

AD-A195 386

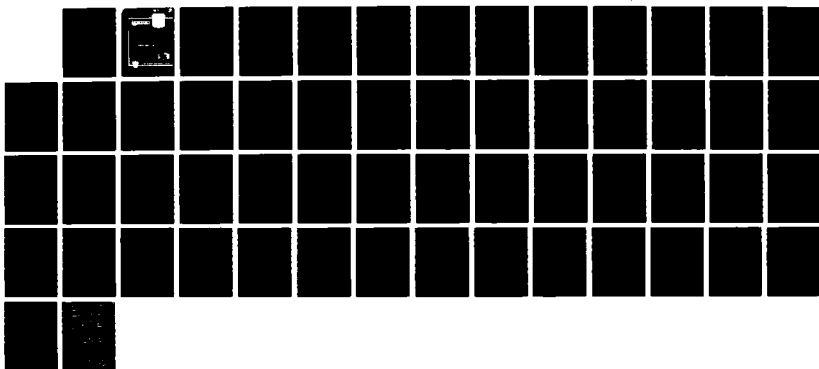
RECONSTITUTION - WINNING BEYOND THE FIRST BATTLE(U)
ARMY WAR COLL CARLISLE BARRACKS PA J C HINEBAUGH
22 APR 88

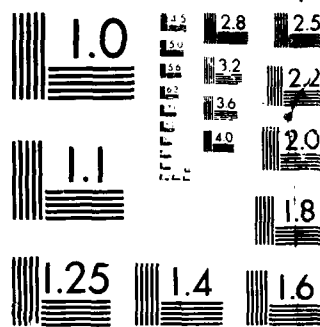
1/1

UNCLASSIFIED

F/G 15/6

NL





MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS 1963-A

AD-A195 306

DTIC FILE COPY

2

The views expressed in this paper are those of the author and do not necessarily reflect the views of the Department of Defense or any of its agencies. This document may not be released for open publication until it has been cleared by the appropriate military service or government agency.



RECONSTITUTION--WINNING BEYOND THE FIRST BATTLE

BY

LIEUTENANT COLONEL JAMES C. HINEBAUGH, JR., OD

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.

22 APRIL 1988

DTIC
ELECTE
JUL 05 1988
S D
E



U.S. ARMY WAR COLLEGE, CARLISLE BARRACKS, PA 17013-5050

88 7 05 038

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER	2. GOVT ACCESSION NO. <u>A195206</u>	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) Reconstitution--Winning Beyond the First Battle		5. TYPE OF REPORT & PERIOD COVERED Individual Study Project
		6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s) LTC James C. Hinebaugh, Jr., OD		8. CONTRACT OR GRANT NUMBER(s)
9. PERFORMING ORGANIZATION NAME AND ADDRESS U.S. Army War College Carlisle Barracks, PA 17013-5050		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
11. CONTROLLING OFFICE NAME AND ADDRESS		12. REPORT DATE 22 April 1988
		13. NUMBER OF PAGES 52
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		15. SECURITY CLASS. (of this report) UNCLASSIFIED
		15a. DECLASSIFICATION DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report) Approved for public release; distribution is unlimited.		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number)		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) The ability to reconstitute combat power quickly and effectively will be especially critical on the modern battlefield with its proliferation of extremely lethal weapons systems. Early battles, particularly in a short or no-warning scenario, may be won or lost depending on the commander's ability to reconstitute his combat power. Given such a scenario and shortfalls in sealift, airlift, and theater active force structure--particularly combat (OVER)		

DD FORM 1473

1 JAN 73 EDITION OF 1 NOV 65 IS OBSOLETE

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)

service support units--commanders may have to fight with little or no backup support. The fact that the U.S. no longer has the large technological lead and the strong industrial base it once enjoyed makes reconstitution an important issue. Reconstitution has also taken on added significance as a result of the AirLand Battle concept. Mobile forces fighting deep in the enemy rear will certainly have to rely heavily on reconstitution of some form as their primary means of sustaining combat power. While reconstitution has become increasingly critical to sustainment of combat power during war, the U.S. Army has done very little to develop reconstitution doctrine, planning, and training. While billions of dollars have been invested in bigger, faster, and more lethal weapons systems, few resources have been dedicated toward developing concepts, doctrine, and techniques for battlefield sustainment. The net result is that the Army's ability to sustain the fight beyond the first battle has not improved. Application of technology and development of doctrine could significantly enhance the field commander's ability to sustain or rebuild combat power. This study attempts to establish the importance of reconstitution, to identify the salient issues of reconstitution and suggest how the reconstitution process could be enhanced.

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)

USAWC MILITARY STUDIES PROGRAM PAPER

The views expressed in this paper are those of the author and do not necessarily reflect the views of the Department of Defense or any of its agencies. This document may not be released for open publication until it has been cleared by the appropriate military service or government agency.

RECONSTITUTION- WINNING BEYOND THE FIRST BATTLE

AN INDIVIDUAL STUDY PROJECT

by

Lieutenant Colonel James C. Hinebaugh, Jr., OD

Lieutenant Colonel David L. Shaver, EN

Project Adviser

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.

U.S. Army War College
Carlisle Barracks, Pennsylvania 17013
22 April 1988

ABSTRACT

AUTHOR: James C. Hinebaugh, Jr., OD
TITLE: Reconstitution- Winning Beyond The First Battle
FORMAT: Individual Study Project
DATE: 22 April 1988 PAGES:47 CLASSIFICATION: Unclassified

The ability to reconstitute combat power quickly and effectively will be especially critical on the modern battlefield with its proliferation of extremely lethal weapons systems. Early battles, particularly in a short or no-warning scenario, may be won or lost depending on the commander's ability to reconstitute his combat power. Given such a scenario and shortfalls in sealift, airlift, and theater active force structure - particularly combat service support units - commanders may have to fight with little or no backup support. The fact that the US no longer has the large technological lead and the strong industrial base it once enjoyed makes reconstitution an important issue. Reconstitution has also taken on added significance as a result of the AirLand Battle concept. Mobile forces fighting deep in the enemy rear will certainly have to rely heavily on reconstitution of some form as their primary means of sustaining combat power. While reconstitution has become increasingly critical to sustainment of combat power during war, the U.S. Army has done very little to develop reconstitution doctrine, planning, and training. While billions of dollars have been invested in bigger, faster, and more lethal weapons systems, few resources have been dedicated toward developing concepts, doctrine, and techniques for battlefield sustainment. The net result is that the Army's ability to sustain the fight beyond the first battle has not improved. Application of technology and development of doctrine could significantly enhance the field commander's ability to sustain or rebuild combat power. This study attempts to establish the importance of reconstitution, to identify the salient issues of reconstitution and suggest how the reconstitution process could be enhanced.

TABLE OF CONTENTS

	Page
ABSTRACT.	ii
CHAPTER I. INTRODUCTION.	1
II. RECONSTITUTION OPTIONS.	4
Reorganization.	4
Regeneration.	5
III. THE IMPORTANCE OF RECONSTITUTION.	8
AirLand Battle Applications	8
Historical Examples	11
IV. SALIENT ISSUES OF RECONSTITUTION.	19
Considerations.	19
Roles/Responsibilities.	21
Training.	25
V. REVIEW OF CURRENT OPERATIONAL CONCEPT	28
VI. NEW IDEAS TO ENHANCE RECONSTITUTION	33
VII. CONCLUSIONS	44
VIII. RECOMMENDATIONS	46
BIBLIOGRAPHY.	iii

Accession For	
NTIS GRA&I	☒
DTIC TAB	☐
Unannounced	☐
Justification	
By	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
A-1	



RECONSTITUTION- WINNING BEYOND THE FIRST BATTLE

CHAPTER I

INTRODUCTION

Very few military analysts would argue that the force modernization program which accompanied the Reagan Administration did not significantly enhance the mobility and the firepower of the U.S. Army's maneuver forces. At the same time, most would recognize that this modernization was accomplished, at least in part, at the expense of sustainability. Combat service support force structure reductions and the inevitable lag between the modernization of combat elements and combat service support elements are examples of externalities of force modernization which have impacted on sustainability. Unfortunately, it appears fiscal constraints will further exacerbate this situation by "stretching out" weapons systems procurement programs and further delaying, if not prohibiting, the modernization of combat service support forces. Thus the Army's leadership must undertake initiatives to enhance sustainability in an environment of constrained resources. One alternative to achieve improved sustainment, especially during combat operations, is an effective battlefield reconstitution program.

The ability to reconstitute combat power quickly and effectively will be especially critical on the modern battlefield with its proliferation of extremely lethal weapons systems. Early battles, particularly in short or no warning scenarios, will be won or lost depending on the commander's ability to reconstitute and sustain his combat power. Given such scenarios, and shortfalls in sealift, airlift, and combat service support force structure, commanders may have to fight for an extended period with little or no backup support. The fact that the US no longer enjoys the technological and industrial dominance it once had over the rest of the world also makes reconstitution a critically important issue.

Additionally, ratification of the Intermediate-Range Nuclear Forces (INF) Treaty with the Soviet Union will place greater reliance on conventional forces for deterrence. The Warsaw Pact's numerically superior forces would have a definite advantage in a war of attrition - the U.S. Army cannot win by trading the Warsaw Pact tank for tank. If the U.S. Army is going to fight outnumbered and win, it must have an effective reconstitution and sustainment program.

While it is generally recognized that reconstitution has become increasingly critical to sustainment of combat power during war, the U.S. Army has done very little to develop reconstitution doctrine, planning, and training.

The purpose of this study is to review U.S. Army doctrine for reconstitution, assess its effectiveness, and propose doctrinal and technological enhancements for improving the current situation. While there are several aspects of reconstitution- rearming, refueling, repairing, and manning- this study will focus on hardware

related issues. Many detailed studies and tests have been conducted on manning and personnel replacement systems, and the related issues of medical care and evacuation. In order to limit the scope of this study, these issues will not be addressed.

An explanation of terms, a discussion of the importance of reconstitution, a review of the salient issues of reconstitution, a review of the current operational concept for reconstitution, and a look at some new ideas to enhance reconstitution will serve as the basis for the conclusions and recommendations.

CHAPTER II

RECONSTITUTION OPTIONS

Reconstitution is defined in TRADOC Pamphlet 525-51 as "extraordinary actions which are planned and implemented by commanders to restore units to a desired level of combat effectiveness commensurate with mission requirements and availability of resources." The ultimate intent of the concept is to provide commanders with the means to sustain combat power within situational resource constraints.¹

Commanders have two reconstitution options available for returning units to a specified level of combat capability--reorganization and regeneration. They may be executed separately or in combination, depending upon current and anticipated situations, priorities, resources, and time available.

REORGANIZATION

Reorganization is action taken to shift internal resources within a degraded unit to increase its level of combat effectiveness. Reorganization includes such actions as cross leveling equipment and personnel, matching crews with operational weapons systems, or

forming composite units. The overall objective is to improve the combat capability of a unit until more extensive efforts can take place. Since reorganization is accomplished 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. It is the option that is most often executed by commanders. Reorganization may be either immediate or deliberate.

Immediate battlefield reorganization is the quick, and for the most part temporary, restoration of degraded units to minimum levels of combat capability.

Deliberate reorganization is conducted to restore degraded units to a specified degree of combat capability given greater time and resources are available. These activities normally take place farther to the rear than immediate battlefield reorganization. Some replacement resources may be available, maintenance is more intensive, and more extensive cross-leveling is possible.²

REGENERATION

Regeneration may be accomplished incrementally or by whole unit regeneration. Incremental regeneration is the massive infusion of individual personnel replacements and single items of equipment into a unit. It involves the rebuilding of a unit through large scale replacement of personnel, equipment, and supplies; the establishment or replacement of essential command and control; and the conduct of mission essential training for the newly built unit. Regeneration is the most difficult reconstitution option to execute because it

requires the greatest amount of effort, coordination, training, and consumption of resources, including time. Time for the unit to train is essential in order to reestablish cohesion and develop teamwork.³

Incremental/individual replacement is historically the way the U.S. Army has conducted reconstitution. Experience and studies have shown unit level replacements- platoon through company level- are most effective. The reconstitution of the 28th Infantry Division during World War II and the Israeli Defense Forces experience during the 1973 Mideast War provide excellent examples of both techniques.

While the reconstitution of the 28th Infantry Division during World War II was predominately a "manning" reconstitution effort, it is probably the best documented example of reconstitution during World War II. It is also important because studies of this reconstitution effort identified the factors to be considered during reconstitution and provide the basis for current U.S. Army doctrine and thinking.

The Israeli experience during the 1973 Mideast War provides insight into the reconstitution process on a "modern" battlefield with its proliferation of lethal weapons systems. While there were certainly "manning" issues during this conflict, the example focuses more on hardware related issues. However, it must be noted that the experience of senior Israeli military leaders validated/reinforced many of the lessons learned during the 28th Infantry Division experience in World War II.

ENDNOTES

1. U.S. Army Training and Doctrine Command, Pamphlet 525-51, p.2.
2. Ibid, pp. 4-5.
3. Ibid, p. 4.

CHAPTER III

THE IMPORTANCE OF RECONSTITUTION

AIRLAND BATTLE APPLICATIONS

The following scenario, developed by the U.S. Army Command and General Staff College, is offered as an example of a reconstitution mission consistent with AirLand Battle doctrine. Although the scenario is similar to the U.S. Army Training and Doctrine Command (TRADOC) common teaching scenario, it has been modified slightly for the purpose of this illustration.¹

Situation: A US heavy armored division, defending against a Soviet combined arms army (CAA) thrusting across the inner-German border (IGB), has contained the initial attack. The Soviet first echelon division was attrited by a substantial corps covering force. The U.S. armored division defeated remnants of the first echelon divisions and fought the second echelon divisions to a standstill. The division's reserve brigade was committed. Since the Soviets did not gain the objectives they had anticipated in this US division's sector, they reinforced elsewhere. The attacking combined arms army was directed to make whatever gains possible, then organize a hasty defense.

The US armored division suffered significant losses, and many battalions are thought to be near or below commonly accepted standards of combat effectiveness. While it can still contain the Soviets, the armored division cannot generate offensive combat power. The armored division can maintain pressure against Soviet defensive positions and allow one brigade at a time to withdraw to be reconstituted. The corps commander has been given the mission of penetrating the Soviet defensive belts and passing a division to conduct deep operations against the adjacent Soviet tank army to the north. The only force he has that can make the penetration is this armored division. The division commander and the corps commander now desperately need to know when the armored division can gather the combat power to make a penetration against a still potent Soviet combined arms force and hold the shoulders open to pass a reserve division through.

The division commander's knowledge of the situation in the division's maneuver battalions regarding personnel, equipment, leadership, morale, and supplies, is based on sporadic status reports received during the battle. The close operations in the division's area were intense. Combat effectiveness of battalion task forces ranges from 24 to 70 percent. Most unit's effectiveness is estimated to have fallen into the 30 to 60 percent range.

Comment: This scenario is a very realistic one. Commanders at every level would do well to anticipate such situations. After all, there is no question as to whether or not reconstitution will be required on the mid-high intensity battlefield- it will be! However, few commanders, or their staffs, are prepared to deal with the

proliferation of questions which will be generated in such a situation. Examples of such questions would include: What are the unit's personnel requirements- by military occupational specialty? What type of reconstitution effort is appropriate- reorganization or regeneration? Is decontamination required? What medical support is required? What are the units supply requirements- food, clothing, etc? What are the unit's fuel, ammunition, maintenance, and equipment requirements? Are the required resources available? How much rest will be required? How is morale? What is the status of the unit's leaders- officers and noncommissioned officers? Where will the reconstitution be conducted? When will the reconstitution site be operational? How long will withdrawal to the reconstitution site take? To what level should the unit be reconstituted? How long will the reconstitution take?

As illustrated in the above CGSC scenario, reconstitution has taken on added significance as a result of the AirLand Battle concept. Mobile forces, especially those fighting deep in the enemy rear, will certainly have to rely on reconstitution of some form as their primary means of sustaining combat power. In most cases, support elements will simply not be able to keep up with maneuver elements because of inadequate communications capability, a lack of mobility/speed, and inadequate armament protection.

If the U.S. Army is going to fight a numerically superior enemy and win beyond the first battle, it must make efficient use of the resources available. Well thought out reconstitution plans, based on sound doctrine and supplemented with realistic training, will enable commanders at all levels to maintain maximum combat power potential

in combat, given situational and resource constraints. Is the U.S. Army preparing its commanders to handle the above situation? Is the doctrine and planning in place to support such a scenario? Are there organizations in place to support such action? Are U.S. Army units and leaders trained to conduct reconstitution operations effectively? These issues will be addressed during the course of this review.

HISTORICAL EXAMPLES

World War II:

Historically, the U.S. Army solution to unit attrition has been to input large quantities of people, equipment, and supplies into battle-weary remnants of a unit and put the unit back on line. This approach was proven inadequate during World War II.² The most frequently cited (and best documented) example of a division level reconstitution in combat is the reconstitution of the 28th Infantry Division at the Battle of Schmidt during World War II. It serves as an excellent example of both incremental and unit regeneration. While this reconstitution was predominately a "manning" intensive operation, it does have a place in this study. As evidenced in the 1973 Mideast War, one must recognize and address all the factors of reconstitution to be effective. Doctrine, planning, and training that does not address these issues will not be effective. Additionally, the lessons learned from these reconstitution efforts, one unsuccessful and the other successful, provide the basis for current U.S. Army thinking and doctrine on reconstitution.

The reorganization of the 28th Infantry Division during the Battle of Schmidt was a classical example of hurling replacement equipment and personnel into the breach to sustain combat power. From 2 through 9 November 1944, the 28th Infantry Division fought a major offensive action in the area of Schmidt, Germany. After 9 November 1944, the division was incapable of further combat operations, even though its total effective strength had decreased by only 5 percent from 2 November to 13 November 1944.³ This slight change in the division's effective strength was a result of large numbers of individual replacements and equipment pumped into the division during the battle. While the effective strength was taken as the principle indicator of the division's combat effectiveness, it was, in fact, only one of the indicators.

Incremental Regeneration: The 28th Infantry Division lacked information about events at the foxhole level that exacerbated the inherent lag in reporting. The majority of the division's 5,028 cumulative losses during the Battle of Schmidt were in its infantry fighting units- a 1944 infantry division had roughly 6,000 riflemen. The 28th Infantry Division entered the operation with 13,932 effectives. On 13 November 1944, the division listed 13,447 effectives, despite 5,028 cumulative losses suffered from 2 November 1944. The division had received 4,458 infantry specialists replacements by 18 November 1944- a turnover of approximately 74

percent in its rifle battalions.⁴ The division had lost nearly all its infantry fighting strength between 2 and 7 November 1944. The division was able to replace its heavy losses, but the turnover was

so great that the individual regiments of the division were no longer combat effective.

The policy in the European Theater of assigning replacements to units in combat was considered feasible unless infantry battalions had casualties of over 20 percent in a very short period of time. Within this parameter, it was believed that units could continue in combat with very little drop in efficiency. In some cases, individual replacements were considered an acceptable alternative to regeneration for units sustaining over 50 percent casualties.

The stress and strain on the division's leadership was a critical factor in the division becoming combat ineffective. Casualties included two regimental and five battalion commanders, and equally severe losses among company and platoon officers. One battalion lost its commander, S2, S3, and executive officer. Officers became disoriented and ineffective because of exhaustion and combat stress. An objective analysis of the division's leadership situation would have quickly revealed an ineffective command and control system. Experience has shown repeatedly that effective command and control is the cornerstone of any military operation.

Unit Regeneration: The regeneration process for the 28th Infantry Division began with the withdrawal of Company L, 3d Battalion, 112th Infantry on 8 November 1944. The Company's strength upon withdrawal was 11 soldiers. Actual regeneration began on 12 November 1944. Until this time the survivors had been left to themselves to recuperate. They had received hot meals, a warm place to sleep, listened to a concert from the division band, and received gratuities from the American Red Cross (beer party, coffee and

doughnuts, etc.). On 12 November 1944, the kitchen started serving the men in rotation by platoons (as in combat), weapons were issued, military order and discipline were reestablished, and the basic cellular components of the fighting company were reconstituted.

The division was moved to a relatively quiet sector of the western front on the Luxembourg-German border. The area had previously been used for orientation of new divisions and recuperation of old ones. The unit was safely out of the range of German artillery, which facilitated addressing physical and psychological needs of the men. Field kitchens served hot meals, passes for Paris were issued for veterans, 20 men per company per day went to the division rear for showers, and church services were conducted.

During regeneration, the division remained on the front line, although in a quiet sector. The men received training behind their lines as units rotated on line following the formula of two units forward and one unit back. In early December 1944, units conducted platoon level assault training, learning patrolling techniques and gradually became acclimated to life in a combat theater's front line. The division's units were given confidence building missions - raids into enemy territory to take prisoners of war, specific targets to destroy, etc. to prepare them for combat.

The 28th Infantry Division still was being regenerated when a major German counteroffensive - the campaign known as the Battle of the Bulge - hit the division head on. The division, shattered and combat ineffective just a month earlier, fought a determined defensive action despite being outnumbered, outgunned, and surprised

by the German thrust. The 28th Infantry Division's performance during the Battle of the Bulge was a function of a successful reconstitution effort in contrast to a poor performance during the Battle of Schmidt following a poorly conducted reconstitution effort.

1973 Mideast War:

The 1973 Mideast War is an excellent example of the importance of reconstitution on a modern battlefield. The war began at 1400 on 6 October 1973, when Egyptian and Syrian forces simultaneously attacked the Israelis on two fronts. The Egyptians attacked the Israelis across the Suez Canal and the Bar Lev Line on the Sinai Front, while the Syrians attacked Israeli units along the Golan Heights.

The most significant difference between the 1973 Mideast War and World War II was the proliferation and lethality of weapons systems. The Arabs had approximately 4000 tanks, 3000 armored personnel

carriers, and 3000 artillery tubes.⁶ The Israelis had approximately 2000 tanks, 4500 armored personnel carriers, and 500 artillery

tubes.⁷ To put the proliferation of weapons systems into perspective, the United States had a total of about 1700 tanks and 500 tubes of artillery in the U.S. Army Europe (USAREUR) at this time. Weapons systems effectiveness added to the lethality of the battlefield- the tanks used in the 1973 Mideast War were about 10 times more effective

than their World War II predecessors.⁸

Equipment losses during the 18 day battle were incredible. The Israelis lost approximately 700-1000 tanks, 1500-2000 armored

personnel carriers, and 50-75 tubes of artillery.⁹ The Arabs lost

approximately 1500-2000 tanks, 1000 armored personnel carriers, and
500 tubes of artillery.¹⁰ The Arabs alone lost what equated to all
the tanks and artillery tubes in USAREUR at the time.

Casualties were also high. The Israelis lost 2222 killed, 5596
wounded and 301 prisoners of war.¹¹ Roughly half of the Israeli
casualties were in its armored corps. The ratio of killed to wounded
on the Israeli side attest to the lethality of a "modern"
battlefield.

By 0400 on 7 October, Southern Command, which controlled the
Israeli units operating in the Sinai, could count only 110
operational tanks. This meant as many as 170 tanks- about 68 percent
of the fleet- were nonoperational or mechanical losses. One brigade
lost 38 percent of its tanks. One battalion lost 19-21 of its

tanks.¹²

This same battalion serves as an excellent example on successful
Israeli reconstitution. After extremely heavy initial losses, the
battalion commander split his survivors into three sub-units to
evacuate wounded, recover tanks, remove weapons and communications
equipment from disabled tanks, and to secure the rear area. By 9
October, less than 48 hours after losing 13 tanks to enemy action, 6
tanks to mechanical failures, and suffering 10 killed and 18 wounded,
the battalion commander had assembled a force of 18 Centurion and 7

Patton tanks.¹³

On 8 October the Israelis lost 70 tanks, including 40 severely
damaged and 25 left behind in enemy controlled territory.¹⁴ From that
evening on, Israeli reconstitution procedures followed a general
pattern of disengagement at evening and replenishment and

regeneration at night. Units withdrew about 5 kilometers from the front to meet the division trains, leaving reconnaissance elements to monitor enemy movement. Casualties were evacuated, equipment repaired, and weapons systems were rearmed and refueled. Commanders reassigned manpower, reorganized units and sub-units, and assigned new leaders to replace casualties. Lessons learned from the day's battle were incorporated into the planning for the next day's battle. As the war progressed, the Israelis found it necessary to speed up the reconstitution process to allow more time for crew rest.

The Israeli ordnance unit retrieval and repair of battle damaged tanks was critical to Israeli reconstitution and sustainment. Nearly every Israeli tank was hit during the war, but ordnance crews repaired most during the course of the fighting. Some tanks were repaired as many as five times. Ultimately, the Israeli Defense Forces wrote off 400 tanks and 25 artillery tubes as totally lost. ¹⁵

"Fix forward" was key to Israeli success. Israeli officers halted withdrawing tanks at checkpoints along the main supply routes 3-5 kilometers behind the front. Maintenance crews repaired malfunctioning tanks on the spot. If immediate repair was not possible, the tank crew was given another tank so that they could return to the battle. Ordnance teams attached to the battalions did spot repairs, and first and second echelon maintenance within close proximity of the front. Fifteen kilometers to the rear, forward companies of divisional ordnance units performed third echelon repairs. Further to the rear, the base company did fourth echelon repairs. Ordnance teams patrolled roads to locate and recover tanks, repair them, and push them to the front. The Israelis used

inoperative tanks- those with nonoperational and non repairable turrets and weapons systems- to recover/tow tanks.

The Israelis made efficient use the time available to refit and replenish units; had an effective system for the recovery and repair of damaged equipment; and were able to recover, repair, and return weapons systems to battle again and again.

ENDNOTES

1. U.S. Army Command and General Staff College, Student Text 101-7, pp C1-C3.
2. Ibid, p. 1-1.
3. Edward J. Drea, Unit Reconstitution- A Historical Perspective, pp. 40-41.
4. CGSC ST 101-7, p. A1.
5. Ibid, p. A3.
6. U.S. Army War College, Case Study: The Arab-Israeli War: October 1973, p. 84.
7. Ibid.
8. Ibid, p. 85.
9. Ibid, p. 84.
10. Ibid.
11. Drea, p. 55.
12. Ibid, p. 53.
13. Ibid, p. 55.
14. Ibid.
15. Ibid.

CHAPTER IV

SALIENT ISSUES OF RECONSTITUTION

CONSIDERATIONS

Based primarily on an analytical study of the 28th Infantry Division experience, the Combat Studies Institute¹ identified the following METT-T (mission, enemy, troops, terrain and weather- time) considerations for planning unit reconstitution:

- Condition of troops at the beginning of the engagement.

Subelements would include the length of time the unit has been in combat; the length of rest just prior to the engagement; the nature of the unit's most recent combat experience; actual unit strength; and the number and specialties of replacements in the unit.

- Terrain. The commander should appraise the terrain not only tactically, but also should consider the psychological effects the terrain will exert on his troops.

- Weather. Weather likewise effects troop performance. Although troops are expected to be adaptable, there may be a price in terms of unit effectiveness and efficiency.

- Expectation of the troops entering battle. The degree of urgency of the mission assigned to a unit may be assumed to influence its determination to carry out the order. Soldiers with thorough knowledge of the commander's plans and intentions historically have fought better because they understand their minor role in the major operation (they see the "big picture").

- The intensity of combat. Commanders must be aware of how their men perceive the particular combat engagement.

- Loss of key leaders. Commanders are dependent on subordinate commanders to access lower level leadership. This is an extremely difficult and time consuming task as it is most difficult to determine the status of lower level key leaders. Historically, great leaders seem to have mastered this problem by keeping themselves in a position to sense/feel the flow of the battle.

- Physical condition of men and equipment. A unit's ability to reconstitute depends on the physical condition of its soldiers. The constant tension of combat, lack of sleep, and exposure to the elements produces fatigue.

- Casualties. While casualty figures should provide the best guide for a commander about the status of his forces, the commander must analyze losses to determine where the unit has been attrited and identify critical shortages by specialty. Particular attention must be given to low-density, high skilled specialties and leadership positions.

- Support expected and received. The commander should never promise his troops more support than may be available. Dashing the troops' high expectations is one of the surest ways to destroy a unit's confidence and morale.

- Isolation. The dispersion of soldiers and units to offset the increased lethality of weapons characterizes modern combat. Tactical dispersion presents not only a command and control problem, but also an individual one. The soldier's lack of information and awareness of what is going on around him heightens his sense of isolation.

- Intangibles: morale, esprit, unit pride, unit cohesion. A commander must know his troops and be sensitive to their needs in order to detect the initially subtle shifts in morale that may ultimately undermine his authority and destroy the unit.

ROLES/RESPONSIBILITIES

The following information, extracted from TRADOC Pamphlet 525-51, U.S. Army Operational Concept For Reconstitution on the AirLand Battlefield, 4 April 1986, outlines the staff planning, training, decision making, and execution processes to support the reconstitution effort.

Reconstitution is a command responsibility. While it is true the commander must rely heavily on his staff for input to his decision, he must not delegate the decision authority. The commander must resist the temptation and natural tendency to delegate responsibility for reconstitution planning and training to his S1/G1 or S4/G4 staff officers. The entire chain of command and staff must

sense the commander's sincere interest in the subject. The commander must think about the problem of reconstitution before being confronted with a reconstitution situation. Reconstitution planning and execution must be proactive- not reactive. After all, there is really no question as to whether or not reconstitution will be required- it will. The question is one of resources, planning, and preparedness. Thus, reconstitution planning is a continuous part of the estimate process.

Even though reconstitution planning is a continuous process, there must be a point of departure from which to begin reconstitution. While it is true that the first casualty of any battle is the plan, a well thought out plan will provide a basis for development of standard operating procedures, as well as training, coordination, and resource requirements.

The commander's mission is paramount in the reconstitution process. It is the commander who is in the best position to assess effectiveness. His conclusions are based not only on facts, figures, and status reports provided by subordinate units and staff, but also - and probably more importantly - on his intimate knowledge of his subordinate elements, his soldiers, the condition and effectiveness of subordinate commanders and/or leaders. He also considers previous, current, and anticipated situations and missions.

Unit standard operating procedures (SOPs) must address procedures for reconstitution. Key reconstitution issues to be addressed in the SOP or plan are:

- Information requirements and reporting procedures.
- Assessment procedures and responsibilities.

- Battle rosters.
- Critical tasks necessary for overall mission accomplishment.
- Procedures to reestablish or reinforce command and control systems.
- Reorganization procedures, criteria, and priorities.
- Techniques to maintain cohesiveness.
- Weapon system replacement operations (WSRO), or similar procedures.
- Procedures for a transition to more extensive reconstitution efforts requiring external assistance.

During the battle planning process, commanders conduct a detailed assessment of unit capabilities, assisted by unit leaders and appropriate staff officers. From this analysis, the commander develops a set of actions which, singly or in combination, will serve to reduce the impact of the battle and preserve his force. Examples of these actions would include conducting leader and soldier cross training; conducting an extensive information program; and developing a course of action that directs friendly strengths against enemy weaknesses.

The commander's reconstitution plan must be based upon the higher commander's plan. The reconstitution plan is based on the unit's current condition, assigned mission, reconstitution guidance provided by higher headquarters, and expected intensity of the conflict. The plan is strongly influenced by anticipated future missions which could effect the reconstitution method ultimately used and the speed or priority with which the reconstitution method is applied. Degraded units should anticipate a reduction in their

communications capability, restricting the flow of information and impeding commanders in making decisions on reconstitution.

As commanders plan for reconstitution, they must be prepared for the possibility of manning weapon systems or primary groups with less than the full complement of crew. This technique is an excellent emergency measure which will maximize combat power within limited resources, maintain primary group integrity, reduce training requirements, and provide a base for preserving or restoring cohesion. Commanders must remember that they will be fighting with reduced combat capability and lower unit endurance and must deal with the higher risks inherent in this technique.

In addition to the aforementioned elements of reconstitution planning, commanders must plan to decontaminate units, plan for the location of reconstitution activities, and plan security for the unit undergoing reconstitution. Decontamination of personnel should be performed at a site enroute to the reconstitution site. The decontamination site must provide for security and an adequate water supply.

Forces undergoing reconstitution and those combat service support units assisting with the reconstitution effort will be subject to attack by a wide array of rear area threats. Units undergoing reconstitution will be particularly vulnerable, because they will be tired and depleted. The addition of all the combat service support elements required to support reconstitution will create a lucrative target.

Reconstitution should be accomplished as far forward as possible. However, reconstitution is best undertaken in an area not under immediate enemy pressure. On the modern battlefield, it will be very difficult -if not impossible- to find an area totally protected from harassment and interdiction. The location will normally be designated by the commander directing reconstitution. Other factors applicable to site selection include the size of the unit, lines of communication available, special requirements, such as water for decontamination, and current or future employment plans for the unit undergoing reconstitution.

TRAINING

Commanders must begin training for reconstitution early and integrate it with other aspects of their training program. It should be noted that many aspects of reconstitution training are already trained under other programs. Training to support reconstitution should not significantly add to the amount of training a unit undergoes.

Particular attention should be given to quick accurate situation assessments and alignment of reconstitution efforts with the priorities, intent, and concept of the commander. Unit training should focus on reorganization techniques and procedures, use of contingency manning standards, and implementation of reconstitution SOPs. Since time is critical during reconstitution, low-density, hard-skill MOSSs must be identified early at all levels of command and necessary cross training programs implemented during peacetime.

Training for succession of command should be conducted down to the lowest levels.

Within the constraints of operations security, commanders should conduct an extensive information program for two reasons. First, to enable leaders at all levels to exercise initiative, to continue the operation, and to succeed. Second, the program will enable soldiers to become mentally prepared for the upcoming battle. Soldiers who are aware of conditions and of available support are less likely to experience debilitating stress when adverse conditions are encountered.

Training must be directed toward raising the reconstituted unit to a specified level of combat readiness. The ability to train is affected by the time available, the reconstitution method used, the reconstitution site location, the tactical situation, the status of unit leadership, morale, and the follow-on mission. The training mission must focus on the essential collective tasks required to perform the next mission. Training should address the individual skills essential to collective tasks attainment or critical to mission accomplishment. Training should progress from squads, teams, and crews to the highest level achievable within time and resource constraints. History suggest that the newly reconstituted unit must have a mission on which to focus for the reconstitution to be successful.

ENDNOTES

1. Edward J. Drea, Unit Reconstitution- A Historical Perspective, pp. 46-49.

CHAPTER V

REVIEW OF CURRENT OPERATIONAL CONCEPT

The U.S. Army's current operational concept for reconstitution on the AirLand Battlefield was disseminated in U.S. Army Training and Doctrine Command Pamphlet 525-51 (TRADOC Pam 525-51), dated 4 April 1986. This document describes, in very general terms, actions commanders and staffs must take in planning, training, and preparing for reconstitution. The following information, extracted from TRADOC Pam 525-51, provides a quick review of the current operational concept. As noted earlier, supporting doctrine has not been developed.

Commanders must remain flexible as mission requirements and available resources (including time) will dictate the conditions and circumstances for reconstitution of degraded units. Commanders down to the division level should use a decision matrix that compares units to be reconstituted against available resources such as sites, replacement personnel, equipment, and support units.

The level to which a unit is degraded before the commander implements a plan to reconstitute will depend on the current situation, anticipated missions, and available resources. During combat, for example, the situation may require that a severely

degraded unit remain in battle due to the situation and rely on reorganization. The commander may decide to accept a lesser, but continuous, degree of capability in order to seize or maintain the initiative.

It is the commander directing implementation of the reconstitution plan who determines the methods, location, and the priority of elements to be reconstituted within the command. When determining the reconstitution method or combination to be used, the commander considers the following:

- time available
- level of capability desired
- nature, intensity, and duration of the battle
- overall condition of the unit to be reconstituted
- assets available for casualty and damage assessment
- capabilities or other commitments of elements available to assist the unit being reconstituted
- availability of replacement personnel, teams, units, equipment, and supplies
- location of the reconstitution site, the availability of transportation, and the lines of communication available
- nature and extent of special requirements
- competing requirements
- exposure to mass casualty weapons

The key to execution is the evaluation process. This assessment is a continuation of the commander's evaluation, the difference being that the commander is now looking at a unit as a candidate for specific reconstitution measures. The commander must have accurate

and timely information from subordinate units in order to make sound decisions.

Normally, the commander one echelon above the unit being reorganized retains approval authority for reorganization. The commander of the unit being reorganized retains control of the reorganization operation. He designs and directs the overall unit reorganization and will guide that of subordinate elements. Command lines will normally remain the same as before reorganization was required. Changes in task organization may require an exception to this general rule.

Regeneration is provided and directed by the first commander with, or who can rapidly obtain, the resources and capabilities to accomplish the task. In most cases, this is the commander two echelons higher in organization than the unit to be regenerated. As a general rule, divisions regenerate battalions and corps regenerate brigades. However, divisions have a very limited ability to support regeneration and may require corps or theater assistance. The parent unit normally retains command of the unit being regenerated.

The key to any type of reconstitution is a viable command and control system. Accordingly, command and control elements are the first areas assessed and the first areas reinforced or reestablished.

The commander directing regeneration will form assessment elements using internal resources. The initial element should be a casualty and damage assessment element (CDAE) which performs liaison functions and assists the unit commander in implementing detailed regeneration efforts. The CDAE forms assets into an assessment and

recovery team (AART) which actually operates the regeneration site(s).

Missions of the CDAE include:

- Immediately assessing the unit's command and control status and reinforcing or reestablishing command and control.
- Assisting the unit commander in a detailed assessment of unit status
- Final determination of requirements to restore the unit to the required capability.
- Assisting the unit commander in marshalling unit resources to begin initial reconstitution.
- Task organizing CDAE assets and other available support resources into ad hoc AARTs.

The CDAE assesses five major functional areas: command and control, personnel, equipment, supply, and training. These assessments must be conducted quickly and accurately in order to determine unit status (losses and remaining capabilities). Command and control and training requirements are identified and forwarded through command channels. Combat service support status and information is passed through operational channels. Detailed CSS information is passed through logistics channels to appropriate agencies and staff sections.

In addition to operating the regeneration site, assessment and recovery teams provide resupply, security, medical care/evacuation, equipment recovery, battlefield repair, and equipment evacuation. The unit conducting the regeneration should avoid drawing on the unit undergoing regeneration for support. Communications capability and mobility are critical to the AART- they must be able to communicate

with higher headquarters and supporting units, possess sufficient mobility to perform their mission, and have a reconnaissance capability.

In the foreward to TRADOC Pam 525-51, the TRADOC Commander, General William R. Richardson, states, "The lethality of the AirLand Battlefield demands a well thought out reconstitution plan that is well coordinated and executed so that maximum combat power is sustained within situational and resource constraints."¹

The U.S. Army cannot have an effective reconstitution program unless the Army's senior leadership recognizes the need, makes reconstitution a priority effort, and resources this effort accordingly.

ENDNOTES

1. U.S. Army Training and Doctrine Command, Pamphlet 525-51, Foreword.

CHAPTER VI

NEW IDEAS TO ENHANCE RECONSTITUTION

Some of the problems in the reconstitution arena require long term/hardware related solutions. Others may be alleviated relatively quickly through organizational changes, doctrinal revisions, leadership training, and technological enhancements. Examples of potential improvements to the U.S. Army's ability to execute reconstitution are described below.

Reporting: One of the biggest problems a maneuver commander has is getting accurate and timely status reports from his subordinate units. This problem is compounded up through the chain of command (from company, to battalion, to brigade, to division, to corps) -the higher the level, the more difficult it is to get timely, reliable information. There are a number of reasons for this dilemma, to include subordinates viewing status reporting as a burdensome "administrative" requirement, concern about "looking bad" by reporting low readiness rates, communications problems, unit dispersion, and unclear reporting procedures. These problems will be exacerbated when the shooting starts - reference Clausewitz's "fog and friction" of war. One of the maneuver commander's biggest

problems will be determining the status of his subordinate units at any point in time.

By the time status reports are briefed to the corps commander, the already questionable information will be at least 24-36 hours old. Commanders at higher levels make critical decisions (assign objectives/missions, allocate resources, select courses of action, etc.) based on the information contained in status reports received from their subordinate elements. This problem is not new and begs for solution.

The problem must be addressed for a number of reasons, to include:

- The U.S. does not have the industrial base to accomplish "surge" production as in World War II. Most manufacturing facilities could not be easily converted to produce military hardware. Most modern, high-tech weapons systems are not designed for easy or rapid production.

- The increasing cost of today's high technology systems, combined with reduced defense spending, prohibits stocking large numbers of end items in war reserve stocks.

- The high cost of "black boxes" and other components for modern systems will not permit large stocks of repair parts.

- Today's high technology systems do not lend themselves to field expedients/quick fixes.

- Reduction in nuclear capability/flexibility puts greater reliance on conventional forces without corresponding increases in conventional force structure.

- Force structure reductions, particularly in CSS units, have reduced sustainment capability.

Although accurate and timely status reporting is a problem that has been with the Army for years, there has been little attempt to apply technology to solve the problem as we have in many other areas. One such technological solution within the current state of the art would be to develop a digital electronic device to expedite status reporting. Each major combat system (tank, personnel carrier, artillery piece, etc.) could be equipped with a device capable of sending a low frequency signal indicating the system is either operational or nonoperational. This device could be tied into a status board at the appropriate level (company, battalion, etc.). The crew/operator could "punch in" system status at prescribed reporting times, or when there is a change in status. It might be desirable to have the the device transmit constantly. Although such a system would not provide detailed information as to why a system is nonoperable, it would give commanders accurate, real-time data on combat system availability. It would certainly be an advantage in selecting courses of action, assigning missions, and allocating scarce resources. This would also allow logisticians and operators to reduce the information time lag and allocate resources more effectively.

A logical follow on would be to expand the concept to allow the commander to track designated combat systems (tanks, fighting vehicles, etc.) at all times. The signal generated by each system could be used to show location as well as operational status, and to provide real time data to command and control elements of maneuver

tasks forces. It might be desirable to add an "identification friend or foe" (IFF) capability such as the system used in aircraft.

Additionally, commanders must establish clear standards for reporting weapons systems as operational or nonoperational. The technical manual preventative maintenance checks and services (PMCS) criteria for considering a weapons system nonoperational may not be appropriate for combat. Leaks, inoperative gauges, track/roadwheel wear, etc. would not normally prevent a tank from "moving, shooting, and communicating" under combat conditions. These conditions should be reported so that the appropriate repair parts can be obtained and repairs programmed, but a tank should not normally be withdrawn from combat for such repairs. The commander must be able to sort out these differences. Clear reporting procedures and a timely reporting system are critical. This system must include provisions for identifying non combat ready systems.

Recovery: Battlefield materiel recovery is another area where technology could be applied to improve a long existing problem. For the reasons stated earlier, a smaller, high-tech Army must plan to make maximum use of its resources. Battlefield recovery, repair, and evacuation of damaged equipment will be critical to the "fix forward" concept and sustainment of combat power.

The Israelis demonstrated the importance of recovery operations during the 1973 Mideast War. The key to Israeli success was recovery of disabled vehicles. The capability to recover, repair, and return tanks to battle over and over again, allowed the Israelis to sustain operations against a numerically superior force. The U.S. Army's

capability to perform this mission could be enhanced through application of technology and doctrinal changes.

Locating and recovering damaged or abandoned equipped is an extremely difficult and time consuming task. This activity could be expedited by the use of a signaling device on disabled/abandoned equipment, minimizing time lost searching for inoperable vehicles and optimizing use of scarce recovery assets. A transponder, or similar type device, on the piece of equipment would enable recovery crews to quickly locate damaged equipment. This feature could be incorporated into the same system suggested earlier for status reporting.

Doctrinal/organizational improvements to the U.S. Army capability might include pulling and consolidating recovery assets at the brigade level. For example, in heavy divisions, the M88 medium recovery vehicle is critical to both maintenance and recovery operations in the forward area. While it would not be wise to pull M88s from front line maneuver units, it would be wise to consolidate M88s from other units (the divisional engineer battalion, corps maintenance battalions, etc.) into recovery teams/units. These teams could be located forward in the brigade support area, under the control of the forward support battalion (FSB), where they could be responsive to urgent requirements. Division rear area and corps elements have access to other recovery/lift resources. The point is, the U.S. Army cannot afford to have M88s performing missions in the division support area, or in the corps rear area, when division elements are in contact. If M88s are not available to recover tanks, operational tanks will have to be pulled off line for this mission. Fighting systems must be recovered promptly, repaired, and returned

to battle if the U.S. Army is to have any chance of fighting outnumbered and winning. Tanks that are not combat ready because of weapons systems problems, which are not immediately repairable, should be included in these recovery teams.

The U.S. Army's recovery problems are further complicated by the M88's limited capability to recover the heavier M1 Abrams tank. Terrain and weather conditions severely limit the M88's effectiveness in recovering the M1. This provides further justification for consolidating assets at a level where resources can be more effectively managed.

Another key to the Israeli success in the 1973 Mideast War was their ability to rapidly transport badly damaged tanks to rear areas for extensive repair. They were also successful in transporting tanks from one front to another. The U.S. Army lacks this capability. Although each heavy division is authorized 24 heavy equipment transporters (HETs), they are not available in the inventory. By table of organization and equipment (TOE), these assets are to be located in the divisional main support battalion (MSB). Consideration should be given to deploying six each HETs with each FSB and retaining six in the MSB once these assets are available.

The FSB is doctrinally responsible for operating equipment collection points and providing backup recovery support to maneuver units. However, the FSB is authorized only one M88. Under current safety restrictions, which require two M88s to tow a M1 tank, the FSB lacks the capability to safely recover a M1 tank. Serious

consideration should be given to authorizing the FSB additional M88s to enhance its ability to perform these missions.

Assessment/Diagnostics: Battlefield damage assessment and diagnostics also lend themselves to technological and organizational/doctrinal solutions. There is an effort in the research and development community to include a diagnostic capability in all new equipment. However, some of today's systems are so complicated that the volume of the antiquated associated diagnostic test equipment developed as an "after-thought" makes the "fix forward" concept impractical. What is needed is a capability to rapidly and accurately assess damaged equipment at the lowest level. Today's sophisticated electronic systems make this more than a possibility. State of the art technology supports improved, miniaturized diagnostic equipment. Diagnostics must be a consideration in weapons system design rather than an after-thought. This would preclude the need for bulky, antiquated test equipment. Future developments should look toward remote diagnostics via radio signal or other medium.

The Army has experimented with concepts utilizing improved technology for diagnostics but is not aggressively pursuing application of the technological solutions available. The Ordnance Center's "master diagnostician" program is a case in point. This program successfully demonstrated that highly trained maintenance personnel could quickly and accurately diagnose M1 Abrams tank malfunctions using a specially fabricated "breaker box" and streamlined troubleshooting procedures. Tests showed these master

diagnosticians were able to significantly reduce time required for trouble shooting nonoperational equipment, while drastically reducing the volume of test and diagnostic equipment required. Emphasis in maintenance specialty training should be on understanding basic systems theory (electricity, hydraulics, etc.) rather than a specific item of equipment. This would facilitate trouble shooting, diagnostics, and repair.

Once battle damaged equipment has been located and diagnosed, it is either repaired on the spot or evacuated. Extensively damaged or unrepairable equipment is evacuated to collection points where it may be used as a source of parts (cannibalization). There is currently no automated system to track these assets. A component or a part needed for a tank in the first brigade area may be available on a tank at the collection point in the second brigade area.

While the forward support battalion (FSB) concept significantly improved overall logistical support at the brigade level, there are some deficiencies which need to be addressed. Diagnostic capability is one of those areas. The maintenance company of the FSB is authorized only one tank diagnostic test set per tank system support team. When these teams deploy with the supported battalion, the FSB (-) has no tank fire control system diagnostic capability. Adding an additional diagnostic set would provide the FSB (-) a capability it must have for float repair/maintenance, and repair of systems evacuated from the maneuver battalion trains area. It would also provide a backup capability to the forward deployed tank system support teams.

"Weighting" the Maintenance Effort: One of the selling points to the FSB organization was that it supported the "fix forward" concept proved so effective by the Israelis during the 1973 Mideast War. The FSB organization in heavy divisions includes large (21-37 personnel) maintenance support teams - normally one per supported battalion. These teams, tailored to support either an infantry or armor battalion, include a fire control, generator, automotive, fuel and electric, and communications/electronics repair capability.

While the system support team concept appears to support the U.S. Army's "fix forward" doctrine, it significantly degrades the FSB maintenance company base capability. When the system support teams (SSTs) deploy with the supported maneuver unit, most of the FSB base maintenance capability is lost. The FSB commander loses his ability to weight the maintenance effort (workload). Under the current FSB organization, a battalion which has experienced intense combat has the same resources as its sister battalion in reserve. Thus, the current support team concept does not allow for efficient use of resources, personnel, and equipment. The FSB (-) has an extremely limited maintenance capability and cannot handle support of brigade support area units and equipment evacuated from the maintenance support teams and maneuver units. Doctrine calls for equipment that cannot be repaired within 4-6 hours in the maneuver battalion trains area to be evacuated to the FSB (-). The FSB (-) does not have the capability to repair or evacuate such a volume of equipment.

A viable alternative would be to reduce the size and capability of the SSTs and consolidate resources in the FSB base. The maneuver units would retain their "fix forward" direct support maintenance

capability and the FSB base's ability to provide BSA and backup support would be improved. This change would give the FSB commander more flexibility to weight the maintenance effort in accordance with the situation and the brigade commander's priorities.

Computer Aids: Some of the problems associated with the lack of doctrine, experience, and training on reconstitution could be alleviated very quickly through the use of an automated reconstitution program. The proliferation of personal computers within units makes this concept a rapid and extremely feasible solution. The Army Logistics Center at Ft. Lee, Virginia is developing a prototype computer program which could be of tremendous help in reconstitution planning. This interactive program, still in the embryonic phase, is being designed to "walk" the user through the various elements of reconstitution planning. It asks a series of questions and suggests actions based on the user's response. Ultimately, it could include data bases which would project equipment, personnel, fuel and ammo requirements; make time estimates for each event; identify critical tasks; and produce a CPM (critical path method) network for use in managing the reconstitution effort.

Corps Support Battalions (CSBs): Forming corps support battalions from the traditional tech services units (maintenance, supply and transportation, medical, and ammunition battalions) would greatly enhance reconstitution. It is generally agreed that the current divisional CSS force structure is too austere to conduct

reconstitution effectively. Reconstitution of divisional elements will require corps support/augmentation.

Forming CSBs would pool the assets required for reconstitution support into a single organization- with organic command and control and a full time staff. This would offer tremendous advantages over the current ad hoc system. The ad hoc casualty and damage assessment element (CDAE) and assessment and recovery team (AART) organizations called for in the current operational concept should be integral components of the CSBs. The current operational concept is analogous to waiting for the opening kickoff before putting together a team to play the game. CSBs could plan and train for reconstitution missions, developing proficiency and expertise.

CSBs would also enhance the corps' ability to quickly provide backup support to divisional elements and facilitate interface with the division support command logistics structure.

CHAPTER VII

CONCLUSIONS

The U.S. Army has adjusted the way it plans to fight to exploit enemy weaknesses and take advantage of technological gains. The force modernization program conducted during the Reagan administration significantly improved the U.S. Army's ability to win the first battle in a mid-high intensity war. Unfortunately, the U.S. Army's ability to sustain the fight and win beyond the first battle remains very questionable.

Resourcing and innovations in logistics doctrine, force structure, and equipment modernization have not kept pace with force modernization in the maneuver arena. Equipment costs have grown with improved technology and capability. Defense spending cuts and rising production costs will certainly slow the modernization process. It would appear the U.S. Army of the future will be a smaller, highly mobile force with a high tooth-to-tail ratio. Sustainment during combat will become increasingly difficult and important. High unit cost, long production lead times, and strategic lift shortfalls will make sustainment increasingly challenging. Improved intelligence and surveillance systems will enhance targeting for more lethal, longer range weapons systems. Artificial intelligence and remote control

systems will further change the complexion of the battlefield of the future.

Although there is clearly a need, the U.S. Army has not developed or articulated effective doctrine for reconstitution, as evidenced by the lack of a field manual (FM) or other "how to" guidance published by Department of the Army. Related field manuals (FM 100-5, Operations, FM 63-2, Combat Service Support Operations-Division, and FM 100-16, Support Operations) only briefly mention reconstitution and its critical importance. Commanders and supporting logisticians have no meaningful guidance from the Army's leadership on reconstitution. Additionally, there do not appear to be any major initiatives on reconstitution underway at the Army Logistics Center, the Combined Arms Center, or the Office of the Deputy Chief of Staff for Logistics, Department of the Army.

Consequently, it should not be surprising that planning and training for reconstitution are inadequate. Neither planning nor training can be conducted effectively in the absence of doctrine. Until the Army leadership develops and articulates an effective reconstitution doctrine, units cannot effectively plan, train, and execute reconstitution. It follows that knowledge, expertise, and experience are also lacking.

The last major reconstitution effort undertaken by the U.S. Army was during World War II. Reconstitutions of lesser magnitude were conducted during the Korean Conflict. Very few (if any) veterans of either of these experiences are now on active duty. Thus, reconstitution experience and expertise are extremely lacking in the U.S. Army.

CHAPTER VIII

RECOMMENDATIONS

First of all, the Army's senior leadership must recognize the critical importance of reconstitution as the maneuver commander's primary means of sustaining combat power. For the reasons detailed in this study, the requirement for effective reconstitution doctrine is inevitable. Senior leaders must get interested - before it is too late - in reconstitution preparation, planning, and execution. Getting "interested" includes resourcing the issue accordingly.

➤ A special task force, chartered by the Chief of Staff of the Army, should be organized to conduct a thorough analysis of the Army's reconstitution posture. This task force should include representatives of the Army's Logistics Center, the Combined Arms Center (CAC), the Department of the Army- Deputy Chief of Staff for Logistics (DCSLOG), the Department of the Army- Deputy Chief of Staff for Operations (DCSOPS), and major subordinate commands (MSC). In addition to an analysis of reconstitution posture, the task force should identify responsibilities, potential improvements, and establish milestones for enhancing reconstitution. This effort must include combat arms elements- it must not be left to logisticians for resolution.

The DCSOPS should emphasize that realistic reconstitution planning and training be addressed in operational and contingency plans, training programs, and exercises. Operators should be encouraged to deal with reconstitution realistically in wargaming exercises, versus "wishing away" the problem by declaring units magically "reconstituted" in unrealistically short periods of time (less than 24 hours!). The DCSOPS should also strongly recommend that reconstitution training be included in officer and noncommissioned officer professional development programs. Lessons learned from World War II and the 1973 Middle East War should be "dusted" off and disseminated.

The DCSLOG, Log Center, and CAC must develop and distribute aids for reconstitution - automated programs, "how-to" manuals, reconstitution wargaming exercises, etc. Organizations and equipment should be developed and acquired to support and complement reconstitution doctrine. Examples of such actions might include implementation of the corps support battalion concept and procurement of heavy equipment transporters.

BIBLIOGRAPHY

1. Coutinho, John de S. "Battlefield Damage Assessment and Repair." Military Review, February 1988, pp. 54-62.
2. Drea, Edward J. Unit Reconstitution - A Historical Perspective. Combat Studies Institute, U.S. Army Command and General Staff College, 1983.
3. Fast, William R. "Operational Level of Support: In Search of Doctrine." Military Review, February 1988, pp. 46-53.
4. Galvin, John R., GEN. "NATO After Zero INF." Armed Forces Journal International, March 1988, pp. 54-60.
5. Horowitz, Dan and Luttwak, Edward. The Israeli Army. New York: Harper and Row, 1975.
6. Horner, Charles W. "Reconstituting a Combat Force." Army Logistician, July-August 1986, pp. 2-5.
7. Landry, John R., and Sullivan, Bloomer D. "Forward Support Battalion." Military Review, January 1987, pp. 24-30.
8. Marsh, Curtis N. III. "Reconstitution." Military Review, January 1987, pp. 56-61.
9. McInnis, Charles W. "Sustainment Doctrine: Not Keeping Pace With AirLand Battle Doctrine." Military Review, February 1988, pp. 22-29.
10. O'Ballance, Edgar. No Victor, No Vanquished: The Yom Kippur War. San Rafael, CA: Presidio Press, 1978.
11. Privratsky, Kenneth L. "Sustaining the Corps: Is the COSCOM Ready for AirLand Battle?" Military Review, February 1988, pp. 40-45.
12. Smiley, Ronald H., and Theroux, Gilbert L. Reconstitution On The Airland Integrated Battlefield. Washington: Defense Nuclear Agency, 1981.
13. U.S. Army Command and General Staff College. Student Text 101-7: Reconstitution. Fort Leavenworth, Kansas: December 1987.
14. U.S. Army Training and Doctrine Command. Pamphlet 525-51: US Army Operational Concept For Reconstitution on the Airland Battlefield. Fort Monroe, Virginia: 4 April 1986.

15. U.S. Army War College. Case Study: The Arab-Israeli War: October 1973. Carlisle Barracks, Pennsylvania: November 1987.

16. U.S. Department of the Army. Field Manual 100-5: Operations. Washington: May 1986.

17. U.S. Department of the Army. Field Manual 100-16: Support Operations: Echelons Above Corps. Washington: April 1985.

18. U.S. Department of the Army. Field Manual 701-58: Logistics Considerations For Military Operations. Washington: May 1987.

19. Van Loon, Henry. "An Exclusive Interview With General John R. Galvin, USA." Armed Forces Journal International, March 1988, pp.50-52.

END

DATE

FILMED

8-88

DTIC