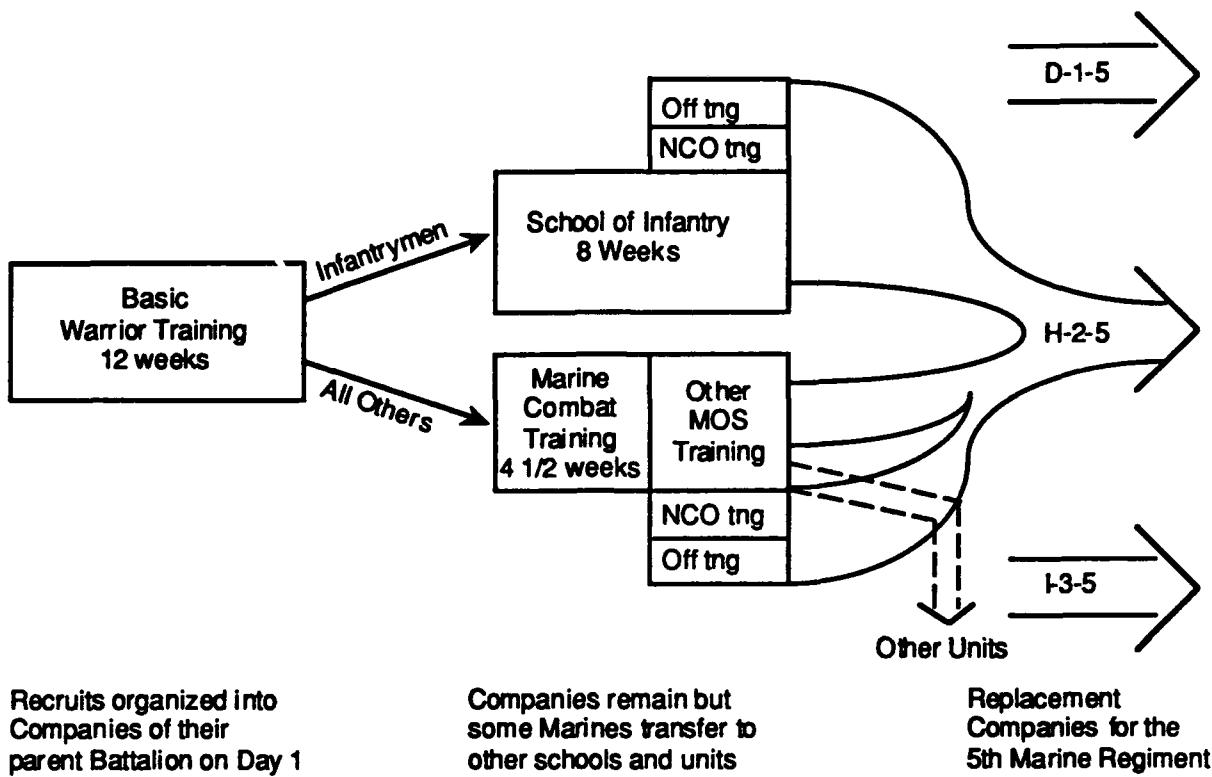
Figure VI-1. USMC Unit Cohesion Training Program, 20 Weeks

During the second phase of training, officers and NCOs who are to be members of the battalion join H-2-5 for training for themselves and to enhance the unit cohesion aspect of the training period. At the end of the second phase of training, the two groups rejoin and move to join their parent battalion. Depending on the approach chosen, several companies could be scheduled to join the battalion at roughly the same time.

This process can be followed for virtually all units in the Ground Combat Element and many of the units in the Air Combat Element and the Force Service Support Group. Marine recruits can be organized into the same kind of units when they enter Basic Warrior Training and then move as a group to Marine Combat Training and other MOS training. Although they would be unlikely to form an entire unit upon completion of the UCTP in line with the CSS example in Chapter IV, they could move into their unit as a group and could remain with the unit for the duration of their first term.

B. THE UNIT DEPLOYMENT PROGRAM

The second phase of the Unit Stability Program, the Unit Deployment Program, is displayed in Figure VI-2. The UDP portrayed is little different from the existing Unit Deployment Program except that the arrival and departure of replacement units and the level of training readiness a unit is expected to meet are specifically linked to the unit's deployment schedule. Marine operational commanders, personnel managers and trainers will manage their activities to this schedule. The Marine Corps employs a master schedule for unit deployments that can serve as the base for managing the UDP for the entire Marine Corps. Individual units can be managed on a variation of existing Marine concepts of X-Y-Z training described in FMFM 0-1.[1]

X - Replacement/Standdown Cycle - ±6 months
Y - Prime Time Training Cycle - pre-deployment or mission essential training cycle - ±4 mos
Z - Unit Deployment Cycle - ±7 mos (1 mo preparation, 6 mo deployment)
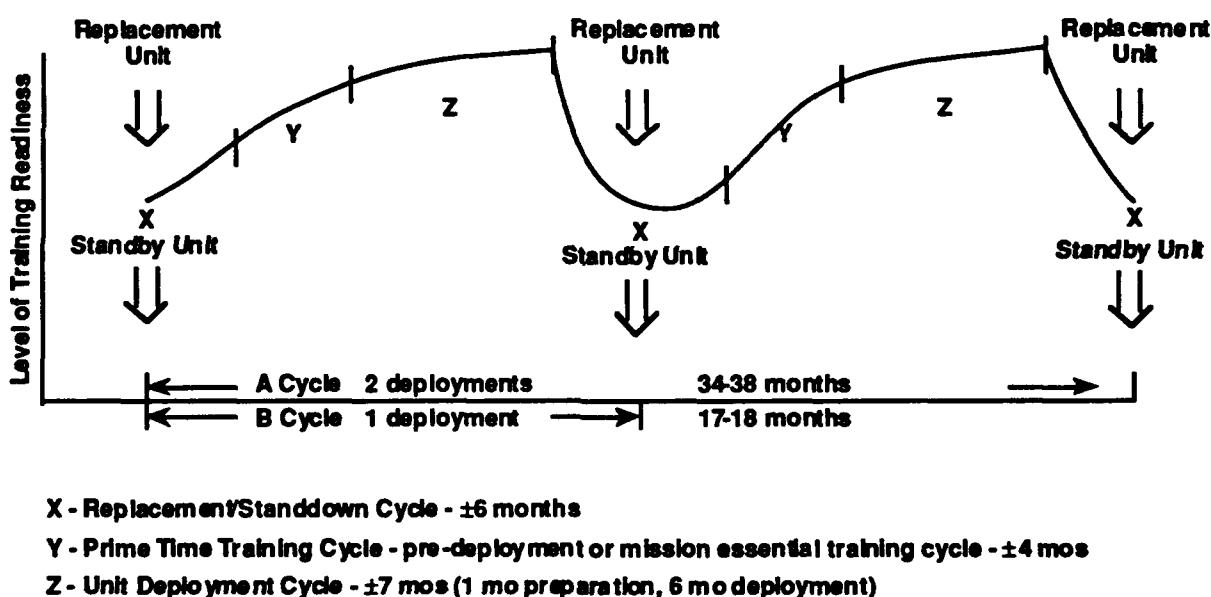
Figure VI-2. USMC Unit Deployment Program

In this version of X-Y-Z training, a unit is in the X-Cycle, the replacement or stand down cycle, for about 6 months after it returns from a deployment. During this time it conducts a routine stand down and undergoes a replacement cycle in which one or

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[1]   FMFM 0-1, Unit Training Management Guide, April 1991.

more new companies arrive in the battalion from the UCTP and a like number of companies leave the battalion to enter the Unit Standby Program.

There are two ways the replacement companies can be integrated into the battalion. One approach that might be most conducive to retaining cohesion that is built in the training cycle would be to keep the replacement company as a company in the battalion. An alternative approach would be to allocate the platoons and the company headquarters of the replacement company among the existing companies in the battalion. This latter approach would be more likely to assure a uniform level of readiness among the units in the battalion and would be most like the process that would likely be followed in wartime to replace combat casualties.

Not all replacements need come from replacement units in order to meet the demands of RSO. Some officers, NCOs, and technical personnel might be assigned on an individual replacement basis. These individual replacements should also be scheduled to arrive and depart during the X-Cycle, however. During the X-Cycle the unit would complete necessary individual training and take care of administrative matters so that it could enter the next cycle with few distractions.

Once the battalion is fully manned, it enters the Y-Cycle, the ± 4 month prime time training cycle in which it conducts its pre-deployment or mission-essential unit training. This is the time in which the battalion trains on its mission-essential tasks and prepares for its deployment. At the completion of this cycle, the battalion would likely undergo a formal evaluation of its training readiness.

Finally, the battalion enters the Z-Cycle, the ± 7 month deployment cycle, in which it would be fully ready to deploy. During this time it reaches its highest level of training readiness. Although the battalion would be fully ready to deploy, its actual deployment would be dependent on the needs of the Marine Corps; thus some units might not deploy. Units in the Z-Cycle, or late in the Y-Cycle, would also be the most appropriate for initial deployment in a crisis.

First-term Marines would remain with their unit for two deployment cycles—a period of 34 to 38 months—that is similar to the 3-year Ready cycle for Army units. Some Marines might stay for only one cycle—about 18 months—in order to provide both flexibility and for upward mobility.

C. THE UNIT STANDBY PROGRAM

The final phase of the Unit Stability Program, the Unit Standby Program, is displayed in Figure VI-3. The membership of units in the Standby program would be dependent on the way that replacement units from the UCTP were integrated in their parent unit in the UDP. In one case, entire companies, plus Marines from the battalion headquarters, etc, would enter Standby status. In the alternative, the companies would remain in the Ready unit and a mix of individuals and platoons would move into Standby status where they would be organized into Standby companies. In either case, these Standby companies would have the advantage of being composed of Marines who had just served at least one 18-month UDP cycle together and would be capable of being organized in ways that would preserve much of the collective skills and cohesion that had been developed during the UDP period.

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                          ┌─────────────────┐
    From                  │    HQ &         │              To
Unit Deployment  ───────> │ Service Slice   │ ───────> Marine Reserve
   Program                ├─────────────────┤              Forces
                          │    H Co         │
                          └─────────────────┘
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Command & Control:
        Unit remains under FMF control
        Individuals managed by SMCR

Manning:
        Full Time, Non-FMF Marines
        Selected Marine Corps Reserve members
        Fleet Marine Corps Reserve members

Training:
        Sub-units and individuals may train with parent battalion

Timing:
        Units remain in Standby status for 18 months

Figure VI-3. USMC Unit Standby Program

These Standby companies would remain under FMF control. They might be managed by their parent Ready battalion; alternatively, they might be organized into

Standby battalions that would be managed by the parent Ready regiment or division. They most likely would be employed as regular companies in the division, but they could be used as unit replacements to replace combat losses.

Up to this point we have described a Marine version of the USP that maintains battalions on a permanent Ready status and rotates companies through the battalion. In this concept, the 18-month cycle serves as the basis for scheduling both replacements and unit deployments and means that, for a 36-month assignment, about 50% of the battalion will be replaced at the end of each cycle. In Marine battalions with four company-size fighting units and a headquarters company, this means that two companies and a part of the headquarters will enter Standby status every 18 months. An alternative would be to use the Army model and put entire battalions on the same schedule. With this approach, entire battalions would move through the training program, the deployment program and would move as a single unit into Standby status.

D. RESPONDING TO BUDGET CUTS

The Unit Cohesion Training Program and the Unit Deployment Program are appropriate for the Marine Corps at any budget level. The Unit Standby Program becomes appropriate in the face of budget cuts that threaten Marine Corps structure. If the Marines maintained Standby units for 18 months, it would be possible to keep as much as 33% of the Fleet Marine Force in Standby status. For example, an infantry battalion with three rifle companies and a weapons company might support two Standby companies. Overall this might allow the Marine Corps to place one third of its companies in Standby status. Alternatively, since it is likely that not all Marines leaving a Ready unit can enter a Standby unit or that Standby units can be maintained for 18 months, the Marines could maintain a smaller portion of the Corps—25% of its TO&E end-strength—in Standby status. RSO could be used in this way to provide the fourth company in every infantry battalion. This would allow the Marines to use their reserve infantry battalions as full strength battalions instead of following current plans and breaking battalions up in order to use their companies as the fourth company in active battalions.

APPENDIX A

THE ARMY COHORT PROGRAM

THE ARMY COHORT PROGRAM

The Army Training and Doctrine Command published an assessment of the Unit Manning System and the COHORT program in March 1989.[1] This assessment identified a number of points that are relevant to this study. The points laid out below are taken directly from the assessment.

1. The most successful of the COHORT models was the nondeploying Battalion on a 3-year fixed life cycle. This model was "key to the successful conversion of infantry forces to the light division design." While it is more difficult to manage than sustained models, it offers the highest potential payoff to readiness of any model yet tried. This model has the potential to facilitate the conduct of routine TDY battalion deployments to the Sinai or to USAREUR should the need arise to reduce dependent presence in Europe. A COHORT division could support 6-month rotations efficiently by synchronizing the deployments with the COHORT unit life cycle. This would provide the OCONUS theater with a steady flow of stable, cohesive units trained to the OCONUS mission through a tailored predeployment unit training program.

2. The Walter Reed Army Institute of Research (WRARI) found that most senior commanders believed COHORT units to be more technically and tactically proficient, more synergistic and cohesive, more psychologically resistant to the potential shock of initial combat, and more willing to fight than non-COHORT units. In the 7th Light Infantry Division the COHORT process was credited with holding the units together as combat ready entities despite the unprecedented external pressures imposed on the division during its intense period of reorganization, downsizing, re-equipping, light infantry division certification, and attainment of RCF status. In heavy forces, where COHORT was not implemented well, WRAIR data finds that the COHORT companies in heavy non-COHORT battalions were generally considered better units.

3. WRAIR also found that the process of recruiting first term soldiers for the same COHORT unit, training them together in OSUT, and keeping them

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[1] HQ U.S. Army Training and Doctrine Command, *Assessment of the Unit Manning System*, Fort Monroe, Va., March 1989, p. 1.

together for their entire first enlistment is potentially a powerful and effective combat multiplier. This process molded COHORT first termers into a cohesive, synergistic combat force whose potential could be exploited by trained leadership.

4. The bonding among COHORT leaders was generally stronger than among non-COHORT leaders. Leader bonding was not as strong as first termer bonding because leaders were not as stabilized. The bonding between first term soldiers and their leaders was generally stronger in COHORT units than in non-COHORT units.

5. Although the Army assessment was unable to come to any specific conclusions about the impact of COHORT on training readiness, the report was able to conclude that "With a proper battalion-level COHORT training program in place, one might expect commanders to conduct more efficient individual training because all first term soldiers are at the same level of training proficiency at the same time, and commanders do not have to repeat training tasks frequently to accommodate the continued trickle of new faces. One might also expect that individual skills would improve because of the more stable and consistent interface between soldier and mentor. Additionally, collective training should be progressively more complex, challenging, and realistic in the stable COHORT unit."

6. First term attrition was found to be approximately equal in COHORT and non-COHORT units.

7. External turbulence was less in COHORT units. First termers were effectively stabilized for their entire enlistment period. NCO turbulence was high because stabilization policies were not well enforced. Officers remained on the individual replacement system and their degree of turbulence proved to be a chronic and significant problem.

8. The implementation of COHORT was much more successful in light infantry units than in heavy units. Entire light infantry divisions were converted to COHORT. In heavy units, COHORT companies and battalions were mixed in with regular armor and mechanized infantry units. As a result, the heavy COHORT units were not well accepted or assimilated due to resentments caused by implementation actions that resulted in actual or perceived privileged treatment.

9. The life cycle of COHORT units led some to argue that COHORT detracted from readiness because a COHORT unit might have to report itself unready on the Unit Status Report during the time it took to complete its initial unit training. Others argued that this was simply a manifestation of the unit replacement system that should be changed and the Army should be willing

to report units as unready just as the Navy reports ships unready when they return from an overseas deployment and large numbers of sailors are reassigned.

10. The Army mastered the process of accessing, training, and delivering first term COHORT soldiers to the right place at the right time as a cohesive group.

11. The Army developed an automated system for integrating numerous Army management systems with COHORT and producing a COHORT unit schedule which is supportable and consistent with accession constraints and training base capacity. The model needs to be enhanced to include operational constraints, such as brigade organization and NTC rotation schedules.

12. The Congress enacted Variable Enlistment Legislation that allows soldiers to enlist for a period of initial training and the entire COHORT life cycle

13. The greatest challenge to institutionalizing the COHORT system is the steady-state management of the personnel flow, especially late arrival of cadre to COHORT units and COHORT unit strength profiles. Both the Personnel Command and installations have had difficulty meeting COHORT schedules, perhaps because of the need for off-line micro-management of many individual COHORT companies. Policies need to be established for managing the strength of COHORT units.

14. COHORT managers did not recognize the magnitude of the prevailing cultural mind-set about the individual replacement system. They found that the prevailing Army culture nurtures an IRS based on the primacy of the individual over the unit. This causes many COHORT initiatives to be seen as restrictive, unfair, and career-damaging. The individual replacement system is a management system of least resistance and the unit manning system restricts management flexibility and curtails command prerogatives.

15. The Unit Status Report focus on "level of fill" is not consistent with Army training philosophy and militates against the use of COHORT. This mind-set will not change until we change the unit status report to recognize and reward stability, cohesion, and collective proficiency as readiness enhancers.

16. Reductions in operating tempo caused by budget reductions could be offset by the unit stability and enhanced readiness inherent in the COHORT system.

17. Stationing of unaccompanied units in Europe could be sustained by an expansion of Sinai-type TDY rotations or establishment of Korea-type short tours. Both of these approaches can be supported by the COHORT system.

APPENDIX B

GLOSSARY

GLOSSARY

AC	active component
ARNG	Army National Guard
ARTEP	Army Training and Evaluation Program
BOS	battlefield operating systems
CATS	Combined Arms Training Strategy
CCTT	Close Combat Tactical Trainer
COHORT	cohesion, operational readiness, training
CONUS	continental United States
CP LAN	command post local area network
CS	combat support
CSS	combat service support
CTC	combat training center
FTS	full time support
IRR	individual ready reserve
JRTC	joint readiness training center
LOC	line of communication
MCCRES	Marine Corps Combat Readiness Evaluation System
METL	Mission Essential Task List
MSO	military service obligation
MTP	mission training plan
NTC	national training center
OPFOR	opposition force
OPPLAN	operations plan
OPTEMPO	operational tempo
ORE	operational readiness exercise
OSUT	one station unit training
RC	reserve component
RSO	Ready Standby Organization
SIMNET	simulation network
SRA	selected reserve augmentee

STXSIM	Situational Training Exercise, Simulation.
TCDC	Tactical Commander's Development Course
TDY	temporary duty
TES	tactical engagement simulations
TQM	Total Quality Management
TRADOC	Training and Doctrine Command
UCOFT	unit conduct of fire trainer
UCTP	Unit Cohesion Training Program
UDP	Unit Deployment Program
UMS	Unit Manning System
UPTM	Unit Personnel Tracking Model
USAREUR	United States Army Europe
USBP	Unit Standby Program
USMC	United States Marine Corps
USP	Unit Stability Program
WRAIR	Walter Reed Army Institute of Research