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

IS 85% DUTY MILITARY OCCUPATIONAL SPECIALTY QUALIFICATION (DMOSQ) ACHIEVABLE FOR THE ARMY RESERVE COMPONENT BY 2005?

BY

COLONEL MEGAN P. TATU
United States Army Reserve

DISTRIBUTION STATEMENT A:
Approved for Public Release.
Distribution is Unlimited.

USAHC CLASS OF 2002

U.S. ARMY WAR COLLEGE, CARLISLE BARRACKS, PA 17013-5050
IS 85% DUTY MILITARY OCCUPATIONAL SPECIALTY QUALIFICATION (DMOSQ) ACHIEVABLE FOR THE ARMY RESERVE COMPONENT BY 2005?

by

COL Megan P. Tatu
United States Army Reserve

COL Hans Mijoecevic
Project Advisor

The views expressed in this academic research paper are those of the author and do not necessarily reflect the official policy or position of the U.S. Government, the Department of Defense, or any of its agencies.

U.S. Army War College
CARLISLE BARRACKS, PENNSYLVANIA 17013

DISTRIBUTION STATEMENT A:
Approved for public release.
Distribution is unlimited.
ABSTRACT

AUTHOR: Megan P. Tatu

TITLE: Is 85% Duty Military Occupational Specialty Qualification (DMOSQ) Achievable for the Army Reserve Component by 2005?

FORMAT: Strategy Research Project

DATE: 09 April 2002 PAGES: 34 CLASSIFICATION: Unclassified

One of the resultant affects of the downsizing of the Active Component (AC) following the Cold War was the Army Reserve becoming the primary combat service support (CSS) provider for the total Army. With 54% of the CSS force structure and equipment located in the Reserve Component (RC), there has logically been a steady increase in the need and reliance on RC capabilities. This has been particularly evident in the last decade because of the military's expanded role in support of peacekeeping and peace enforcement missions, resulting in a significant increase in the operations tempo of both the AC and RC. With increased reliance on the RC has come the need to assure RC readiness. This paper will explore one essential component of readiness with implications for RC relevance and reliability for warfighter planning and execution - the Duty Military Occupational Specialty Qualification (DMOSQ) of the force. Without fully qualified reserve soldiers, confidence of warfight planners that the RC can be called upon to successfully perform their missions will be eroded. As a means of underscoring the necessity for ready, trained RC soldiers, the former Chief of Staff of the Army, General Reimer, and successive Army Chiefs mandated the RC reach and sustain 85% Duty Military Occupational Specialty Qualification (DMOSQ) by fiscal year 2005. This paper examines the feasibility of the RC reaching 85% DMOSQ by 2005 through an analysis of DMOSQ trends and the issues that affect soldiers' DMOSQ status. Finally, the paper explores proposed recommendations to reach the desired 85% DMOSQ goal.
# TABLE OF CONTENTS

ABSTRACT ........................................................................................................................................... iii

LIST OF ILLUSTRATIONS ................................................................................................................ vii

LIST OF TABLES ............................................................................................................................... ix

**IS 85% DUTY MILITARY OCCUPATIONAL SPECIALTY QUALIFICATION (DMOSQ) ACHIEVEABLE FOR THE ARMY RESERVE COMPONENT BY 2005?** ................................................................. 1

- BACKGROUND .............................................................................................................................. 1
- OPERATION DESERT STORM/DESERT SHIELD .............................................................................. 2
- ARMY TRANSFORMATION ............................................................................................................... 2
- DMOSQ TRENDS ............................................................................................................................ 3
- ANALYSIS OF CONTRIBUTING FACTORS TO NON-DMOSQ .......................................................... 6
- INITIAL ENTRY TRAINING ............................................................................................................... 6
- PERSONNEL TURNOVER .............................................................................................................. 8
- MAINTENANCE OF AUTOMATED DATABASE MANAGEMENT SYSTEMS ........................................ 9
- OCAR PLAN TO ACHIEVE 85% DMOSQ BY 2005 ........................................................................ 9
- RECOMMENDATIONS TO ACHIEVE 85% DMOSQ .................................................................. 11
- INITIAL ENTRY TRAINING ............................................................................................................ 12
- PERSONNEL TURNOVER ............................................................................................................. 13
- ADDITIONAL RECOMMENDATION ............................................................................................... 14
- Improved Retirement Benefits ...................................................................................................... 14
- CONCLUSION ................................................................................................................................. 15

ENDNOTES ......................................................................................................................................... 19

BIBLIOGRAPHY ................................................................................................................................. 23
LIST OF ILLUSTRATIONS

FIGURE 1. RC END STRENGTH ................................................................................. 3
FIGURE 2. ENLISTED NON-DMOSQ CATEGORIES ....................................................... 6
FIGURE 3. ENLISTED ATTRITION PERCENTAGE ......................................................... 8
LIST OF TABLES

TABLE 1. OCAR METHODOLOGY ................................................................. 10
TABLE 2. PROJECTED ATTRITION REDUCTION ........................................ 16
TABLE 3. PROJECTED DMOSQ IMPROVEMENT BY CATEGORY ..................... 17
IS 85% DUTY MILITARY OCCUPATIONAL SPECIALTY QUALIFICATION (DMOSQ) ACHIEVEABLE FOR THE ARMY RESERVE COMPONENT BY 2005?

The kinds and amounts of readiness the United States needs after the Cold War depend on who it might have to fight, how much time it will have to convert potential into actual power (that is, economic potential into structural readiness, and structural into operational readiness), and how it intends to fight. These questions have to be answered, at least provisionally, or there is no basis for military policy and strategic choice.

—Richard K. Betts

Readiness serves as the cornerstone for national security and national military strategists to determine the full spectrum of capabilities and missions required to defend our national security interests.¹ This paper will explore one essential component of readiness with implications for Reserve Component (RC) relevance and reliability for warfighter planning and execution - the Duty Military Occupational Specialty Qualification (DMOSQ) of the force. DMOSQ rates translate to the number of soldiers trained and qualified to perform their assigned job to insure a unit's ability to successfully perform its mission.

Equipment cannot be operated, missions cannot be conducted, warfight planners cannot effectively prepare and ultimately, our national security cannot be defended without trained, qualified soldiers available and ready, filling the ranks of units necessary to carry out and sustain the full spectrum of military operations.² To this end, the former Chief of Staff of the Army, General Reimer, and successive Army Chiefs mandated that the United States Army Reserve (USAR) reach and sustain 85% DMOSQ by fiscal year 2005.³

This figure was not derived in a vacuum, but rather "typical Army practice calls for 85% of a unit's positions to be filled by DMOSQ soldiers before it can be deployed overseas."⁴ The purpose of this paper is to examine the feasibility of this requirement based on trends that reveal a DMOSQ history well below 85%, analysis of the issues affecting attainment of the 85% goal, and recommendations to achieve the goal.

BACKGROUND

The end of the Cold War was the impetus for a significant downsizing of the Active Component (AC) forces and a transfer of much of its support operations assets into the reserves. The consequence of this has been an increase in the reliance on RC capabilities by strategic warfight planners. Increased reliance dictates that reserve leadership make achieving high training readiness standards an imperative. Without fully qualified RC soldiers, confidence
of warfight planners that the RC can be called upon to successfully perform their missions will erode.

OPERATION DESERT STORM/DESERT SHIELD

The outcome of the most recent extensive test of Reserve Component readiness, Operation Desert Shield/Desert Storm (ODS/S), and the resultant call for a transformation of the Army to be able to conduct simultaneous high and low end spectrum operations serve to highlight the necessity for the RC to achieve and maintain the Army Chief of Staff’s mandated DMOSQ figure of 85%.

During ODS/S the extensive practice of cross-leveling soldiers between units was employed to overcome deficiencies in numbers of trained, qualified soldiers in activated RC units. However successful this policy may have been, it is important to keep the accomplishments of cross-leveling in perspective. Success was largely due to the benefit of a "surplus of forces" from the Cold War. In fact, there were 25% more Army RC units to draw from during Desert Storm for cross-leveling purposes than exist today. Therefore, reliance on such a program today would not be practical and could detract from the immediacy of need to focus on present DMOSQ readiness issues within the Army RC.

Finally, to consider cross-leveling as the panacea to DMOSQ readiness for the reserves is to overlook an essential element to successful military units, cohesiveness. The role that unit integrity, team building and chain-of-command plays in mission success should not be underestimated. Creating ad hoc units can only serve to delay deployment to allow for sufficient training as a cohesive unit or, if there is insufficient time to allow for such training, jeopardize the ability of the unit to competently perform its assigned mission. In reality, given the compressed deployment timeframes as laid out in the transformation plan, RC units will need to be in place by the 75th day in the event of a major contingency. By contrast, the Army was afforded seven months preparation for the ground war for Operation Desert Storm. Additionally, recent events may further escalate this timeline. Therefore, it can be assumed that there will be insufficient time to rely on a policy of cross-leveling given today’s need for units to deploy much sooner than previously required.

ARMY TRANSFORMATION

In October of 1999, Chief of Staff of the Army, General Eric Shinseki, presented a historic model for change to the force structure of the United States Army entitling his vision, "The Army Transformation." One of the key transformation goals is to create a light, quick reacting force
with reduced deployment schedules, capable of engaging in the "full spectrum of military operations from humanitarian assistance on one end to global war on the other." With the Army Reserve providing 23% of the combat support (CS) and 54% of the combat service support (CSS) capabilities of the Total Army,\textsuperscript{11} the transformation end state has a direct impact not only on the shaping and resourcing of the Active Component (AC), but also on the CS/CSS units found in the Army RC. Because the RC is the essential provider for support operations,\textsuperscript{12} there has been an increased reliance on reserve forces and corresponding increases in deployments of RC personnel beginning with Operation Desert Storm.\textsuperscript{13}

Since ODS/S, the increase to RC operations tempo (OPTEMPO) has come from the support of lower spectrum peacekeeping operations and military operations other than war (MOOTW). These types of missions traditionally require more CS/CSS assets than military warfighting operations. In considering today's high OPTEMPO environment, the requirement for the Army RC to be at 85% DMOSQ by 2005 is based on a legitimate need to insure reservists are capable of meeting faster deployability timelines across the full spectrum of operations. Achieving this DMOSQ level creates the potential to reduce the time needed for post mobilization training and improves the ability of the RC to get to the fight more quickly. The legitimacy of the requirement is further substantiated in that it promotes unit integrity by eliminating or significantly reducing the need to cross level soldiers unknown to the unit.

**DMOSQ TRENDS**

In order to examine the feasibility of the RC achieving the 85% DMOSQ goal, we must first examine DMOSQ percentage trends and what factors contribute to the current shortfalls. This paper will focus on the enlisted DMOSQ shortfalls because the greatest contributor to the DMOSQ goal resides in the enlisted pool, as depicted in Figure 1.\textsuperscript{14} Combined commissioned and warrant officer DMOSQ percentages have traditionally been above 85% and therefore, are not considered in this research.\textsuperscript{15}

Throughout the 1990s and into the 21st century, Army Reserve Component DMOSQ has hovered around the low to mid-60th percentile.\textsuperscript{16} Given this trend, it is important to understand the categories that make up the non-DMOSQ numbers in order to derive
recommendations to reduce DMOSQ shortfalls. According to the RAND Arroyo research brief published in 2001, "Enhancing Personnel Readiness in the Army Reserve Components", Initial Entry Training (IET) soldiers historically account for one-third of the total USAR non-DMOSQ population. This IET total is also supported in Figure 2, which depicts the breakdown of non-DMOSQ enlisted personnel by categories into the first quarter of fiscal year 2002. Here it is shown that IET soldiers account for 40 percent of all non-DMOSQ enlisted soldiers.

The analysis of the categories in Figure 2 also shows the other major source of non-DMOSQ personnel (25%), those soldiers that require MOS reclassification training. There are three circumstances that cause MOS mismatches that result in soldiers requiring MOS reclassification training. The first situation involves prior service soldiers who have transferred from the AC into a RC unit that does not have a position vacancy for the MOSs in which the soldiers were trained. The second condition is soldiers who transfer from one RC unit into a different RC unit (because of geographic relocations, personal reasons and other factors) that does not offer a MOS match. The third factor that leads to greater numbers of soldiers requiring MOS reclassification training is when units undergo reorganizations that create changes to the MOSs and grade structures.

The remaining non-DMOSQ categories are ones that primarily involve administrative corrections to the automated database management systems. These systems include the Total Army Personnel Database-Reserve (TAPDB-R), the Army Training Requirements and Resources System (ATRRS) and the Unit Manning Roster (UMR) that is generated from both the Reserve Level Application System (RLAS) at the unit level and the TAPDB-R. The responsibility of unit level leaders to insure the management of these systems is critical to the accuracy of readiness data for operational and strategic level planners.

It is the automated systems data that Forces Command (FORSCOM) mobilization planners rely on to give them the most recent status of units in order to determine their ability to be activated. The primary tool used by these strategic planners to assess all readiness categories, to include MOS, comes from yet another automated database system, the Status of Resources and Training System (SORTS). This reporting system "contains unit readiness metrics on select operational units for the Joint Staff, the Services, and the combatant commands to use in different ways". The instrument that feeds the SORTS database comes from the Unit Status Report (USR). The USR is a composite of data from various automated systems, such as the TAPDB-R for personnel status and DMOSQ determination. The USR requires commanders to rate the readiness of their units utilizing a condition rating criteria, or C-levels. A C-1 condition rating is
the highest level and, in the case of soldier DMOSQ status, is defined as "not less than 85% of full MTOE required strength are personnel in the available strength who are qualified to perform duties of the position to which assigned." Therefore, for the Chief of Staff of the Army to mandate that the USAR be at 85% DMOSQ by 2005 is to require all RC units to be a C-1 in MOS.

There has been a great deal of criticism concerning the accuracy of USR data from all levels of command. However, until the analysis on how to improve the reporting procedures are completed and changes implemented, ultimately DMOSQ data reflected in the USR and SORTS is only as accurate as the RLAS operator at the unit level inputting the data. If the operator is not adequately trained in RLAS or fails to routinely update and maintain the database, and the unit commander is not versed enough to recognize deficiencies, the readiness of the unit cannot accurately be determined. It is essential that unit level commanders and administrators understand the implications of maintaining an accurate database for mobilization and deployment decisions at the operational and strategic levels. A lack of faith in the accuracy of the USR can muddle the decisions that must be made by senior strategic leaders who "do not have many sources to draw on for thorough and disinterested analysis of readiness."22

The significance of the low DMOSQ trend is twofold. First, they serve to reinforce the reason for the need to rely on extensive cross-leveling during Operation Desert Storm and secondly, that little has changed in the years since that war to reverse the trends. Given the increased operations tempo that requires units to be available and ready to deploy faster than previously demanded, an assumption is made that cross-leveling cannot be a primary option in strategic and operational level planning. As a result, strategic warplanners might well raise the questions of how reliable are Army RC units in being able to meet compressed deployability timeframes and can they be expected to perform capably?23

Exploring the feasibility of the Army RC's ability to reach 85% DMOSQ by 2005 is essential so that the focus at the decision maker level is properly directed at what measures must be taken to reach this goal. Only then can we assure the warfight planners of RC readiness and reliability. What follows then, is an examination of several of the Army RC DMOSQ shortfalls and whether they can be overcome to reach the DMOSQ level established by the Army Chief of Staff.
Non-DMOSQ - Enlisted
DCG Enlisted Assigned Report 11/26/2001

FIGURE 2. ENLISTED NON-DMOSQ CATEGORIES

ANALYSIS OF CONTRIBUTING FACTORS TO NON-DMOSQ

There are in fact layer upon layer of underlying factors that impact overall DMOSQ readiness of USAR soldiers. What follows is an analysis of those categories of non-DMOSQ with the greatest rate of return for improved overall readiness, IET management and personnel turnover. The determination of IET and personnel turnover as the two focus areas for change to achieve 85% DMOSQ is based on trend data and former studies on the issue of RC personnel readiness conducted by the RAND Arroyo Center as well as personal interviews. A third factor, administrative corrections to DMOSQ data is briefly explored because of its significance to warfight planners. The analysis of these issues form the foundation for the recommendations to achieving 85% DMOSQ and a determination of whether the goal is achievable by 2005.

INITIAL ENTRY TRAINING

While the most critical Army RC manpower resource remains the non-prior service IET enlistee, the management of this resource creates unique challenges to improving DMOSQ. When IET soldiers assess into the Army RC, they are immediately assigned to a unit, before
they have attended basic and Individual Advanced Duty Training (IADT) to be qualified for a military occupational specialty (MOS). The impact on the unit is it receives an automatic "hit" against its DMOSQ percentage, as IET soldiers are not qualified until they have graduated from IADT. In the case of split option soldiers, a unit must carry them as non-DMOSQ for up to two years. This is because they complete their basic between their junior and senior years of high school but don't attend AIT until some time after they graduate. Conversely, the AC places its new recruits in a transients, trainees, holdees and students (TTHS) account, not in units, while they are attending basic and MOS producing schools. This account allows the AC to "maintain the DMOSQ rates and readiness levels within units, and enhances collective training."26

There are other 2nd and 3rd order consequences as a result of the current Deferred Entry and Delayed Training enlistment policies. In addition to unit readiness being negatively impacted, the unit leadership has the burden of responsibility to integrate the new enlistees into programmed individual and limited collective training events to keep the enlistees "motivated" until they go off to their basic and MOS producing schools.27 With full drill schedules consistently impacted by competing training and administrative requirements, time is often not afforded for orientation of the new enlistees. Subsequently, a number of them become disenchanted with the military before they have completed their schooling. Further, because they are non-DMOSQ, they are not authorized to attend collective, unit annual training (AT) exercises, which has the potential to degrade the collective training experience and negatively impact the motivation level of the new trainees. A detailed study is currently being conducted by the Science Applications International Corporation (SAIC) Strategies Group to evaluate the "Failure to Ship" losses and to explore alternative management practices of new enlistees. Of significance for this paper however, is the impact on RC readiness under the current practice of including untrained, non-prior service members in DMOSQ figures.

This current policy of assigning IET soldiers to Troop Program Units (TPUs) does contribute to meeting aggregate RC end strength goals. However, what the Army RC gains in overall strength figures, it loses in training readiness by degrading unit personnel readiness for as much as two years, as these soldiers are not deployable assets until they have completed their initial training requirements. The impact of this is by no means insignificant. At the end of fiscal year 01, a full 15% of TPU enlisted strength was non-deployable because of their non-DMOSQ status.28 TPU soldiers form the largest USAR manpower pool that is available for the President to call-up in the event of a national emergency or to meet the requirements of war. Therefore, the significance of this number for the warfight planner, when combined with those
soldiers requiring reclassification training, has the potential to call into question the RC reliability.

PERSONNEL TURNOVER

The most significant factor resulting in low DMOSQ percentages for the Army Reserve component is that of attrition. As the chart in Figure 3 shows, annual churn rates have historically been high for the Army RC, with the end of FY 01 turnover percentage being at 28% throughout the U.S. Army Reserve Command (USARC). Not only does attrition result in decreased DMOSQ readiness, but also it logically affects the amount of money required for recruiting and training replacements for the soldiers who leave the service.

![Enlisted Attrition Rates](image)

**FIGURE 3. ENLISTED ATTRITION PERCENTAGES**

implications for DMOSQ readiness is job changes within the RC. This refers to those soldiers who remain in the RC but leave one unit for another for reasons varying from promotion, dissatisfaction with viability of training in their present unit, civilian job relocations or they transfer temporarily into the Individual Ready Reserve (IRR) for personal reasons. The Office of the Chief, Army Reserve's "Report Explaining the Factors that Influence Army Reserve Recruiting" found that "little has been done to deal with the overall impacts of turbulence in the 'career force'." The impact that frequent internal job changes have on DMOSQ rates was studied by the RAND Arroyo Center utilizing FY93 Selected Reserve records. It is significant to note that 63% of soldiers staying in the same job past one year maintained a DMOSQ percent of 86.6. Conversely, the 16.6 percent of soldiers who changed RC jobs after a year had a DMOSQ percent of only 36.4. Therefore, if success can be reached in stabilizing soldiers to keep them from frequent job changes, significant improvement in DMOSQ rates can be achieved.

Another aspect of personnel turnover with
MAINTENANCE OF AUTOMATED DATABASE MANAGEMENT SYSTEMS

In 1999 a new database management system was fielded and became the database of record for DMOSQ for the USARC, the enhanced Individual Training Requirements and Resources-Geographic Information System (eITRR-GIS). This system merged together the information from the Total Army Personnel Database-Reserve (TAPDB-R) and the Army Training Requirements and Resources System (ATRRS) to "determine DMOSQ in accordance with the rules of Army Regulation 220-1, Unit Status Reporting".\textsuperscript{35} The eITRR-GIS data, used to create Figure 2, highlights that there are some basic administrative fixes to improving overall DMOSQ rates. For instance, a nearly 4% increase in DMOSQ can be achieved by leadership directing soldiers to be reslotted into vacant positions based on a secondary or additional MOS and another 2% could be gained by making the proper entry to the deployability code for IET graduates. These increases to DMOSQ come at no cost other than time to input the data correctly and maintain it as needed.

While these administrative categories do not represent high yield increases in overall DMOSQ rates, the important point to be made is that improving the management of DMOSQ data will provide a more accurate readiness picture for warfight planners. This in turn has the potential to minimize mobilization delays by reducing the time required to reassess the deployability of soldiers because of faulty DMOSQ status reflected in the TAPDB-R.

OCAR PLAN TO ACHIEVE 85% DMOSQ BY 2005

"Hope is not a Method"


Research for this paper was conducted to explore specific programs or policies that had been developed to raise the DMOSQ rate from the historical mid-sixty percentile to the stated goal of 85%. The discussion that follows highlights what is currently considered the RC methodology to achieve the goal.

In December 1999, members of the Office of the Chief, Army Reserve (OCAR) presented a briefing to the Department of the Army (DA) on the RC "methodology" for reaching 85% DMOSQ by FY05. Figure 4 depicts the breakdown of DMOSQ and non-DMOSQ predictive figures to attain the 85% goal.
USAR DMOSQ Methodology

<table>
<thead>
<tr>
<th></th>
<th>End FY01</th>
<th>End FY02</th>
<th>End FY03</th>
<th>End FY04</th>
<th>End FY05</th>
</tr>
</thead>
<tbody>
<tr>
<td>85% Goal</td>
<td>133,138</td>
<td>133,138</td>
<td>133,138</td>
<td>133,138</td>
<td>133,138</td>
</tr>
<tr>
<td>Projected DMOSQ</td>
<td>114,027</td>
<td>118,326</td>
<td>122,825</td>
<td>127,524</td>
<td>132,424</td>
</tr>
<tr>
<td>Backlog</td>
<td>42,606</td>
<td>38,307</td>
<td>33,808</td>
<td>29,109</td>
<td>24,209</td>
</tr>
<tr>
<td>Projected DMOSQ</td>
<td>73%</td>
<td>76%</td>
<td>78%</td>
<td>81%</td>
<td>85%</td>
</tr>
</tbody>
</table>

Backlog: 42,606 38,307 33,808 29,109 24,209
(+ Prior Service): 8,506 8,506 8,506 8,506 8,506
(+ Transfers): 3,916 3,916 3,916 3,916 3,916
(-) Attrition: -9,720 -9,720 -9,720 -9,720 -9,720
(+ ARNG Division Redesign Study): 0 0 0 0 0
Gross Requirement: 45,307 41,006 36,509 31,809 26,910
(-) No Show: -700 -720 -740 -760 -800
Net Requirement: 44,607 40,286 35,769 31,049 26,610
Quotas Required to meet MOSQ Ramp: 7,000 7,200 7,400 7,600 3,000
(+ No Show): 700 720 740 760 300
Backlog: 38,307 33,808 29,109 24,209 23,910

TABLE 1. OCAR METHODOLOGY

The problem with the methodology as presented is that it utilizes a straight-line function model to reach 85%. In interpreting the data, the DMOSQ attrition of only 9,720 represents an attrition rate of just over 6% of the total USAR enlisted population. However, the attrition rate for the last fiscal year was 28.6% and was as high as 37.5% as recently as fiscal year 1997. This 6% attrition rate is also not supported according to a RAND study that identifies attrition as a significant factor impacting DMOSQ readiness levels. Finally, a National Defense Authorization Action Review on Reserve Recruiting concluded in April 2001:

"A part of the long-term solution for manning the USAR Troop Program Unit force and improving readiness is by retaining trained and ready soldiers, which will reduce personnel losses to strength and lower the recruiting requirements. Personnel losses, as a rate measured against strength or attrition rate, in the USAR have traditionally been 30 per cent per year or more, which represents an 'historical' organizational level of turnover...It is likely that attrition rates of the
30% magnitude have readiness impacts...What is clear is that retention has historically been under-resourced, even though it seems to represent a very positive trade-off to increasing accessions."

Report on "Explaining the Factors that Influence Army Reserve Recruiting"\(^{38}\)

Not only is the attrition rate used for the OCAR methodology chart well below the actuals, there was nothing evident to address the need for changes to policies to reduce attrition to the levels projected in Table 1. Any recommendations to achieve the goal of 85% must address reduction in attrition with requisite policies and programs.

Secondly, the "Projected DMOSQ" figure for FY 01 in the OCAR methodology chart is listed as 73%, but a review of the statistical DMOSQ figures for enlisted personnel based on the eITTR-GIS shows the figure through November 2001 to be 64%.\(^{39}\) This indicates we are already well below the ambitious projections laid out in the chart in Table 1. Additionally, the "No-Show" figure for FY 01 and the subsequent predictive figures in the OCAR methodology chart are not based on trend data but rather by using the Chief, Army Reserve (CAR) policy standard of no more than 10% no shows for total school seats requested. Therefore, the accuracy of the predictive model employed is subject to challenge.

A predictive model utilizing a straight-line function for determining the viability of the RC ability to reach 85% DMOSQ by 2005 is not reliable. Many other studies, based on trend data, have highlighted the need to address the factors that cause reduced DMOSQ numbers. They have recognized the need for changes to current practices, such as the use of new or varied incentives to reduce personnel turnover, in order to realistically improve overall DMOSQ readiness. DA personnel failed to question what "methodology" was involved in the USAR DMOSQ plan. This failure, while it led to the approval of funding for the predictive number of training seats, serves to perpetuate an adverse trend. Spending money up front for training, only to lose in the long run by failing to retain the soldier in the MOS for which he was trained or failing to keep him in the RC, is a fundamental flaw. Subsequently, there is greater outlay in the future as the training dollars and experience are lost from attrition and increased monies are needed to train replacements. This translates to more recruiting dollars expended as the greater the churn rate, the greater the number of resources needed to recruit replacements.

**RECOMMENDATIONS TO ACHIEVE 85% DMOSQ**

To this point, the DMOSQ trends have been discussed and an analysis of the issues and factors that impact RC DMOSQ rates have been presented. This information makes it possible to develop recommendations or highlight studies previously conducted which provide courses of
action to improve RC DMOSQ rates. In most cases, these studies have concluded with specific recommendations for changes to improve RC readiness. No longer should it be necessary for senior leaders to direct yet more studies, but to move on into the next phase of implementing those changes or pilot programs in order to reach and sustain 85% DMOSQ.

INITIAL ENTRY TRAINING

Continuing the policy found in AR 601-210, Regular Army and Army Reserve Enlistment Program (Feb 95), that allows non-prior service enlists to be assigned to RC units prior to basic and IADT will prevent the USAR from achieving 85% DMOSQ by 2005 and beyond. An alternative program for the management of IET soldiers that is comparable to the AC TTHS account is recommended. A holding company approach, or TTHS account, would allow the USAR to maintain end strength objectives without compromising DMOSQ readiness rates. This type of approach is further desirable from a practical standpoint. It would relieve the TPU leadership of the burden of administrative responsibilities for these soldiers while they await training and of having to incorporate untrained soldiers into collective training events, which has the potential of degrading overall unit task accomplishment.

Historically, the concept of pre-training new soldiers to fill the gap in time from the day of their enlistment until being shipped off to training camps can be traced back to World War I. "Boards of Instruction" were developed in 1918 at the suggestion of the Secretary of War to raise the morale of new selectees. They were given information on benefits and allotments, U.S. purpose and goals in the war, as well as some "preliminary military drill." These indoctrination efforts proved extremely successful in instilling high individual morale and sending more motivated groups off to training camps. These same goals can be achieved with pre-training holding companies for today's RC IET soldiers just as the Boards of Instruction accomplished for the selectees of years past.

One notional concept of the operations of RC IET holding companies suggests these units be administrative companies, stood up within the Institutional Training Divisions, and run primarily by training division drill sergeants. A program of instruction (POI) would involve a pre-IADT program to engage the soldiers in purposeful and productive indoctrination training. This would help to keep non-prior service soldiers interested in the Army and result in increased motivation and desire to complete basic and AIT.

Therefore, consideration should be given that explores the advantages to the AC practice that places all non-prior service enlists in a TTHS account. Additionally, a cost analysis is needed of the funds lost when IET soldiers fail to finish their MOS schooling, or who do not stay
in the RC for the extent of their initial contract, versus costs to establishing and maintaining a holding company concept like the TTHS found in the AC.

PERSONNEL TURNOVER

While the Chief, Army Reserve, Lieutenant General Plewes, stated before the House Armed Services Committee that the RC has achieved a 5% decline in enlisted attrition since 1997,\textsuperscript{43} the fact is that attrition remains a significant barrier to the USAR achieving and maintaining 85% DMOSQ. Attrition rates in the mid to high 20% range are estimated to cause a corresponding decrease in DMOSQ rates of approximately 10%.\textsuperscript{44}

As a result, DMOSQ improvement strategies are explored as options to address Army RC DMOSQ shortfalls attributed to personnel turnover. The first, as proposed by RAND Arroyo Center in its 1996 study "Ensuring Personnel Readiness in the Army Reserve Component," suggests a series of bonuses to reduce attrition and job turbulence. The broadest, overarching includes a "10 percent raise in average drill pay which is estimated to reduce attrition from 4.5 to 9.5 percent."\textsuperscript{45} Given current budget restrictions, this would probably be the least economically feasible but may be viable if applied to MOSs that see the highest rate of turnover or applied to units that experience the greatest annual churn.

The RAND Arroyo Center study also recognized that promotion plays a large role in soldiers' decisions to change units. In order to mitigate this circumstance, the study suggests paying soldiers the cost differential for the increased pay grade they would turn down as an incentive to staying in their present rank in their same unit.\textsuperscript{46} A problem with this proposal is that giving soldiers incentives to forego promotions doesn't remove the need of that unit to fill the vacancy in that next higher grade level. When it does get filled, you are then paying the higher pay grade to that soldier assigned to fill the position in addition to paying the differential between the current grade and the promotion grade to the soldier who opted to forgo his promotion. Additionally, if there is extensive delay in filling the vacant position, this potentially degrades the senior grade readiness of that unit and it's ability to perform its mission. Subsequently, cost savings to the Army RC is potentially negated.

Another bonus incentive proposed by RAND Arroyo is one that is paid at the end of each year that a soldier remains in a given unit. The study shows that even "modest compensation changes, such as bonuses in the range of $200 to $1,000 suggest major improvements in personnel turnover."\textsuperscript{47} Again, this has more potential for implementation if applied to MOSs which historically experience high turnover rates or to high OPTEMPO units that also show greater than average annual personnel turnover.
ADDITIONAL RECOMMENDATION

Improved Retirement Benefits

One area that holds significant implications for retention, particularly of a population that is often overlooked- the mid-level NCOs, is the Army RC retirement program. The current retirement plan was developed and enacted over 50 years ago, at a time when it was never envisioned the RC would face the increased OPTEMPO of today. "Somewhere along the continuum, the citizen-soldier becomes more than a part-time soldier in terms of responsibility, accountability, and contributions to mission accomplishment. It would be reasonable for the retirement payout to reflect in some fashion the paradigm shift."48

Not only is a change needed because of the increased use of the Army RC for the spectrum of military operations, it is also needed to be on a more competitive level with the retirement programs offered in the civilian sector. When one seeks employment with a company, what that company offers in terms of retirement entitlements weighs heavily on the decision to work there. The same holds true for reservists. In the past decade and for the foreseeable future, there is clearly more output on the part of reservists and as an incentive for the sacrifices made from time away from civilian job responsibilities and from family, reservists are entitled to improved benefits.

Program changes under consideration range from a pro-rated, early-payout retirement annuity that would recognize increased participation, provide for retirement benefits as soon as earned instead of potentially retiring after 20 years then having to wait an additional 20 before receiving entitlements. Other deliberations include new criteria for awarding retirement credit to include civilian education or providing for a 401k plan with matching funds. 49 These proposed changes to modernize an outdated retirement program would most likely result in increased retention of mid-level officers NCOs (E-6 and greater). Minimizing the loss of these mid-level leaders would have a tremendous cost savings in terms of the dollars that are invested in the entry level and continuing education of this pool. Additionally, the years of experiences these NCOs possess provide for a more mature leadership and subsequently, more effective and capable units.

Whatever the reasons given for soldiers leaving the RC or changing jobs, the impact on DMOSQ readiness is significant enough that it warrants greater study as to the effects certain incentive programs have on reducing personnel chum rates. Success in stabilizing the force would result in minimizing the need for cross-leveling to fill unit vacancies, created either from soldiers leaving the service or changing jobs; reduced training costs as there would be less
initial and reclassification training needed; and ultimately result in increased DMOSQ percentages for the Army RC.

CONCLUSION

Downsizing trends over the past several years have resulted in "a smaller Total Force (which) has led to an increased role for the Reserve Component." While the RC force structure has been reduced, the reliance on RC capabilities has increased since Desert Storm/Desert Shield. Evidence that OPTEMPO will continue at a high level is apparent by the 2001 Quadrennial Defense Review that requires U.S. forces to be prepared to provide for homeland security, victory in two overlapping major conflicts, and conduct limited smaller scale contingency operations. The consequence of increased OPTEMPO for the reserves is cited in the analysis from a RAND Arroyo Center Issue Paper in which the authors contend:

"...more RC units are needed than in Desert Storm, and they are needed sooner...Despite the need, the readiness of the RC CS/CSS units does not appear to support their ability to be trained and ready to deploy early...In large measure, this results because the thinking of both the active and reserve components with respect to the reserves has not kept pace with changes in strategic thinking. It remains largely in a Cold War mold, that is, to maintain units at home station at some reduced level of readiness and, on activation, bring them to a mobilization station and raise them to the readiness standards set by the AC and the CINCs...The resources gravitate toward the combat units, along with the leadership's attention...But this focus should be broadened if the criterion is what is needed from the RC first." 

An examination of RC support for contingency operations in the past few years shows that "what is needed from the RC first" comes from units classified as lower priority, non-Force Support Packages (FSP). Therefore, for the RC to meet the required 85% DMOSQ goal, a holistic approach to solutions is needed. Failure to make necessary policy changes to increase DMOSQ puts the RC at risk of failing to meet expected deployment timelines in the event of a RC call-up across the full spectrum of military operations. It is imperative that program and policy changes targeted to improve RC DMOSQ focus on the aggregate reserve force and not strictly high priority units.

The methodology to achieve 85% DMOSQ by 2005 is not simply accomplished by a straight-line mathematical function. Rather, OCAR must examine DMOSQ shortfalls by "econometric modeling" as used by the RAND Arroyo Institute and as suggested by the "blue ribbon panel" looking into the National Defense Authorization Action to review reserve recruiting. Table 2 depicts an example, using the causal DMOSQ shortfall category of attrition, of how methodology should be tied to specific policy recommendations that address
underlying causes. The table shows how each bonus or incentive program would contribute to the overall reduction in attrition. As an example, an increase in drill pay would be responsible for a 5 to 9% decrease in attrition, with the summative goal from all programs being to cut attrition in half. While these programs would require additional funding, the savings from reduced recruiting and training costs would at least partially offset the costs.\textsuperscript{55} Once this initial examination in made, OCAR would then need to determine which programs might succeed in achieving the end state of reducing attrition as well as training and recruiting costs, and then invest the resources of time and money to test the effects on DMOSQ rates.

**Projected Program Impact on Attrition Reduction (Estimated)**

*These figures are example estimates, with the actual numbers to be established through pilot programs or studies*

<table>
<thead>
<tr>
<th></th>
<th>FY01</th>
<th>FY02</th>
<th>FY03</th>
<th>FY04</th>
<th>FY05</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attrition %</td>
<td>28%</td>
<td>23%</td>
<td>17%</td>
<td>15%</td>
<td>14%</td>
</tr>
<tr>
<td>Drill Pay Increases</td>
<td>-----</td>
<td>(-1)-(-3)%</td>
<td>(-3)-(-7)%</td>
<td>(-5)-(-8)%</td>
<td>(-5)-(-9)%</td>
</tr>
<tr>
<td>Targeted MOS Bonuses</td>
<td>-----</td>
<td>(-1)-(-2)%</td>
<td>(-3)-(-4)%</td>
<td>(-3)-(-6)%</td>
<td>(-4)-(-6)%</td>
</tr>
<tr>
<td>Retirement Plan Improvements</td>
<td>-----</td>
<td>(-1)-(-2)%</td>
<td>(-1)-(-2)%</td>
<td>(-1)-(-2)%</td>
<td>(-1)-(-2)%</td>
</tr>
<tr>
<td>Total Impact</td>
<td>-----</td>
<td>(-3)-(-6)%</td>
<td>(-7)-(-13)%</td>
<td>(-9)-(-16)%</td>
<td>(-10)-(-17)%</td>
</tr>
</tbody>
</table>

**TABLE 2. PROJECTED ATTRITION REDUCTION**

It is inconceivable that extensive implementation of needed policy changes would be implemented, or their impact measured, in time to achieve 85% DMOSQ by 2005. Nor will the USAR reach 85% DMOSQ beyond the "goal" year if the practices are continued of compromising DMOSQ readiness for end strength objectives, failing to thoroughly explore the impact of monetary incentives to reduce personnel turnover, and failing to hold leaders accountable for the continual maintenance of automated database systems that track personnel readiness. As an additional caveat, correcting just one shortfall category will not get the USAR to 85%, but improvements in all three categories discussed in this paper can, as shown in Table 3.
<table>
<thead>
<tr>
<th>Category</th>
<th>DMOSQ % Improvement</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>IET Holding Account</td>
<td>10-15%</td>
<td>Based on historical IET contribution to non-DMOSQ (see Figure 2)</td>
</tr>
<tr>
<td>Attrition Reduction</td>
<td>4-6%</td>
<td>Based on a 50% reduction in attrition\textsuperscript{56}</td>
</tr>
<tr>
<td>Administrative Management</td>
<td>4-6%</td>
<td>See Figure 2</td>
</tr>
<tr>
<td>Total</td>
<td>18-27%</td>
<td>Added to a historical DMOSQ average in the low to mid 60% range, the result would be in the 80-90% range</td>
</tr>
</tbody>
</table>

**TABLE 3. PROJECTED DMOSQ IMPROVEMENT BY CATEGORY**

While it is outside the scope of this project to peel back every factor that contributes to overall non-DMOSQ rates for the USAR, this paper has shown that what is fundamental to increasing RC DMOSQ is leadership. Leadership at the top must be willing to use the compelling DMOSQ trend data from the eITRR-GIS as the basis for change. The model for change to our IET management already exists in the AC. The establishment of holding companies does not require additions to the RC force structure, but a reorganization of existing assets. We need leadership at the top to take the definitive knowledge that stabilizing soldiers leads to substantially higher DMOSQ rates and institute a revised system of targeted bonuses aimed at reducing attrition and job turbulence. Mitigating attrition and frequent job changes results in less output for recruiting and reclassification training dollars. Therefore, no tenable argument against the proposed bonuses can be made without a full assessment of these extenuating factors. Lastly, a capability exists today for an immediate, no-cost improvement to RC DMOSQ. This capability is simply, maintenance of soldiers' records. Leadership at all levels of command must foster communication between their training personnel and RLAS operators so that timely, accurate DMOSQ inputs to existing personnel database management systems are made. Leaders must understand the relationship of this data to the readiness picture of the reserves.

The non-DMOSQ statistics readily available from eITRR-GIS provide the roadmap and prioritization of effort to achieve 85% DMOSQ and serve to emphatically underscore the role that leadership plays in the DMOSQ process. Tactical and organizational level leaders are dependant on OCAR to capitalize on this information by using it to implement changes to systemic problems. In turn, OCAR is dependant on tactical and organizational commanders to enforce exacting standards for accuracy and maintenance of this data. In the end, the
effectiveness of RC leadership will be the key to the USAR finally breaking through the perennial mid-60th DMOSQ percentile. Attaining 85% DMOSQ certainly holds critical significance to warfight planners but also, in a larger context, maintaining this goal holds important significance for the strategic value of the Reserve Component as a whole.

WORD COUNT=6453
ENDNOTES


5 Bruce R. Orvis et al., Ensuring Personnel Readiness in the Army Reserve Components (Santa Monica, CA: RAND, 1996), xi.


8 Ibid.

9 Betts, 185.

10 Shinseki, "Transformation Brief-Short Version."


12 Ibid.


15 Billy Steptoe <Billy.Spetoe.CACI@usarc-emh2.army.mil>, "Officer DMOSQ Percentages," electronic mail message to Megan Tatu <mmt82@mindspring.com>, 8 February 2002.
16 RAND Arroyo Center, "Enhancing Personnel Readiness in the Army Reserve Components."

17 Ibid.


19 Ibid. 19% not scheduled for MOS reclassification training + 6% scheduled for MOS reclassification = 25% of soldiers require reclassification training.


22 Betts, 103.


26 Orvis, 94.

27 Willingham, "In Progress Review for MG Cavin, CG USAREC."

28 Ibid.

29 Orvis, 21.


32 Ibid., 34

33 Ibid.
34 Orvis, 21.

35 Guide on How to Use ITRRS to Improve Duty MOS Qualification (DMOSQ).


37 Orvis, xv.


41 Ibid.


43 Plewes.

44 Orvis, 29.

45 Ibid., xvii.

46 Ibid., xviii.

47 RAND Arroyo Center, "Enhancing Personnel Readiness in the Army Reserve Components."


49 Ibid.

51 Ibid.

52 Halliday, Oaks, and Sollinger, 2.

53 U.S. Reserve Forces Policy Board, 64. FSP units receive priority for both equipment and personnel as they are designated as "first to fight" forces.

54 A Report Explaining the Factors that Influence Army Reserve Recruiting, 34.

55 Orvis, 29.

56 Ibid., 32.
BIBLIOGRAPHY


Hein, Helmut <HeinHelm@usarc-emh2.army.mil>. "RE: Strategic Research Topic." Electronic mail message to Megan Tatu <Megan.Tatu@carlisle.army.mil>. 27 December 2001.


Steptoe, Billy <Billy.Steptoe.CACL@usarc-emh2.army.mil>. "Officer DMOSQ Percentages." Electronic mail message to Megan Tatu <mmt82@mindspring.com>. 8 February 2002.


