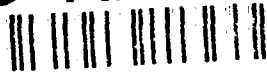


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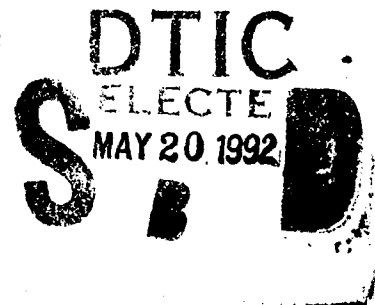
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**THE ROLE OF THE U.S. ARMY'S NATIONAL GUARD
ROUNDUP AND ROUNDOUT BRIGADES IN
FORCE RECONSTITUTION**

BY

Colonel Thomas J. Strauss
United States Army



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THE ROLE OF THE U.S. ARMY'S NATIONAL GUARD ROUNDUP AND ROUNDOUT BRIGADES IN FORCE RECONSTITUTION

AN INDIVIDUAL STUDY PROJECT

by

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ABSTRACT

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From a national security perspective the United States is confronting a changing but still dangerous external environment. Although former Cold War threats have receded, evolving regional security challenges and internal economic problems will test our leadership role in the world. As the defense establishment and the Army, in particular, downsize, the readiness and role of our Reserve Component forces, both USAR and ARNG, become increasingly more significant. The availability and readiness of well led, cohesive and comparably structured, trained and equipped Army National Guard roundup and roundout brigades and ARNG maneuver divisions, in particular, will be critical to supporting contingency operations in future regional conflicts. They provide the Total Army with expansible reinforcement options, and the most readily available and viable reconstitution capability at the division, corps and theater army levels. This study focuses on an analysis of the lessons learned by the German and Soviet Armies in World War II with large scale unit replacements, and the U.S. Army's replacement processes in World War II, Korea, Vietnam, and Desert Shield/Desert Storm. In addition, current and evolving U.S. Army doctrine for force reconstitution is also evaluated as it relates to our changing external environment and the Total Army's reduced force structure and projected end strength.

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INTRODUCTION

From a national security perspective the United States is confronting a changing but still dangerous external environment. As former Cold War threats recede, potential regional security conflicts and internal economic problems challenge our leadership role in the world. Recognizing this evolving environment, the President has set forth a security strategy for the 1990s based on the "four fundamental demands of this new era: to ensure strategic deterrence, to exercise forward presence in key areas, to respond effectively to crises, and to retain the national capacity to reconstitute forces should this ever be needed."¹ The Total Army has a critical role to play in the reshaping of our national security strategy. It is my intent in this paper to assess the capability of the current Reserve Components' (RC) most immediately available combat units, the Army National Guard's roundout and roundup brigades, to augment and reinforce Active Component divisions, corps and the theater army. Finally, I will analyze their capability to support force reconstitution, particularly in the event of future major regional contingencies (MRCs) similar in intensity and force requirements to Desert Shield/Desert Storm.

The Army must be capable of effectively functioning in an ever-changing and interactive environment. It must plan for, process and transform resources into a viable force that is deployable, expandable, flexible, lethal and ready to support and implement the national security strategy.

Absolutely essential for the Army's unprecedented success in its last three wars (Operation Just Cause, favorable termination of the Cold War, and

Operation Desert Storm was its effective implementation of change through the Total Force Integration process. Significant changes have occurred in the critical areas of doctrine, force structure, training strategy, and the acquisition and fielding of more than 400 new items of equipment. In addition, the personnel/unit replacement systems have been revitalized by the adoption of the Army's Regimental System, a functional COHORT philosophy, and the Total Force policy.

The National Security Strategy of the United States, August 1991, outlined four fundamental demands the defense agenda must address during the 1990s and into the 21st century. Force reconstitution, forward presence, and crisis response are particularly interrelated in a conventional deterrence sense--strategic deterrence being the fourth fundamental. As the defense establishment and the Army, in particular, downsize, the readiness and role of Reserve Component forces, both the U.S. Army Reserve (USAR) and the Army National Guard (ARNG), become increasingly more significant. The availability and readiness of well led, cohesive, and comparably structured, trained and equipped ARNG roundout/roundup brigades, USAR infantry brigades, and RC divisions, both ARNG maneuver and USAR training divisions, are critical to supporting contingency operations in regional conflicts. They provide the Total Army and the Unified Command Plan's (UCP) Combatant Commands, with deployable, lethal, and expansible reinforcement options in the future. Finally, RC units (particularly ARNG brigades and divisions) provide the most readily available and viable combat unit reconstitution capability available at the division, corps and theater army levels.

Research Methodology

I divided this study into three parts: 1. historical analysis; 2. review of current wartime unit replacement doctrine; 3. exploration of the concept for utilizing ARNG roundup/roundout brigades as specifically designated reconstitution units for theater army, corps and division commanders. I used both primary and secondary sources in the development and validation of my thesis. A number of excellent studies are available which include invaluable historical data on both foreign as well as the United States Army's wartime personnel replacement operations. Specifically, I have oriented on the Soviet and German experiences in World War II, and the U.S. Army's replacement operations in World War II, Korea, Vietnam, and Desert Shield/Storm. In terms of the adequacy of current U.S. Army wartime replacement operations, I have limited this study to the division, corps and theater army levels with emphasis on the latter two formations. Having personally studied replacement operations since 1983, I can state that the Army's doctrine has evolved significantly in terms of developing effective methods for unit replacement at the division level and below. Currently, reconstitution is being addressed in two new doctrinal manuals--Training and Doctrine Command (TRADOC) Pam 525-5 AirLand Operations, and field manual (FM) 100-7 The Army in Theater Operations. The critical challenge now is to plan, implement, evaluate and refine, effective force reconstitution procedures at both the corps and theater army (TA) levels, and decide how the most recently designated, early deploying roundup brigades can be effectively integrated within this process.

Scope

Throughout this paper, I will be addressing wartime unit replacement operations, with primary emphasis on reconstitution operations at TA and corps levels employing ARNG roundup brigades. Conclusions reached by this study and corresponding recommendations may directly impact on the share individual replacements (including Individual Ready Reservists, IRR) make up within the composition of the total personnel replacement picture, but this is not the primary concern of this paper. In addition, I will only address one specific mobilization lesson learned from the Desert Shield/Storm experience--ARNG roundout pre and post mobilization training. Finally, the challenges of planning and preparing for future industrial base mobilization, and the development of cadre divisions and new units, are not in the scope of this particular study.

Assumptions

1. By 1995, Total Army endstrength for both Active and Reserve Components (AC and RC) will result in a force structure of 10 AC divisions, 6 ARNG divisions, 9 USAR training divisions, 2 ARNG roundup brigades, 3 ARNG roundout brigades, 3 USAR infantry brigades, and 2 cadre divisions.

2. All AC and RC units will be organized in accordance with (IAW) the current Army of Excellence (AOE) Table of Organization and Equipment (TO&E), and, as a minimum, the ARNG roundup and roundout brigades will be fully modernized to the same standard as their CAPSTONE affiliated AC units.

3. In the event of an MRC, the President with Congressional support, will declare a national emergency, and immediately direct Partial Mobilization--

the authority to federalize up to 1,000,000 personnel in units and the IRR for two years.

4. ARNG combat units--roundup and roundout brigades--will be mobilized, and, as soon as they are available, deployed to the theater of war, preferably with their CAPSTONE affiliated AC major commands.

5. The United States will participate in future MRCs as part of an allied coalition force.

6. RC combat and combat support units will have time to train in rear area security missions in the theater of war (minimum 30-45 days), prior to commitment to forward area combat operations. These units will be committed as units and not piecemeal as individual replacements.

7. The USAR training divisions will mobilize and effectively support the initial surge in training requirements, and begin manning the cadre divisions on order.

8. Major weapon systems will be available to reconstitute forward deployed units (Partial Mobilization).

9. Transportation Command (TRANSCOM) will have the capability to support the timely movement of all required AC and RC reinforcing units (Partial Mobilization) from the continental United States (CONUS) base to the theater of war.

HISTORICAL PERSPECTIVE LESSONS LEARNED: WARTIME PERSONNEL REPLACEMENT

"Historical examples clarify everything and also provide the best kind of proof in the empirical sciences. This is particularly true of the art of war."²

Carl von Clausewitz

A review of historical sources provides a wealth of data on both foreign as well as the United States Army's wartime personnel replacement operations. Because of the amount of information available, I have limited this discussion to data relevant to the United States, German and Russian armies in particular. Since 1939, these nations represented the principal combatants in war, considering manpower available, and soldiers committed as ground combat forces. I have also heeded Carl von Clausewitz's dictum that, "the further back one goes, the less useful military history becomes, growing poorer and barer at the same time. . . . One will come to the most obvious conclusions that examples should be drawn from modern military history, insofar as it is properly known and evaluated."³

The Personnel Replacement System in World War II

The German Experience

In September 1939, the German Army was divided into the Field Army (2,740,000 men), and the Replacement Army (965,000 men). The latter's function was to recruit, train (basic and some specialized/advanced training), receive and retrain/rehabilitate soldiers recovered from wounds or illness, and send these replacements back to the Field Army.⁴ Replacements reached the Field Army in three categories: as individuals to armies, corps or divisions; as rehabilitated units which had been withdrawn after heavy combat and rebuilt with both men and equipment; and as new formations. A single military commander--commanding the Replacement Army and designated, Chief of Army Equipment--was responsible for all army activities within Germany (Zone of the the Interior-ZI), induction and training of new troops, procurement, storage, and distribution of all military supplies and service for the Field Army. Also involved in planning

replacement operations were the Personnel Office of the Army High Command (OKH), with sole responsibility for officer procurement and training, and the Organizational Branch of the Army General Staff, Army High Command, which ascertained the Field Army's replacement requirements and determined the allocation of available replacements.

The Replacement Army was designed to provide each maneuver division with replacements from the same geographical area where the division had been originally garrisoned in peacetime. All corps and divisions were headquartered in one of 15 German territorial military districts (Wehrkreise), four non-territorial (e.g. Berlin) and four occupied (captured territory) Wehrkreise. Upon deployment, each corps maintained a deputy corps headquarters in its Wehrkreise with command authority over the local units of the Replacement Army. Subordinate units of the Field Army were also represented in their Wehrkreise by a related Replacement Army unit (each regiment by a battalion, each battalion/specialist unit by a company) to which they provided cadre and instructors, and from which they received replacements. Replacement and training battalions were formed into regiments with a staff, and the regiments into divisions under the command of the deputy corps headquarters. New organizations were formed and affiliated with existing battalions so that Replacement Army units became responsible for providing replacements to them and their original divisions as well. By the end of 1944 there were 571 replacement battalions affiliated with 203 infantry and 33 panzer divisions.⁵

Beginning in September 1942, units of the Replacement Army were used to occupy captured territory, thus freeing up combat divisions for further operations. This necessitated a split of all replacement battalions into replacement and training units with the latter being free to move out of

the Wehrkreise and closer to their affiliated field units. All functions other than training remained with the replacement units. The training units, taking regimental and divisional staffs with them, concentrated on preparing recruits, received from the replacement units with only preliminary training and initial issue of equipment, with a completion of basic and advanced training for transfer to field units. Training under near combat conditions was the greatest advantage of this system. As a result, the new replacements became more quickly acclimated to their combat environment by training in relatively close proximity to the front lines. Conducting rear area security operations, these replacement units were able to train and hone their combat skills by operating against less well equipped Soviet Partisans before being deployed to face the more lethal Soviet Guards formations at the front. Training battalions were grouped into reserve divisions, and, in some cases, the divisions were formed into reserve corps directly under the Replacement Army. These reserve corps and divisions supported the Field Army with replacements in the same fashion as the deputy corps headquarters in the Wehrkreise. Throughout the war, the Replacement Army adhered to a consistent policy of using only experienced personnel as instructors, and, as of 1 September 1944, 83,592 personnel were serving in an instructional or cadre capacity training new replacements.⁶

Combat divisions maintained close relations with their replacement units, exchanging officers for both liaison and as instructors, and requisitioning replacements through their Wehrkreise deputy corps headquarters. Replacements always travelled in transfer battalions of 250 to 1000 men (Marschbattalion), armed and equipped for combat if the need arose. By 1944, combat transfer battalions were assigned more arms and

experienced escorts so they might be better prepared for combat. New officers, managed by the OKH personnel office, were sent individually or with transfer units, to army group, and from there to field units. Like enlisted men, wounded officers were returned to their original unit if at all possible.

New units, whenever possible, were built around cadres of experienced personnel. When combat action was minimal, units as large as battalions of experienced men were sent back by field units to act as cadres to organize new units from replacements, while WALKUERE units were formed totally from Wehrkreise cadres. The Replacement Army contributed a large proportion of the manpower it recruited for both rehabilitating shattered units and forming new ones. The decision to rehabilitate a unit was made by the Army High Command, which would withdraw the unit as far behind the front as possible, and fill the ranks from the Wehrkreise directly, allowing for as much training as time permitted before recommitting the unit to combat. The process of adding new units continued throughout the war as Hitler repeatedly ordered more and directed rehabilitation of others, oftentimes disregarding the advice of Colonel General Friedrich Fromm, Commander, Replacement Army. Fromm recommended that badly shattered units be combined (reconstitution by reorganization) to form fewer units at authorized strength. Hitler's demands for new units (83 new divisions in 1944 alone), and refusal to allow destroyed divisions to be eliminated from the German order of Battle, (Sixth Army, destroyed at Stalingrad, for example, had its 20 divisions rebuilt), meant that casualties all along the front were never fully replaced.⁷

Given the alternatives of either keeping existing divisions up to strength (the preferred American method) or using replacements to set up new

divisions, Hitler opted for the latter. By maintaining a large number of divisions and subordinate maneuver units, rotation of formations in and out of line was possible. Above all, this policy meant that German units, especially at the lowest levels, were and remained tight groups of men, who suffered, fought and died together. The division's social homogeneity, and the fact that they were not continually brought up to strength, goes far to explain their remarkable cohesion, as measured by the low number of desertions and surrenders.⁸ As the war progressed, the Germans reduced the size of their organizations because many saw the task of command was to prevent the complete attrition of numbers, to assemble new units and hold others in readiness, even though they were smaller in size. As an example, very experienced division commanders reduced the authorized strength of the infantry company from 180 to 80 in 1943, and to 40 later in the war. Veteran combat leaders concluded this smaller number better accommodated the leadership and command and control abilities of junior officers, and bigger losses occurred in larger companies without much difference in effectiveness. What they lacked in numbers they made up for in tactical skill.⁹

In summary, the Replacement Army developed a methodology for implementing three different forms of unit replacement. Reserve divisions, composed of training elements of training and replacement battalions, were used in occupied territory to replace field divisions which then became available for combat duty. In emergency situations, WALKUERE regiments and newly formed divisions were sent to areas of less intense action to replace experienced divisions, releasing them for more strenuous combat duty. Finally, when combat forces suffered catastrophic losses, unit

replacements became essential in order to withdraw combat units for rehabilitation, and to establish new defensive lines.

The Soviet Experience

Prewar replacement doctrine called for both individual and unit replacements in two ways: direct dispatch of fillers to the divisions during combat, and substituting fresh divisions for battered ones which were withdrawn and refitted in the army or army group zone. These refitted divisions were then available to repeat the unit replacement process, the preferred method over feeding fillers to a badly depleted unit. The Red Army's Main Administration for New Formations and Replacements was responsible for the readiness of replacements during the war. The military setbacks of 1941 (personnel combat losses exceeded one million, and four million prospective conscripts were lost to German occupied territory) forced the Red Army to reduce the individual replacement program and concentrate on the organization of new units. Until December 1941, the Soviets put most of their available manpower into new units, and thereafter began to increase the number of individual replacements reaching the combat zone. From June through December 1941, 60,000 individual replacements versus 368,000 personnel unit replacements monthly were moved to the front. From January through April 1942, another 1,900,000 replacements (individual and unit) were shipped to the front, 754,700 as individual replacements.¹⁰

All new units were formed and dispatched to the front by order of the General Headquarters (GHQ) of the High Command. They were sent either to replacement (reserve) armies and assigned to the GHQ reserve, or directly to army groups or field armies where they were used as unit replacements or

reinforcements. Unit replacements were not confined to divisions or corps but could entail entire armies when the need met the Soviet Command's operational objectives. Beginning in October 1941, replacement armies started to form by combining the new divisions. Eventually, 10 replacement armies were created.¹¹ Military districts within the Soviet Union were responsible for the organization, training, armament, supply, logistics and administration of new units, as directed by the Main Administration for New Formations and Replacements. During the first year of the war many divisions arrived at the front only partially armed, understrength, and with six weeks training or less. The 316th Rifle Division, organized in the summer of 1941 and deployed vicinity Moscow as a replacement for a destroyed division, suffered catastrophic casualties in stopping the German offensive at the gates of the Soviet Capital. By December 1941, the 316th was reduced to only 380 men from an original strength of 11,000. Prewar replacement doctrine called for relief in place, and withdrawal from combat when a division suffered 30-35 percent losses in manpower; however, in practice, the Soviets seldom replaced a combat unit which had suffered less than 70 percent losses. As was the case with the 316th Rifle Division, in 1941 and 1942, divisions with strengths of 500 or less remained in combat.¹² The replacement of a unit was normally conducted at night, the norm being one night for an entire division to be relieved. If necessary, a new replacement formation could be committed into action directly from the march, passing through the battle formations of the remnants of the old unit.

Replacement fillers, organized in transfer companies of 200 men and battalions of 1000, were sent unarmed from home replacement-training regiments to an assigned army or army group. Replacement regiments, affiliated with a specific army or army group and varying in strength from

several hundred to 10,000 men, received and armed the new fillers. A rifle replacement regiment was normally composed of three rifle replacement battalions, one each artillery, machine gun, and mortar battalion, a battalion of special troops (engineers, signal, chemical) and an NCO training school battalion.¹³ Stationed not far from the major unit headquarters to which they were attached, these regiments armed and provided additional training for the new replacements, and, by their very positioning, increased security for the supported headquarters.

Army group and army replacement regiments also received fillers from army group hospitals. Unlike the German system, convalescents lost their attachment to their old units (some elite Guards formations were excepted) and became regular fillers, averaging 200,000 returned to combat monthly. Replacement regiments served as quick personnel replacement pools for combat divisions, by concentrating large numbers of replacements, in anticipation of considerable losses before major operations.¹⁴

The American Experience

At the start of World War II, little prior planning for replacement operations, or even a review of lessons learned from World War I had taken place. General Albert C. Wedemeyer's "Victory Plan of 1941," the blueprint for the general mobilization of the United States Army and the operational concept for fighting the war, made no provision for replacements. Wedemeyer's emphasis on the relationship between total available manpower and complete field divisions ignored the need to procure, train, and assign replacements for combat losses. No other staff element, however, seems to have considered the problem either. In fact, there was no single agency of the War Department General Staff responsible for providing

replacements. With a total of 215 Victory Plan divisions, the Army would have had the option of replacing one division with another on a regular cycle, thereby giving units needed time to rest or reconstitute. The manpower existed; it was the flawed allocation formula that caused severe shortfalls. The Army's subsequent inability to field a sufficient number of divisions to rotate soldiers by unit forced it to use an individual replacement system.¹⁵

On 29 January 1942, the War Department General Staff (WDGS) acknowledged that, "Some thought should be given to the subject of establishing a rapid and direct method of supplying officers and enlisted loss replacements to our overseas forces."¹⁶ By December 1943, a tabulation of battle casualties showed which type of replacements would be most needed, but, there was still no evidence that any thought had been given to the overall administration of the replacement pools.¹⁷ Finally, on 29 June 1945, the War Department assigned the Commanding General (CG), Army Service Forces (ASF) overall responsibility for overseas replacement operations.

The reorganization of the War Department in 1942 made the Adjutant General (TAG) and its subordinates--the Military Personnel Division and the Classification and Replacement Branch of the Operations and Training Division--directly responsible to the CG, ASF. Headquarters (Hqs) ASF included the Director of Personnel, and, after March 1942, officers from the G1, WDGS, and the Combat Arms Chiefs. This Division designated personnel for new organizations, thereby assuming important functions in connection with replacements, and, under War Department direction, formulated and recommended personnel policies, plans, and procedures.¹⁸ Hqs ASF's Military Personnel Division (MPD), exercised operational control over the replacement system as prescribed by policies of the G1, and the G3, WDGS.

An overseas Replacement Branch of MPD was activated 11 February 1943 to supervise all matters relating to personnel within the Service Forces.

The G3 Army Ground Forces (AGF), computed shortages and requirements, and established priorities for replacement allocations to the AGF's subordinate commands. The G1, WDGS filled manpower requirements. Loss replacements were provided by training centers to units that had completed basic training, and reception centers supplied filler replacements, except cadre, for newly activated units. On 1 March 1943, the newly activated Classification and Replacement Division, AGF, began dealing with requisitions for replacements and assignments from AGF training centers. By 1944, demand became so heavy, commanders were required to absorb replacements with low classification scores and correct training deficiencies on the job.

The AGF oriented initially on the activation and training of units, with a growing interest in replacements as the war continued. TAG assigned personnel to training centers, schools, and units, and AGF was responsible for training its units. The strategic decision to create fewer divisions (90 total with 89 eventually entering combat), than the 215 envisioned by the "Victory Plan," meant that replacements received individual, not unit training. Furthermore, the policy of keeping committed divisions up to strength by a steady stream of replacements made unit rotation unnecessary.

The 1937 Protective Mobilization Plan assumed that all replacements would first graduate from a vigorous training program at a specialized facility, and then be assigned to a specific unit. In late December 1941, however, Army Chief of Staff, General George Marshall, disapproved a proposed increase in the number of training centers. By 1943, his decision

significantly reduced the replacement system's responsiveness. As a result, many CONUS based units received recruits directly from reception centers; and, after giving them improvised basic training, would often be ordered to send them on to newer units, or to higher priority deploying units. Training and morale suffered as the Army carried the concept of individual replacements to the extreme. Worst of all, this system diverted the affected unit's training program from more advanced unit training to basic individual training. Thus, by early 1943, the G3 AGF noted, that criticism of replacements received in overseas theaters tended to focus on the lack of small unit training.¹⁹

One feature of the replacement system General Marshall strongly supported was that a division, once committed, seldom withdrew from the front for rest or replenishment. As a result, U.S. divisions remained in line much longer than either the allies or the enemy, and received replacements from the rear, hopefully in proportion to their losses. Even smaller units, such as brigades and battalions, seldom withdrew far from the front. This individual replacement system meant that soldiers who escaped death, injury or sickness, received only brief spells of rest close to the front.²⁰ No passes were granted in the European Theater of Operations (ETO) until 1 October 1944. Rest and recreation centers did not receive attention until mid October of the same year, and even then, divisions had to sponsor their own rest areas, receiving little support from either the corps or assigned army in the project. Rest centers within the ETO had very limited capacities: 600 men each in III and V Corps, 2400 in VII Corps, and 800 in VIII Corps.²¹ For example, a regiment of a division or an individual battalion might be two or three miles behind the front for rest and reconstitution, while the remainder of the division was on line in combat. In February

1944, General Devers wrote to General McNair from the Mediterranean Theater:

It has been demonstrated here that the division should not be left in the line any longer than 30 or 40 days in an active theater. If you do this as has been done in this theater, everybody gets tired, then they get careless and there are tremendous sick rates and casualty rates. . . . The result is you feed replacements into a machine in the line, and it is like throwing good money after bad. Your replacement system is bound to break down, as it has done in this theater.²²

General Marshall's decision with Presidential approval, to establish a force structure ceiling of 90 divisions, prevented divisional size rotations for rest and reconstitution, as practiced by the Germans and Russians. With a final strength of 89 divisions and 5,700,000 men (excluding the Air Corps), the Army's divisional slice was 64,044, versus 26,583 for its German counterpart.²³ The growth in overhead (1,197,000 more support personnel) versus gains in combat strength (124,000) between December 1942 and March 1945, resulted in a tenfold increase in service support forces.²⁴

The shortage of maneuver divisions restricted rotation out of the front lines, and resulted in shifting units to a relatively inactive sector of the front for rest and reconstitution. However, even in a quiet sector an American unit still engaged the enemy. The 28th Division, for example, was in a quiet sector in October 1944, undergoing reconstitution after heavy fighting in August and September. During this period of reconstitution, the Division suffered 993 battle casualties, including 106 killed.²⁵ On the issue of rest needed by combat units, Major General John S. Wood, CG 4th Armored Division declared:

The best system in war is to remove divisions from action and reestablish their combat effectiveness before again committing them. . . . Unfortunately, under the misguided conception that kept divisions continuously in combat with no play of reserves,

division commanders found great difficulty in achieving any rotation of their units. Individual rotation destroys unit teamwork and is about as poor a system as has been developed in thousands of years of warfare.²⁶

Additional voices demanding a change in the system were heard. General T.J. Christian proposed that training centers turn out complete units not individual replacements. A system tying training centers to specific divisions was also proposed, along with a suggestion to set up an American equivalent of the German Field Replacement Battalions. These proposals, however, were denied by the War Department on administrative grounds. Dissatisfied with the system, the 79th Infantry Division, General Ira T. Wyche Commanding, set up its own organization for receiving and allocating replacements. The 79th Division's replacement training system was practically a carbon copy of the German division system, with three regimental replacement pools and a special troop section manned by an experienced cadre of officers and NCOs. The 79th Division's combat prowess was one of an exceptionally few specifically cited by General Eisenhower in the U.S. Army's Official History of World War II and its Replacement Training System was emulated by several other divisions in the European Theater.²⁷

The Army's replacement system in World War II was based on individual replacements with no provision for unit replacements. In practice, once a ground unit had been in combat for an extended period and suffered heavy casualties, the unit's combat effectiveness was degraded to such a degree, that even if individual losses were promptly replaced, its continued value in combat operations was seriously impaired. Unlike their German counterparts, the U.S. Army's training centers were neither tied to specific parent units, nor did their training cadre possess combat experience. Training of replacements was constructed on principles of engineering, breaking down

tasks into small components, rehearsed, and then put into sequence. The goal was to produce men who could serve their weapons automatically, without thought.²⁸

Korea

In June 1950, the U.S. Army's force structure included 10 maneuver divisions and an end strength of 591,000--figures that closely parallel the Army's current AC maneuver division projection for 1995, but with an AC endstrength that is 140,000 personnel smaller. The surprise North Korean (D-Day) attack upset U.S. mobilization planning (M-Day) because there was no time to expand the Army before deployment. The Chinese offensive later in the war, again upset Army expansion and personnel replacement plans. A number of external and internal environmental pressures--political, economic, social and military--also adversely impacted on manpower available for commitment. The demand to release reservists early to rotate men individually from Korea after varying lengths of service, rebuild the CONUS General Reserve, and support the North Atlantic Treaty Organization (NATO), upset the Army's mobilization and personnel replacement policies. Throughout the Korean War the bottom line was for trained manpower and units, which required six months training time for individuals, and nine months for units.

When hostilities began, General MacArthur's Far Eastern Command consisted of four understrength divisions: the 24th, 25th and 7th Infantry and the 1st Cavalry Division. The 7th and 24th Infantry, and 1st Cavalry were each 6000-7000 men below authorized strength (19,000), while the 25th Infantry Division was in the best condition with 15,018 men assigned.²⁹ General MacArthur requested a field army of four divisions, one airborne

regimental combat team (RCT), one armored group, numerous artillery and support units, and 30,000 individual replacements to restore his units to full strength. Unable to deploy a field army, the Joint Chiefs of Staff (JCS) dispatched 11 of the available 18 infantry battalions in the CONUS General Reserve, leaving only two of the six divisions in CONUS untouched (82d Airborne and 2d Armored Divisions). These deployments left the remaining four CONUS divisions at or below cadre strength (4700 men), and the Army's General Reserve unable to react to other global emergencies. This necessary replacement action sacrificed the critical fighting quality, esprit, and camaraderie of CONUS combat units for expediency.³⁰

By September 1950, the Regular Army had exhausted its pool of trained men in the General Reserve, and Far Eastern Command still needed 82,500 individual replacements. On 1 September 1950, the 28th, 40th, 43d, and 45th National Guard (NG) Divisions, and the 196th and 278th RCTs (NG) were federalized. These divisions were each 10,000-11,000 men short of authorized strength, and the RCTs were 1200-2300 men understrength.³¹ General Mark Clark, CG Forces Command (Hqs responsible for Guard training) estimated that these federalized units would need seven months to train, beginning with basic training for the large influx of inductees needed to bring them up to strength. With the National Guard committed, the only other available source of fillers and loss replacements immediately available were prior service World War II veterans in the Organized Reserve Corps (ORC). Because of serious combat service support (CSS) shortages, 600 separate Reserve units (ORC) were also recalled. Many were ineffective. For example, a bakery company reported with 18 of its 142 authorized men, and a signal battalion had only 23 of its 1035 men.³² In many cases the units were

deactivated upon arrival at their mobilization station and their personnel used as individual replacements.

Individual rotation was a continuing problem. Reserve officers and enlisted soldiers had a 24 month service obligation, and, by December 1951, 150,000 soldiers returned to CONUS. To meet Eighth Army's needs, NG divisions were levied for individual replacements. The 47th NG Division, federalized in January 1951, had only 1500-2000 of its 10,000 originally assigned guardsmen by October 1951.³³ The only two NG divisions deployed to Korea, the 40th and 45th Infantry, arrived in Japan in April 1951, with the 45th Division having left 4000 men in CONUS to complete basic training. Completing unit training in Japan, both divisions arrived in Korea by January 1952. Again, the question of individual versus unit replacements was raised. General Ridgway, CG Eighth Army, wanted to use these NG divisions as individual replacements for regular units; but, General J. Lawton Collins, Army Chief of Staff (CSA), refused this request, stating: "Such a move would bring justifiable wrath from the National Guard Association."³⁴

Vietnam

In Vietnam, the U.S. Army continued its policy of replacing individuals not units. Due to the nature of the fighting and enemy--infrequent set piece, sustained battles--the few units requiring reconstitution could be moved to relatively safe areas without excessive security problems. Just as in Korea, the Army's tour-of-duty policy created significant problems for the replacement program. Individual rotation boosted morale, but it also weakened units that had to send experienced men home.

For the initial build-up, Strategic Army Forces (STRAF) in CONUS were tapped to meet Vietnam's personnel requirements. The expansion of forces

later, however--principally light infantry and aviation units--was not accompanied by a comparable and balanced expansion of Army forces. Most combat units in CONUS and United States Army Europe (USAREUR) were NATO oriented, and, therefore, were primarily armored units. This led to a basic structural imbalance since the Army's sustaining base was not comprised of units like those in Vietnam.

Thirty-four (34) Army NG and 42 Army Reserve (USAR) units were mobilized (Partial Mobilization, May 1968) with 43 of these units selected for deployment to Vietnam. Seventeen thousand five hundred (17,500) reservists assigned to these units reported for active duty, and an additional 2600 men from the Individual Ready Reserve (IRR) were activated in June 1968. Forty-three (43) RC units deployed between August and December 1968, and their morale, training, and mission accomplishments were rated more than satisfactory. From September 1968 to May 1969, 6500 additional reservists deployed to Vietnam as individual replacements.³⁵

The personnel replacement system that supported the U.S. Army in Vietnam was similar to its Korean War predecessor. Both emphasized individual replacements, with officers being assigned by name at the Department of the Army (DA) level, and enlisted men by levy (grade and MOS) on CONUS installations. In both conflicts, the system performed satisfactorily, providing the number of replacements required, eventually.

Desert Shield/Desert Storm

Although the ground phase lasted but 100 hours, victory was the fruit of two decades of effort and investment. . . . In the history of America's first battles, those of Desert Storm were unique, and that was no accident. . . . It was the character of the American soldier that produced the most significant overmatch

to the enemy. . . . Desert Storm saw the coming of age of the volunteer Total Army.³⁶

Lt. Gen. John J. Yeosock, CG Third U.S. Army

Not since the Battle of Kursk in 1943, have two such heavily armored protagonists clashed. The one-sided Coalition victory, demonstrated lethality, maneuver speed, overwhelming technological and operational superiority, and professional leadership by the joint air-sea-ground components of the United States military. AirLand operations crushed the fourth largest army in the world, inflicting staggering losses on the Iraqis while dramatically minimizing allied casualties (a total of 46 KIA within Third U.S. Army).

The most important lesson learned by the Army in Desert Shield/Desert Storm, was that the Total Army concept--the integration of Active and Reserve Components with the military's civilian personnel--works, and is key if a downsized Army is to remain a viable strategic force in the future. Two hundred and twenty-eight thousand, seven hundred (228,700) Regular Army personnel, 36,800 National Guardsmen, 36,500 troop program unit Reservists, and 2733 IRRs deployed to Desert Shield/Storm. Of the 1045 RC units activated, 708 supported combat operations in the Gulf, 43 backfilled units deployed from Europe, and 294 were integrated into the CONUS sustaining base. In all, 139,207 RC soldiers were called to active duty between the initial Presidential Call Up of the Selected Reserve on 23 August 1990, and Partial Mobilization on 18 January 1991. Access to the IRR, specifically RT-12s--soldiers who had left the Army within the past 12 months--was critical. They were the primary source of qualified and well-trained fillers and replacements for both active and reserve units. Having to wait, however, until 18 January 1991 for

Partial Mobilization--the authority to federalize up to 1,000,000 personnel in units and the IRR for two years--forced the Army to cross-level within its Active and Reserve Component units more than was probably prudent.³⁷

As the 1st Armored Division's Operations Officer (Assistant Chief of Staff, G3), I witnessed the cross-leveling of a significant number of trained combat crews, as well as combat support and CSS soldiers and teams, from non-deploying VII Corps units. These individual fillers and crews allowed the Division to deploy at 100% of authorized strength. During the Gulf War, the Army had the luxury of a Total Force of 28 Divisions from which to cross-level personnel and equipment, and modernize the deployed force. It would be instructive to study the impact of cross-leveling on those AC divisions, brigades, and regiments that did not deploy, and determine the number of replacements they would have needed had they been ordered to the Gulf.

The immediate objective of Desert Shield was to deter and defend against an Iraqi attack against Saudi Arabia. Most propitiously, U.S. Central Command's (CENTCOM) July 1990 Exercise "Internal Look" scenario, closely replicated the future Iraqi invasion of Kuwait, and had planned for the immediate deployment of the 24th and 1st Cav Divisions, rounded out with active Army vice ARNG brigades. As the actual Iraqi invasion of Kuwait unfolded, USCINCENT, General H. Norman Schwarzkopf, requested two full strength heavy divisions 16 days prior to the presidential approval of reserve callup authority on 22 August 1990. Active brigades had to be substituted for the alerted CONUS heavy divisions' CAPSTONE affiliated roundout brigades.³⁸ The 197th (Separate) Infantry Brigade was attached to the 24th ID, and the 1st "Tiger" Brigade, 2d Armored Division, joined the 1st Cavalry Division and deployed with their new parent units to Saudi Arabia

on 13 August and 11 September 1990 respectively. The divisional roundout brigades, 48th Mechanized Brigade (GAARNG)/24th ID, and the 155th Armored Brigade (MSARNG)/1st Cav Division, were not activated until 30 November and 7 December 1990 respectively. The final CONUS heavy division deployed, the 1st Infantry, added the 2d Armored Division (Forward) from USAREUR, as its third ground maneuver brigade.

In September 1990, following the Presidential 200K Call Up, the Secretary of Defense (SECDEF) responded, as follows, to inquiries from the House Armed Services Committee, as to why Selected Reserve combat units had not been federalized:

To date, I have not authorized the call-up of Army combat units for. . . two reasons. First, my senior military advisers have not advised me that the call-up. . . is necessary. . . . Secondly, the statutory time limits on the use of the Selected Reserve units imposes artificial constraints on their employment.³⁹

In January 1991, the "Tiger" Brigade was detached from the 1st Cavalry Division and attached to the 2d U.S. Marine Division. This left the 1st Cavalry Division, USCINCCENT's strategic ground reserve, as a two "ground" maneuver brigade force throughout the remainder of Desert Shield/Storm. By this time however, the 1st Cav's CAPSTONE affiliated roundout brigade and 10th roundout battalion--the 155th Armored Brigade (MSARNG), and the 3-141 MECH Battalion (TXARNG)--had been conducting postmobilization training since 7 December 1990.

Of the three activated roundout brigades conducting postmobilization training, only the 48th Infantry Brigade was formally validated by the Active Army as being ready for deployment on 28 February 1991, 90 days after activation and the date of the cessation of hostilities with Iraq. The 155th Armored Brigade was scheduled for validation on 22 March 1991, 105

days after it was activated, and the 256th Infantry Brigade, Louisiana ARNG (roundout brigade to the 5th Infantry Division), was scheduled for validation on 13 April, 135 days after activation.⁴⁰ It is important to note that it was never envisioned, prior to the Persian Gulf War, that a roundout brigade would be able to deploy as part of an immediate response to a no-notice/short-notice, rapid response contingency. As the CSA, General Gordon R. Sullivan, stated in an address to the 113th General Conference of the National Guard Association of the United States, Honolulu, Hawaii, 4 September 1991:

The roundouts originated to increase the strength of active divisions for major, protracted combat in Europe. They were not meant to be used as contingency forces for immediate, short duration deployments.⁴¹

In conducting an assessment of the mobilization of the ARNG combat brigades, the Army's Inspector General (DAIG) noted:

Title 10 USC 673(b), Presidential Call Up, limits the ability to mobilize roundouts early enough to train and deploy with their affiliated AC unit. This law restricts the number of personnel called up in the Selected Reserve to 200K and allows call up for a maximum period of 180 days ("90 + 90"--Selected Reserve members are involuntarily activated for not more than 90 days, with an additional 90 day extension possible). This constraint precludes almost any OCONUS deployment by roundout units and may limit their employment in current contingency scenarios.⁴²

There also exists factious debate between the AC and ARNG leadership as to the readiness of the roundout brigades and battalions to deploy to the theater of war, and subsequently conduct combat operations. The question of readiness, and whose assessment was most accurate, was, of course, not put to the test in the Gulf. Some valuable lessons learned, however, were garnered by both the Active and Reserve Components' (USAR and ARNG)

leadership, which will positively affect future mobilizations and contingency deployments. The DAIG's "Special Assessment on National Guard Brigades' Mobilization" concluded:

Mobilization and training shortfalls are correctable if pre-mobilization and postmobilization strategies are complementary and are implemented as a package. Roundout units must be special units and the Active Component and Army National Guard link must be strong. A total commitment from both, AC and ARNG, will be required. . . .Bottom Line--the Army can reduce the length of time required to mobilize, train, validate, and deploy the roundout brigades. . . . Training focus at lower levels must be the cornerstone of future roundout pre-mobilization programs. . . . Units must enter postmobilization training in future crises with trained crews if units are to meet expected deployment windows. This achievement alone would have directly shortened the DESERT SHIELD process "model" by as much as two weeks. Major recommendations include: prescribing a training strategy that mandates basic levels of proficiency (i.e., Pre-mobilization--mandate crew qualification and platoon maneuver proficiency; platoon gunnery and multi-echelon training should be conducted as time allows. Postmobilization training--plans can be more efficient if the AC sponsor units ensure full participation of roundout leaders, require commanders' assessments, concentrate training on approved, specific unit METL tasks, and factor in administrative and logistical needs); improving personnel and logistics readiness; strengthening pre-mobilization AC-RC affiliation; centralizing selection and improving training of leaders; and, changing overall responsibility for roundout postmobilization to the AC sponsor unit commander.⁴³

In the aftermath of Desert Storm, U.S. Army Forces Command (FORSCOM) Commander presented an innovative new integrated training and readiness strategy, Bold Shift, an integral part of the Army's RC Enhancement Action Plan. This new initiative supports both pre and post mobilization preparedness, taking action to resolve shortcomings noted during Desert Shield, and, through a proactive evaluation program (FORSCOM Operational

Readiness Exercise--ORE), will "validate pre-mob(RC)/pre-alert(AC) operational and training readiness of selected Active and Reserve Component units and their preparedness to deploy and perform assigned wartime missions."⁴⁴ According to senior trainers from DA's Deputy Chief of Staff for Operations and Plans (DCSOPS) and TRADOC, Bold Shift will focus RC combat units, up to and including ARNG divisions, on individual soldier skill and maintenance training (military occupational specialty (MOS) and duty MOS (DMOS) emphasis), leader development (noncommissioned officer education system (NCOES) and officer education system (OES)), and collective training emphasizing platoon level/battalion staff proficiency during pre-mobilization training. During postmobilization training, RC combat units--specifically, ARNG roundout and roundup brigades--will conduct 60 days of intensive collective and multi-echelon training with their affiliated AC divisions in accordance with established Total Army Training Standards, and then deploy (ideally, with their divisions) to the theater of operations.

If the roundout brigades had deployed to Saudi Arabia after initial postmobilization training (60 days in CONUS), the range facilities and maneuver space would have been available in the theater of war to enhance their skills. As G3, 1st Armored Division, I was responsible for planning and supporting the live-fire and maneuver training (to include Division-level attack rehearsals) conducted by our units. Our Division's training area was far larger than the Army's National Training Center (NTC), Ft Irwin, California, and the live-fire and maneuver opportunities exceeded anything available in CONUS or USAREUR. Seventh (VII) Corps units, with the direct support of the USAREUR Commander, deployed "Miles" equipment, targetry, and ammunition, specifically dedicated to large scale, multi-echelon training. USAREUR's 7th Army Mobile Training Team organized and supported small

unit replacement training in close proximity to VII Corps training areas. Had the decision been made in mid to late January 1991 to deploy the roundout brigades, the trainers and training areas were available. These excellent ranges (small arms thru 120mm tank main gun, tube artillery, MLRS and HELLFIRE), and maneuver areas, had been developed, "proofed" and extensively used by VII Corps units (2d Armored Cavalry Regiment, 1st Infantry Division, 1st Armored Division, and 3d Armored Division).

During Desert Storm, no reconstitution operations were required in the Theater of Operations because of the extremely low number of casualties and short duration of the ground conflict. This was most fortunate, because by day three of the ground campaign, all combat forces were committed--USCINCENT and CG Third (US) Army, had released their only ground reserve, the 1st Cavalry Division to VII Corps. There was no TA ground reserve, larger than platoon size, available in the theater of operations after 26 February 1991.

From an operational perspective, the presence in theater of the roundout brigades in a reinforcing role would also have increased the CINC's and 3d (US) Army Commander's options and maneuver flexibility. They would have been available to secure forward deployed, army and corps-level supply dumps, critical lines of communication (LOCs), and conduct forward defense along the Saudi-Iraqi border in both the VII and XVIII Airborne Corps' areas of operation during Desert Shield. As heavy maneuver forces, the roundout brigades would have been most valuable to both the VII and XVIII Airborne Corps Commanders during the ground phase of Desert Storm, ensuring security for LOCs that extended between 150-400kms into Iraq. Most important, if heavy casualties occurred, they would have been readily available to conduct relief in place operations with combat ineffective

battalions or brigades as whole unit replacements, so that the TA and corps could maintain optimal combat power, and ensure the offensive's momentum.

As noted earlier, Third U.S. Army, had platoon and Weapon System Replacement Operation Teams (WSRO), ready to serve as loss replacements during the ground war. USAREUR, and its executive agent, 7th Army Training Command, were tasked by DA to provide a command and control headquarters for training and logistical support of squads, crews and platoons in theater not later than 15 January 1991. Training was conducted 2 thru 26 February 1991 for nine light infantry platoons, 12 mechanized infantry platoons, and 19 armor platoons. Linking up new equipment with recently arrived and trained crews, the training verified weapons' functioning, provided a physical environment orientation/acclimatization, oriented the replacements on Iraqi operations, and provided fully mission capable weapon systems ready for employment. Replacement training was conducted in a realistic environment and included operations at the individual, crew/squad and platoon levels.⁴⁵ In line with the Army's history in the 20th century, and specifically, World War II, Korea, and Vietnam, the emphasis remained on individual and small unit replacement operations, ignoring again the important German, Soviet and American experiences during the Second World War.

Comparison of American, German and Soviet Wartime Replacement Systems

Prewar planning failed to adequately plan for unit replacements in emergencies as well as maintaining existing combat units at authorized strength with individual replacements. The Germans and the Soviets had planned for a short offensive war and neither were prepared for the

desperate war of attrition which followed. Even with the experience of allies and enemies readily available, the U.S. Army, in the conflicts prior to Desert Storm, consistently underestimated both the numbers and types of combat personnel replacements required to reconstitute combat units.

The complex German system (Replacement Army) ensured centralized control of replacements, a coordinated training program capitalizing on battlefield experience, and affiliation between replacement and field units. The replacement system was hampered during the war by the unforeseen quantity of losses and constant activation of new units, which absorbed manpower that might have been used to reconstitute badly depleted units. Hitler's insistence on rehabilitating old units while continuing to build new ones made it impossible to bring either up to full strength or to have adequate experienced cadres available for development of new units of high quality.

The Soviet replacement system trained recruits for transfer to army and army group replacement units where they were parcelled out to the divisions most in need. Meanwhile, replacement-training units in the interior were tasked to build new combat units.

In both the German and Soviet systems, depleted units were withdrawn and rehabilitated, usually a short distance behind the combat zone, and allowed time for retraining. By training in close proximity to their attached army or corps, these replacement units, by their very positioning, increased headquarter's security, and trained, under near front line conditions, by conducting rear area security missions. In addition, the large number of combat divisions (300+ German, and 400-600 Soviet) allowed division-size rotations and a semblance of rehabilitation to occur. In the case of American replacement operations, the shortage of divisions (89 versus the 215

recommended in the "Victory Plan" of 1941) mandated a total reliance on individual replacements.

The German and Soviet replacement systems followed diverging paths as the war dragged on, while the Americans remained tied to the individual replacement system simply because unit replacements had never been adequately planned for. The Germans withdrew ineffective and exhausted units and replaced them with new units when available. The Soviets, especially in critical situations, committed new units as reinforcements, permitting old exhausted units to continue fighting almost to the last man. They established a ceiling on the total number of new units to be formed early in the war. By 1943, the impetus swung toward rehabilitating old units. If necessary, the Soviets would dissolve and combine remnants of several divisions to reconstitute one division, rather than form new ones. The Germans continued to add new units throughout the war. In most cases, they refused to dissolve and combine depleted divisions into one effective formation, attempting to keep all field units filled to authorized strength.

The World War II divisions of the U.S. Army were kept up to strength despite the fact that 90 days of intense combat, on the average, cost an infantry regiment 100 percent casualties. Though the divisions were maintained, the thinness of ground combat strength required that units still in training had to be stripped of men periodically for replacements for the forces overseas. These divisions in training were then shipped overseas themselves often with nearly half or more of their personnel, recent additions. The lack of divisions in reserve, required those on line to remain there too long. The strain, fatigue, and attrition of excessive time in combat multiplied casualties.⁴⁶

In Korea, and 15 years later in Vietnam, the lessons learned in World War II were forgotten. During the Korean War, regular component U.S. Army divisions stationed both in CONUS and overseas, were stripped of significant numbers of personnel, and, in certain instances, drawn down to cadre strength, to provide fillers and casualty replacements for units in combat. In the case of NG divisions deployed as units to the theater, only the personal intervention of the CSA, prevented the Army Commander from breaking-up the NG divisions and using them as individual replacements. In Vietnam, a national policy of rotating individuals after 12 months in country, and no significant RC unit activations, prevented deployed Army units from maintaining their integrity and cohesiveness, thus adversely impacting on their combat effectiveness.

Would history have repeated itself if the Gulf War had been protracted, and the losses much more severe? Based on the evolving doctrine for both unit replacement and large scale reconstitution operations, today's Army has learned from the past and will be better able to respond in the future should unit reconstitution be necessary. Fortunately, during Desert Storm, the unit replacement capability for large scale losses was not required. Had multiple combat brigades been rendered combat ineffective, the trained replacement platoons, available on 26 February 1991, would have been insufficient to reconstitute severely attrited brigade-size units expeditiously. If the roundout brigades and battalions had been available in theater, this reconstitution challenge would have been minimized.

Based on my assessment, as the 1st Armored Division's G3, regarding the effectiveness of 34 days of intense training conducted at task force, brigade and division levels prior to the ground offensive, the roundout brigades and battalions would have benefited as much, and probably more, by deploying

to, and training in the theater of operations vice CONUS. There is no doubt, their presence would have been welcome from the perspective of the additional security they would have provided within the Army Communications Zone (COMMZ), and the flexible and available heavy force reinforcement capability they would have represented to the TA commander. In effect, they would have been training in an environment that paralleled the terrain and weather in the actual theater of operations, and, like German replacement units training against Russian partisans, would have tactically matured more quickly in close proximity to the actual area of operations.

FORCE RECONSTITUTION IN THE 1990s AND BEYOND

Current Army Plans and Programs

Based on the lessons drawn from the historical review of the U.S., German, and Soviet wartime personnel replacement systems, the need exists for a flexible and responsive replacement system that provides both units (platoon thru division size) and individual fillers. Replacement operations encompass the mobilization, training and onward movement of TO&E units (both AC and RC), under the control of the FORSCOM Commander (a UCP designated Specified Command Commander, the rough equivalent of the German Replacement Army Commander in World War II). In addition, the TRADOC Commander, assumes responsibilities similar to the U.S. Army's World War II ASF Commander, for training inductees in basic and advanced military skills, and providing these trained personnel to FORSCOM for inclusion in reinforcing and CONUS deploying units. Once deployed to the theater of war/operations, reinforcing/replacement units and individual

fillers/loss replacements are assigned to the TA, the Army component headquarters supporting the designated Combatant Command.

Currently, replacements are designated as either replacement units, filler requirements, replacement requirements, or weapon system replacement operations (WSRO).⁴⁷ During the early phases of the war when casualties are expected to be at their highest levels, replacement units will be in great demand. They are more valuable to the theater commander than individual replacements since they provide maximum flexibility in their use--this represents a doctrinal recognition of lessons learned from both the German and Soviet replacement experiences of World War II. Besides the obvious cohesiveness and commitment advantages, replacement units provide increased flexibility since they can be employed as complete units or drawn down as the commander desires.⁴⁸ At the TA level, the commander has two general reconstitution options he may execute separately, sequentially or in combination: reorganization and regeneration. Reorganization shifts resources within a attrited unit to increase its level of combat effectiveness, while regeneration is the rebuilding of a unit through large scale replacement of personnel, equipment and supplies, the conduct of mission essential training (METL) for replacement units and personnel, and re-establishment of command and control. Regeneration is the predominant reconstitution operation conducted at the theater level. Planning must include assessments of the unit's current combat effectiveness, and consider future unit missions, contingency manning standards, and the extent of decontamination warranted based on mission requirements.⁴⁹

In terms of personnel replacements, filler requirements are used to raise the TA strength from peacetime levels to required wartime levels. The push system is designed to provide filler personnel, by unit or as individuals, to TA

units. Filler requirements (theater shelf requisitions) are identified in conjunction with periodic updates by the Combatant Commands of their general defense plans (GDP) and contingency operations plans (CONPLANS). The flow of filler personnel from CONUS to the TA begins on or before mobilization day (M-Day), whereas replacement flow may begin on or before hostilities commence (D-Day).⁵⁰ Based on the short-notice requirements for fillers and cross-leveling personnel to support deploying units during Operation Desert Shield/Storm, LTG William H. Reno, former U.S. Army Deputy Chief of Staff for Personnel (DCSPER) concluded:

During mobilization we found we needed access to the Individual Ready Reserve (IRR) earlier than partial mobilization authority. The IRR will continue to be a primary source of qualified and well-trained fillers and replacements for both active and reserve units. Having to wait for partial mobilization forced us to cross level more than we wanted to, so the IRR soldiers were especially important.⁵¹

Replacement requirements are not identified for known specific vacancies, but are based on losses by number, military occupational specialty (MOS), and grade, projected to occur between D-Day and D+90 to D+120. These losses are based on medical planning models and the casualty estimate tables in FM 101-10-1, Vol.2, Staff Officer's Field Manual. Organizational Technical and Logistical Data Planning Factors. After D+90-120, actual loss data will be the basis for replacement requirements. Finally, as described in the review of Desert Storm replacement operations, WSRO operations, conducted at the TA COMMZ or the corps or division support areas, link-up trained crews with equipment to produce "ready to fight" weapon systems.⁵² The entire replacement system at the theater level and below transitions to a pull operation, based on theater battlefield requirements, 90 to 120 days into

the conflict. In the future, theater strength managers may be required to prepare shelf requisitions on crew, team, and small unit (through company-level) replacements.⁵³

Theater Army Replacement Operations

The TA's Personnel Command (PERSCOM) is the Army's replacement system manager, and is responsible for strength accounting information which flows from COMMZ, corps and division units, and drives the theater's replacement requirements. The TA's PERSCOM, in turn, reports net replacement requirements to the U.S. Total Army PERSCOM (Alexandria, VA). Unit replacements normally deploy directly from their home or mobilization stations. Individuals, teams, and small-unit packages proceed through CONUS based replacement centers where they will receive final administrative processing and qualification for overseas movement: issue of field equipment, chemical protective clothing and equipment, and individual weapons. Upon arrival in the TA, individuals, teams, and small-unit packages will receive orientations by one of the TA PERSCOM's personnel replacement battalions (PRB), prior to movement to units of assignment based on the TA commander's priorities. The PRB is the principal operating unit in the theater replacement system, controlling up to six replacement regulating detachments (RRDs), and accounting for the inventory of replacements moving through replacement channels. The basis of allocation is one PRB per corps or five per theater, with each PRB capable of processing 2400 replacements daily.⁵⁴

Force Reconstitution--Generation of Wholly New Forces and Rebuilding Attrited Units

As the Defense establishment builds-down to a minimum essential/Base Force, unclassified guidance in the 1992 Joint Strategic Capabilities Plan (JSCP) tasks the UCP's Combatant Commands to develop plans capable of deterring, and, if necessary, defeating multiple threats in sequential MRCs. Reconstitution, envisioned during crisis response periods of either single or sequential MRCs similar in intensity to Desert Storm but of longer duration, will be handled by Active and Reserve forces in being. The Department of Defense (DOD) and the Army however, must also continue to plan for potential contingencies that will require an expansible force structure equivalent in strength to former Cold War levels (i.e., pre-Conventional Forces Europe Treaty (CFE)). Based on much improved warning time (24-36 months minimum), General Galvin, Supreme Allied Commander Europe, postulated that the United States and its allies will have additional time to raise, organize, train and equip wholly new combat formations while simultaneously invigorating the defense industrial base. Consider, however, the appropriate warning of General George L. Butler, CINC, U.S. Strategic Air Command:

A new contingency planning strategy (Crisis Response) puts a premium on what I call "Graduated Deterrence Response". . . . Its most operative feature being each regional planning team, develops several response options keyed to specified conditions of crisis onset: warning time, response timing, reserve call-up, and lift availability. . . . Of critical concern, are some things with respect to warning that we can be sure about: First, to guess wrong when dealing with a powerful adversary is to lose; Second, warning time isn't warning unless you exploit it (otherwise it's wasted time); and Third, the propensity to avail oneself of warning time is inversely proportional to the amount of time perceived to be available. If warning time

("available response time") is truly increasing with respect to any future conflict in Europe, that fact may well prove to be a curse as well as a blessing. Clearly it is a blessing in that NATO has been enabled to begin reducing its force posture, readiness levels, and other Cold War defense burdens. Increased warning time will be a curse, however, if it lulls us and our alliance partners into failing to sustain the potential for reconstituting large, competent forces as a hedge against a fundamental threat reversal in Europe or elsewhere. This means that in planning for "Gradual Mobilization Responses" we must pay careful attention to the management of the vital elements of military potential, to wit, our scientific, technological, and industrial base, manpower pool; and strategic materials.⁵⁵

As noted earlier, it is not my intent, to address force reconstitution in terms of either forming new units or industrial base mobilization. However, announcements, attributed to the SECDEF on 24 January 1992, indicated that our evolving military strategy, based on the end of the Cold War, increased warning time and domestic economic concerns, will be to curtail current weapon system production lines and emphasize the development of one of a kind, prototype systems that represent quantum leap technology. As we end current production and related force modernization, we will also stop equipping the Total Army with the weapons and support systems, as a minimum, that won Desert Storm. Tying future readiness, expansibility and lethality, to technologically advanced weapons, that may, or may not be ready for timely production and initial issue to, as a minimum, Category I units, will cause us to depend even more on recognizing the warning signs in time (24 to 36 months out). With ever increasing political, economic and domestic demands for decreased spending on security (both Defense and the Intelligence Community), will the nation possess a military and industrial base ready to expand when the warning finally does come? Investment in a technologically advanced defense industrial base, and in research and

development (R&D) becomes even more important as the size of the Total Army declines. Our nation must retain the technological edge in weaponry through an aggressive, ongoing R&D program, and the maintenance of a modernized, on-line industrial capacity to produce weapons in sufficient quantity to equip the total force (including new units to potentially pre-CFE totals).

Rebuilding Attrited Units

A senior command and control headquarters (brigade thru TA) has four basic options available to restore combat power to one of its subordinate commands that has suffered combat losses--incremental replacement, whole unit replacement, reorganization/composite unit formation, and reduced strength operations. The incremental replacement option corresponds to the individual replacement system and WSRO, whereby losses are made up by the introduction of individual personnel and crews. When it is not feasible to restore a unit's effectiveness through the incremental approach because of operational considerations or extremely heavy losses, that unit may be replaced in its entirety. Entire units may also be replaced for rest and recuperation after extended periods of combat. The latter two operational requirements favor the flexibility offered to the theater commander by reinforcing units--either recently arrived AC or RC combat (up to and including divisions), combat support (CS), or CSS units--as practiced by both the German and Soviet Armies in World War II. The reorganization/composite approach (the Soviet's favored option) calls for the regrouping and reorganization of surviving personnel and equipment from attrited formations to form a single, combat effective unit. More limited reorganization may occur within sub-units of larger formations, including

redistribution and cross-leveling of personnel. Finally, reduced strength operations, characteristic of the German Army in World War II, are an option for attrited units required to continue in combat with only minor internal organizational changes made.

The doctrine of reconstitution is evolving just as the operational doctrine of AirLand Battle is changing to AirLand Operations. In 1983, U.S. Army TRADOC recognized three forms of unit reconstitution: reorganization, regeneration, and redistribution. By 1986, redistribution had been eliminated as a separate and distinct form of reconstitution with the publication of TRADOC PAM 525-51 U.S. Army Operational Concept for Reconstitution on the AirLand Battlefield, 4 April 1986, and FM 100-5 Operations, 5 May 1986. The evolving reconstitution doctrine continues to be a central operational theme focused at the corps and TA levels: FM 100-10 Combat Service Support, 18 February 1988; FM 100-16 Support Operations: Echelons Above Corps, 16 April 1985; FM 100-7 The Army in Theater Operations, 31 August 1990; FM 12-6 Personnel Doctrine, 23 August 1989; and, TRADOC Pam 525-5 AirLand Operations, 1 August 1991.

As noted earlier, commanders, doctrinally, have two options available for reconstituting units: reorganization and regeneration. Reorganization is normally done at unit level and does not require extensive external support beyond supply replenishment, maintenance assistance, and limited personnel replacement. Regeneration is more difficult to execute because it requires a greater amount of effort, coordination, training, and consumption of materiel. Regeneration is normally accomplished by the echelon two above the organization to be regenerated--battalions by division, brigades by corps, divisions by TA. The TA, corps and division provide needed resources by changing priorities for supplies, equipment, and other service support, and

tasking an organization to provide direct support to the organization being regenerated.⁵⁶

Reorganization shifts internal resources within a degraded unit to increase its level of combat effectiveness. It may take the form of either immediate battlefield reorganization or deliberate reorganization. Both forms may include such measures as cross leveling equipment and personnel, matching operational weapon systems with crews (WSRO), or forming composite units (joining two attrited units to form a single full-strength or overstrength unit--formerly called redistribution). The overall objective of both immediate and deliberate reorganization is to improve the combat capability of a unit until more extensive efforts can take place, if required. Since reorganization is conducted internally, it is the most expedient means of maintaining combat power in the early stages of a conflict, and in forward units throughout the duration of the conflict. Commanders should maintain as much unit integrity (i.e., squad, crew, or team) as possible, because this contributes to retention of cohesion and provides a base for rebuilding units if regeneration is to be accomplished in the future.⁵⁷

Regeneration, either incremental or whole-unit, involves the rebuilding of a unit through large-scale replacement of personnel, equipment, and supplies; the reestablishment or replacement of essential command and control; and the conduct of METL training for the newly rebuilt unit. The intensive nature of the regeneration process may well require the unit to move to a designated area protected from enemy interdiction. The most difficult reconstitution option to execute, regeneration requires the greatest amount of effort, coordination, training, and consumption of materiel. Time for the unit to train is essential in order to reestablish cohesion and develop teamwork. Consideration also should be given to maintaining the integrity of

remaining effective squads, teams, or crews. Taking this action preserves the cohesion, trust, and confidence of a unit.

Incremental regeneration is the massive infusion of individual personnel replacements and single items of equipment into a unit. If sufficient time for training and building cohesion and teamwork is available, commanders may be able to accept large numbers of individual replacements. However, this probably will require removal of the unit from significant enemy contact for an extended period.

Whole-unit regeneration is the replacement of whole units, or definable sub-elements, with a new unit or sub-element. The replacement unit may come from redistributed assets, reserves, or from the resources of higher echelons. Entire units may also be replaced for reasons other than combat losses (i.e., time in combat, morale, training, or other factors).

Historical evidence suggests the total time for regeneration can be minimized if replacements are from trained and cohesive small units or subunits before they are introduced into the regenerating unit. Because of the expectation of high casualties in a future conflict, a decision must be made as to how deploying units (including mobilized RC units) would be used during reconstitution. For example, deploying units could be split to provide individual or small unit fillers, or intact deploying units could be filled with assets in theater to be brought to full strength. This decision impacts on both unit deployment and individual replacement operations as well as the reconstitution options available. The decision must be made early at the TA level in coordination with the unified or combined commander and the Department of the Army.⁵⁸

An Assessment of Force Reconstitution in the 1990s and Beyond

The responsibility for managing reconstitution is retained by the commander two levels senior in the chain of command to the attrited unit--battalions by division, brigades by corps, and divisions by TA. Paralleling the management of change--i.e. revised force structure, new doctrine, new equipment, and new training strategy--that marks the peacetime force integration process, the reorganization and regeneration of attrited units require the same intensity of effort in terms of planning, implementation and command and control to attain optimal operational effectiveness in minimal time.

During the initial phases of an operational campaign, losses may well exceed the personnel and equipment replacements available within the theater. It will take time for the CONUS training (i.e., inductees and volunteers) and mobilization bases (IRRs, especially RT-12s, and retirees), to provide sufficient individual replacements as fillers (based on theater shelf requisitions) to bring/maintain units at 100% of required strength. Reinforcing/follow-on units (roundup and roundout brigades and roundout battalions) are the initial major unit assets available, primarily to TA and corps commanders, for optional reconstitution missions, either as direct unit replacements (relief in place), or to fill regenerating units.

With particular emphasis on the reconstitution of attrited units of battalion size and larger, USAREUR has had an ongoing exercise program that has planned, rehearsed and executed unit reorganization and regeneration procedures dating back to 1985. The 1st Armored Division incrementally regenerated a tank battalion, replacing key members of the chain of command and staff with division assets, and all 58 of its main battle tanks from Theater Reserve stocks during REFORGER 85. Subsequent to V Corps'

Exercise Caravan Guard in February 1988, 3d COSCOM was tasked to regenerate the 11th Armored Cavalry Regiment (ACR), restoring as much of its combat effectiveness as possible within 48 hours. The 11th ACR conducted its own reorganization prior to redeploying to its Corps assigned regeneration site, where the 3d COSCOM supported unit reconstitution. Regeneration was limited to one ground squadron and elements of the aviation squadron. All classes of supply were exercised, extensive maintenance and recovery operations conducted, and field services provided.⁵⁹

My major concern with this regeneration exercise is the limited amount of time allocated (48 hours) to restore combat effectiveness to at least one-third of the regiment's combat power. Crews, sections, platoons and troops that had been cross-leveled and reorganized prior to redeployment for regeneration, would barely have time to draw and test equipment (emphasizing boresight and zero), and get some rest. There would be no opportunity for METL/future mission related training and unit rehearsals. Without this critical time for rebuilding unit cohesion and teamwork, I question the level of combat effectiveness the ACR and its regenerated sub-elements would be able to generate.

A more doctrinally sound approach was demonstrated, in USAREUR, during a brigade level Training Center Rotation (Combat Maneuver Training Center (CMTC), Hohenfels, Federal Republic of Germany (FRG)) in August-September 1990. Seventh (VII) Corps, 1st Armored Division (1AD), and the 2d COSCOM after extensive planning and coordination, executed brigade level reconstitution operations (1AD Exercise "Iron Infusion"). Based on combat losses suffered during the CMTC rotation, Task Force (TF) 3-35 (Armor) was rendered combat ineffective. The division commander reallocated combat

power to the main attack (3d Brigade), attaching TF 6-6 (Infantry) from the division reserve (2d Brigade) to the 3d Brigade. Simultaneously, TF 3-35 was attached to 2d Brigade's command and control for reconstitution. Repositioned with the division's reserve brigade, TF 3-35 was redeployed to an area outside of enemy direct and indirect fires (approximately 30 kilometers from the forward battle area), but in close proximity to the Division Support Area (DSA), where both the CSS assets of 2d COSCOM and the division were most readily available to support whole-unit regeneration. The actual physical replacement of losses (20 M1A1 tanks, 7 Bradley Fighting Vehicles (BFV), and 350 personnel--trained individuals, crews and platoons) took seven working days. Most importantly, cohesion/team building operations were interwoven by the Brigade and TF leadership into 15 days of METL related training that occurred vicinity the DSA (Montieth Barracks, FRG). As part of the Division's reserve brigade within the ongoing training scenario, TF 3-35 was assigned, in turn, the reserve mission for the 2d Brigade, to optimize its training time while positioned to conduct Level III security missions in the Division rear area.⁶⁰

This VII Corps sponsored reconstitution scenario, closely replicated lessons learned from German replacement operations in World War II--position, support, refit, and train replacement units in reserve areas, deriving the added benefit of securing service support units, reserve stocks of supplies, and key LOCs from attack. It was always better, in the past, to rehearse and hone a (German) replacement unit's combat skills against a rear area partisan organization, than to thrust it immediately into the front lines against an experienced (Soviet) Guards unit. There is no reason to deviate from this valuable lesson in the future either.

Seventh (VII) Corps, 2d COSCOM, and 1AD were never able to conduct and fully evaluate the training, as planned, at CMTC in the 1st Quarter of FY91. The Corps, COSCOM, and Division, were alerted, and began deploying to Desert Shield/Storm in their original, pre-exercise configuration. The bottom line, however, is that the Army's senior leadership has recognized the importance of planning for and rehearsing large scale reconstitution operations. First (1st) Armored Division's exercise ("Iron Infusion") is representative of the realistic efforts underway, both in CONUS and overseas, to improve reconstitution training in today's Army. With General Frederick M. Franks Jr. as the new TRADOC Commander, and knowing his involvement in force reconstitution as Commander VII Corps, I am confident that the Army's reconstitution doctrine and training emphasis will continue to improve.

CONCLUSION

Time after time, as peace breaks out, we dismantle a battle-proven Army, only to fall short in answering the next call for effective combat capability. . . . The most important challenge that confronts us in the future years is to avoid a repetition of this pattern. Our task is to break the historical mold and maintain a trained and ready Army. . . . The war-fighting edge we have now and must maintain in the future. . . . is the combined effect of quality people who have been trained to razor sharpness, outfitted with modern equipment, led by tough and competent leaders, structured into an appropriate mix of forces by type, and employed according to up-to-date doctrine. . . . The Total Force concept works. Active Army, Army Reserve, Army National Guard and civilian men and women all worked side by side to contribute to success on the battlefield; it was a team effort and a team victory. . . . We will work to establish premobilization and postmobilization standards for the Army National Guard and the U.S. Army Reserve. The roundout brigades are central to strengthening the Total Army; our aim is

to optimize their contribution--they are here to stay. The future Army will be a balanced force. . . .active and reserve. And the key word is balanced. The active and reserve components must develop a mutual respect for one another and train more closely together in the future as manpower requirements shrink.⁶¹

General Gordon R. Sullivan, Chief of Staff of the Army

It is clear that the Chief of Staff has set the course for America's Army. As end strength and force structure continue to decline, greater demands will be placed on crisis response and reinforcing forces, as well as the CONUS mobilization base. Our National Military Strategy must be responsive in recognizing future threat(s) early, and, our armed forces prepared to effectively implement, pre-planned, coordinated and appropriately wargamed actions. With sufficient warning time, the Army must be prepared to deploy, sustain and rapidly reinforce a capabilities tailored contingency force, while simultaneously mobilizing additional RC forces for augmentation and reinforcement operations.

A key factor that must be contemplated as the military option is being considered, is that the Army's future AC and RC force structure (i.e. 16 maneuver divisions plus two cadre divisions by 1995), will be relatively small. Once committed to one or more MRCs, the Army will have to place an extremely high premium on its ability to mobilize early and adequately (Partial Mobilization). The capability to expeditiously reinforce, and then sustain committed forces of deployed corps and theater army(s), will be axiomatic imperatives for the ground campaign's success.

Reinforcing/replacement units (especially ARNG roundup brigades), must plan and train, extensively rehearse, and be prepared to execute, relief in place operations. This will enable TA and corps commanders the flexibility to reconstitute degraded formations and rest others. Military history illustrates

that reconstitution is not a quick fix for rebuilding effective combat power. Only time (measured in weeks, not hours), to fully integrate replacements with leaders and equipment, and conduct intensive, mission oriented unit training, can rebuild shattered formations to a semblance of their former capability. In addition, units that have been in extended combat for 30 days or more, experience a psychological degradation of their overall combat effectiveness, and need time to rest and refit. They too should be replaced.

Reinforcing units (specifically ARNG roundup and roundout brigades and battalions, the USAR infantry brigades, and the ARNG divisions) provide additional capability and flexibility to the Army's, initial deploying, crisis response forces. The Army leadership recognizes the importance of providing units, vice individual replacements, early to the theater of operations. As the Army downsizes, the two modernized roundup brigades--the 48th Mech (GAARNG) and the 155th Armored (MSARNG)--in particular, provide an early and critical reinforcement/replacement unit capability for the reinforcing corps. Deployed to the theater of war following mobilization and 60 days of intense multi-echelon training in CONUS, roundup brigades provide a force immediately ready to conduct critical rear area security and other reserve combat missions. As they continue to train and improve their readiness, roundup brigades provide additional options and added operational flexibility for TA and corps commanders. Attached to a forward division for combat operations, they may serve as replacement units, relieving committed formations for needed rest and refit, or more intensive reconstitution operations (i.e., reorganization or incremental regeneration). Based on the TA or assigned corps commander's decision, a roundup brigade may also support whole-unit regeneration, serving as a source of unit, and subunit replacements (platoon thru battalion level). Deployed corps and TA

commanders, therefore, must be cognizant of their reinforcing units' combat readiness, and plan for/timeline their employment, so as to maintain their campaign's operational momentum.

Finally, the Total Force must recommit itself to more combined AC/RC small unit, battle-staff, and eventually, battalion and brigade level multi-echelon training to the same Army standard. Working together, Hqs DA, FORSCOM, the National Guard Bureau (NGB), Office Chief Army Reserve, and TRADOC have developed a strategy for improving both pre and post mobilization training for RC combat units. The RC Enhancement Action Plan, TRADOC and NGB's RC Training Institution Quality Assurance Program, and FORSCOM's Operation Bold Shift are focused on one common goal--improved, and sustainable AC/RC force readiness. As part of this strategy, each element of the Total Force, both AC and RC, must orient on training to the same standard for their specific METL tasks, based on their most probable wartime missions. By orienting on CAPSTONE alignment and specific missions--i.e., 48th Mech (GAARNG), and 155 AR (MSARNG), roundup brigades for the 24th ID and 1st Cav respectively--each unit gains a better understanding of its own, and senior/adjacent units' mission focus, joint deployment timelines, and METL tasks that must receive the greatest planning and training emphasis during all unit and joint combined exercises.

The Total Army must be completely committed to attaining and maintaining the CSA's vision of the future--a trained and strategically deployable force; versatile, lethal, expansible, and ready to fight to achieve decisive victory whenever and wherever America calls. On the ever more dangerous AirLand battlefield of the future, the Army cannot afford to commit either a reinforcing Active or Reserve Component formation, or

reconstituted unit that lacks competent leadership, sufficient training, or first class equipment.

RECOMMENDATIONS

The ability to move a credible, overwhelming force to an area at the outset of a regional crisis, when stability is threatened, is the key to strategic and operational success, and is of deterrent value in its own right. . . . The Army more than any other service, relies extensively on its reserve components for reinforcing forces and for augmentation of its combat support and combat service support forces. . . . The Total Force will rely significantly on the reserve components initially to fulfill increasing support roles as any crisis deployment expands, and then to add needed combat augmentation as deployment grows larger and more prolonged.⁶²

Lt. Gen. J.H. Binford Peay III, U.S. Army DCSOPS

To ensure the Army's readiness to prepare for, train/rehearse, and effectively implement force reconstitution during combat, necessitates a review of the "Total Force Integration/Modernization Process." I most strongly recommend the Army reconsider decisions affecting the structure, equipping, manning and training of like type AC and RC units. In particular, heavy AC/RC divisions, regiments/groups/brigades and battalions (including all combat support--i.e., artillery, air defense, engineer, intelligence, military police and signal etc.--and service support), must be structured, modernized, equipped, and trained to the same standard.

The Army as a whole, must be willing to make the tough decisions that support the CSA's vision of the future--a totally integrated, trained and strategically deployable force, ready to fight and win. That means, the Army's corporate leadership, AC, RC and civilian, must be dedicated to the

force integration and modernization of all elements of the AC/RC force structure, even if it means reducing AC end strength.

The Army must be proactive in its AC/RC force structure plans and recommendations within its own leadership (AC and RC), and especially with the national political leadership. Should Congress continue to direct higher Army RC endstrength than that requested by the Administration and DOD, the Army in particular, must be flexible in dealing with guidance, and tailor the forces authorized--both AC and RC--to make optimum use of the available resources. Instead of eliminating excess RC combat support and service support units caused by the reduction of supported AC force structure, I recommend the conversion of these units to either field artillery, military police, engineer, or transportation brigades/groups. Lesson learned during Desert Shield/Storm, revealed that the Army has a definite shortage of these critical combat support and service support units.

Adoption of this recommended Total Force integration and modernization strategy would keep more of the military-industrial base functioning, albeit at reduced levels, to complete the modernization of the Army's projected 16 divisions, and their reinforcing/supporting units. I also strongly recommend the procurement and prepositioning of modernized sets of equipment for the two proposed cadre divisions and specified theater reserves as well. For example, continue funding the BFV production line plus M2A2/M3A2 depot upgrades, M1A1 heavy armor fielding and conversion for all AC/RC heavy units, and M109A6 Paladin upgrade for all 155mm SP howitzers in the AC/RC inventory.

In terms of training, there has been a general lack of emphasis on realistic reconstitution operations at major exercises. Currently during command post exercises (CPX) and field training exercises (FTX), senior

commanders reconstitute marginally effective, or combat ineffective units in the forward battle area, oftentimes because they lack the available reinforcing/reserve forces (i.e. roundup brigades) necessary to conduct a relief in place. In my personal experience as a battalion and brigade S3, battalion commander, G3 plans officer at both division and corps, and division G3, the Army's computer assisted wargames neither accurately portray the extensive time it takes to rebuild a cohesive, combat effective maneuver unit, nor penalize the commander for reemploying units that regenerate their combat effectiveness in hours/days, versus weeks as history tells us. In effect, our exercise wargames are reinforcing inaccurate operational lessons in terms of sustainment and major unit reconstitution. I most strongly recommend the upgrade of software supporting current wargames that accurately reflect required unit reconstitution requirements and timelines. In terms of field exercises, consider attaching platoons (I recommend one company equivalent per battalion) from each of the roundup/roundout brigades to their affiliated AC divisions during National Training Center (NTC) rotations. These units together, will not only enhance their training, but will also be able to more realistically replicate wartime unit replacement activities--either small unit relief in place or reconstitution operations. Not only will RC combat readiness be improved, but AC/RC teamwork will also be enhanced at the unit level.

I recommend that designated reinforcing/reserve units (particularly commanders and staffs of roundup/roundout brigades) participate in division and corps level Battle Command Training Programs (BCTP), and major theater army exercises such as REFORGER and TEAM SPIRIT. It is particularly imperative, that roundup and roundout brigades participate with their affiliated AC divisions and corps, and that ARNG divisions train with

their respective corps and TA. These units will provide TA, corps and division commanders with a (JSCP apportioned) force structure, that accurately reflects wartime capabilities. Additionally, these exercises will challenge both commanders and their staffs, to plan for and execute more doctrinally supportable, and realistic decisions concerning sustainment, large scale reliefs in place, and unit reconstitution operations.

The primary emphasis of force reconstitution must be the sustainment of maximum combat power at all times. In order to optimize the land component's power as force structure reductions occur, the Army must continue to emphasize, integrate (especially in training and wargaming), and modernize the total AC/RC team. As downsizing continues, roundup and roundout brigades represent a significant amount of ground combat power which TA, corps and division commanders must come to rely upon early during future crises. In response to these changing requirements, U.S. Army FORSCOM's Bold Shift initiative, is an important confidence building application of valuable lessons learned from the Total Army's collective victory in Desert Shield/Desert Storm. This critical initiative fully recognizes the mutual importance the Army's senior leadership, AC and RC combined, has placed on attaining, and maintaining a Total Force readiness standard. As a balanced, Total Force, every element of the Army, as a whole, must accept its individual complementary roles. To do otherwise, may spell disaster.

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