PERSONNEL REPLACEMENTS OPERATIONS DURING OPERATIONS DESERT STORM AND DESERT SHIELD

A thesis presented to the Faculty of the U.S. Army Command and General Staff College in partial fulfillment of the requirements for the degree

MASTER OF MILITARY ART AND SCIENCE General Studies

by

BRIAN L. HOLLANDSWORTH, MAJOR, U.S. ARMY B.S., Louisiana College, Pineville, Louisiana, 2004

Fort Leavenworth, Kansas 2015

BELLUM

Approved for public release; distribution is unlimited.

REPORT DOCUMENTATION PAGE

Form Approved OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.

1. REPORT DATE (DD-MM-YYYY)	2. REPORT TYPE	3. DATES COVERED (From - To)
12-06-2015	Master's Thesis	AUG 2014 – JUN 2015
4. TITLE AND SUBTITLE		5a. CONTRACT NUMBER
Personnel Replacement Open	rations during Operations Desert	5b. GRANT NUMBER
Storm and Desert Shield		
		5c. PROGRAM ELEMENT NUMBER
6. AUTHOR(S)		5d. PROJECT NUMBER
. ,		
Major Brian L. Hollandsworth		5e. TASK NUMBER
		5f. WORK UNIT NUMBER
7. PERFORMING ORGANIZATION NA		8. PERFORMING ORG REPORT
U.S. Army Command and General	l Staff College	NUMBER
ATTN: ATZL-SWD-GD	_	
Fort Leavenworth, KS 66027-230	1	
9. SPONSORING / MONITORING AG	ENCY NAME(S) AND ADDRESS(ES)	10. SPONSOR/MONITOR'S
		ACRONYM(S)
		11. SPONSOR/MONITOR'S REPORT
		NUMBER(S)
12. DISTRIBUTION / AVAILABILITY S	STATEMENT	
Approved for Public Release: Dist	ribution is Unlimited	

Approved for Public Release; Distribution is Unlimited

13. SUPPLEMENTARY NOTES

14. ABSTRACT

This thesis uses historical narratives in the forms of interviews conducted after the conclusion of Operations Desert Shield and Desert Storm to assess personnel replacement operations. The primary research question focuses on the adequacy of replacement operations during this period using the personal assessments of individuals involved in theater replacement operations. Adequacy for this research thesis focuses on two elements. First, it seeks to find specific statements made by the interviewees about issues/concerns with replacement operations with the actual workload from combat operations. Additionally, the thesis seeks to identify issues/concerns these leaders identify as potentially problematic had the amount of casualties met or exceeded the planning estimates. These challenges were assessed using the doctrine, organization, training, materiel, leadership, personnel, facilities, and policy (DOTMLPF-P) framework to determine which of the categories led to the issue/concern. The intent of this historical analysis is to assess performance of theater replacement operations during Operations Desert Shield and Desert Storm in order to assess what, if any, additional considerations should be made for human resource operations in Unified Land Operations.

15. SUBJECT TERMS

Replacement Operations, Personnel Service Support, Operation Desert Shield, Operation Desert Storm

16. SECURIT	Y CLASSIFICATI	ON OF:	17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT	b. ABSTRACT	c. THIS PAGE			19b. PHONE NUMBER (include area code)
(U)	(U)	(U)	(U)	89	

Standard Form 298 (Rev. 8-98) Prescribed by ANSI Std. Z39.18

MASTER OF MILITARY ART AND SCIENCE

THESIS APPROVAL PAGE

Name of Candidate: Major Brian L. Hollandsworth Thesis Title: Personnel Replacement Operations during Operations Desert Storm and Desert Shield Approved by: _____, Thesis Committee Chair Marc A. Wagner, M.A. , Member Edward D. Jennings, M.S. , Member O. Shawn Cupp, Ph.D. Accepted this 12th day of June 2015 by: _____, Director, Graduate Degree Programs

The opinions and conclusions expressed herein are those of the student author and do not necessarily represent the views of the U.S. Army Command and General Staff College or any other governmental agency. (References to this study should include the foregoing statement.)

Robert F. Baumann, Ph.D.

ABSTRACT

PERSONNEL REPLACEMENT OPERATIONS DURING OPERATIONS DESERT STORM AND DESERT SHIELD, by Major Brian L. Hollandsworth, 89 pages.

This thesis uses historical narratives in the forms of interviews conducted after the conclusion of Operations Desert Shield and Desert Storm to assess personnel replacement operations. The primary research question focuses on the adequacy of replacement operations during this period using the personal assessments of individuals involved in theater replacement operations. Adequacy for this research thesis focuses on two elements. First, it seeks to find specific statements made by the interviewees about issues/concerns with replacement operations with the actual workload from combat operations. Additionally, the thesis seeks to identify issues/concerns these leaders identify as potentially problematic had the amount of casualties met or exceeded the planning estimates. These challenges were assessed using the doctrine, organization, training, materiel, leadership, personnel, facilities, and policy (DOTMLPF-P) framework to determine which of the categories led to the issue/concern. The intent of this historical analysis is to assess performance of theater replacement operations during Operations Desert Shield and Desert Storm in order to assess what, if any, additional considerations should be made for human resource operations in Unified Land Operations.

ACKNOWLEDGMENTS

Over the course of this project, many individuals have come alongside to give insight, critique, and encouragement. First and foremost, I would like to thank my lovely wife Ellen for her love and support over these past months as I have spent countless hours reviewing and typing documents and studying interviews. Without your patience and willingness to be my sounding board throughout this project, I am confident I would not have been able to finish. To my three daughters, Isabella, Caroline, and Catherine, I thank you for your love and for giving me the motivation to press on towards this goal. I know I missed out on opportunities to see you play, and I thank you for always giving a hug and encouraging word. Daddy loves you.

To Dr. Stephen Bower and Ms. Adria Olmi of the Soldier Support Institute, I offer my utmost gratitude. Without their assistance in retrieving original transcripts of the interviews, the research for this thesis would not have been possible. Your dedication to the Army and the students at the Soldier Support Institute is unmatched.

And lastly but definitely not least, I would like to thank my committee. Your keen insight and dedication to this thesis have not gone unnoticed, and your fingerprints are evident throughout this thesis. To my chair, Mr. Wagner, thank you for keeping me on task and focused. To Dr. Cupp, I thank you for broadening my understanding of research and ensuring it had academic rigor. To Mr. Jennings, thank you for your excellent feedback and critique of my writing. Your commitment to ensuring this thesis was a quality product was evident in the constructive comments you provided. And to LTC Holden I would like to thank you for providing you HR expertise and your perspective to make this thesis a better document. I am forever grateful to you all.

TABLE OF CONTENTS

	Page
MASTER OF MILITARY ART AND SCIENCE THESIS APPROVAL PAGE	iii
ABSTRACT	iv
ACKNOWLEDGMENTS	v
TABLE OF CONTENTS	vi
ACRONYMS	viii
ILLUSTRATIONS	ix
TABLES	X
CHAPTER 1 INTRODUCTION	1
Introduction and Background	7 8
CHAPTER 2 LITERATURE REVIEW	10
Contextual Readings Doctrinal Publications During the Conflict Post Operation Desert Storm Regulation and Doctrinal Publications Summary of Literature Review	18 21
CHAPTER 3 RESEARCH METHODOLOGY	32
Replacement Operations Expectation Issues and Concerns Identified Organizational Echelon DOTMLPF-P Assessment	36 36
CHAPTER 4 ANALYSIS	39
Doctrine	50 52 55

Policy	62
Summary	64
CHAPTER 5 CONCLUSION AND RECOMMENDATIONS	65
Conclusion	65
Recommendations	
Areas of Future Study	
Summary	69
APPENDIX A LIST OF INTERVIEWS MAINTAINED BY THE SOLDIER	
SUPPORT INSTITUTE	71
APPENDIX B REPLACEMENT INTERVIEWEE CODING RESULTS	75
BIBLIOGRAPHY	77

ACRONYMS

AG Adjutant General

AGR Active Guard Reserve

APC Armored Personnel Carrier

CONUS Continental United States

CRC Continental United States Replacement Center

DOTMLPF-P Doctrine, Organization, Training, Materiel, Leadership and

Education, Personnel, Facilities, and Policy

FM Field Manual

HR Human Resources

HRC Human Resources Command

HRSC Human Resources Sustainment Center

PERSCOM Personnel Command

R5 Reception, Replacement, Return-to-Duty, Rest and Recuperation,

and Redeployment

RSOI Reception, Staging, Onward Movement, and Integration

WSRO Weapon System Replacement Operations

ILLUSTRATIONS

		Page
Figure 1.	OCONUS Personnel Replacement Flow	20
Figure 2.	Human Resources Transformation with the Modular Army	24
Figure 3.	Replacement Flow	27
Figure 4.	Replacement Flow	30

TABLES

		Page
Table 1.	DOTMLPF-P Methodology	38
Table 2.	NVIVO Coding Results	41
Table 3.	Doctrine Coding Results	45

CHAPTER 1

INTRODUCTION

Introduction and Background

The purpose of this thesis is to critically assess personnel replacement operations during Operations Desert Shield and Desert Storm. During these operations, the Army achieved tactical and operational success. The Army successfully liberated Kuwait from Iraqi forces, and the American people celebrated at the conclusion of what has been deemed the 100 hour war. Despite these successes, the sustainment of forces in Saudi Arabia and Kuwait presented challenges to the military-particularly Human Resources (HR) support. From the challenges of processing mail to conducting Personnel Information Management to managing casualty operations, HR providers overcame equipment and manning shortages. One area of particular importance involves replacement operations and the build up of forces in preparation for combat operations. In assessing the effectiveness of personnel replacement operations, it is the intent of this research thesis to assess the current capabilities of the Army's HR system to conduct individual replacement operations in support of Unified Land Operations.

Operations Desert Shield and Desert Storm served as a display of American military power. By most accounts, the operation was an overwhelming success. The United States was able to deploy forces to Saudi Arabia at the request of the Saudi King, and the Americans were able to build an international coalition opposed to the Iraqi

occupation of Kuwait. In the end, 31 countries, including the United States, provided forces to expel Saddam Hussein's forces from Kuwait.¹

Operations in Saudi Arabia, Kuwait, and Iraq helped the military move beyond the painful experience in Vietnam. Major Mark Clodfelter, USAF, notes, "President George Bush proclaimed that the totality of the triumph erased the stigma of an American defeat 16 years earlier in the jungles of Southeast Asia." Additionally, Dr. Jeffrey J. Clarke, former Chief of Military History, noted Operations Desert Shield and Desert Storm marked the "first test of the U.S. Army since the Vietnam War."

When looking at the results from Operations Desert Shield and Desert Storm, it is hard not to acknowledge the achievement of American and coalition forces. According to the Center for Military History's publication "War in the Persian Gulf", Saddam's army "numbered over a million soldiers." More importantly, the Iraqi Army "was well equipped by the virtue of huge purchases from international arms markets." The Iraqi Army was also battle hardened from its eight year war with Iran, and it had successfully conquered a much smaller neighbor in Kuwait.

¹ Bruce W. Watson, *Military Lessons of the Gulf War* (London: Greenhill Books, 1991), 221-260.

² Mark Clodfelter, "Of Demons, Storms, and Thunder," *Air Power Journal* (1991): 1, accessed October 14, 2014, http://www.au.af.mil/au/afri/aspj/airchronicles/apj/apj91/win91/clod.htm.

³ U.S. Army Center for Military History, *War in the Persian Gulf: Operations Desert Shield and Desert Storm August 1990-March 1991* (Washington, DC: U.S. Army, 2010): vi, accessed October 14, 2014, http://www.history.army.mil/html/books/070/70-117-1/cmh 70-117-1.pdf.

⁴ Ibid., 2.

⁵ Ibid.

Despite the assessments of the Iraqi military's capabilities, as mentioned already, the coalition was able to defeat Iraq. But even with all the tactical successes, the coalition did face challenges. One area in particular was friendly fire incidents. In the book *Desert Storm: A Forgotten War*, the authors Bin, Hill, and Jones highlight the challenges of these incidents. "About three-fourths of the 35 U.S. Army tanks and APCs [armored personnel carriers] damaged in combat were hit by friendly fire." The fluidity of the battlefield coupled with extreme environmental conditions of sand storms and burning oil wells made it difficult for units to discern Coalition from Iraqi forces.

In addition to the tactical challenges, the Army faced several challenges related to sustaining the fight. When assessing Desert Storm and Desert Shield there is a tendency to focus on tactical success, but as noted in the Combat Studies Institute's *Lucky War:*Third Army in Desert Storm logistics played a key role in both operations. "The great lesson of operational art for Desert Storm has nothing to do with the metaphysics of selecting 'centers of gravity' . . . nor with the insight that it was better for ground forces to go around than through the Iraqi array. . . . Rather, it is in the extent to which logistics dominates the operational offensive."

In his US Army War College paper, Colonel Kenneth King points out some of the challenges he experienced as a company commander during the conflict. He states, "Logisticians found themselves buried by the 'Thunder Storms of Logistics.' Not having a Theater Distribution Plan (TDP) early on, botched automation platforms feeding a poor

⁶ Alberto Bin, Richard Hill, and Archer Jones, *Desert Storm: A Forgotten War* (Westport, CT: Praeger, 1998), 242.

⁷ Richard Swain, *Lucky War: Third Army in Desert Storm* (Fort Leavenworth, KS: U.S. Army Combat Studies Institute, 1994), 366.

logistics intelligence picture, and a shortage of logisticians muscle only fueled the variety of logistical countermeasures taken to offset the seams in the operation." COL King highlights the praise received by Lieutenant General Frederick Franks, the XVIII Airborne Corps commander as to the effectiveness of logistics during the conflict, but he further postulates, "could 'Brute Force Logistics' have sustained a 200-hour war, or perhaps a 300-hour war?"

One key aspect of sustainment is providing personnel support, and this aspect of operations providing support also had challenges. The volume of mail arriving in theater reached 38,000 tons, "enough to cover 21 football fields eight feet high," and placed a strain on the limited assets. Additionally, personnel units struggled to establish accurate personnel accountability as personnel arrived in theater, and limitations to information technology made it difficult to keep accurate personnel information for those in theater. Additionally, casualty operations posed an additional area of concern for Adjutant General's Corps leaders as they worked to expand their capacity to process the expected volume of casualties as well as consolidating the records of emergency data in the event they needed to notify family members.

This thesis will focus on an oft-overlooked aspect of providing personnel support within the military, the importance of replacement operations. This significance came to the fore when the former Soldier Support Institute Commander, Brigadier General David

⁸ Kenneth King, "Operation Desert Storm: Thunder Storms of Logistics" (Master's thesis, U.S. Army War College, 2007), 5.

⁹ Ibid., 6.

¹⁰ Ibid., 6-7.

MacEwen, stated that "We got lucky." during a class capstone briefing about Operations Desert Shield and Desert Storm. From his experience, the personnel community would have been ill prepared to adequately man units had the volume of casualties increased and had the conflict lasted longer than 100 hours. Additionally, during a visit to the Soldier Support Institute the Commander of the Army's Human Resources Command, Major General Richard Mustion, issued a challenge to the students on how the Army would conduct casualty shelf and replacement operations in today's environment. MG Mustion was referring to the individual replacements maintained as a bench in theater to provide the ability to quickly replace personnel. With the decreasing end strength of the Army, MG Mustion's question focused on the feasibility of such operations in the future.

The natural questions at this point are "Why use the Operations Desert Shield and Desert Storm time periods?" and "Why should we be concerned with replacement operations?" To answer the first question, there has been little assessment done specifically related to replacement challenges during that period. Despite the Soldier Support Institute maintaining interviews from key leaders from this period, a focused study and analysis of personnel replacements from the perspective of the executors of these systems during this period could not be found during research on the topic.

The second question speaks to the challenges faced by our military today and in the future. The ability to replace individuals, crews, and units is still relevant as we face an increasingly capable enemy. Simulations conducted at the U.S. Army War College as part of the "Deep Future" analysis of conflict in 2030s highlights the challenges units will face as our technological dominance decreases relative to our enemy. Stated simply, "there's no substitute for sheer numbers, no matter how much high technology the Army

buys."¹¹ One unnamed general stated bluntly, "We started running out of numbers. At some point those numbers still matter."¹²

It would be easy to dismiss the results of the wargame as too distant to be relevant to today's force. However, in conversations with over a dozen former students who have completed Combat Training Center (CTC) rotations, the volume of casualties received when facing the opposing forces in the Decisive Action Training Environment reached approximately 400 to 500 casualties in the brigade per day-a number that would likely be unsustainable over multiple days of battle. Most problematic is that these units have limited ability to reconstitute themselves, and the limited duration of CTC rotations does not allow for the replication of the time it takes to replace individuals and crews that become casualties on the battlefield.

In assessing the replacement operations from Operations Desert Shield and Desert Storm, this thesis aims to critically assess what replacement responsibilities existed at the time and to assess how HR personnel conducted replacement operations. The goal is not to judge performance by strict adherence to doctrinal principles. Instead, it aims to provide an assessment to better understand what did and did not work and why.

Additionally, this thesis will identify trends throughout the replacement process from the Continental United States (CONUS) to arrival in theater to delivery to unit to identify which element or elements of doctrine, organization, training, materiel, leadership &

¹¹ Sydney Freedberg Jr., "Wargame Predicts Army Loses High Tech Edge," *Breaking Defense*, September 20, 2013, accessed October 18, 2014, http://breakingdefense.com/2013/09/wargame-predicts-army-loses-high-tech-edge/.

¹² Ibid.

education, personnel, facilities, and policy (DOTMLPF-P) most likely contributed to these challenges.¹³

The intent of this thesis is not to seem overly critical of the performance of these leaders; despite the challenges faced, they were able to provide support by adapting to an ambiguous situation while improvising to ensure mission success. Instead, the intent is to assess the effectiveness of replacement operations in an attempt to identify areas that our Army should address holistically to ensure we have the personnel to win the next conflict. The focus on the importance of replacements does not reside solely with the Army's personnelists; the need to develop a plan for replacements is a holistic requirement that transcends any one branch.

Research Question

The thesis question addresses the adequacy of theater replacement given by Army HR units at the corps-level and above during Operations Desert Shield and Desert Storm. The research question guides the analysis of historical interviews conducted by HR providers during the period to assess their performance and identify challenges faced by these forces during military operations. The thesis question is, "Was the Human Resources Support during Operations Desert Shield and Desert Storm adequate to execute personnel replacement operations?"

Two secondary questions support the primary question of this thesis. They are, "What issues and concerns did the executors of the personnel replacement process have

¹³ Defense Acquisition University, "DOTmLPF-P Analysis," April 15, 2014, accessed February 21, 2015, https://dap.dau.mil/acquipedia/Pages/ArticleDetails.aspx?aid=d11b6afa-a16e-43cc-b3bb-ff8c9eb3e6f2.

during Operations Desert Shield and Desert Storm?" and "What was the framework used by Human Resources personnel for replacement operations during Operations Desert Shield and Desert Storm?" The intent of the first question is to identify specific challenges HR leaders faced during operations, regardless if these concerns fully materialized. With the overwhelming tactical success, the replacement system did not face challenge related to Iraqi Army successes during the conflict. However, had the Iraqi had greater success, these concerns/issues had the potential to negatively impact the effectiveness of HR providers. The other secondary research question seeks to identify not only the organizational framework of HR units during operations but also the logic behind the techniques employed. The intent is to determine, if inadequacies exist, whether these challenges are a result of HR organizations directly or a broader oversight by the Army as a whole.

Assumptions

This thesis relies on primary source interviews of HR leaders at the conclusion of Operations Desert Shield and Desert Storm. One key assumption of this thesis is that the answers provided during the interviews are accurate to the events as they occurred during operations as well as self-critical as to the shortcomings of conducting replacement operations during the conflict. Another key assumption is that the interviewees' experience are representative of HR leaders as a whole. There would be a natural inclination to focus on what the HR units performed well while neglecting to acknowledge the challenges faced.

As it relates to the conduct of replacement operations in Unified Land Operations, another assumption is that the methods used to conduct replacement operations during

Operations Desert Shield and Desert Storm mirror how we will conduct replacement operations in future conflicts. This paper relies heavily on the assumption that the functions conducted in Southwest Asia to receive, inprocess, and assign replacements are still valid - even if the units executing the replacement operations are no longer within the Army structure.

Limitations

The research on this subject is limited to personnel replacement operations during Operations Desert Shield and Desert Storm. Despite the relationship between replacement and casualty operations, this thesis will not address casualty reporting and tracking. Additionally, this thesis focuses solely individual replacements. It is not within the scope of this writing to assess unit replacement operations as organizations move into a theater as a whole. The intent of this limitation is to focus on the responsibilities of the theater HR organizations in providing life support and transportation for replacements.

CHAPTER 2

LITERATURE REVIEW

To assess the Army's replacement efforts during Operations Desert Shield and Desert Storm, this thesis relies on historical accounts of the operations, academic papers and theses, doctrinal manuals, and first-hand accounts from senior Adjutant General leaders during the conflict. These sources provide the context of decisions made during the period related to replacement operations prior to the start of the conflict. The doctrinal manuals provide insight into how leaders envisioned executing replacement operations prior to Desert Storm and Desert Shield, and interviews provide insight from leaders responsible for aspects of the replacement system at the beginning of hostilities. For the ease of reviewing these different sources, the literature review divides into two distinct sections: contextual readings and doctrinal publications.

Contextual Readings

Major Robert R. Mackey's monograph "Building a Shallow Army" highlights the challenges of replacements through the lens of historical casualty assessment. His monograph highlights the challenges of rebuilding the Army in the Objective Force envisioned after the Cold War, but there are some valid considerations related to replacement operations during the period covered in this thesis. It provides perspective of the replacement system used during Operations Desert Shield and Desert Storm to include organizational structure that existed to handle theater replacements.

MAJ Mackey's premise is that the Army's replacement system seems unprepared to handle the lethality of the modern battlefield and the implication to future

engagements. His statement "The seemingly bloodless engagements of the Gulf War and the Balkans, where Iraqi tank rounds bounced off American tanks . . . perhaps has given military and political leaders a false model for future warfare." This article provides perspective on why replacement operations remain key to military operations.

Major Monique Hale's paper Naval War College paper "Personnel Reconstitution of Units: Will the United States Army's Personnel Replacement System Support the Airland Battle?" addresses the challenges to reconstitution of units within Airland Battle doctrine. The title of the paper suggests the author is going to assess whether or not the replacement system will support replacements under Airland doctrine, but she does not definitively answer the question. Instead, she relies heavily on the experiences of Vietnam and World War II to suggest that the replacement system would prove inadequate based on the impact of individual replacements.

MAJ Hale's paper does highlight, however, the changes to where reconstitution will be conducted and how it affects the ability of the unit successfully receive replacements. Within the Airland Battle doctrine, units would not have the depth of organizations to disengage from the front line and receive replacements of personnel and equipment as seen during World War II. Instead, these individual replacements would have to be integrated closer to the enemy while likely facing enemy resistance. This paper provides context to better analyze how Army units conducted replacement operations during Operations Desert Shield and Desert Storm.

¹⁴ Robert Mackey, "Building a Shallow Army: Replacement Operations in the Future Force" (Monograph, School of Advanced Military Studies, 2002), 2.

Another additional consideration MAJ Hale includes is the potential impact of individual replacements on the unit's effectiveness. She discusses the ineffectiveness of trying to deploy individual replacements in light of the complex weapon systems used as part of Airland Battle. She notes, "It is a system that inducts, trains and deploys individuals and is built on the premise that men and machines are interchangeable parts. Individuals can be replaced just as spare parts without affecting the overall performance of the vast war machine." This perspective is important to this thesis in that it gives another area to assess whether or not the Army's replacement system addressed this concern during Operations Desert Shield and Desert Storm. Interestingly, the paper was published in February 1989, more than a year before Iraq invaded Kuwait.

Major Mark Armstrong's MMAS titled "Reconstitution: Implications for a Force Projection Army" provides some insight into the replacement of personnel during Operations Desert Shield and Desert Storm. His thesis focuses on the need to update the overarching reconstitution doctrine following the end of the Cold War, and he provides a broader context of historical reconstitution efforts and their impact on the effectiveness of units. This document provides an assessment of the larger challenges to reconstitution, and this thesis focuses particularly on the personnel replacement aspect of the reconstitution process highlighted in Armstrong's thesis.

MAJ Armstrong's thesis highlights the lack of a formal doctrinal foundation for reconstitution despite the military having utilized reconstitution for units in previous engagements. It was during the eighties, under the Airland Battle concept, that immediate

¹⁵ Monique Hale, "Personnel Reconstitution of Units: Will the United States Army's Personnel Replacement System Support the Airland Battle?" (Master's thesis, Naval War College, 1989), 8.

attention was paid to the formulation of a formal Army doctrinal publication on reconstitution that theretofore had been missing. The 1983 version of FM 63-2, Combat Service Support Operations - Division (How to Support) provided a point of departure for reconstitution doctrine writers. ¹⁶ This is of note to this thesis due to its assessment of the adequacy of doctrine to execute personnel replacement operations, which is a portion of the reconstitution process.

MAJ Armstrong does provide some insight into the types of replacements used during Operations Desert Shield and Desert Storm. He notes, "At the tactical level, reconstitution during ODS was readily accomplished by immediate reorganization and [Weapon System Replacement Operations] WSRO. Combat forces did not experience losses that rendered them so ineffective that regeneration was necessary." Armstrong does state that these crew replacements happened before the beginning of ground operations, and he also adds that the amount of casualties were "far lighter than expected." This leaves open the possibility that the personnel replacement system during the conflict would have been unable to handle a larger volume of replacements. This thesis will assess this possibility using the accounts of the personnel officers responsible for this portion of reconstitution.

The ANDRULIS Research Corporation's assessment of the US Army Reserve's role in personnel replacements provides valuable insight into the organizations and

¹⁶ Mark Armstrong, "Reconstitution: Implications for a Force Projection Army" (Master's thesis, Command and General Staff College, 1993), 74.

¹⁷ Ibid., 80.

¹⁸ Ibid., 73.

structures used to conduct individual replacement operations during the conflict. One such insight is the manning level of units as they deployed. "Most of the Army units that went to Southwest Asia were filled to their authorized strengths before they deployed. (A major exception were Army CSS units that were authorized to be staffed at 80% in peacetime and were deployed at that strength.)" This information helps explain the phased deployment of replacement units to Southwest Asia.

The report also highlights the manning procedures by phase. For example, prior to the buildup of forces to conduct offensive actions, replacements were managed by the peacetime system of ordinary replacements. Once the military began planning for offensive operations, the Army augmented the replacement structure in Southwest Asia and the CONUS for additional surge of personnel. The report notes that "in anticipation of combat, and to handle the increased number of individuals made available by the granting on 19 January 1991 of partial mobilization, a robust replacement system was established to preposition replacements in the theater." These phases help frame the research question in determining if replacement operations were adequate throughout the buildup and the impact of policy decisions related to the mobilization of forces.

Another aspect of the ANDRULIS report is the location of the personnel replacement structure. Per the report, replacement units focused their efforts on the CONUS Replacement Centers (CRC), the air transport of soldiers to Southwest Asia, and the theater system to receive and process replacements. This thesis focuses on the CRC

¹⁹ John Brinkerhoff and Theodore Silva, *The United States Army Reserve in Operation Desert Storm: Personnel Services Support* (ANDRULIS Research Corporation, 1995), 6.

²⁰ Ibid., 6-7.

and the theater replacement system. For the CRC, this thesis will assess the throughput of personnel. Also, it will assess the theater replacement system's ability "to receive individual replacements as they landed at airports in SWA [Southwest Asia], identify them, match them to units, assign them, and convey them through several echelons of organization to their units." ²¹

The ANDRULIS report also provides information on how the replacement estimates were made for Operations Desert Shield and Desert Storm. The report notes those estimates began when "Lieutenant Colonel Bruce Wasielewski, an Army Reserve AGR [Army Guard Reserve] Officer, got the Replacement Shelf for Southwest Asia out of his safe, dusted it off, and started the process of coordination with CENTCOM." The original estimate of losses was "around 40,000." More important than the aggregate number is the need to identify particular military occupational specialties by grade for the replacements - a far more complex challenge for the replacement system. The validation of these requisitions occurs as the Commander in Chief for the geographic area provides feedback to the Army's Personnel Command. Interestingly, "For DESERT STORM, CENTCOM [Central Command] (actually ARCENT [U.S. Army Central Command]) made only minor changes in the PERSCOM replacement shelf." ²⁴

The report also gives perspective on the integration of the Reserve Component into replacement operations. One key consideration is how the Active Component

²¹ Ibid., 7.

²² Ibid., 9.

²³ Ibid.

²⁴ Ibid.

personnel groups employed the different replacement battalions. The VII Personnel Group integrated the reserve soldiers into their organization as part of the staff. The Chief of the Replacement Directorate at the 10th Personnel Command, Colonel Les Bowen, was less optimistic of the unit he worked with. He believed "as a whole they were not the kind of people one would not want around to do a mission." Many of the challenges facing these units involved their transition to a new structure with fewer people while fulfilling a new mission.

Major Jo Rusin's thesis titled "Command and Control of Personnel Replacements" focuses on the historical challenges of providing replacement personnel to a theater of operations. In particular, MAJ Rusin highlights the impact of transit time on replacement morale as the challenges for division commanders to get the required manpower to conduct operations. ²⁶ MAJ Rusin provides several examples from World War II, Korea, and Vietnam where division commanders, who were the primary warfighters, were the last in priority when it came to the management of replacements. The author does not suggest that the higher echelons did not think providing replacements to the division was unimportant. Rather, the priority was a result of replacements being assigned and reassigned and the different echelons. For example, the theater army would make the first decision on where replacements were assigned, and the corps headquarters would make further manning decisions for personnel. These levels of

²⁵ Ibid., 26.

²⁶ Jo Rusin, "Command and Control of Personnel Replacements" (Master's thesis, Command and General Staff College, 1982), 30.

assignment created additional time for replacements to be in transit - resulting in morale challenges and the potential for skills to atrophy.

MAJ Rusin's thesis also includes a model for future replacement operations to shift the paradigm of how replacements are managed within Airland Battle doctrine. The basic premise of this model is that individuals are assigned to divisions who train and retain their own replacements. By leveraging air assets, the divisions would deploy the replacements forward as they were needed. Rusin suggests this helps overcome the morale challenges of the previous system while also giving the division commander more control over his replacements.

The thesis also provides insight into the establishment of the CRCs. This is of significance to this thesis since one of the aspects of replacement operations being assessed is the effectiveness of the CRCs. MAJ Rusin highlights the exercise to proof the concept was done using fictional soldiers; however the lack of actual soldiers did not mean the process went smoothly. MAJ Rusin writes, "The US Army Military Personnel Center directed the identification and shipment of these imaginary replacements. Major problems surfaced in the centralized management of such large numbers of individual replacements." This thesis will seek to determine if these issues surfaced during actual operations during the conflict.

MAJ Rusin's thesis is of particular interest to this thesis due to her position during Operations Desert Shield and Desert Storm. MAJ Rusin rose to the rank of colonel prior to the start of operations, and she served as one of only three Personnel Group commanders during the conflict. Her thesis provides insight into one of the HR leaders

²⁷ Ibid., 27.

interviewed for the Oral History Program. In fact during her interview, COL Rusin makes reference to her own thesis and interest in the topic of replacements. In her thesis, MAJ Rusin states, "Today's Army does not have the luxury of extra people and facilities to devote to an inefficient replacement system that serves the needs of the division commander only after the needs of higher command and control headquarters are met." This provides insight into the challenges Rusin believed she would face, and her interview allows the reader to see if her concerns came to fruition.

Doctrinal Publications During the Conflict

The 1989 edition of U.S. Army Field Manual (FM) 12-6, *Personnel Doctrine*, provides the doctrinal framework for HR professionals during the period being assessed. The doctrinal publication attempts to frame personnel support within Airland Battle doctrine while providing considerations for conducting HR support in this environment. Of note, the document does highlight what it deems "significant changes" to the personnel system of the day.²⁹ These changes include changes to HR organizations, an increased reliance on automation, and changing of postal structure to improve efficiency. Two of these challenges, organizational changes and automation, tie directly to this thesis in that they had some impact on HR support during Operations Desert Shield and Desert Storm.

²⁸ Ibid., 43.

²⁹ U.S. Department of the Army, Field Manual (FM) 12-6, *Personnel Doctrine* (Washington, DC: U.S. Department of the Army, 1989), 7.

FM 12-6 states that replacement operations are the "most important battlefield function" of personnel service support. ³⁰ The doctrine writers stress the importance of meeting the manpower requirements for commanders, and FM 12-6 pays particular attention to the importance of manning with unit replacements. One stated objective of replacement operation is "to get the right soldier to the right place at the right time." ³¹ This prominence of replacements serves this thesis well because it provides another perspective to assess the effectiveness of replacement operations based on how it was managed during the period of study.

FM 12-6 also provides doctrinal guidance on the execution of key elements of the replacement system that this thesis will examine. For example, the doctrine specifies timelines for CRCs as well as the communication responsibilities to inform the Theater Personnel Command of inbound personnel. These doctrinal guidelines provide a measure to assess replacement operations during the conflict. Additionally, FM 12-6 provides information on casualty shelf requisition requirements, Weapon System Replacement Operations (WSRO), and requirements of replacement organizations in processing personnel. These areas provide areas to assess when examining the historical interviews. Figure 1, provided below, is an excerpt from FM 12-6 showing the planned flow of personnel during the period studied.

³⁰ Ibid., 20.

³¹ Ibid.

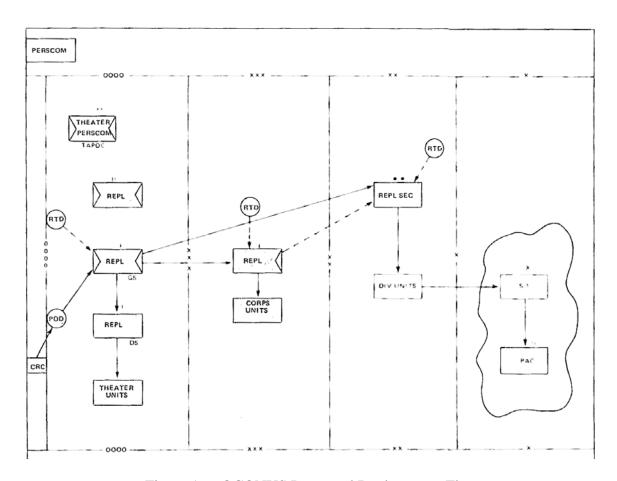


Figure 1. OCONUS Personnel Replacement Flow

Source: U.S. Department of the Army, Field Manual (FM) 12-6, Personnel Doctrine (Washington, DC: U.S. Department of the Army, 1989), 24.

Another doctrinal source used to understand the replacement process is TRADOC Pamphlet 525-51, "US Army Operational Concept for Reconstitution on the Airland Battlefield". This document provides the doctrinal considerations for units as they prepared to engage in future conflicts. This writing serves as a primer to assess how the sustainment community would assist with rebuilding combat power. One interesting note included in the pamphlet is ambiguity about how replacement personnel would arrive in theater – either as deploying units or individual deployers. The pamphlet notes future

battlefields would not be void of high casualties, and the pamphlet authors point out that "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." The authors further identify the need to identify replacement policy as soon as possible in order since that decision "impacts on both unit deployment and individual replacement operations as well as reconstitution operations."

Post Operation Desert Storm Regulation and Doctrinal Publications

FM 100-9, *Reconstitution*, further delineates replacement considerations for units in Airland Battle. Despite not being published until following Operations Desert Shield and Desert Storm, the field manual codifies many of the same concepts of TRADOC Pamphlet 525-51. This publication is valuable to the researcher since it provides an opportunity to assess what, if any, changes doctrine writers made after the end of combat operations. FM 100-9 does not make any changes to the requirements of both personnel staff officers and personnel commands and groups, which suggests doctrine writers saw no need to add additional details on the conduct of replacement operations.

In 1993, the Army released Army Regulation 600-8-111, titled *Wartime*Replacement Operations. This regulation represented the first regulation with the subject of replacements, and the document, which is still active, provides an overview of

³² U.S. Department of the Army, Training and Doctrine Command Pamphlet 525-51, *US Army Operational Concept for Reconstitution on the Airland Battlefield* (Fort Monroe, VA: TRADOC, 1986), 17.

³³ Ibid.

responsibilities, some basic principles of support, an overview of theater replacement operations, considerations for CRCs, and information on the casualty shelf.

The responsibilities portion is particularly interesting because it provides responsibilities for the Deputy Chiefs of Staff for Logistics, for Operations and Plans, and for Personnel. Additionally, it provides responsibility for the U.S. Army Reserve, Forces Command, Training and Doctrine Command, Major Army Commands, and U.S. Total Army Personnel Command (now Human Resources Command). The variety of responsibilities further emphasizes the point that planning for replacement operations is not solely an HR consideration.

Of note, the regulation establishes the proponent for theater replacement operations as the Combined Arms Support Command. ³⁴ The primary managers of theater replacement operations, the Adjutant General branch, are subordinate to the Combined Arms Support Command and have the responsibility to "publish doctrinal literature for Army wartime replacement operations." ³⁵ This is of interest because the remaining documents in this portion of the literature review focus on this doctrinal literature.

One additional consideration when reviewing AR 600-8-111 is how dated the document is. A key example can be found in chapter three, which discusses theater replacement operations. The regulation identifies the following organizations as those performing the various theater replacement functions: the theater army personnel command, theater personnel groups, theater replacement battalions, and theater

³⁴ U.S. Department of the Army, Army Regulation (AR) 600-8-111, *Army Wartime Replacement Operations* (Washington, DC: U.S. Department of the Army, 1993), 2.

³⁵ Ibid.

replacement companies.³⁶ This is problematic for those who rely on the regulation today because these organizations no longer exist.

The 1989 version of FM 12-6, reviewed previously, received an update in September of 1994 without any substantive change to the conduct of personnel replacement operations. HR doctrine did not receive another update until 2007. In 2007, FM 1-0, *Human Resources Support*, was published as a result of the modularization of the Army. FM 1-0 sought to create the doctrinal framework to make "brigades capable of independent human resources operations, regardless of location." No longer would these organizations be reliant on the structure of HR organizations used during the Cold War. FM 1-0 referred to this transition as Personnel Services Delivery Redesign. The doctrine states, "HR support is transitioning from a centralized stovepipe support philosophy, where AG force structure provided the majority of support, to a decentralized support structure. This transition places the majority of HR support closer to Soldiers and embeds required capabilities in all Battalion and Brigade/BCT S-1 sections." Figure 2 on the following page shows the transition of organizational designs as a result of Personnel Services Delivery Redesign.

³⁶ Ibid., 4.

³⁷ U.S. Department of the Army, Field Manual (FM) 1-0, *Human Resources Support* (Washington, DC: U.S. Department of the Army, 2007), v.

³⁸ Ibid., 2-2.

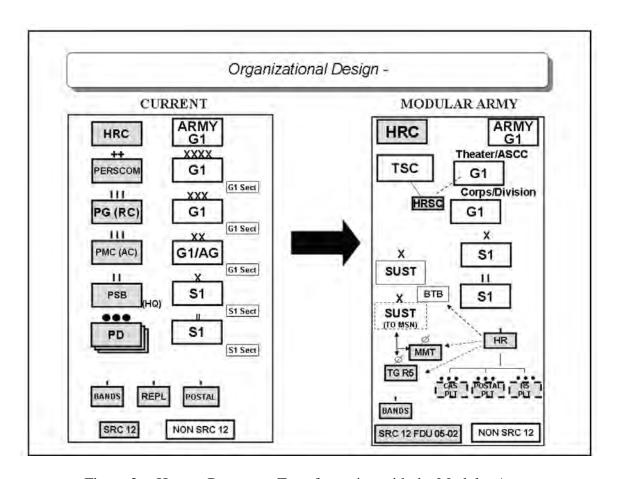


Figure 2. Human Resources Transformation with the Modular Army *Source*: U.S. Department of the Army, Field Manual (FM) 1-0, *Human Resources Support* (Washington, DC: U.S. Department of the Army, 2007), 2-2.

As the figure highlights, Personnel Services Delivery Redesign resulted in the removal of the HR organizations that existed during and after Operations Desert Shield and Desert Storm. Gone were the Personnel Command that managed HR support for the theater and the Personnel Groups that supported Corps. Additionally, the Personnel Service Companies, which were replaced by Personnel Support Battalions, also were no longer part of the organization to provide personnel support. It is outside the scope of this thesis to assess why these changes occurred. However, this thesis seeks to provide

considerations for supporting personnel replacement operations in the future.

Understanding the organizations that were removed as well as their capabilities is beneficial that end.

The 2007 edition of FM 1-0 does address replacement operations, and it is considered a core competency for HR support part of "Reception, Replacement, Return to Duty (RTD), Rest and Recuperation (R&R), Redeployment (R5) Operations." The doctrine further breaks R5 operations into two separate elements - R5 support and R5 management. The doctrine highlights R5 management "relates to accounting and processing transiting Soldiers and units, while R5 support is the physical reception, support, and delivery of military and civilian personnel." This is significant to this thesis since these are the very functions used in replacement operations during Operations Desert Shield and Desert Storm. The doctrine also highlights the importance of R5 operations to the Reception, Staging, Onward Movement, and Integration process.

The 2007 edition of FM 1-0 further elaborated on R5 in Appendix D. In this appendix, R5 operations management responsibilities are provided across all echelons, from the Battalion S-1 to the Army Service Component Command G-1. This appendix is helpful due to the clear delineation of various responsibilities of all parties. The appendix also discusses the newly formed Human Resources Sustainment Center and Theater Gateway R5 Team. 42

³⁹ Ibid., 1-2.

⁴⁰ Ibid., 1-4.

⁴¹ Ibid.

⁴² Ibid., D-3.

The Army produced another revision to FM 1-0 in April 2010. Noticeably absent from this update is the term R5. Instead, replacements moved under the Personnel Readiness Management key function. This edition of FM 1-0 focuses on the National HR provider delivering "replacement force packages based on forecasted losses and allocates to brigade-level IAW [in accordance with] HQDA [Headquarters Department of the Army] manning guidance." It focuses on ensuring fighting formations have adequate numbers to continue operations. What it lacks are the clearly defined responsibilities found in the 2007 version of FM 1-0. Instead, the doctrine provides a simple diagram to show the standard flow of personnel into a theater of operations. Missing is the understanding that replacements must still move through various echelons outside of a mature combat theater as was the case in Afghanistan and Iraq.

⁴³ U.S. Department of the Army, Field Manual (FM) 1-0, *Human Resources Support* (Washington, DC: U.S. Department of the Army, 2010), 3-2.

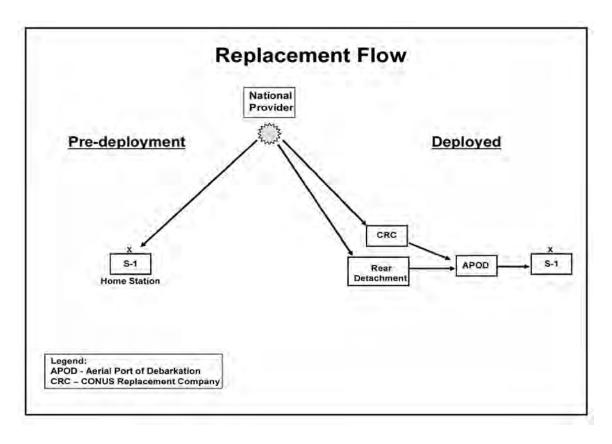


Figure 3. Replacement Flow

Source: U.S. Department of the Army, Field Manual (FM) 1-0, Human Resources Support (Washington, DC: U.S. Department of the Army, 2010), 3-3.

The Army published the most recent edition of FM 1-0 in April 2014. The doctrine replicates the key concepts addressed in the 2010 version with some changes to replacement operation considerations. One of the major change in the 2014 version is the removal of the replacements heading under the Personnel Readiness Management section of the doctrine. Interestingly, the numbering of the paragraphs addressing replacement operations, 3-10 through 3-13, are identical in the 2010 and 2014 version. The primary difference is that the bold heading from the 2010 version which provided a quick location for the portion discussing replacements has been removed by the doctrine writers.

There are some differences in the verbiage of the 2010 and 2014 doctrine. In the 2014 version of FM 1-0, the doctrine author differentiates between the processing of replacements for active component and Reserve Component soldiers. It states, "Active Army replacement personnel arrive at the brigade's installation and are in-processed by the installation and unit." The doctrine then specifies that Reserve Component replacements "are processed through the CONUS Replacement Center (CRC) for all deployed RC [Reserve Component] units." This is of interest since the 2010 version does not mention the unique process of using the CRC solely for Reserve Component soldiers.

Another difference with the 2014 document is the responsibility for developing a casualty shelf. The 2010 document states, "HRC [Human Resources Command] G-3 is responsible for assisting Army commands in developing these shelves." The 2014 version is less specific as to which section of Human Resources Command aids with the shelf requisitions, and the phrase "is responsible" is absent. The current doctrine is less directive with the sentence now reading, "HRC assists Army commands in developing casualty requisition packages."

The 2014 version of FM 1-0 is more specific in terms of the timespan HRC will consider replacements related to deployment operations. The document notes that

⁴⁴ U.S. Department of the Army, Field Manual (FM) 1-0, *Human Resources Support* (Washington, DC: U.S. Department of the Army, 2014), 3-2.

⁴⁵ Ibid.

⁴⁶ Ibid.

⁴⁷ Ibid.

replacements will be looked at based on estimated casualties over a 12 month period. Additionally, the doctrine vaguely states that the return time window will be taken into account, recognizing that redeployment will be considered when planning replacement assignments. The use of the 12 month model is interesting based on the current rotational policy of 9 months. Additionally, the planning of replacement operations in regard to redeployment timelines is interesting in that it does not include consideration for the possibility of a deployment being extended beyond 9 or even 12 months.

In addition to these changes in wording, there is new depiction of replacement flow, as seen in Figure 4 on the following page. Although the changes appear to be mostly cosmetic, the 2014 version does suggest replacement operations focus at the installation level. After further assessment, however, the doctrine does not directly address the implication of this manning of replacements. The 2014 version of the doctrine states, "Diversions from the original assignment should be by exception and only made to meet operational requirements. Deviations from the original assignment are coordinated directly with the National HR Provider that directed the assignment." The 2014 doctrine does provide an additional point of consideration in the following statement, "HRC works in concert with the forward element to get replacements off the installation for additional casualty replacements above the enlisted targeted casualty package. HRC replaces the installation location these Soldiers were pulled from if they are not over target strength." This is significant to replacement operations in the future due to the implied requirement for the senior HR management at the installation to manage the

⁴⁸ Ibid.

⁴⁹ Ibid.

cross-leveling of soldiers. With the current decline in the size of G-1 organizations by 25 percent, this simple change has implications as to who will be responsible for managing the assignment of replacement personnel.

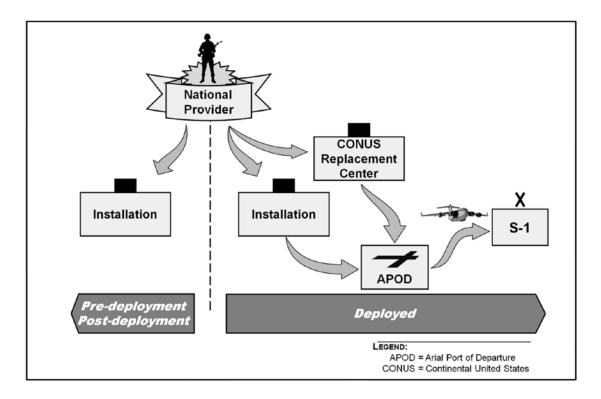


Figure 4. Replacement Flow

Source: U.S. Department of the Army, Field Manual (FM) 1-0, Human Resources Support (Washington, DC: U.S. Department of the Army, 2014), 3-3.

Summary of Literature Review

The documents in this literature review speak to the importance of replacements as well as the challenges of conducting replacement operations in the Airland Battle doctrine framework. The contextual readings provide insight into the challenges of

replacement operations through the lens of casualty management. Additionally, the contextual documents demonstrate considerations of those preparing to conduct replacement operations during Operations Desert Shield and Desert Storm - in particular reconstitution planning considerations and concerns. Lastly, the contextual documents highlighted challenges to replacement operations from a Reserve Component perspective. These included the unique challenges of reserve replacements traveling to Southwest Asia as well as the reserve units that provided HR support during the conflict. Doctrinal publications of the period provide awareness of the primacy of personnel replacement operations to doctrinal planners of the time as well as reconstitution considerations. Current doctrine shows the progression of replacement operations from a core competency to a subordinate of personnel readiness management with no special delineation. The literature included in this section provide the context to assess personnel replacement operations during the period, and it provides background to assess how to address replacement operations for future consideration.

CHAPTER 3

RESEARCH METHODOLOGY

The research methodology chosen to answer the primary and secondary research questions is a qualitative study using narrative research as defined in *Qualitative Inquiry* & *Research Design* (2nd ed.). Qualitative research best answers the research question by developing "a deeper and richer understanding within a specific context, which can be missed in quantitative research." The intent of the research is to gain a greater comprehension of replacement operations during the period. Typically this analysis relies on discussions or the active observation of individuals with particular experiences that address the research question. Due to the time that has elapsed between the events studied and the date of this study, the methodology relies on the document analysis of historical interviews given by leaders of HR organizations at the conclusion of Operations Desert Shield and Desert Storm as part of the *Operations Desert Shield and Desert Storm Oral History Program*, which are maintained by the Soldier Support Institute located at Fort Jackson, South Carolina.

Using historical interviews allows this thesis to answer the primary research question: "Was the Human Resources Support during Operations Desert Shield and Desert Storm adequate to execute personnel replacement operations?" This analysis of interviews of personnel facilitating personnel replacements into and within the theater of

⁵⁰ Eileen Thomas and Joan K. Magilvy, "Qualitative Rigor or Research Validity in Qualitative Research," *Journal for Specialists in Pediatric Nursing*, no. 16 (2011): 152.

⁵¹ John W. Creswell, *Qualitative Inquiry & Research Design: Choosing Among Five Approaches*, 2nd ed. (Thousand Oaks, CA: Sage Publications, 2007), 57.

operations will also address the two secondary questions, which are, "What issues and concerns did the executors of the personnel replacement process have during Operations Desert Shield and Desert Storm?" and "What was the framework used by Human Resources personnel for replacement operations during Operations Desert Shield and Desert Storm?" The methodology chosen provides the construct to answer the primary and secondary research questions synthesizing the lessons learned by HR practitioners from the period studied, using interviews conducted within one year of the end of major combat operations. The reliance on these historical interviews also means that no further historical analysis interviews will be conducted as part of this research.

No research methodology is without challenges. One particular challenge to using the narrative research for this project is the lack of contextual information on each interviewee. Stated differently, the challenge faced in using the document review methodology is that the "Information may be incomplete or inaccurate." The duty positions of each of the individuals are listed within each interview, but the transcripts do not include other information and experiences which might frame the person's biases as well as assessment of his/her experiences during Operations Desert Shield and Desert Storm. Another possible disadvantage includes a lack of consensus on the effectiveness of different organizations as it relates to replacement operations. Due to multiple organizations performing similar functions in theater under different commands and command philosophies, a challenge for one organization may not be representative for other organizations in theater.

⁵² Centers for Disease Control, "Data Collection Methods for Evaluation: Document Review," January 18, 2009, accessed February 22, 2015, http://www.cdc.gov/healthyyouth/evaluation/pdf/brief18.pdf, 2.

Despite potential disadvantages, the use of these interviews still provides the best method to assess the primary and secondary research questions. By utilizing historical interviews conducted nearer to the conclusion of the Operations Desert Shield and Desert Storm, this thesis hopes to bolster the credibility of the answers given by the interviewees. This links to benefit of a document review in that these interviews provide a "good source of background information." Reliance on more recent recollections from these key individuals has the potential to contain additional bias and/or omission of small but crucial details that impacted other organizations. In addition, this thesis focuses on the responses of the leaders of the various HR organizations and corroborates information given by each interviewee. This is in attempt to maintain credibility to the overall research, while minimizing the potential of over exaggerating an issue that may have been isolated to a particular unit.

The use of the historical interviews also allows greater dependability in research. Each narrative used was conducted either Dr. Stephen E. Bower, resident historian of the Soldier Support Institute, or Dr. Marilyn A. Kindred, researcher with the U.S. Army Center for Military History. This thesis assumes the use of interviews conducted by these two researchers further enhances the dependability of the contents of each. Since there is no known assessment using these sources, it provides the researcher the opportunity to "bring up issues not noted by other means." ⁵⁴

The interviews used also allow transferability and confirmability for further research. Maintaining these documents on digital repository at the Soldier Support

⁵³ Ibid.

⁵⁴ Ibid.

Institute ensures the interviews are made available for future analysis, and the institute does maintain original transcripts of the interviews. One negative aspect of the interviews is that the original audio recordings are no longer available. This impedes future confirmability in that the researcher cannot gather contextual information from the interviewee's verbal reaction to questions. Additionally, the interviews were conducted without coordination between the interviewers or the interviewees. As a result, the responses sometimes appear to be disorganized, which is a characteristic of the document review methodology utilized in this study. 55

Despite focusing on a conflict from 1990 and 1991, the research of this thesis still has significance to the US Army. Understanding the effectiveness of personnel replacement operations during Operations Desert Shield and Desert Storm provides Army professionals with an understanding of the capabilities and requirements inherent in conducting replacement operations in the future. Until the US Army no longer relies on human soldiers on the battlefield, it still must plan for personnel replacements on the battlefield.

Replacement Operations Expectation

The first step in the research methodology is to assess what each interviewee understood his/her organization's function was in replacement operations. The intent of assessing what each interviewee viewed as his/her role is to determine expectations of each organization from a doctrinal and operational perspective. Additionally, by assessing interviewees' expectations this thesis attempts to evaluate if the roles of each of

⁵⁵ Ibid.

the organizations at the various echelons were standard across the different units.

Furthermore, the expectations of each of the interviewees speak to the estimated requirement of replacement operations prior to the start of the conflict. In addressing the adequacy of the replacement operations, it is not enough to deem the support adequate due to the low volume of requirements due to the tactical success. The interviewees' expectations provide insight into whether or not the replacement flow would have been adequate if there were higher incidences of casualties during Operations Desert Shield and Desert Storm.

<u>Issues and Concerns Identified</u>

The second step in this methodology is to analyze each interview to identify issues and concerns noted by each interviewee related to personnel replacement operations. By identifying the challenges mentioned by the interviewees, the research is seeking to recognize any deficiencies, which may have impacted the adequacy of replacement operations - speaking directly to the primary research question.

Organizational Echelon

The third step using this methodology is to identify which organizational echelon each interviewee provide HR support. To determine the echelon groupings, this thesis relied on figure 1 of this thesis, figure 2-1 from the 1989 edition of FM 12-6 provided in chapter 2. In this figure, replacement organizations are divided into the following categories: replacement organizations located in the CONUS, theater replacement organizations, corps replacement organizations, divisional replacement organizations, and brigade units. Determining which echelon in which each interviewee operated serves two

purposes. Primarily, it allows the researcher to confirm if the challenges faced by that interviewee were isolated to that particular organization or were systemic across all organizations at that echelon. Additionally, it allows the researcher to assess the effectiveness of personnel replacements as they moved between the different echelons to their forward units.

DOTMLPF-P Assessment

The fourth step is to apply the issues and concerns identified in the second step to determine which element or elements of DOTMLPF-P relate to the challenge. The use of the DOTMLPF-P framework serves two purposes. Primarily, it provides an orderly, accepted methodology for assessing the force management of Army forces. Moreover, using this construct will more readily facilitate potential future study related to how the US Army plans to conduct personnel replacement operations in the future. Table 1 on the following page provides the framework for coding using the DOTMLPF-P methodology specific to this thesis.

Table 1. DOTMLPF-P Methodology				
Element	Description	Application to Thesis		
Doctrine	the way we fight	HR doctrine, regulations, and standard		
		operating procedures		
Organization	how we organize to fight	HR units designed to support		
		replacement operations (e.g. CONUS		
		Replacement Centers, Personnel		
		Groups, Replacement Regulating		
		Detachments)		
Training	how we prepare to fight tactically	training and preparation related to		
		replacement operations (e.g. systems		
		training, training to receive and		
		process replacements)		
Materiel	all the "stuff" necessary to equip	equipment used to receive, process,		
	our forces that DOES NOT	and transport replacements as well as		
	require a new development effort	equipment for replacements		
Leadership	how we prepare our leaders to	preparations unique to HR leaders		
and	lead the fight	responsible for the replacement		
Education		process		
Personnel	availability of qualified people for	personnel available to conduct the		
	peacetime, wartime, and various	mission as well as the management of		
	contingency operations	replacement assignments		
Facilities	real property, installations, and	buildings and installations provided to		
	industrial facilities	HR organizations to support		
		conducting replacement operations		
Policy	DoD, interagency, or international	policies that impacted replacement		
	policy that impacts the other seven	operations (e.g. Total Force Policy,		
	non-materiel elements	theater policies, replacement policies)		

Source: Created by author. Description from Defense Acquisition University, "DOTmLPF-P Analysis," April 15, 2014, accessed February 21, 2015, https://dap.dau.mil/acquipedia/Pages/ArticleDetails.aspx?aid=d11b6afa-a16e-43cc-b3bb-ff8c9eb3e6f2.

The methodology chosen allows an objective assessment of the adequacy of personnel replacement operations during Operations Desert Shield and Desert Storm. By incorporating multiple perspectives from different leaders and different organizations, this thesis presents a holistic assessment of the theater personnel replacement system employed during the conflict.

CHAPTER 4

ANALYSIS

The analysis of replacement operations during Operations Desert Shield and Desert Storm is found in this chapter. This analysis is based on the document review of historical interviews conducted by Dr. Marilyn Kindred and Dr. Steven Bower as part of the *Operations Desert Shield and Desert Storm Oral History Program*. This analysis utilizes qualitative assessment to identify successes and challenges for the HR providers during the conflict from the perspectives of each of the interviewees. By comparing the responses of the different interviewees, analysis focused on identifying themes within the DOTMLPF-P framework.

Initially, the Soldier Support Institute historian, Dr. Steven Bower, provided 50 interviews related to personnel support from the conflict. After initial review, it was determined that 24 of the interviewees addressed replacement operations during the conflict, both in theater and in CONUS. Analysis of these interviews allowed this thesis to answer the primary research question, "Was the Human Resources Support during Operations Desert Shield and Desert Storm adequate to execute personnel replacement operations?" Additionally, the interviewees provided insight into the two secondary questions of, "What issues and concerns did the executors of the personnel replacement process have during Operations Desert Shield and Desert Storm?" and "What was the framework used by Human Resources personnel for replacement operations during Operations Desert Shield and Desert Storm?"

To analyze the interviews, the statements of the interviewees were examined to determine which element or elements of DOTMLPF-P the interviewee addressed in

his/her response. The research utilized the qualitative analysis software NVIVO to organize the collective statements and sentiments to collate issues to assess if deficiencies were isolated to certain organizations or echelons or systemic. As part of the coding process, the research used the framework from Table 1 provided in Chapter 3 to ensure consistent analysis and comparison to the DOTMLPF-P framework.

Analysis of the interviews showed that interviewees had thoughts on all elements of DOTMLPF-P, with the only exception being Leadership and Education. All other elements had varying references in the interviews reviewed. Table 2 on the following page provides a numerical rollup of the coding data to highlight the volume of times a particular element is mentioned during the interviews. The sources column contains the number of individual interviewees that commented on a related area, and the references column identifies how many times each element was coded during analysis. Beginning with the most mentioned, the results indicate the precedence of issues is: Doctrine, Materiel, Training, Organization, Personnel, Policy, and Facilities.

Table 2. NVIVO Coding Results				
Element	Sources	References		
Doctrine	16	133		
Organization	11	20		
Training	9	25		
Materiel	17	57		
Leadership and Education	0	0		
Personnel	12	17		
Facilities	1	1		
Policy	7	16		

Source: Created by author.

Despite some elements having limited commentary on particular elements, this thesis still addresses the assessments to provide a comprehensive analysis of personnel replacement operations. For example, the element of facilities had only one reference. Analysis of this element, however, is important to provide an inclusive assessment of replacement operations during the period as it relates to the secondary question of the structure used for replacement operations.

The remainder of this chapter assesses each element using the statements and assessments of the interviewees to highlight themes that surfaced during analysis. It attempts to provide balanced analysis to ensure that no one individual's experiences is taken as the definitive answer as to the effectiveness in any particular element. By doing

so, the analysis provides a holistic and systematic assessment to answer the primary and secondary research questions.

Doctrine

As noted from the coding, the most discussed element from the interviews is doctrine, which for the interviewees was the 1989 edition of FM 12-6. As a reminder to the reader, FM 12-6 notes that conducting replacement operations "entails the coordinated support and delivery of replacements and return-to-duty soldiers; it includes orders issuance, personnel accounting, logistical support, processing and transportation." Analysis of doctrine focused on the opinions and insight of the practitioners of the doctrine related to each of the aspects mentioned in the definition from FM 12-6. This sentiment was initially coded as either positive/neutral or negative to determine the overall perception. As a result of the initial assessment, the analysis showed there were 28 negative assessments of FM 12-6 with 7 assessments with a positive neutral/assessment.

The volume of negative assessments should not be mistaken by the reader to suggest proportionality of negative sentiment of the doctrine, however. To illustrate this point, eight sources expressed negative sentiment towards the doctrine whereas five sources expressed positive/neutral perception towards the doctrine. The ratio for favorable to unfavorable mentioned previously was four to one. The following paragraphs will further elaborate on the themes identified from both the positive/neutral statements and the negative statements.

⁵⁶ U.S. Department of the Army, Field Manual (FM) 12-6, *Personnel Doctrine* (Washington, DC: U.S. Department of the Army, 1989), 21.

Positive regard for the doctrine from the interviewees stemmed from two related thoughts. To these individuals, the doctrine provided at least the broad guidelines that the practitioners could apply, and it provided enough latitude for those executing the doctrine. The Strength Manager for the 19th Replacement Detachment, CPT William Whatley stated, "The way we do business we almost have to go by doctrine because doctrine reflects pretty much the sequence of events."57 Whatley's statement suggested that the principles used during the conflict were sound in their execution. Another interviewee, LTC Raymond Fehrenbach, responded to a question from Dr. Kindred about if it ever seemed out of control by stating, "People knew what they needed to do due to doctrine and standard operating procedures (SOPs); there was a system in place."58 Both of these responses suggest that the doctrine had some benefit during operations and it provided enough context of what to think to conduct operations. Sergeant Major Gerald LaBarbera further elaborated that by design doctrine is a guide which sometimes requires adaptation, and he noted that doctrine could not possibly contain all the possibilities. His sentiment was that if the doctrine writers had tried, they would have created a "mammoth volume", which would have been of little use to HR professionals.⁵⁹ From a broad

⁵⁷ William Whatley, interviewed by Marilyn Kindred, Fort Bragg, NC, December 10, 1991, 2 (Available upon request from the Soldier Support Institute Library, Fort Jackson, SC).

⁵⁸ Raymond Fehrenbach, interviewed by Stephen Bower, Fort Ben Harrison, IN, December 6, 1991, 4 (Available upon request from the Soldier Support Institute Library, Fort Jackson, SC).

⁵⁹ Gerald LaBarbera, interviewed by Stephen Bower, Fort Ben Harrison, IN, February 4, 1992, 14 (Available upon request from the Soldier Support Institute Library, Fort Jackson, SC).

perspective, those with a positive or neutral view of the doctrine felt it provided some framework to use during the conflict.

As noted previously, negative sentiment did outweigh any neutral or favorable perception of the doctrine. These negative opinions centered around the following themes: transportation challenges, inadequate logistical support, inadequate organizational structure, over assessed capability, lack of clarity, and overall quality. Each of these themes had at least two interviewees mentioning a particular deficiency, with exception of the themes of lack of clarity and overall quality. These two areas had only had one source each. The thesis analyzed these two areas because they do provide insight into the effectiveness of replacement operations. Additionally, the interviewee that addressed clarity is the only CRC commander out of three that served during the conflict that was interviewed. The interviewee who provided insight into the quality of the doctrine on replacement operations was the theater personnel command commander which provided key insight as the senior HR leader in theater who was responsible for all replacement operations. Doctrine coding results are provided in table 3.

Table 3. Doctrine Coding Results				
Element	Sources	References		
Transportation	3	8		
Logistic Support	6	7		
Organization	3	6		
Capability	2	4		
Clarity	1	1		
Quality	1	2		

Source: Created by author.

Transportation challenges addressed during the interviews primarily focused on the specifics on movement of personnel. CPT William Whatley highlighted the challenge when he stated, "People don't just get from a replacement detachment to 10, 15, 20 kilometers into a battle zone, or a potential battle zone, because some piece of paper says it." HR units found themselves reliant on sustainment units to move replacements, which proved to be a daunting task due to the competing requirements for these logistics units to move supplies throughout theater. MAJ Lawrence O'Hara pointed out that "transportation assets were at a premium." Some units leveraged internal capabilities to

 $^{^{60}}$ William Whatley, interviewed by Marilyn Kindred, Fort Bragg, NC, December 10, 1991, 17.

⁶¹ Lawrence O'Hara, interviewed by Marilyn Kindred, Fort Bragg, NC, May 23, 1991, 11 (Available upon request from the Soldier Support Institute Library, Fort Jackson, SC).

train bus drivers to augment the capability of transportation organizations in theater to ensure that replacements moved forward to units. MAJ O'Hara licensed drivers from the 18th Personnel and Administration Battalions to fill this void. Without this deviation from the doctrinal principles, which relied on the Corps and Division Support Command assets, O'Hara stated, "we wouldn't have been able to move replacements north." 62

A point of frustration for transportation of replacements was also ensuring that individuals were sent forward to units expeditiously. COL Rusin, whose MMAS thesis is in the literature review of this thesis, highlighted the challenges on moving personnel forward to minimize the impact on replacement morale and effectiveness. Her interview reiterated her belief that "replacements should be kept in the replacement stream as short a time as possible and, if needed, should be processed as quickly as possible to a unit." COL Rusin further noted that the processing of replacements, despite efforts to streamline the flow of personnel, still resembled World War II, Korea, and Vietnam. The challenge COL Rusin highlighted was the distance to the units. She stated, "Finally, we couldn't get them out to units because the units were too far away - there was a time factor - so we had to ask the units to come pick up."

Another transportation issue noted by CPT Whatley involved host nation support.

Due to the threat and conditions in Saudi Arabia, units had difficulty maintaining local contracted operators to provide transportation for replacement operations. Whatley noted,

⁶² Ibid.

⁶³ Jo Rusin, interviewed by Marilyn Kindred, Fort Bragg, NC, July 30, 1991, 8 (Available upon request from the Soldier Support Institute Library, Fort Jackson, SC).

⁶⁴ Ibid., 10.

"A lot of the doctrine depends on the host nation's support. Well, I'm telling you that when they started hearing about the missiles coming, our host nation's support was no where to be found, and that happened in the theater." Doctrine sought to offset the decrease in organic transportation through the use of contracted drivers. However, the operating environment led to challenges in relying on this support.

In addition to transportation, replacement organizations had challenges with providing logistics support to replacements in the form of food and lodging. The doctrinal concepts relied on receiving external support to provide food and shelter for replacements as they processed through the replacement organizations. One respondee, LTC Robert Murphy, made mention of this challenge by stating, "But our doctrine in the AG Corps is totally dependent upon resources from other units because we don't have the first resource." Whatley further elaborated on the issue by stating, "We make a lot of assumptions in our doctrine about receiving a whole lot of support from a whole lot of people, and those are absolutely nothing more than bogus assumptions." The responses suggest that these leaders were disappointed with how replacement operations nested with the larger sustainment doctrine and the challenges of this doctrinal framework.

Another aspect of doctrine that the interviewees addressed focused on to organizational structure. Organizations will be further addressed in a separate element

 $^{^{65}}$ William Whatley, interviewed by Marilyn Kindred, Fort Bragg, NC, December 10, 1991, 17.

⁶⁶ Robert Murphy, interviewed by Marilyn Kindred, Fort Bragg, NC, November 12, 1991, 17 (Available upon request from the Soldier Support Institute Library, Fort Jackson, SC).

⁶⁷ William Whatley, interviewed by Marilyn Kindred, Fort Bragg, NC, December 10, 1991, 17.

analysis, but it bears consideration of the interviewees' perspective in regards to what doctrine did and did not do to provide the construct for these organizations. The doctrinal shortcomings mentioned by the interviewees centered on the framework by which the personnel organizations would function - primarily the scope of responsibility for the Personnel Group commanders. Two of the three Personnel Group commanders, Colonel Gary Gresh and Colonel Jo Rusin, both noted what they believed was a doctrinal oversight when it came to ensuring proper command and control to subordinate units. COL Rusin stated, "It is absolutely impossible for one lieutenant colonel or for one colonel, for that matter, to supervise twelve companies, particularly with different missions."68 Doctrine writers appear to have underestimated the issues with span of control. COL Gresh successfully overcame this deficiency by deviating from doctrine and maintaining a Personnel and Administration Battalion to provide another level of oversight between the group level and the subordinate companies. One subordinate Personnel Service Company commander, MAJ William Mansell, Jr., stated the decision to keep the additional organizational level "was one of the best decisions he [COL Gresh] could have made." From an organizational structure perspective, the interviews suggest that HR leaders believed the structure envisioned in doctrine failed to properly account for the actual requirements that would be placed upon these organizations in combat.

The next doctrinal challenge highlighted by an interviewee is clarity of the doctrine. This challenge only surfaced in one interviewee, LTC Timothy Love, the only CRC commander with an interview on file. LTC Love's challenge with the doctrine of

⁶⁸ Jo Rusin, interviewed by Marilyn Kindred, Fort Bragg, NC, July 30, 1991, 3.

the time was that "It was far too general." LTC Love's critique appears to stem from the fact that the CRC was a newly created organization at the time, which would explain his desire for more clarity in the document. It is of note that Love believed the lack of clarity did have its advantages. When asked by Dr. Kindred if more specific timelines should be incorporated into doctrine, he responded that it would be cumbersome to include every aspect of CRC operations in doctrine. He concluded his thought by stating, "[FM] 12-6 is very general and that's alright." Despite the issue of clarity being addressed, clarity appears to have only been a minor issue within doctrine.

The last doctrinal challenge theme focuses on the overall quality of the doctrine. As with clarity, only one interviewee provided comments on the quality of the document. That interviewee was Brigadier General Thomas Sikora, the commander of the 10th Personnel Command and the senior HR leader in theater. BG Sikora's opinion is summed up in his statement to Dr. Kindred, "It is a lousy document created in haste." BG Sikora's dislike of the document stemmed from its failure to "provide the basis for action," that he believed the document should, and he pointed to inconsistencies within the document. Particularly interesting was the fact that BG Sikora specifically assessed what the doctrine said about replacement operations. To check the document, he cut out

⁶⁹ Timothy Love, interviewed by Marilyn Kindred, Fort Bragg, NC, July 11, 1991, 16 (Available upon request from the Soldier Support Institute Library, Fort Jackson, SC).

⁷⁰ Ibid.

⁷¹ Thomas Sikora, interviewed by Marilyn Kindred, Fort Bragg, NC, July 31, 1991, 12 (Available upon request from the Soldier Support Institute Library, Fort Jackson, SC).

⁷² Ibid., 11.

portions of the doctrine related to replacement operations and HR organizations. When he compared the extracted portion to later sections of the doctrine, BG Sikora found inconsistencies internal to the doctrine. Additionally, he noted, "There is a lot of duplication. It was generally very, very poorly done." BG Sikora noted that in general terms the doctrine was not current due to its omission of tasks that HR organizations knew were their responsibility. BG Sikora's critique of FM 12-6 provides the most direct assessment of FM 12-6. He concluded his thoughts on why the document he felt was so deficient made it to publication by saying, "I know exactly how it was printed. The individual was anxious to get it on the road, so he printed it even though it wasn't quite ready." BG Sikora's interview suggests the doctrine and the concepts it contained were not fully proofed - including personnel replacement operations.

Organization

Organizational challenges for the HR units operating during Operations Desert Shield and Desert Storm stemmed the number of personnel available on the Modified Table of Organization and Equipment and the lack of capability inherent in the organization. The other organizational issue mentioned by the interviewees involved the ability of the personnel groups to provide adequate command and control to subordinate organizations. Since the issue of command and control was addressed previously in the doctrine theme, it will not be further explored in this section to avoid being repetitious.

⁷³ Ibid.

⁷⁴ Ibid.

⁷⁵ Ibid., 12.

The remainder of this section will further expand upon the implications of the lack of capability within HR organizations as well as the limited number of personnel.

The organizational structure provided by the Modified Table of Organization and Equipment did not provide adequate capability for HR units conducting replacement operations. This was primarily due to the need for HR organizations to self support and the requirements posed by conducting replacement operations, and several interviewees mentioned this a challenge in conducting their missions. COL Gresh noted that in garrison, HR organizations leveraged installation support for dining facilities and supply rooms. The challenge he experienced upon deployment was that those same functions still had to happen, but he lacked the personnel to carry out these requirements. He noted the sentiment was that "if we go to war somebody will provide those functions. But what we found out is that 'somebody' is us, and we didn't have anything with which to provide the functions." The organizations charged with supporting replacement operations found themselves undermanned and ill-equipped to meet the demands placed on them in the sands of Southwest Asia.

Replacement operations conducted during the build up to Operation Desert Storm highlighted organizational deficiencies in the replacement detachments. CPT Molosso noted that replacement units at the division level previously had "a 21-man replacement attachment that was somewhat self-sufficient, having its own mess hall."⁷⁷ That

⁷⁶ Gary Gresh, interviewed by Marilyn Kindred, Fort Bragg, NC, June 7, 1991, 7 (Available upon request from the Soldier Support Institute Library, Fort Jackson, SC).

⁷⁷ Michael Molosso, interviewed by Marilyn Kindred, Fort Bragg, NC, December 11, 1991, 18 (Available upon request from the Soldier Support Institute Library, Fort Jackson, SC).

organization transitioned to only eight personnel with logistical support coming from external organizations. LTC Orval Schierholz, the G1/AG for the 1st Infantry Division called the replacement operations organization "inadequate" due to this lack of personnel and equipment. The data indicated that organizations did not receive the means to conduct the types of operations they would need to in order to sustain forces during the conflict.

Training

Nine different interviewees discussed training challenges for HR organizations during the period studied, and the prevailing concerns were training Reserve Component units and a lack of opportunity for realistic unit training prior to deployment. LTC Love also offered one additional training challenge related to preparation for CRC operations. The following paragraphs provide further analysis on each of these three aspects.

The bulk of the issues with Reserve Component training stemmed from the need to train these soldiers to use the Tactical Army Combat Service Support Computer System (TACCS) - the active component system. MAJ Lawrence O'Hara, commander of a reserve Personnel Services Company, noted that "the first time any of my soldiers had seen TACCS was when we came here to Fort Harrison." Due to each component using different systems, the Reserve Component soldiers were not afforded the opportunity to train on the system that they would be expected to use when they had to deploy. As stated by MAJ Mansell, these organizations "came in and really did not have a lot of the knowledge needed to fill in and automatically perform the job. A lot of training was

⁷⁸ Lawrence O'Hara, interviewed by Marilyn Kindred, Fort Bragg, NC, May 23, 1991, 9.

required."⁷⁹ COL Rusin further stated the importance of this training by saying, "While we need to rely on the Reserve Components in combat service support, you can't ask them to function at higher levels if you don't give them training."⁸⁰ Interviewees felt that the reliance on reserve soldiers to fill key positions required training to bring these soldiers to a level of proficiency to integrate with active duty units. Unfortunately, this training was difficult to execute due to policies which will be discussed in the policy section of this chapter.

Unit training was another area mentioned by the interviewees. In particular, leaders noted that prior to deployment units lacked the ability to replicate the volume and conditions to be faced in combat. COL Rusin illustrated the challenge in her comment, "They tried to train on exercises and did Army Training and Evaluation Program (ARTEPS), but you cannot simulate 400 or 500 replacements who are wandering around with jet lag and wondering where they're going." Additionally, the inability to replicate wartime conditions meant that HR organizations were unable to verify their wartime requirements if processing large volumes of replacements.

Another area of unit training that suffered was in transportation. In particular, LTC Fehrenbach, the XVIII Airborne Corps G1, noted the lack of training for transportation of replacements. LTC Fehrenbach said, "I never saw the time when we said we were going to get 75 or 100 replacements and then checked to make sure that

⁷⁹ William Mansell, Jr, interviewed by Marilyn Kindred, Fort Bragg, NC, April 29, 1992, 4 (Available upon request from the Soldier Support Institute Library, Fort Jackson, SC).

⁸⁰ Jo Rusin, interviewed by Marilyn Kindred, Fort Bragg, NC, July 30, 1991, 13.

⁸¹ Ibid., 8.

there would be vehicles allocated to support those replacements from point A to point B."⁸² This is interesting because, as mentioned previously, MAJ O'Hara noted that the 18th Personnel and Administration Battalion found itself without any trained bus drivers in the unit. Leveraging two of his soldiers who were bus drivers for the Metro bus system in Indianapolis, he created a platoon of bus drivers to provide the capability. This improvised training benefited the unit because without this capability the units would not have been able to move replacements forward to their units.⁸³

It appears that the organizations recognized the training deficiencies after the conclusion of the conflict. The remarks of MAJ Mansell provide some insight into this correction. He commented "Also, I never knew how involved the PSC would get in replacement operations until I went to Saudi Arabia. It is now a collective task in my METL." HR organizations appear to have recognized the training deficiencies as it related to unit training and made adjustments to ensure training would support mission requirements in the future.

CRC operations provides insight into a positive aspect of training as a result of proactive planning. LTC Love, commander of the CRC at Fort Knox, knew his organization was "never tested because there was really no way to test them." As a

⁸² Raymond Fehrenbach, interviewed by Stephen Bower, Fort Ben Harrison, IN, December 6, 1991, 8.

 $^{^{\}rm 83}$ Lawrence O'Hara, interviewed by Marilyn Kindred, Fort Bragg, NC, May 23, 1991, 11.

⁸⁴ William Mansell, Jr, interviewed by Marilyn Kindred, Fort Bragg, NC, April 29, 1992, 24.

 $^{^{85}}$ Timothy Love, interviewed by Marilyn Kindred, Fort Bragg, NC, July 11, 1991, 2.

Component which meant the time he would have to train and prepare his personnel for operations was very limited. As a result, LTC Love requested and was approved to conduct his annual training early to use that training event to write and refine how they would conduct operations. Love recalled, "We set the CRC up, had all the in-process reviews with all the people on the post, taught them what we were supposed to do, received a great portion of our buildings, set our procedures up, wrote our SOPs and aligned all the people in all the units in just the right format." As a result of Love's proactive training, the organization was prepared to conduct operations two days later when they were called up to active duty to prepare the CRC to process replacements to send to Saudi Arabia.

Materiel

The second most coded concern for interviewees involved materiel, and the three most prominent concerns involved vehicles, automations, and communications equipment. The other materiel concern mentioned focused on replacement sustainment materiel needed to house and feed replacements as they transited through replacement units. Each of these elements will be further analyzed in the remaining paragraphs.

As noted in the section on organizations, the availability of vehicles was of particular concern to HR units. COL Rusin stated, "We brought extra trucks from Europe, so we had two deuces and a half for our active duty replacement detachments, but the

⁸⁶ Ibid., 6.

Reserve Component unit had none."87 Despite having extra vehicles, these trucks lacked the capacity to transport the volume of soldiers expected. 88 To augment the limited transportation assets, units contracted for bus support in country. However, this was not without its own issues. BG Sikora noted the composition of these vehicles in his statement, "We had Yugoslavian trucks. We had Egyptians trucks. We had American trucks. We had Saudi trucks. We had trucks we drove until they died; we just left them. Some, particularly the Yugoslavian trucks, didn't run very long before they quit."89 The multiple models created maintenance challenges for units, which lacked the replacement parts for the equipment as well as the trained maintenance personnel to fix them. These maintenance issues were further complicated by the operating environment. Once they had to move replacements on unimproved roads, Rusin noted the commercial buses were prone to breaking down. 90 Although buses eventually provided valuable transportation capability, MAJ Mansell highlighted the challenge for HR leaders having to react to a lack of materiel in theater. He stated, "If we would have known what all the operation entailed and what it was going to grow to, we would have had more time to prepare."91

Another solution to the vehicle shortage was to resort to pilfering vehicles from the port. The lack of support received from the Corps Support Command led COL Gresh

⁸⁷ Jo Rusin, interviewed by Marilyn Kindred, Fort Bragg, NC, July 30, 1991, 10.

⁸⁸ Ibid.

 $^{^{89}}$ Thomas Sikora, interviewed by Marilyn Kindred, Fort Bragg, NC, July 31, 1991, 10.

⁹⁰ Jo Rusin, interviewed by Marilyn Kindred, Fort Bragg, NC, July 30, 1991, 10.

⁹¹ William Mansell, Jr, interviewed by Marilyn Kindred, Fort Bragg, NC, April 29, 1992, 10.

to resort to this method to sustain his operations. He noted, "What we had to do was literally steal the assets we needed to survive." COL Gresh's organization did sign for the equipment so it was accounted for the Army system. However, he acknowledges that his organization took equipment "destined for other units." Although this method did provide additional assets, the fact that HR organizations had to resort to theft suggests units were woefully undersupplied on the materiel they needed for operations.

Automation issues during the conflict involved the use of the TACCS system in theater. Aside from the training challenges for reserve soldiers who had limited or no experience on the system, many of the interviewees found the system to be slow and unable to process the amount of data required. SFC Ithier-Montanez, a computer programmer serving with the XVIII Airborne Corps, offered the following assessment of the system. "It's an old computer, really slow and with a very small storage capacity, especially when you are talking about 120,000 records or even 200,000 records and you have a computer that runs out of space." Another drawback of the system was its physical size. As a result, several units used commercial laptop computers to manage personnel data. LTC Fehrenbach's point on the next conflict sums up the sentiment on the use of TACCS. He stated, "When the next war comes, we are going to take a lap top computer... You can't hand-carry a TACCS box on an airplane; you can hand-carry a lap

⁹² Gary Gresh, interviewed by Marilyn Kindred, Fort Bragg, NC, June 7, 1991, 3.

⁹³ Ibid., 4.

⁹⁴ Oscar Ithier-Montanez, interviewed by Marilyn Kindred, Fort Bragg, NC, July 25, 1991, 3 (Available upon request from the Soldier Support Institute Library, Fort Jackson, SC).

top on an airplane." LTC Fehrenbach further noted the inadequacy of the system when he stated, "It was a piece of junk when it was being developed in the early 1980s. . . When they wanted me to try it, I said it was too complicated and too big - and it is still too complicated and too big." ⁹⁶

Communication challenges were a result of the lack of radios available for HR units to coordinate support and technical challenges with sending data back to the United States for processing. A lack of radios presented challenges for units because it made it increasingly difficult to coordinate replacement operations. CPT Robert Bennett stated his replacement detachment would go days without speaking to supported units, and the lack of coordination impacted the transition of replacement personnel to their assigned units. He noted, "When replacements came in, you wanted to give the units a heads up so they could prepare their lower units, but we couldn't do that." The other challenge in having a lack of communications equipment is locating the units to deliver replacements. COL Gresh highlighted this problem in his statement, "My soldiers haven't the foggiest idea where the brigade is, let alone who they are, what their call signs are, their frequencies, or anything else. And of course we have no radios because it's not in our TO&E [Table of Organization and Equipment]."

⁹⁵ Raymond Fehrenbach, interviewed by Stephen Bower, Fort Ben Harrison, IN, December 6, 1991, 22.

⁹⁶ Ibid.

⁹⁷ Robert Bennett, interviewed by Marilyn Kindred, Fort Bragg, NC, December 10, 1991, 18 (Available upon request from the Soldier Support Institute Library, Fort Jackson, SC).

⁹⁸ Gary Gresh, interviewed by Marilyn Kindred, Fort Bragg, NC, June 7, 1991,18.

Replacement sustainment materiel was the last aspect of materiel addressed by the interviewees. Replacement organizations found themselves with soldiers needing food and shelter, but they found themselves ill-equipped to sustain these soldiers. COL Gresh noted that one of his commanders "didn't even have tentage to take care of his own battalion. Then add to that 1,000 replacements a day, a truck company, a bus driver and anybody else he had to feed and house." To overcome tentage deficiencies, MAJ Timothy Robertson noted that his units required "four to six times" what he was authorized to provide adequate tentage for replacements. The materiel required to provide support to replacements appears to have been woefully short of what was actually required.

Personnel

Personnel challenges mentioned by the interviewees stem from the issues previously addressed in the doctrine, organization, and materiel elements. These challenges include inadequate number of personnel to support the replacement mission and a lack of needed skills to support replacement operations. Key points on each of these personnel issues will be addressed further in the following paragraphs.

The biggest challenge for replacement organizations from a personnel perspective was not having enough soldiers to manage replacements. The most direct assessment from any of the interviewees is from MAJ Timothy Robertson when he remarked, "The

⁹⁹ Ibid., 6.

¹⁰⁰ Timothy Robertson, interviewed by Marilyn Kindred, Fort Bragg, NC, December 11, 1991, 6 (Available upon request from the Soldier Support Institute Library, Fort Jackson, SC).

replacement detachment doesn't have the organic people or equipment to do its mission, not even come close." He further noted that the replacement detachment "could never come close" to processing two hundred or more replacements a day as they were designed to do. 102 COL Rusin also commented that the replacement detachments were "entirely too lean." To augment their replacement operations, some HR organizations were augmented with soldiers of other branches to serve as cadre. SGM Gerald LaBarbera noted that "Division augmented my replacement detachment with six cadres from the brigades." These additional personnel provided the additional manpower need to process replacements.

Just as the replacement units did not have adequate vehicles to transport personnel, they also lacked requisite skills to support replacement operations. One area in particular mentioned during the interviews was a lack of qualified drivers. In addition to training drivers on how to operate buses, HR organizations also took motor transport operators out of the replacement streams to man the equipment. COL Gresh stated that his organization took control of these soldiers that were "destined to go to COSCOM [Corps Support Command] or somewhere to drive trucks." COL Gresh's unit used

¹⁰¹ Ibid.

¹⁰² Ibid.

¹⁰³ Jo Rusin, interviewed by Marilyn Kindred, Fort Bragg, NC, July 30, 1991, 12.

¹⁰⁴ Gerald LaBarbera, interviewed by Stephen Bower, Fort Ben Harrison, IN, February 4, 1992, 14.

¹⁰⁵ Gary Gresh, interviewed by Marilyn Kindred, Fort Bragg, NC, June 7, 1991, 4.

these personnel to perform their mission, and once the fighting was over, they were assigned to units authorized to have them.

Facilities

There were few mentions of facilities in the interviews, and the only area of replacement operations directly affected by facilities were the CRCs. LTC Love briefly noted the importance of facilities being located in close proximity to streamline the processing of personnel and reduce requirements for transportation support. He highlighted this in his statement, "We had a more consolidated place to train than the other two installations. Our buildings were in better condition." Interestingly, the authors of the report *The United States Army Reserve in Operation Desert Storm:*Personnel Services Support provide a less positive assessment on the quality of facilities at Fort Knox where LTC Love commanded. The report stated, "despite the advanced planning, little work had been done to get the CRC facility ready to operate." The report further states, "There was a constant struggle for space to house the replacements and the CRC members were required to move five times during their stay at Fort Knox." Additionally, there was limited parking available for reservists arriving to process through the CRC for deployment. The limited commentary on the subject of CRC

 $^{^{106}}$ Timothy Love, interviewed by Marilyn Kindred, Fort Bragg, NC, July 11, 1991, 17.

¹⁰⁷ Brinkerhoff and Silva, *The United States Army Reserve in Operation Desert Storm*, 7-18.

¹⁰⁸ Ibid., 7-19.

facilities highlights a few of the challenges the CRCs faced when being allocated facilities to conduct operations.

Policy

Policy challenges highlighted by the interviewees focused primarily on two areas. The first area involved the heavy reliance on the Reserve Component for combat service support functions as part of the Army of Excellence, and the second area focused on the flow of HR organizations into theater, including the delayed establishment of the Theater Personnel Command. The following paragraphs elaborate on observations from the interviewees on these two areas.

The primary concern with reserve soldiers stemmed from the concern that these organizations lacked adequate training to conduct replacement operations as was previously mentioned in this thesis. Further analysis showed another primary concern was the timeline required to mobilize and deploy reserve units filled critical nodes throughout the replacement system. The following statement from CPT Whatley highlights the challenge in establishing a theater replacement system with the time constraints of reserve forces. "We need to have a good, clear-cut, smooth-running system at theater level before it's too late. We don't need to field a Reserve battalion to do this mission half a month before the war starts." ¹⁰⁹ He further illustrated this point in his statement, "A lot of our Reserve units are not on the Time Phased Force Deployment Data List (TPFDL) until C+50 and beyond, and that's too late." ¹¹⁰ The Army of

 $^{^{109}}$ William Whatley, interviewed by Marilyn Kindred, Fort Bragg, NC, December 10, 1991, 23.

¹¹⁰ Ibid., 24.

Excellence's reliance on the Reserve Component inhibited the ability to establish a functioning replacement system before the bulk of replacements began moving into the system when it became known the mission would transition to an operation to liberate Kuwait.

Directly tied to the timelines associated with employing reserve forces, active forces also struggled to deploy into theater early to establish systems for HR support. COL Conrad Boterweg, the Forces Command Adjutant General, noted, "The decision was made during this process—this is just all hearsay—not to deploy personnel units, or, if they deployed, they would fall to the bottom of the TPFDL." COL Boterweg further noted that replacement units fell to the bottom along with postal organizations. He explained the reasoning behind this policy was the finite assets available to move soldiers forward, and as a result, the priority went to combat forces to deter further Iraqi aggression. CPT Bennett stated the issue with this deployment policy was that replacement organizations had "to get Replacement Ops [Operations] going at the last minute." COL Fehrenbach stated, "The AG arena has to come on line in the planning stage as opposed to coming in when we are about to go to the field." During Operations Desert Shield and Desert Shield, AG organizations were unable to accomplish this goal.

¹¹¹ Conrad Boterweg, interviewed by Stephen Bower, Fort Ben Harrison, IN, October 28, 1991, 1 (Available upon request from the Soldier Support Institute Library, Fort Jackson, SC).

¹¹² Robert Bennett, interviewed by Marilyn Kindred, Fort Bragg, NC, December 10, 1991, 5.

¹¹³ Raymond Fehrenbach, interviewed by Stephen Bower, Fort Ben Harrison, IN, December 6, 1991, 8.

Summary

Interviewees provided comments that impacted each of the elements of DOTMLPF-P with exception to the leadership and education element. The most mentioned element was doctrine, and the negative aspects of doctrine permeated the rest of the areas assessed in this thesis. The biggest challenges raised by the interviewees were organizational deficiencies, a lack of equipment to self-sustain, and inadequate numbers of personnel to provide the adequate command and control of replacements processing through the system.

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

Conclusion

After analysis of each of the interviews, this thesis determined that personnel replacement operations were not fully adequate during Operations Desert Shield and Desert Storm across each of the elements of DOTMLPF-P, with the exception of leadership and education. This determination has one caveat, however. Throughout the research, it was determined that HR leaders during the conflict adapted to ensure replacement operations did not fail despite the challenges mentioned in the previous chapter. These HR leaders ensured that over 19,000 replacements were processed into theater, and fortunately, the conflict ended before the system had to process replacements for the estimated 35,000 personnel. 114 The ANDRULIS report *The United States Army Reserve in Operation Desert Storm: Personnel Services Support* further supports the findings of this thesis in noting the system "was barely adequate for the workload that occurred and would have been inadequate to sustain combat operations for several weeks." 115

The analysis of chapter four, directly addresses the secondary research question of, "What issues and concerns did the executors of the personnel replacement process have during Operations Desert Shield and Desert Storm?" This analysis showed these HR personnel struggled with adequate transportation and life support capability to support the

¹¹⁴ Brinkerhoff and Silva, *The United States Army Reserve in Operation Desert Storm*, 7-35, 7-7.

¹¹⁵ Ibid., 7-35

volume of replacement transiting the theater. Additionally, the organizations found themselves undermanned to provide the requisite support for these personnel. Each of these issues challenged HR leaders to find alternate means to support replacement operations. These included borrowed military manpower from subordinate units to stealing equipment from the port. Holistically, the issues mentioned by the interviewees showed that replacement operations had systemic challenges throughout the conflict.

As mentioned previously, the second subordinate research question used to assess adequacy was, "What was the framework used by Human Resources personnel for replacement operations during Operations Desert Shield and Desert Storm?" Analysis of the interviews showed that organizational framework presented challenges for the HR organizations provide support to replacement operations. The two main issues addressed were the late establishment of the Theater PERSCOM and the large span of control for Personnel Groups. The other framework challenge mentioned during the interviews focused on the reliance on external support from the Corps Support Commands and Division Support Commands, which did not function in line with the doctrinal considerations.

Each of these secondary research questions aided in determining the answer to the primary research question of, "Was the Human Resources Support during Operations Desert Shield and Desert Storm adequate to execute personnel replacement operations?" As mentioned previously, the analysis of the interviews suggests that replacement operations were not fully adequate during the period. Despite the adaptability and improvisation of the HR providers, the system in place was deficient in ensuring the processing of replacements into theater.

Recommendations

As noted in the literature review, the structures and organizations in place during Operations Desert Shield and Desert Storm, with the exception of the CRC, are no longer present in the U.S. Army. Personnel Groups, Personnel and Administration Battalions, Personnel Companies no longer exist within the AG community. Additionally, the likelihood of the recreation of these organizations seems highly unlikely in the resource constrained environment the Army faces. As a result, recommendations will not focus on creating structure. Instead, these recommendations focus on doctrinal clarification and considerations and ensuring the requirements of replacement operations are met with adequate capabilities within the sustainment community at large. The subsequent points further elaborate on each of these elements.

- 1. As highlighted in the analysis, the most prominent element mentioned by interviewees was doctrine. As such, the first recommendation involves overcoming doctrinal challenges to the current doctrine. The literature review of HR doctrine showed how replacement operations has transitioned from a separate chapter in FM 12-6 in 1989 to merely three sub-paragraphs of Personnel Readiness Management in the most current doctrine, the 2014 version of FM 1-0. To provide greater doctrinal weight to replacement operations, it should be elevated as a key task under the Man the Force core competency. By elevating replacement operations, doctrine writers would provide key considerations for replacement operations which are absent in the current doctrinal breakout.
- 2. The second recommendation would be to make the HR Company responsible for providing replacement operations support to subordinate brigades. With HR Companies now assigned to the Special Troops Battalion of the Sustainment Brigade,

these organizations seem like an ideal organization to assume responsibility for coordination of the transportation, housing, and sustainment of replacements en route to brigades. Current doctrine focuses these companies on providing mission command for subordinate platoons conducting casualty operations, personnel accountability, and postal operations. Doctrine would need to broaden the scope of requirements for the HR Company to incorporate replacement operations management. The pending transformation of these formations to Human Resource Units working in coordination with Division and Corps G-1s means the G-1s must plan for their implementation as it relates to replacement operations. With this additional coordination, Human Resource Units could leverage both the company's organic plans and operations section and the Human Resources Operations Branch in the Sustainment Brigade's Support Operations section to manage replacements as they transit to their organizations. Additionally, G-1s must ensure their Human Resource Units are scalable and modular to support brigades conducting Unified Land Operations.

Areas of Future Study

The interviews used for this thesis contained multiple topics of interest for future research. These include discussions on casualty operations, challenges in conducting postal operations in an austere environment, MWR planning considerations, personnel accountability challenges, and considerations for conducting multi-component operations. Additionally, some interviews address perceptions towards women serving during the conflict as well as cultural challenges faced by these organizations in a conservative, Muslim country. All of these topics were outside the scope of this thesis,

but the interviews provided key insights that bear further analysis related to each of the topics listed.

Summary

This thesis is not meant to question the abilities of the HR providers during the conflict. As mentioned previously, these personnel adapted to the new doctrine and organizations in place at the time, and they ensured they accomplished the mission. In his interview, BG Sikora recalls a statement from LTG John J. Yeosock at the conclusion of the conflict. LTG Yeosock stated, "This was clearly a success. A success for all of us, a great success for our country and for our Army. But now the difficulty is going to begin because success is no longer newsworthy. And people are going to start looking for all the things that did not go right." The intent of this thesis is not to focus on the negative aspects of HR operations. Instead, it strives to better understand replacement operations in this conflict to apply these lessons learned in future engagements. As COL Michael Spinello stated in his interview, "Hopefully somebody will take the time to go over some of this so that we won't have the problems in the future." This thesis attempts to fulfill COL Spinello's hope.

The significance of this thesis is not constrained to merely HR providers or the Army's sustainment community. The ability to maintain combat power through the expeditious replacement of personnel is key to future success on the battlefield – just as it

¹¹⁶ Thomas Sikora, interviewed by Marilyn Kindred, Fort Bragg, NC, July 31, 1991, 22-23.

¹¹⁷ Michael Spinello, interviewed by Stephen Bower, Fort Ben Harrison, IN, January 13, 1992, 19 (Available upon request from the Soldier Support Institute Library, Fort Jackson, SC).

has been for centuries past. A key observation from the ANDRULIS report mentioned previously is that, "In the Persian Gulf War, we won big and we won quick, but that fortunate turn of events may not occur in a future war." The lack of need for replacements during Operations Desert Shield and Desert Storm and even subsequent combat operations in Iraq and Afghanistan, does not mean the need for processing and managing replacement is gone. The Army as a whole must ensure it has the ability to conduct replacement operations in a future, expeditionary force. Commanders are rightfully concerned to avoid culmination due to a lack of fuel or ammunition. Without planning and consideration for replacement operations, units risk culminating due to a lack of personnel. The ANDRULIS report captures this sentiment by stating, "This lack of early attention to replacement of losses continues the American tradition that started in the Civil War of putting the effort on winning quickly and turning to sustainment only after the quick win does not happen."

¹¹⁸ Brinkerhoff and Silva, *The United States Army Reserve in Operation Desert Storm*, 7-35.

¹¹⁹ Ibid.

APPENDIX A

LIST OF INTERVIEWS MAINTAINED BY THE SOLDIER SUPPORT INSTITUTE

The table below contains the list of the personnel with interviews on file with the Soldier Support Institute including their duty position during the conflict. The intent of including this list is to assist in future research using these documents.

Interviewee	Rank	Position	Unit
Almanza, Gilberto Jr.	CPT	Commander	1015th AG Company Postal
Almandaraz David C	SFC	Cymanyidan	DAC 4/64th Ammon DN
Almendarez, David G.	SFC	Supervisor	PAC - 4/64th Armor BN
			24th Infantry Division (Mechanized
Bareford, Jackson D.	MAJ	S1	Artillery)
		Corps	19th Replacement Detachment, 18th
D D 1 W	CDT	Readiness	Personnel and Administration
Bennett, Robert W.	CPT	Officer	Battalion, XVIII Airborne Corps
Bishop, John P. Jr.	SFC	NCOIC	101st Airborne Division, PSC
		A 11	
Dataman Cama 1	COL	Adjutant General	F1
Boterweg, Conrad	COL	General	Forces Command
Cadigan, Robert B.	CPT	Commander	320th AG Company Postal
8 /			1 ,
Carpenter, Michael	SFC	NCOIC	82nd Airborne Division Artillery
		G1 Operations	
Chamman Danial	MAT	Officer/Strengt	VVIII A inhomo Como
Chapman, Daniel	MAJ	h Accounting	XVIII Airborne Corps
Collins, Mark E.	MAJ	Deputy G1	82nd Airborne Division
		Chief, Casualty	
		Processing	
De Oro, Arthur A.	CPT	Branch	10th Personnel Command
		Special	
		Advisor for	
D 4.	COL	Postal	Ha + B + H = -
Dean, Art	COL	Operations	U.S. Army Recruiting Command

	967	Deputy	
Dupay, Arthur P.	COL	Commander	10th Personnel Command
Fehrenbach, Raymond T.	LTC	G1	XVIII Airborne Corps
Cibaan Danial D	CDT	Chief, Enlisted	101 at Aigh ages Division
Gibson, Daniel B.	CPT	Management	101st Airborne Division
		PAC	
Graves, Matthew	SFC	Supervisor	1st, 187th Infantry
Gresh, Gary	COL	Commander	18th Personnel Group
		Chief, Military	•
		Personnel	
Crotagut Nail	COL	Integration Division	Personnel Command
Grotegut, Neil	COL	Division	Personnel Command
		Executive	
Hilla, Larra A.	2LT	Officer	1015th AG Company Postal
Hughes, Gerald W.	CPT	Commander	129th AG Postal Company
<i>S</i> ,		Computer	
		Programmer/A	
Ithier-Montanez, Oscar	SFC	nalyst	XVIII Airborne Corps
		Executive	
Kulifay, Bernard A.	MAJ	Officer	18th Personnel Group
		G1/AG	
LaBarbera, Gerald J.	SGM	Sergeant Major	101st Airborne Division
Labarocia, Geraia 3.	BOM	Bergeunt Wagor	TOTSLY MIDDING DIVISION
Larsen, James P.	MAJ	Commander	101st Personnel Service Company
		Commander/Ba	
Lockett Jr., Willie James	CWO	nd Master	82nd Airborne Division
Love, Timothy R.	LTC	Commander	CRC - Ft Knox
Love, Timothy K.	LIC	Commander	CAC - I t MIOA
Mansell Jr., William R.	MAJ	Commander	573rd Personnel Service Company
		NCOIC, Plans and Operations	
McConnell, David W.	SGT	Division	XVIII Airborne Corps
. ,		· -	r

McEyyan Dobart A	MAJ	Adjutant C1	101st Airborne Division
McEwan, Robert A.	WIAJ	Adjutant S1	Torst Airborne Division
McKeta, Robert F.	GM- 13	Recreation Director	Community Family Support Center
Molosso Michael R.	LTC	Deputy G1	82nd Airborne Division
Murphy, Robert J.	LTC	G1/AG	82nd Airborne Division
Nation, Charles E.	MR	MWR Liaison Officer	Community Family Support Center
Nichala Frad A	LTC	Deputy Adjutant General; Chief, Theater Personnel Operations	Farma Cammand
Nichols, Fred A.	LTC	Directorate	Forces Command
O'Hara, Lawrence F.	MAJ	Commander	425th Personnel Services Company
Owens, Tom	LTC	Commander	18th Personnel & Administration Battalion
Revell, Joseph L.	LTC	Chief, Professional Development	Adjutant General School
Robertson, Tim	MAJ	Commander	82nd Personnel Service Company
Robertson, Timothy F.	MAJ	Commander	82nd Personnel Service Company
Rogers, Wanda E.	MAJ	Deputy G1	24th Infantry Division
Rusin, Jo	COL	Commander	7th Personnel Group
Schierholz, Orval B.	LTC	G1/AG	1st Infantry Division
Schwartz, Barbara	MAJ	Chief, MWR	U.S. Army Reserve, U.S. Central Command G1

Shugart, Wayne R.	LTC	G1	1st Corps Support Command
Sikora, Thomas	BG	Commander	10th Personnel Command
		Director, Casualties and Memorial Affairs Operation	
Spinello, Michael	COL	Center	Personnel Command
Sturdivant, Terry D.	SFC	Chief, Records Branch	101st Personnel Service Company
•			
Turner, William N.	SGM	Sergeant Major	24th Personnel Service Company
	GOY	Deputy Chief of Staff for	
Webb, Hershel	COL	Personnel	Third U.S. Army
		Strength	19th Replacement Detachment, 18th
	1	Management	Personnel and Administration
Whatley Jr., William A.	CPT	Officer	Battalion, XVIII Airborne Corps

APPENDIX B

REPLACEMENT INTERVIEWEE CODING RESULTS

As stated previously, the initial interviewee list was reduced from the 50 interviews contained in Appendix A to 24 individuals who mentioned replacement operations. During coding, 19 individuals were found to have substantive comments on replacement operations. This table provides the reader a quick synopsis of the areas each of the 19 interviewees mentioned during his/her interview.

Interviewee	D	О	Т	M	P	F	P
Bareford	X	X			X		
Bennett	X	X		X	X		X
Boterweg	X	X		X			X
Carpenter	X						
Fehrenbach	X	X	X	X	X		X
Gresh	X	X	X	X	X		
Ithier-Montanez	X			X			
LaBarbera	X			X	X		
Love	X	X	X	X		X	X
Mansell	X	X	X	X			X
McEwan	X		X	X			
Molosso	X	X		X	X		
Murphy	X	X	X	X	X		X
Nichols			X	X	X		
O'Hara			X	X	X		

Robertson				X	X	
Rusin	X	X	X	X	X	
	37	***		***	37	
Schierholz	X	X		X	X	
Sikora	X			X		X

BIBLIOGRAPHY

Books

- Bin, Alberto, Richard Hill, and Archer Jones. *Desert Storm: A Forgotten War*. Westport, CT: Praeger, 1998.
- Bourque, Stephen A. *Jayhawk: the VII Corps in the Persian Gulf War*. Fort McNair: Center for Military History, 2002.
- Brinkerhoff, John, and Theodore Silva. *The United States Army Reserve in Operation Desert Storm: Personnel Services Support*. ANDRULIS Research Corporation, 1995.
- Creswell, John W. *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*. 2nd ed. Thousand Oaks: Sage Publications, 2007.
- Gordon, Michael R., and Bernard E. Trainor. *The Generals' War: The Inside Story of the Conflict in the Gulf.* Boston: Little, Brown, 1995.
- Kitfield, James. Prodigal Soldiers. New York: Brassey, 1997. Kindle Edition.
- Pagonis, William G., and Jeffrey L. Cruikshank. *Moving Mountains*. Boston, MA: Harvard Business School Press, 1992.
- Record, Jeffrey. *Hollow Victory: A Contrary View of the Gulf War*. Washington: Brassey, 1993.
- Swain, Richard. *Lucky War: Third Army in Desert Storm*. Fort Leavenworth, KS: Combat Studies Institute, 1994.
- Turabian, Kate L. A Manual for Writers of Term Papers, Theses, and Dissertations. 8th ed. Revised by Wayne C. Booth, Gregory G. Colomb, Joseph M. Williams, and the University of Chicago Press Editorial Staff. Chicago: University of Chicago Press, 2013.
- U.S. Army Center for Military History. War in the Persian Gulf: Operations Desert Shield and Desert Storm August 1990-March 1991. Washington, DC: U.S. Army, 2010.
- U.S. Army Command and General Staff College. ST 20-10, *Master of Military Art and Science (MMAS) Research and Thesis*. Ft. Leavenworth, KS: USA CGSC, August 2014.
- Watson, Bruce W. Military Lessons of the Gulf War. London: Greenhill Books, 1991.

Periodicals and Journals

- Clodfelter, Mark. "Of Demons, Storms, and Thunder." *Air Power Journal* (1991). Accessed October 14, 2014. http://www.au.af.mil/au/afri/aspj/airchronicles/apj/apj91/win91/clod.htm.
- Thomas, Eileen, and Joan Magilvy. "Qualitative Rigor or Research Validity in Qualitative Research." *Journal for Specialists in Pediatric Nursing* 16 (2011).

Theses

- Armstrong, Mark. "Reconstitution: Implications for a Force Projection Army." Master's thesis, Command and General Staff College, 1993.
- Hale, Monique. "Personnel Reconstitution of Units: Will the United States Army's Personnel Replacement System Support the Airland Battle?" Master's thesis, Naval War College, 1989.
- King, Kenneth. "Operation Desert Storm: Thunder Storms of Logistics." Master's thesis, U.S. Army War College, 2007.
- Mackey, Robert. "Building a Shallow Army: Replacement Operations in the Future Force." Master's thesis, School of Advanced Military Studies, 2002.
- Rusin, Jo. "Command and Control of Personnel Replacements." Master's thesis, Command and General Staff College, 1982.

Government Documents

Depa	ortment of the Army. Army Doctrinal Publication (ADP) 3-0, <i>Unified Land Operations</i> . Washington, DC: Government Printing Office, 2011.
	 Army Doctrinal Reference Publication (ADRP) 3-0, <i>Unified Land Operations</i>. Washington, DC: Government Printing Office, 2012.
	—. Army Doctrinal Publication (ADP) 4-0, <i>Sustainment</i> . Washington, DC: Government Printing Office, 2012.
	 Army Doctrinal Reference Publication (ADRP) 4-0, Sustainment. Washington DC: Government Printing Office, 2012.
	 Army Regulation (AR) 600-8-111, Wartime Replacement Operations. Washington, DC: Government Printing Office, 1993.
	—. Field Manual (FM) 12-6, <i>Personnel Doctrine</i> . Washington, DC: Government Printing Office, 1989.

